ROLLER BEARINGS

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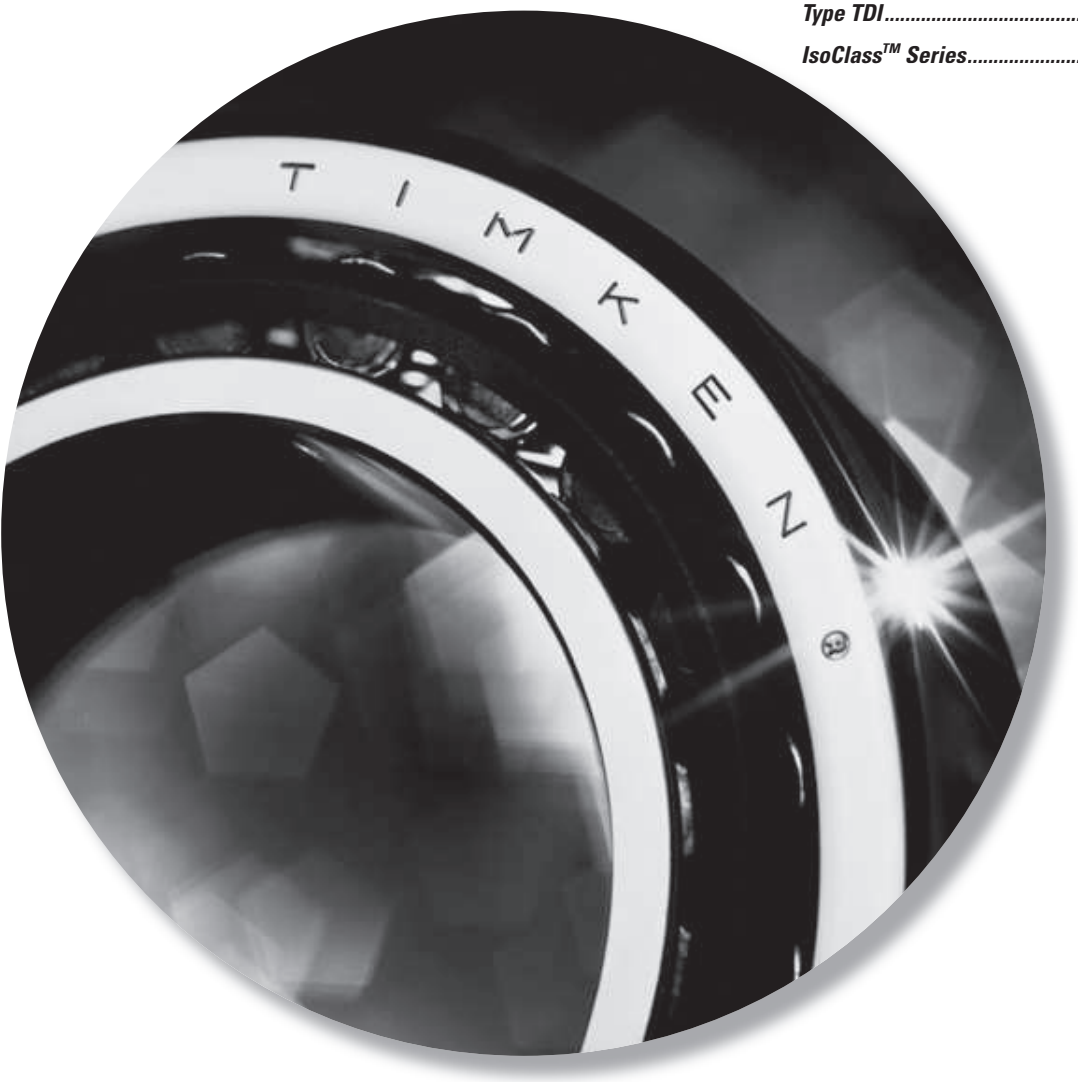
TAPERED ROLLER BEARINGS

Overview: Timken offers the most extensive line of tapered roller bearings in the world. Tapered roller bearings consist of four interdependent components: the cone (inner ring), the cup (outer ring), the tapered rollers (rolling elements) and the cage (roller retainer). Tapered bearings are uniquely designed to manage both thrust and radial loads on rotating shafts. The steeper the cup angle, the greater the ability of the bearing to handle thrust loads.

- **Sizes:** 8 mm (0.31496 in.) bore to 2222.5 mm (87.5 in.) outside diameter (O.D.).
- **Markets:** Automotive, industrial, rail, rolling mills, crane wheels, sheaves.
- **Features:** Available in single-, double- and four-row configurations. Customized surface geometries and coatings are available.
- **Benefits:** Enhanced performance in demanding applications.



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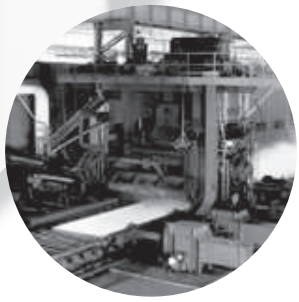


HOW TO RECOGNIZE YOUR PART NUMBER

The part numbering systems for single-row tapered roller bearings (type TS) are internationally recognized. Several part number systems have been developed that can be classified according to "metric" or "inch" systems. Within both the metric and inch systems, different part number systems have been developed. Inch system bearings are normally assigned individual part numbers for the inner race and outer races, whereas ISO bearings are assigned a unique part number for the bearing assembly (inner race and outer race).

BEARING SERIES

In all the part numbering systems the term "bearing series" is used to describe bearings having the same basic internal geometry (e.g. roller size, included inner race and outer race angle). Any inner race (including roller set) can be matched with any outer race within the same series providing that the same type of bearing is being used.

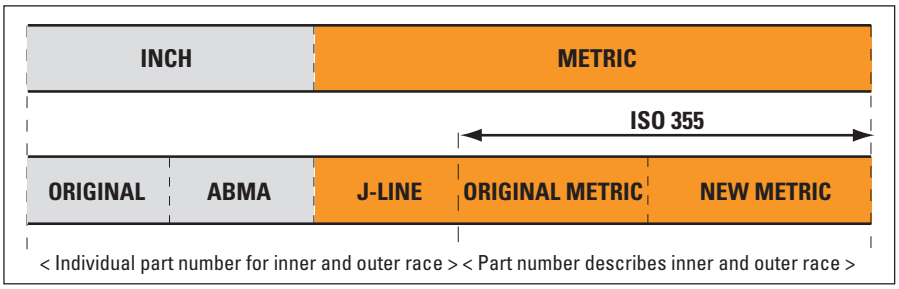
INCH PART NUMBERING SYSTEMS

ORIGINAL INCH PART NUMBERING SYSTEM

The original system developed by The Timken Company was based on a family of bearings designed around a common roller. Varying the number of rollers and the angle of the raceways allows different bearings to be designed for predominant radial load (shallow angle) or thrust load (steep angle).

For example, all the tapered roller bearings in the 500 family use the same roller. However, the 595 Series has a steep angle and 24 rollers while the 525 Series has a shallow angle and 15 rollers.

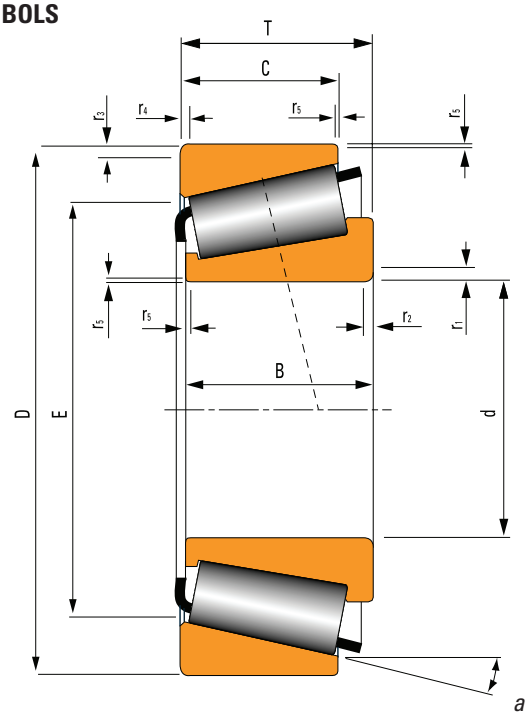
Individual part numbers are assigned to the inner race and outer races. Although there are exceptions, the general rule is that the outer race has a part number that is lower than the series number, whereas the inner race is assigned a higher number.



For example:

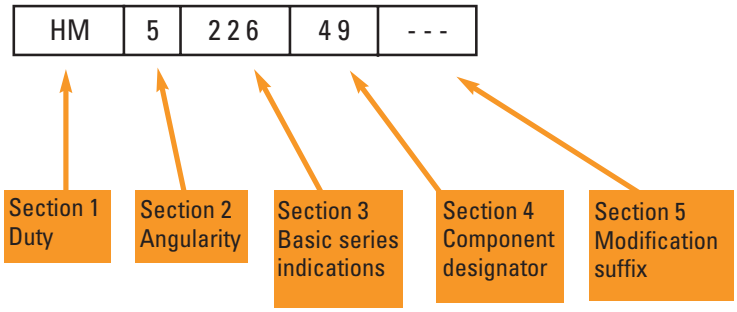
Series	575
Outer race	572
Inner race	576

SYMBOLS



d	=	bearing bore diameter
D	=	bearing outside diameter
T	=	bearing width
B	=	inner race width
C	=	outer race width
E	=	outer race small inside diameter
a	=	1/2 included outer race contact angle
r1	=	inner race back face radius height
r2	=	inner race back face radius width
r3	=	outer race back face radius height
r4	=	outer race back face radius width
r5	=	inner race and outer race front face chamfer height and width

ABMA INCH PART NUMBERING SYSTEM



A new inch part numbering system was developed by the American Bearing Manufacturers Association (ABMA) to address the expansion in the number of new applications and tapered roller bearing designs. This part numbering system has become the international standard for inch-sized bearings.

The ABMA part numbering system applies to new bearing seriesonly. Existing part numbers according to the original system, new part numbers that are added to the existing series and proprietary part numbers of special bearings continue to be used.

The new part number is divided into 5 alpha-numeric sections:

Section 1 - Prefix Letters

The prefixes will consist of one or two letters and will designate the duty class for which the bearing is designed.

EL	Extra Light	HM	Heavy Medium
LL	Lighter than Light	H	Heavy
L	Light	HH	Heavier than Heavy
LM	Light Medium	EH	Extra Heavy
M	Medium	T	Thrust only

Section 2 - Angularity Designator

The first digit following the prefix will represent the angle coding as determined by the included angle of the outer race.

Included Outer race Angle		Code
0	to 23° 59′ 59.99″	1
24°	to 25° 29′ 59.99″	2
25° 30′	to 26° 59′ 59.99″	3
27°	to 28° 29′ 59.99″	4
28° 30′	to 30° 29′ 59.99″	5
30° 30′	to 32° 29′ 59.99″	6
32° 30′	to 35° 59′ 59.99″	7
36°	to 44° 59′ 59.99″	8
45°	Up, but not thrust only	9
90°	Thrust bearing only	0

Section 3 - Basic Series Indication

The 2nd, 3rd, and 4th digits following the prefix letters are reserved for the basic series indication.

The selection of the basic series indication in relation to the maximum theoretical bore of the bearing will then be in accordance with the following tabulation:

Maximum Bore Range (inches)	Series Indication	Maximum Bore Range (inches)	Series Indication
0 - 1	00 to 19 incl.	15 - 16	640 to 659 incl.
1 - 2	20 to 99 incl.	16 - 17	660 to 679 incl.
	000 to 029 incl.	17 - 18	680 to 694 incl.
2 - 3	030 to 129 incl.	18 - 19	695 to 709 incl.
3 - 4	130 to 189 incl.	19 - 20	710 to 724 incl.
4 - 5	190 to 239 incl.	20 - 21	725 to 739 incl.
5 - 6	240 to 289 incl.	21 - 22	740 to 754 incl.
6 - 7	290 to 339 incl.	22 - 23	755 to 769 incl.
7 - 8	340 to 389 incl.	23 - 24	770 to 784 incl.
8 - 9	390 to 429 incl.	24 - 25	785 to 799 incl.
9 - 10	430 to 469 incl.	25 - 30	800 to 829 incl.
10 - 11	470 to 509 incl.	30 - 35	830 to 859 incl.
11 - 12	510 to 549 incl.	35 - 40	860 to 879 incl.
12 - 13	550 to 579 incl.	40 - 50	880 to 889 incl.
13 - 14	580 to 609 incl.	50 - 72.5	890 to 899 incl.
14 - 15	610 to 639 incl.	72.5 and over	900 to 999 incl.

Section 4 - Component Designator

The 5th and 6th digits, or the last two digits, following the prefix letters will indicatethe actual part number of the bearing component.

Outer race numbers will beindicated by the digits 10 to 19, inclusive, the first outer race made to minimum section in any series starting with the number 10. If more than 10 outer races appear in any series, numbers 20 to 29 will be utilized where available.

Inner race numbers will be indicated by the digits 30 to 49, inclusive, the first inner race made to minimum section in any series being numbered 49.

Section 5 - Suffix

This will consist of one letter to three letters in pre-arranged combinations, indicating modifications in external form or internal arrangement.

PREFIXES AND SUFFIXES

Some of the symbols used by The Timken Company and prefixes and suffixes that are part of the ABMA part numbering standard:

PREFIX	SUFFIX	INNER RACE OR OUTER RACE	EXPLANATION
A		Inner race & Outer race	Standard basic series part number.
	A	Inner race	Different radius from basic part number.
	A	Inner race	Different bore from basic part number.
	A	Inner race	Different complement of rollers.
	A	Outer race	Different O.D. from basic part number.
	A	Outer race	Different radius from basic part number.
	A	Outer race	Different width from basic part number.
	AA	Inner race & Outer race	Different bore, O.D., width or radius from basic part number.
	AB	Inner race	Different bore, width or radius from basic part number, assembled with brass cage.
	AB	Outer race	Flanged outer race. (Non-interchangeable with basic part number.)
	AC	Inner race	Different bore or radius, different internal geometry.
	AC	Outer race	Different O.D., width or radius from basic part number.
	AD	Outer race	Double Outer race. (Non-interchangeable with basic part number.)
	ADW	Inner race	Double Inner race. Pilots and slots each end, holes in large rib.
	AH	Inner race	Assembled with special cage, rollers, and/or internal geometry
	AL	Inner race	Assembled with Duo-Face seal.
	ARB	Outer race	Single outer race with snap ring groove in O.D.
	AS	Inner race & Outer race	Different bore, O.D., width, or radius from basic part number.
	ASB	Inner race	Single inner race, different bore or width from basic part number, assembled with brass cage.
	AV	Inner race & Outer race	Made of special steel.
	AW	Inner race & Outer race	Keyway or slotted inner race or outer race.
	AX	Inner race & Outer race	Different bore, O.D., width, or radius from basic part number.
	AXB	Inner race	Different bore, width, or radius from basic part number, assembled with brass cage.
	AXD	Outer race	ISO outer race - double outer race without oil holes or groove.
	AXV	Inner race & Outer race	Different O.D., width, or radius from basic part number. Made of special steel.
	AXX	Inner race & Outer race	Different O.D., width, or radius from basic part number. Made of special steel.
	B	Outer race	Flanged outer race. (Non-interchangeable with basic part number.)
	B	Inner race	Inner race using brass cage.
	B	Inner race & Outer race	ISO bearing with same boundary dimensions as basic part number, but with different internal geometry, steeper included outer race angle.
	BA	Outer race	Flanged outer race. (Non-interchangeable with basic part number.)
	BNA	Inner race	ISO inner race used in assemblies with 2 inner races mated with double outer race to form a double row non-adjusting bearing. (Non-interchangeable with other inner races having the same basic part numbers, which may vary in bore or width dimensions.)
	BR	Outer race	Single outer race with groove in O.D. for snap ring.
	BS	Outer race	Flanged outer race. (Non-interchangeable with basic part number.)
	BW	Outer race	Flanged outer race with slot. (Non-interchangeable with basic part number.)
	BX	Outer race	Flanged Outer race. (Non-interchangeable with basic part number.)
	BXX	Outer race	Flanged single outer race. Made of special steel.
	C	Inner race	Single inner race, envelope dimensions same as basic part number, different internal geometry.
	C	Outer race	Dimensionally different from basic part number. (Non-interchangeable.)
	CA	Inner race	Single inner race, envelope dimensions same as basic part number, different internal geometry.
	CB	Inner race	Single inner race, dimensionally different from basic part number.
	CD	Outer race	Double outer race with oil holes and groove. One hole counter-bored for locking pin.
	CE	Outer race	Dimensionally different from basic part number. (Non-interchangeable.)
CN		Outer race	Neoprene cushioned outer race.

PREFIX	SUFFIX	INNER RACE OR OUTER RACE	EXPLANATION
	CP	Inner race & outer race	Flash chrome plated. Otherwise, interchangeable with basic part number
	CP	Inner race & outer race	Envelope dimensions same as basic part number, different internal geometry, customized for performance.
	CR	Inner race & outer race	Ribbed outer race bearing series.
	CS	Inner race & outer race	Dimensionally different from basic part number. (Non-interchangeable.)
	CX	Inner race	Dimensionally different from basic part number. (Non-interchangeable.)
	D	Inner race & outer race	Double inner race or Double outer race. (Non-interchangeable with basic part number.)
	DA	Inner race	Double inner race. (Non-interchangeable with inner races having same basic part number.)
	DA	Outer race	Spherical O.D. double outer race. (Non-interchangeable with basic part number or other double outer races having same basic numbers.)
	DB	Outer race	Double outer race with flange. (Non-interchangeable with basic part number or double outer races having same basic numbers.)
	DB	Inner race	Double inner race assembled with brass cages.
	DC	Outer race	Double outer race with hole for locking pin.
	DD	Inner race & outer Race	Special long double inner race or outer race. (Non-interchangeable with basic part number or other double parts having same basic numbers.)
	DE	Inner race & outer race	Double inner race or double outer race having different dimensions or other characteristics from single and double parts identified with same basic part number.
	DF	Outer race	Double outer race with oil holes and groove. Snap ring groove on O.D..
	DG	Inner race	Double inner race with pressure removal groove or helical groove in bore.
	DGA	Inner race	Double inner race with pressure removal groove or helical groove in bore. (Non-interchangeable with basic part number.)
	DGE	Inner race	Double inner race with pressure removal groove or helical groove in bore. (Non-interchangeable with basic part number.)
	DGH	Inner Race	Double inner race with presure removal groove or helical groove in bore and with special cage, rollers, and/or internal geometry.
	DGW	Inner race	Double inner race with pressure removal groove or helical groove in bore, and having face slots.
	DH	Inner race	Double inner race with special cage, rollers, and/or internal geometry.
	DP	Inner race	Double inner race with puller groove.
	DR	Outer race	Double outer race for ribbed outer race series. (Non-interchangeable with single and double outer races identified with same basic part number.)
	DRB	Outer race	Double outer race with snap ring groove.
	DS	Outer race	Crowned O.D. double outer race. (Non-interchangeable with other outer races having same basic part numbers.)
	DT	Outer race	Tapered O.D. double outer race. (Non-interchangeable with other outer races having same basic part numbers.)
	DV	Inner race & outer race	Double inner race or double outer race made of special steel.
	DVH	Inner race	Double inner race, special steel, and/or internal geometry.
	DW	Inner race & outer race	Double inner race or double outer race with keyway or slot. (Non-interchangeable with inner races or outer races identified with same basic part numbers.)
	DWA	Inner race	Double inner race with one end extended and with oil slots in extended end. (Asymmetrical)
	DWH	Inner race	Double inner race with oil slots, assembled with special cage, rollers, and/or internal geometry.
	DWV	Inner race & outer race	Double inner race or double outer race with keyway or slot. (Non-interchangeable with inner races or outer races identified with same basic part numbers.) Made of special steel.
	DX	Outer race	Adaptor for spherical or straight O.D. outer race.
	DX	Outer race	Threaded O.D. double outer race. (Non-interchangeable with outer races identified with same basic part numbers.)
	DXX	Inner race & outer race	Double inner race or double outer race made of special steel.
	E	Inner race & outer race	Inner races or outer races having special characteristics differing from and non-interchangeable with other inner races or outer races identified with the same

PREFIX	SUFFIX	INNER RACE OR OUTER RACE	EXPLANATION
			basic part numbers.
	ED	Outer race	Double outer races. (Non-interchangeable with other outer races identified with same basic part numbers.)
	EDC		Outer race Double outer races, special hole in O.D. for locking pin.
EE		Inner race	Large and small ribs - close guided rollers. (Non-interchangeable with other inner races identified with same basic part numbers.)
EH		Inner race & outer race	Extra heavy series.
EL		Inner race & Outer race	Extra light series.
EX		Inner race & outer race	Experimental.
	EXX	Inner race & outer race	Inner races or outer races having special characteristics differing from and non-interchangable with other inner races or outer races identified with the same basic part numbers. Made of special steel.
	F	Inner race	Assembled with polymer cage.
FL		Inner race & outer race	'Free lateral' series, no large or small ribs.
FX		Inner race & outer race	Factory identification number only.
	G	Inner race	Retainer groove in bore.
H		Inner race & outer race	Heavy series. (Non-interchangeable with other inner races and outer races identified with same basic part numbers.)
	H	Inner race	Assembled with special cage, rollers, and/or internal geometry.
	HV	Inner race	Assembled with special cage, rollers, and/or internal geometry. Made of special steel.
	HH	Inner race & Outer race	Heavy-Heavy series. (Non-interchangeable with other inner races and outer races identified with same basic part numbers.)
HM		Inner race & outer race	Heavy-Medium series. (Non-interchangeable with other inner races outer races identified with same basic part numbers.)
	HP	Inner race	Assembled with special cage and/or roller, different internal geometry. Customized for performance.
	HR	Outer race	Special outer race used in 'Hydra-Rib' bearing.
J		Inner race & outer race	Used alone or with other prefix letters to indicate metric bore and/or O.D..
JC		Inner race & outer race	Metric Series.
JD		Inner race & outer race	Metric Series.
JE		Inner race & outer race	Metric Series.
JF		Inner race & outer race	Metric Series.
JG		Inner race & outer race	Metric Series.
JN		Inner race & outer race	Metric Series.
JP		Inner race & outer race	Metric Series.
JR		Inner race & outer race	Metric Series.
JRM		Inner race & outer race	Metric Series, UNIPAC bearing.
JS		Inner race & outer race	Metric Series.
JT		Inner race & outer race	Metric Series.
JU		Inner race & outer race	Metric Series.
JW		Inner race & outer race	Metric Series.
K		Outer race	Double outer race with heavy section. May have unusual features such as flange, tapered O.D., etc.
K		Inner race & outer race	Through hardened components, Non-DIN 720 Part Numbers
K		Miscellaneous	K prefix with 5 or 6 digits following also used for miscellaneous components (seals, bolts, filler rings, etc.)
	KP	Thrust Bearing	Cadmium plated.
L		Inner race & outer race	Light series. (Non-interchangeable with other inner races and outer races identified with same basic part numbers.)
	L	Inner race	Inner race assembled with Duo-Face seal.
	L	Outer race	Loose rib. (Part of Unit-Bearing.)

PREFIX	SUFFIX	INNER RACE OR OUTER RACE	EXPLANATION
	LA	Inner race	Inner race assembled with Duo-Face-Plus seal.
	LA, LB, LC, etc.	Seal	These suffixes are used on a basic Duo-Face-Plus seal number to identify the assembly resulting from the use of the seal with various inner races in the series.
LL		Inner race & outer race	Light-Light series.
LM		Inner race & outer race	Light-Medium series.
M		Inner race & outer race	Medium series.
	M	Inner race & outer race	Through hardened components, DIN 720 Part Numbers, IsoClass Part Numbers
N		Inner race	Bock or Gilliam type bearings.
NA	NA	Inner race	Two inner races mated with double outer race to form double row non-adjustable bearing. (Non-interchangeable with other inner races having same basic part numbers which may vary in bore, O.D., and width dimensions.)
	NA	Outer race	Etched electric pencil on double outer races mated with two 'NA' type single inner races to form double row non-adjustable bearings.
	NAV	Inner race	'NA' inner race made of special steel.
	NC	Outer race	Cushioned outer race (usually neoprene.)
	NI	Inner race	Tapered or threaded bore.
NP		Inner race & outer race	Used with random numbers for product differentiation.
	NR	Inner race	'NA' type ribless inner race for ribbed outer race series.
	NW	Inner race	'NA' type inner race with slotted front face.
	NWV	Inner race	'NA' type inner race with slotted front face. Made of special steel.
	NX	Inner race	Lapped front face.
	P	Inner race	Puller groove.
	P	Inner race & outer race	Customized for performance.
R		Inner race & outer race	Gilliam replacement series. (Non-interchangeable with other inner races and outer races identified with same basic numbers.)
	R	Inner race & outer race	Special feature bearing. (Non-interchangeable with bearings having the same basic part numbers.)
	R	Inner race & outer race	Bock type bearing.
	R	Inner race	Basic part number with polymer lubricant.
	RB	Outer race	Snap ring on O.D.
RC		Inner race & outer race	Special ribbed outer race bearing.
	RN	Various	Used with random numbers, not to exceed six (6) digits, for purchased items that are distributed by Timken.
	RR	Inner race & outer race	'Relieved race.'
	S	Inner race & outer race	Special feature bearing. (Non-interchangable with bearings having same basic part numbers.)
	SA	Inner race & outer race	Special feature bearing. (Non-interchangable with bearings having same basic part numbers.)
	SB	Inner race	Assembled with brass cage.
	SB	Outer race	Flanged outer race.
	SC	Inner race	With square bore.
	SD	Inner race & outer race	Double inner race with square bore or double outer race.
	SH	Inner race	Special feature bearing, with special cage, rollers, and/or internal geometry. (Non-interchangeable with bearings having same basic part numbers.)
	SL	Thrust bearing	Basic part number with polymer lubricant.
	SR	Inner race	Different radius from basic part numbers.
	SW	Inner race & outer race	Slot or keyway. (Non-interchangeable with bearings having same basic part numbers.)
	SWB	Inner race	Slot or keyway assembled with brass cage. (Non-interchangeable with bearings having same basic part numbers.)
	SWV	Inner race	Slot or keyway made of special steel. (Non-interchangable with bearings having same basic part numbers.)

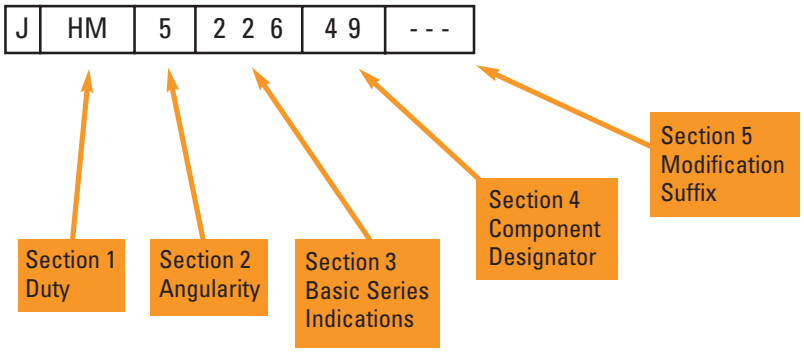
PREFIX	SUFFIX	INNER RACE OR OUTER RACE	EXPLANATION
	SX	Outer race	Special feature bearing. (Non-interchangeable with bearings having same basic part numbers.)
T		Race	Thrust bearing assemblies.
T		Outer race	Double outer race with heavy section. May have unusual feature such as flange, tapered O.D., etc.
	T	Inner race	Tapered bore.
	T	Outer race	Tapered O.D.
	TA	Inner race	Tapered bore 'NA' type inner race.
	TA	Outer race	Tapered O.D.
	TB	Inner race	Tapered bore inner race with brass cage.
TC		Race	Thrust bearing assembly.
	TC	Inner race	Tapered bore.
	TD	Inner race	Double with tapered bore.
	TDB	Inner race	Double with tapered bore, assembled with brass cages.
	TDE	Inner race	Double with tapered bore and extended rib.
	TDG	Inner race	Double with tapered bore, pressure removal groove or spiral groove in bore.
	TDGV	Inner race	Double with tapered bore, pressure removal groove or spiral groove in bore. Made of special steel.
	TDH	Inner race	Double with tapered bore, special cage, rollers or internal geometry.
	TDL	Inner race	Double with tapered bore, interlock feature.
	TDV	Inner race	Double with tapered bore. Made of special steel.
	TDW	Inner race	Double with tapered bore and slots or keys.
	TDXX	Inner race	Double with tapered bore. Made of special steel.
	TE	Inner race	Single, tapered bore, extended large rib.
	TEV	Inner race	Single, tapered bore, extended large rib. Made of special steel.
	TL	Inner race	Tapered bore with interlock feature.
	TLE	Inner race	Tapered bore with interlock feature and extended rib.
	TP	Inner race	Tapered bore inner race with puller groove.
	TPE	Inner race	Tapered bore inner race with puller groove, extended inner race large rib.
	TV	Inner race & outer race	Tapered bore inner race or outer race O.D. Made of special steel.
	TW	Inner race & outer race	Tapered bore inner race or outer race O.D. with slots or keys.
	TWE	Inner race & outer race	Tapered bore inner race or outer race O.D. with locking keyway in front face, extended inner race large rib or outer race width.
	TXX	Inner race	Tapered bore. Made of special steel.
U		Inner race & outer race	Basic series part number, unitized, self-contained.
	U	Inner race & outer race	Basic series part number, unitized, self-contained.
	US	Inner race & outer race	Special close stand.
V		Inner race & outer race	Special close stand.
	V	Inner race & outer race	Made of special steel.
	VC	Inner race	Special internal geometry. Made of special steel.
	VH	Inner race	Special cage, rollers, and/or internal geometry. Made of special steel.
	W	Inner race & outer race	Slot(s) or keyway(s).
	W	Thrust Bearing	Oil holes in retainer.
	WA	Inner race & outer race	Slot(s) or keyway(s).
	WB	Inner race	Slot(s) or keyway(s) with brass cage.
	WC	Inner race & outer race	Slot(s) or keyway(s).
	WD	Inner race & outer race	Double inner race or outer race with slot(s) or keyway(s).
	WE	Inner race & outer race	Extended face with slot(s) or keyway(s).
	WS	Inner race & outer race	Slot(s) or keyway(s).
WV		Inner race & Outer race	Slot(s) or keyway(s). Made of special steel.

PREFIX	SUFFIX	INNER RACE OR OUTER RACE	EXPLANATION
	WXX	Inner race & Outer race	Slot(s) or keyway(s). Made of special steel.
X		Inner race	ISO part number.
	X	Inner race	Slot(s) or keyway(s).
	X	Inner race & Outer race	Special feature bearing. (Non-interchangable with bearings having the same basic part number.)
	X	Inner race & Outer race	ISO bearing with same boundary dimensions as basic part number but with different internal geometry, yielding increased rating.
	XA	Inner race & Outer race	Special feature bearing. (Non-interchangeable with bearings having the same basic part number.)
XAA		Inner race	ISO single inner race. (Non-interchangeable with bearings having the same basic part number.)
XAB		Inner race	ISO single inner race. (Non-interchangeable with bearings having the same basic part number.)
	XB	Inner race	Different bore, width, or radius, from basic part number. Assembled with brass cage.
	XB	Outer race	Special feature flanged outer race. (Non-interchangeable with bearings having the same basic part number.)
XC		Inner race & Outer race	Limited production bearings to which standard series part numbers have not been assigned.
	XD	Outer race	Double outer race, no oil holes or groove.
	XD	Inner race	Double inner race, different bore or width from basic part numbers.
	XD	Inner race	Double inner race, oil holes in large rib.
	XDXP	Outer race	Double outer race, no oil holes or groove, special material and process.
	XE	Outer race	Different bore, width, or radius from basic part number.
XGA		Inner race	ISO single inner race. (Non-interchangeable with bearings having the same basic part number.)
XGB		Inner race	ISO single inner race. (Non-interchangeable with bearings having the same basic part number.)
	XP	Inner race	Special steel and process.
XR		Inner race & Outer race	Crossed roller bearings.
	XS	Inner race & Outer race	Different bore, O.D., width, or radius from basic part number.
	XV	Inner race & Outer race	Special feature inner race or outer race made of special steel.
	XW	Inner race	Slotted.
	XX	Inner race & Outer race	Single inner race or single outer race. Made of special steel.
Y		Outer race	ISO part number.
	YD	Outer race	Double outer race with oil holes, no groove.
	YDA	Outer race	Double outer race with oil holes, no groove. (Non-interchangeable with bearings having the same basic part number.)
	YDV	Outer race	Double outer race with oil holes, no groove. made of special steel.
	YDW	Inner race	Double outer race with oil holes, no groove. Slot(s) or keyway(s) in face(s).
YKA		Outer race	ISO single outer race. (Non-interchangeable with bearings having the same basic part number.)
YKB		Outer race	ISO single outer race. (Non-interchangeable with bearings having the same basic part number.)
YSA		Outer race	ISO single outer race. (Non-interchangeable with bearings having the same basic part number.)
	Z	Inner race & Outer race	Close stand part.

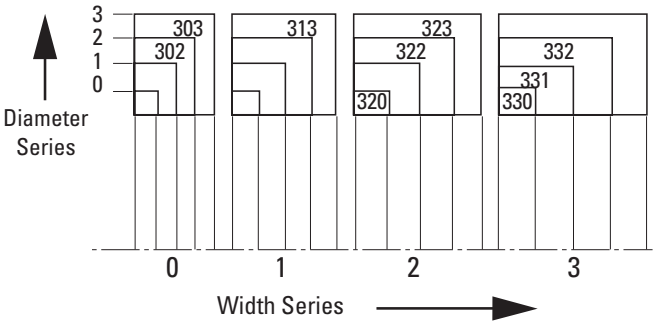
METRIC PART NUMBERING SYSTEMS

J-LINE PART NUMBERS

The "J" prefix letter is used in conjunction with the ABMA part numbering system to identify metric dimensioned and toleranced inner race and outer races. The bearing series designation does not contain the prefix letter "J". J-Line bearings are referred to as inch bearings in metric bore, O.D. and width.



ISO PART NUMBERING SYSTEM



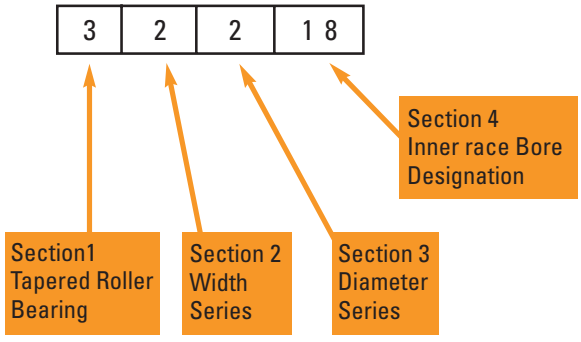
The original metric part numbering system for tapered roller bearings was based on the ISO 15 dimensional plan for radialbearings. A 5-digit part number commencing with numeral 3 describes the bearing assembly (inner race and outer races).

Section 1 - Symbol for bearing type
3 always applies to tapered roller bearings.

Section 2 - Width series
The bearing width is classified from 0 to 3 in increasing order of width.

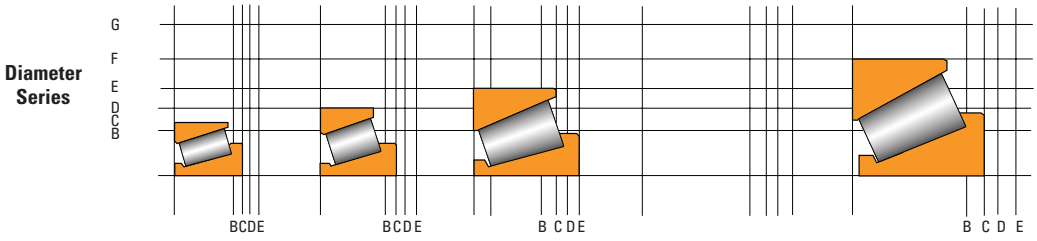
Section 3 - Diameter series
The bearing section height is classified from 0 through 3 in increasing order of O.D. for a given bore size.

Section 4 - Inner race bore designation
The 2 last digits relate to the inner race bore diameter that can be calculated by multiplying the number indicated by 5, if the bore diameter is between 20 and 500 mm. For example, bearing 32218 has a 90 mm bore. If the bore diameter is less than 20 mm, the last two digits can interpreted as follows: 00=10 mm, 01=12 mm, 02=15 mm and 03=17 mm. If the bore diameter is greater than 500 mm, then the last 3 digits (preceded by a slash) correspond to the bore size.



NEW ISO 355 PART NUMBERING SYSTEM

Finding that tapered roller bearings did not conform to the ISO 15 general plan, because dimensions given were not found to be optimal, the ISO introduced a new numbering system for tapered roller bearings in ISO 355. This system uses 3 alpha-numeric fields to define the bearing series. The bearing part number is then defined by adding the inner race diameter in mm after the bearing series. Although all original metric part numbers were assigned a new designation in the ISO 355 plan, the original part number is still used.



T	4	C	B	100

Symbol for tapered roller bearings (optional)

Angle Series Designation	a	
	over	incl.
1	Reserved for future use	
2	10°	13° 52′
3	13° 52′	15° 59′
4	15° 59′	18° 55′
5	18° 55′	23°
6	23°	27°
7	27°	30°

Diameter Series Designation	$\frac{D}{d^{0.77}}$	
	over	incl.
A	Reserved for future use	
B	3.40	3.80
C	3.80	4.40
D	4.40	4.70
E	4.70	5.00
F	5.00	5.60
G	5.60	7.00

Width Series Designation	$\frac{T}{(D-d)^{0.95}}$	
	over	incl.
A	Reserved for future use	
B	0.50	0.68
C	0.68	0.80
D	0.80	0.88
E	0.88	1.00

Bearing bore diameter (mm)

"NEW" METRIC BEARINGS

A new range of metric bearings were also included in the ISO 355 plan. These new bearings are specifically applicationoriented and are designed for optimum performance.

To easily identify these part numbers against the application type, The Timken Company introduced an alpha-numeric part number designation. The part number construction is similar to that of J-Line part numbers and separate numbers are assigned to both inner race and outer races.

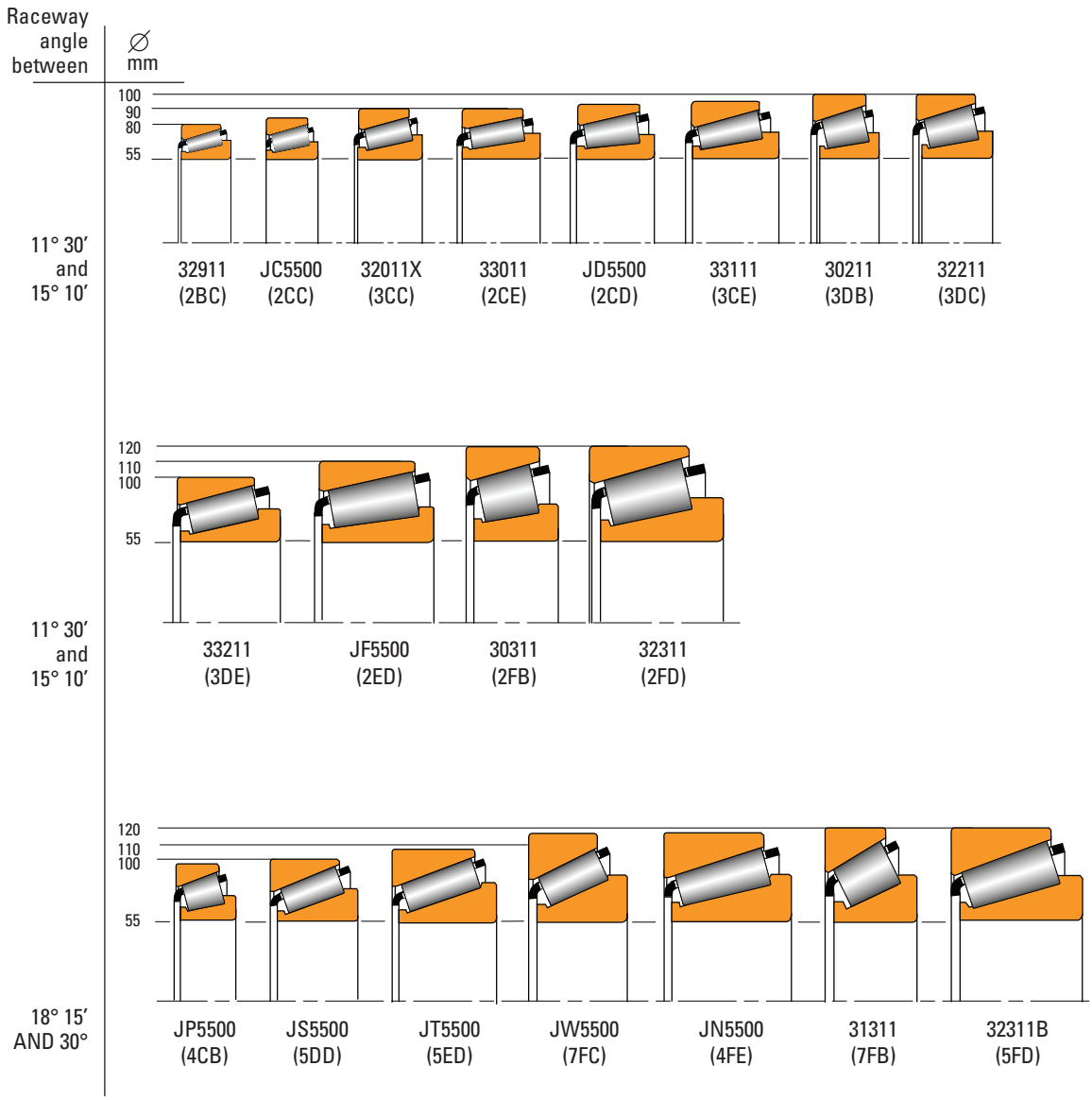
J-prefix

All of the new metric bearings are identified with a J-prefix that indicates a new metric dimensioned and toleranced bearing.

Section 1 - Duty

Indicates application type:
C, D & F = general purpose
N = combination of general purpose and pinion
P = high speed
S and T = pinions
W = high axial loads

COMPARISON TABLE: INCREASE IN SECTION FOR A 55 MM BORE BEARING



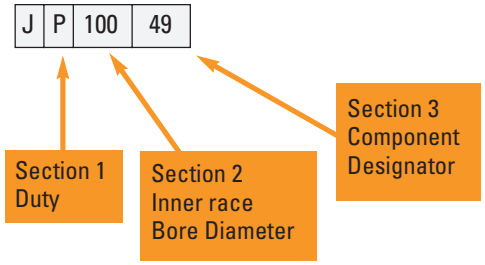
Section 2 - Inner race Bore

The inner race bore metric diameter is included in the part number designation of both the inner race and outer races.

Section 3 - Component Designator

Same identification as in the ABMA part numbering system.

For further explanation of prefix and suffix symbols, or proprietary part numbers of special bearings, consult your Timken sales representative.



OPTIMUM BEARING SELECTION: ISO 355

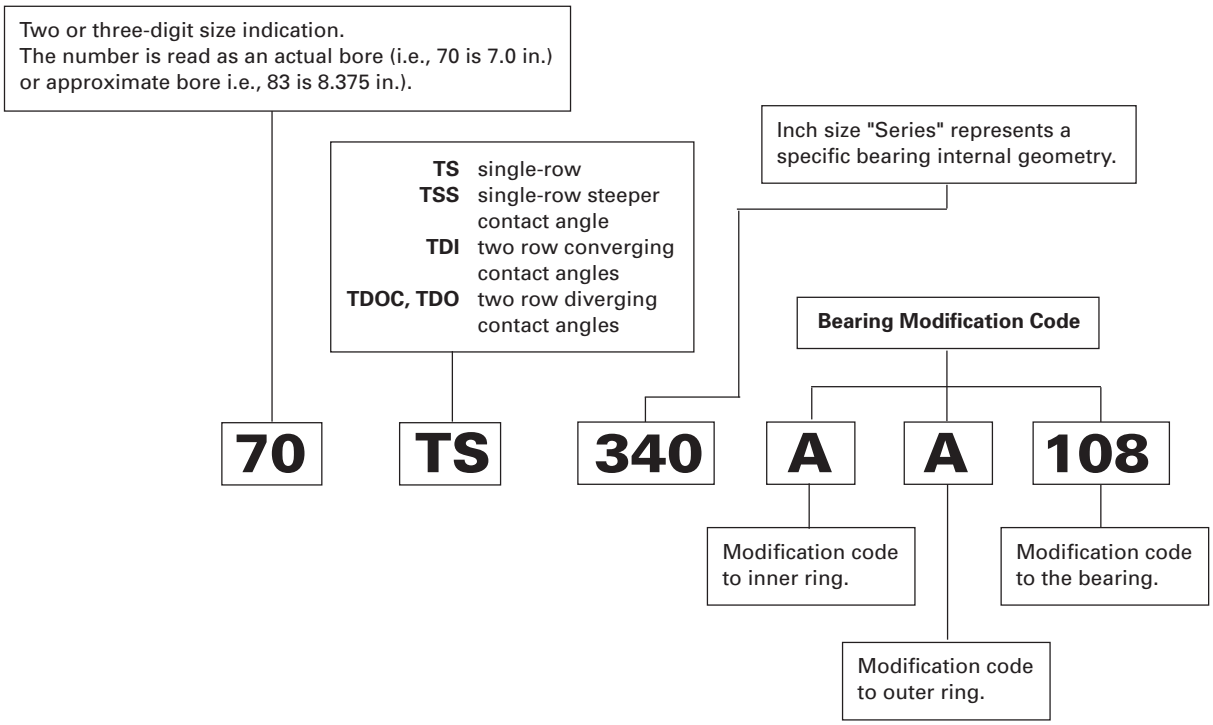
ISO 355 offers many application-specific bearing selection options for a given bore. Depending on application and type of load, thrust and/or radial, the bearing with the optimum angle and section can be selected. For example, pinion bearings have a steep angle, whereas bearings for machine tools are generally designed with a shallow angle and a light-section. The previous table demonstrates this feature for 55 mm bore bearings.

BEARING ASSEMBLY NUMBERS

Multiple-row bearings and matched bearing assemblies are assigned a 5-digit alpha-numeric code, in combination with the inner race part number to describe the individual component parts, inspection level and the adjustment value of pre-set assemblies: e.g., LM48548-9K2A7.

An assembly number is assigned on receipt of the first order for new applications. It is very important for correct function of the bearing in a given application that the same assembly number is quoted for all subsequent orders.The Timken Company should be consulted if additional information is required on the assembly number.

Radial Tapered Roller Bearings - Torrington



TS

TAPERED ROLLER BEARINGS

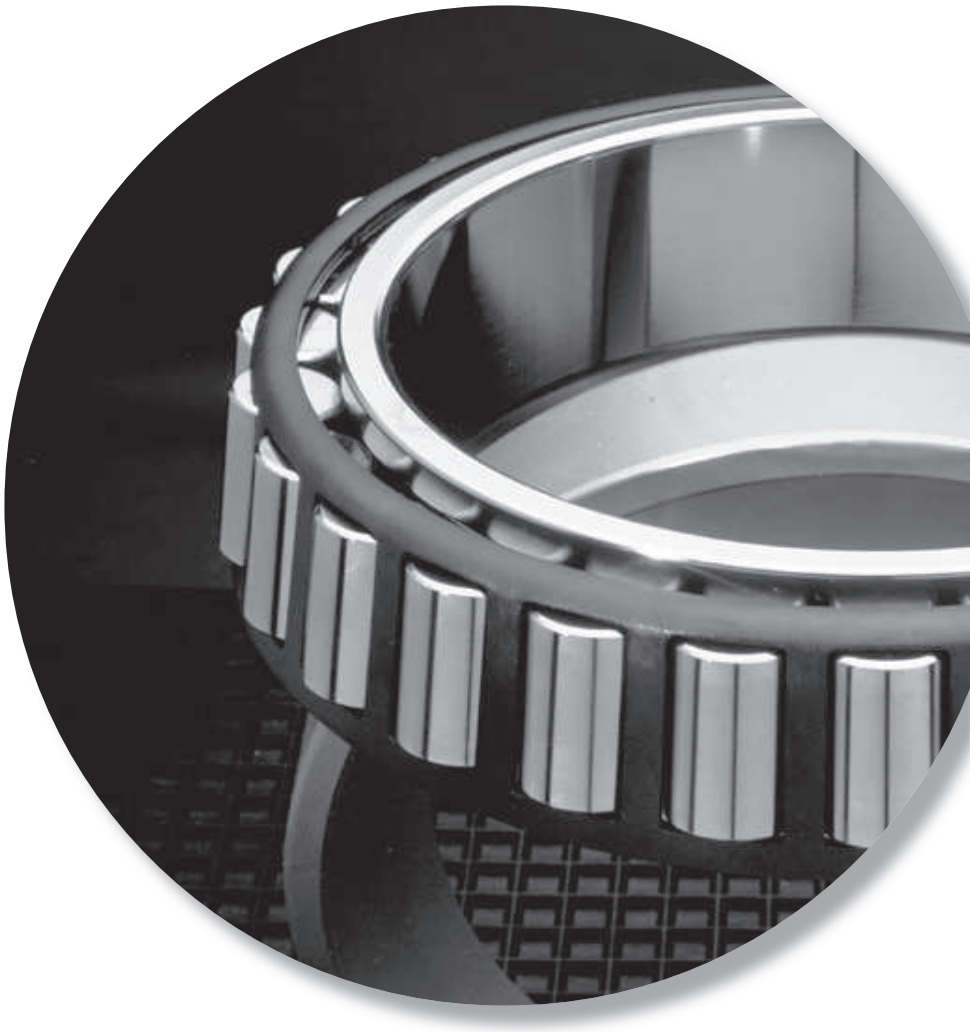
- TS style is the most widely used tapered roller bearing.
- Part numbers give specifiers the widest possible choice from the comprehensive range of metric (ISO and 'J' prefix) and inch-sizes available from The Timken Company.
- Consult your Timken representative before making a final bearing selection to ensure suitability, availability and the most cost-effective application.
- To place an order or obtain a quotation, specify the inner and outer part numbers.

  Example: inner race outer race

  JH211749 - JH211710
- In most ISO bearings, only one bearing number is specified for both races:

  Example: **32310**

  Conforms to the ISO 355 standard.



BEARING DATA TABLES

In the following bearing data tables, part numbers are listed in ascending order of bore, outside diameter and width.

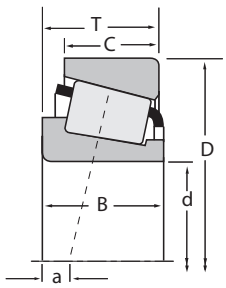
Bearing ratings shown in tables are based on environmental reference conditions. Effects of known operating conditions on bearing performance in an application should be investigated before final bearing selection is made.

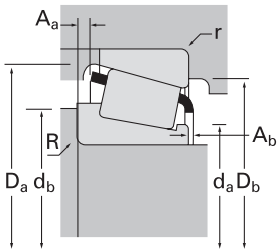
Approximate mass is listed for every part number. For weight-critical applications or exact freight cost evaluation purposes, a more accurate value should be obtained from your Timken representative.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
7.938 0.3125	31.991 1.2595	10.008 0.3940	10600 2380	0.41	1.48	2750 618	1910 429	1.44	9230 2070	A2031	A2126
9.525 0.3750	31.991 1.2595	10.008 0.3940	10600 2380	0.41	1.48	2750 618	1910 429	1.44	9230 2070	A2037	A2126
11.112 0.4375	34.988 1.3775	10.998 0.4330	12200 2740	0.45	1.32	3160 710	2450 550	1.29	11500 2580	A4044	A4138
11.987 0.4719	31.991 1.2595	10.008 0.3940	10600 2380	0.41	1.48	2750 618	1910 429	1.44	9230 2070	A2047	A2126
12.680 0.4992	34.988 1.3775	10.998 0.4330	12200 2740	0.45	1.32	3160 710	2450 550	1.29	11500 2580	A4049	A4138
12.700 0.5000	34.988 1.3775	10.998 0.4330	12200 2740	0.45	1.32	3160 710	2450 550	1.29	11500 2580	A4050	A4138
12.700 0.5000	38.100 1.5000	13.495 0.5313	19300 4340	0.28	2.18	5010 1130	2360 531	2.12	17100 3840	00050	00150
14.987 0.5901	34.988 1.3775	10.998 0.4330	12200 2740	0.45	1.32	3160 710	2450 550	1.29	11500 2580	A4059	A4138
15.875 0.6250	34.988 1.3775	10.998 0.4330	14100 3160	0.32	1.88	3650 820	1990 447	1.83	13900 3130	L21549	L21511
15.875 0.6250	39.992 1.5745	12.014 0.4730	12400 2790	0.53	1.14	3220 724	2900 653	1.11	12300 2770	A6062	A6157
15.875 0.6250	41.275 1.6250	14.288 0.5625	22200 5000	0.31	1.93	5770 1300	3070 690	1.88	21300 4780	03062	03162
15.875 0.6250	42.862 1.6875	14.288 0.5625	17400 3910	0.70	0.85	4510 1010	5430 1220	0.83	17400 3920	11590	11520
15.875 0.6250	42.862 1.6875	16.670 0.6563	29100 6540	0.33	1.81	7550 1700	4280 962	1.76	29200 6560	17580	17520
15.875 0.6250	47.000 1.8504	14.381 0.5662	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05062	05185
15.875 0.6250	49.225 1.9380	19.845 0.7813	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09062	09195
15.875 0.6250	49.225 1.9380	23.020 0.9063	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09062	09194
15.875 0.6250	53.975 2.1250	22.225 0.8750	43000 9670	0.59	1.02	11200 2510	11300 2540	0.99	42500 9560	21063	21212
15.987 0.6294	46.975 1.8494	21.000 0.8268	37100 8350	0.55	1.10	9630 2170	9000 2020	1.07	39300 8840	HM81649	HM81610
16.993 0.6690	39.982 1.5741	12.014 0.4730	12400 2790	0.53	1.14	3220 724	2900 653	1.11	12300 2770	A6067	A6157A
16.993 0.6690	39.992 1.5745	12.014 0.4730	12400 2790	0.53	1.14	3220 724	2900 653	1.11	12300 2770	A6067	A6157
16.993 0.6690	47.000 1.8504	14.381 0.5662	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05066	05185
17.455 0.6872	36.525 1.4380	11.112 0.4375	12100 2720	0.49	1.23	3130 704	2610 587	1.20	11600 2600	A5069	A5144
17.462 0.6875	39.878 1.5700	13.843 0.5450	22900 5160	0.29	2.10	5950 1340	2910 655	2.04	23400 5260	LM11749	LM11710
17.462 0.6875	44.450 1.7500	12.700 0.5000	19900 4460	0.48	1.25	5150 1160	4220 950	1.22	20600 4640	4C	6
17.462 0.6875	44.450 1.7500	15.494 0.6100	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05068	05175
17.987 0.7082	47.000 1.8504	14.381 0.5662	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05070XS	05185-S
18.000 0.7087	47.000 1.8504	14.381 0.5662	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05070X	05185-S
19.004 0.7482	56.896 2.2400	19.368 0.7625	42000 9450	0.31	1.95	10900 2450	5740 1290	1.90	45300 10200	1774	1729

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
10.785 0.4246	7.938 0.3125	-3.0 -0.12	0.5 0.02	12.5 0.49	13.0 0.51	1.3 0.05	29.0 1.14	26.0 1.02	-0.20 -0.01	1.40 0.06	1.7	3.17	0.0308	0.05 0.10
10.785 0.4246	7.938 0.3125	-3.0 -0.12	1.3 0.05	13.5 0.53	15.0 0.59	1.3 0.05	29.0 1.14	26.0 1.02	-0.20 -0.01	1.40 0.06	1.7	3.17	0.0308	0.04 0.10
10.988 0.4326	8.730 0.3437	-2.5 -0.10	1.3 0.05	15.5 0.61	17.5 0.69	1.3 0.05	32.0 1.26	29.0 1.14	0.10 0.00	1.10 0.04	2.3	4.12	0.0355	0.06 0.13
10.785 0.4246	7.938 0.3125	-3.0 -0.12	0.8 0.03	15.5 0.61	16.5 0.65	1.3 0.05	29.0 1.14	26.0 1.02	-0.20 -0.01	1.40 0.06	1.7	3.17	0.0308	0.04 0.09
10.988 0.4326	8.730 0.3437	-2.5 -0.10	0.8 0.03	17.5 0.69	17.5 0.69	1.3 0.05	32.0 1.26	29.0 1.14	0.10 0.00	1.10 0.04	2.3	4.12	0.0355	0.05 0.12
10.988 0.4326	8.730 0.3437	-2.5 -0.10	1.3 0.05	17.0 0.67	18.5 0.73	1.3 0.05	32.0 1.26	29.0 1.14	0.10 0.00	1.10 0.04	2.3	4.12	0.0355	0.05 0.12
14.072 0.5540	11.112 0.4375	-5.1 -0.20	1.5 0.06	16.5 0.65	19.0 0.75	0.8 0.03	34.0 1.34	33.0 1.30	-0.40 -0.02	1.30 0.05	3.1	2.92	0.0330	0.08 0.18
10.988 0.4326	8.730 0.3437	-2.5 -0.10	0.8 0.03	19.0 0.75	19.5 0.77	1.3 0.05	32.0 1.26	29.0 1.14	0.10 0.00	1.10 0.04	2.3	4.12	0.0355	0.05 0.11
10.998 0.4330	8.712 0.3430	-3.3 -0.13	1.3 0.05	19.5 0.77	21.5 0.85	1.3 0.05	32.5 1.28	29.0 1.14	-0.30 -0.01	1.30 0.05	3	5.36	0.0348	0.05 0.11
11.153 0.4391	9.525 0.3750	-1.5 -0.06	1.3 0.05	20.5 0.81	22.0 0.87	1.3 0.05	37.0 1.46	34.0 1.34	0.50 0.02	1.60 0.06	2.9	5.64	0.0404	0.07 0.16
14.681 0.5780	11.112 0.4375	-5.1 -0.20	1.3 0.05	20.0 0.79	21.5 0.85	2.0 0.08	37.5 1.48	34.0 1.34	0.40 0.02	1.30 0.05	4.2	4.01	0.0384	0.09 0.21
14.288 0.5625	9.525 0.3750	-1.3 -0.05	1.5 0.06	22.5 0.89	24.5 0.96	1.5 0.06	39.5 1.56	34.5 1.36	1.50 0.06	0.60 0.02	3.4	4.63	0.0465	0.10 0.22
16.670 0.6563	13.495 0.5313	-5.8 -0.23	1.5 0.06	21.0 0.83	23.0 0.91	1.5 0.06	39.0 1.54	36.5 1.44	0.40 0.02	1.90 0.08	5.3	4.53	0.0423	0.12 0.27
14.381 0.5662	11.112 0.4375	-4.1 -0.16	1.5 0.06	21.0 0.83	23.5 0.93	1.3 0.05	42.5 1.67	40.5 1.59	0.20 0.01	1.20 0.05	5.8	5.55	0.0448	0.13 0.29
21.539 0.8480	14.288 0.5625	-9.1 -0.36	0.8 0.03	21.5 0.85	22.0 0.87	1.3 0.05	44.5 1.75	42.0 1.65	2.30 0.09	0.60 0.02	8	4.05	0.0452	0.20 0.44
21.539 0.8480	17.462 0.6875	-9.1 -0.36	0.8 0.03	21.5 0.85	22.0 0.87	3.5 0.14	44.5 1.75	39.0 1.54	2.30 0.09	0.60 0.02	8	4.05	0.0452	0.21 0.47
21.839 0.8598	15.875 0.6250	-5.8 -0.23	0.8 0.03	26.0 1.03	29.0 1.14	2.3 0.09	50.0 1.97	43.0 1.69	* *	* *	7	4.14	0.0558	0.26 0.57
21.000 0.8268	16.000 0.6299	-6.1 -0.24	1.0 0.04	23.0 0.90	27.5 1.08	2.0 0.08	43.0 1.69	37.5 1.48	1.40 0.06	1.30 0.05	6.1	4.57	0.0526	0.19 0.42
11.153 0.4391	9.525 0.3750	-1.5 -0.06	0.8 0.03	21.0 0.83	22.0 0.87	1.3 0.05	36.5 1.44	34.0 1.34	0.50 0.02	1.60 0.06	2.9	5.64	0.0404	0.07 0.16
11.153 0.4391	9.525 0.3750	-1.5 -0.06	0.8 0.03	21.0 0.83	22.0 0.87	1.3 0.05	37.0 1.46	34.0 1.34	0.50 0.02	1.60 0.06	2.9	5.64	0.0404	0.07 0.16
14.381 0.5662	11.112 0.4375	-4.1 -0.16	1.5 0.06	22.0 0.87	24.5 0.96	1.3 0.05	42.5 1.67	40.5 1.59	0.20 0.01	1.20 0.05	5.8	5.55	0.0448	0.13 0.28
11.112 0.4375	7.938 0.3125	-2.0 -0.08	1.5 0.06	21.5 0.84	23.5 0.93	1.5 0.06	33.5 1.32	30.0 1.18	0.00 0.00	1.30 0.05	2.5	4.61	0.0376	0.05 0.11
14.605 0.5750	10.668 0.4200	-5.1 -0.20	1.3 0.05	22.0 0.87	23.5 0.93	1.3 0.05	37.0 1.46	34.0 1.34	0.40 0.02	0.70 0.03	4.8	4.74	0.0392	0.08 0.18
11.908 0.4688	9.525 0.3750	-1.8 -0.07	1.5 0.06	22.0 0.87	24.5 0.96	1.5 0.06	41.0 1.61	38.0 1.50	0.80 0.03	1.60 0.06	4.6	2.61	0.0456	0.10 0.21
14.381 0.5662	11.430 0.4500	-4.1 -0.16	0.8 0.03	22.5 0.89	23.0 0.91	1.5 0.06	42.0 1.65	38.0 1.50	0.20 0.01	1.20 0.05	5.8	5.55	0.0448	0.12 0.25
14.381 0.5662	11.112 0.4375	-4.1 -0.16	2.0 0.08	22.5 0.89	26.0 1.02	1.5 0.06	42.5 1.67	40.5 1.59	0.20 0.01	1.20 0.05	5.8	5.55	0.0448	0.12 0.27
14.381 0.5662	11.112 0.4375	-4.1 -0.16	1.5 0.06	22.5 0.89	25.0 0.98	1.5 0.06	42.5 1.67	40.5 1.59	0.20 0.01	1.20 0.05	5.8	5.55	0.0448	0.13 0.28
19.837 0.7810	15.875 0.6250	-6.9 -0.27	1.5 0.06	25.0 0.98	27.0 1.06	1.3 0.05	51.0 2.01	49.0 1.93	* *	* *	10.6	5.39	0.0521	0.27 0.59

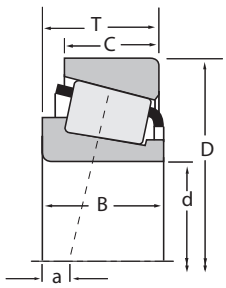
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

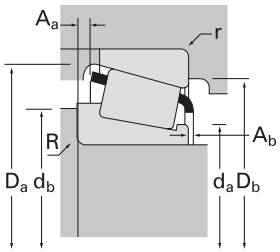
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
19.004 0.7482	56.896 2.2400	19.368 0.7625	42000 9450	0.31	1.95	10900 2450	5740 1290	1.90	45300 10200	1774	1729X
19.050 0.7500	39.992 1.5745	12.014 0.4730	12400 2790	0.53	1.14	3220 724	2900 653	1.11	12300 2770	A6075	A6157
19.050 0.7500	41.275 1.6250	11.905 0.4687	12400 2790	0.53	1.14	3220 724	2900 653	1.11	12300 2770	A6075	A6162
19.050 0.7500	44.450 1.7500	12.700 0.5000	19900 4460	0.48	1.25	5150 1160	4220 950	1.22	20600 4640	4A	6
19.050 0.7500	45.237 1.7810	15.494 0.6100	30600 6870	0.30	2.00	7930 1780	4080 917	1.94	32000 7200	LM11949	LM11910
19.050 0.7500	47.000 1.8504	14.381 0.5662	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05075	05185
19.050 0.7500	47.000 1.8504	14.381 0.5662	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05075X	05185-S
19.050 0.7500	49.225 1.9380	18.034 0.7100	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09067	09195
19.050 0.7500	49.225 1.9380	19.845 0.7813	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09074	09195
19.050 0.7500	49.225 1.9380	19.845 0.7813	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09078	09195
19.050 0.7500	49.225 1.9380	21.209 0.8350	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09067	09194
19.050 0.7500	49.225 1.9380	21.209 0.8350	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09067	09196
19.050 0.7500	49.225 1.9380	23.020 0.9063	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09074	09194
19.050 0.7500	49.225 1.9380	23.020 0.9063	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09074	09196
19.050 0.7500	49.225 1.9380	23.020 0.9063	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09078	09194
19.050 0.7500	49.225 1.9380	23.020 0.9063	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09078	09196
19.050 0.7500	50.800 2.0000	20.638 0.8125	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09074	09201
19.050 0.7500	52.800 2.0787	18.034 0.7100	30600 6870	0.30	2.00	7930 1780	4080 917	1.94	32000 7200	LM11949	LM11919
19.050 0.7500	52.883 2.0820	18.430 0.7256	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09067	09194-S
19.050 0.7500	52.883 2.0820	20.241 0.7969	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09074	09194-S
19.050 0.7500	53.975 2.1250	22.225 0.8750	43000 9670	0.59	1.02	11200 2510	11300 2540	0.99	42500 9560	21075	21212
19.050 0.7500	53.975 2.1250	22.225 0.8750	43000 9670	0.59	1.02	11200 2510	11300 2540	0.99	42500 9560	21075	21213
19.050 0.7500	53.975 2.1250	22.225 0.8750	43000 9670	0.59	1.02	11200 2510	11300 2540	0.99	42500 9560	21075A	21212
19.050 0.7500	56.896 2.2400	19.368 0.7625	42000 9450	0.31	1.95	10900 2450	5740 1290	1.90	45300 10200	1775	1729
19.987 0.7869	46.982 1.8497	14.381 0.5662	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05079	05185A
19.987 0.7869	46.990 1.8500	15.250 0.6004	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05079	05186
19.987 0.7869	47.000 1.8504	14.381 0.5662	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05079	05185
19.987 0.7869	47.000 1.8504	14.381 0.5662	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05079	05185-S

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
19.837 0.7810	15.875 0.6250	-6.9 -0.27	1.5 0.06	25.0 0.98	27.0 1.06	1.5 0.06	51.0 2.01	49.0 1.93	* *	* *	10.6	5.39	0.0521	0.27 0.59
11.153 0.4391	9.525 0.3750	-1.5 -0.06	1.0 0.04	23.0 0.91	24.0 0.94	1.3 0.05	37.0 1.46	34.0 1.34	0.50 0.02	1.60 0.06	2.9	5.64	0.0404	0.07 0.14
11.153 0.4391	8.730 0.3437	-1.5 -0.06	1.0 0.04	23.0 0.91	24.0 0.94	1.3 0.05	37.0 1.46	34.5 1.36	0.50 0.02	1.60 0.06	2.9	5.64	0.0404	0.07 0.15
11.908 0.4688	9.525 0.3750	-1.8 -0.07	1.5 0.06	23.5 0.93	25.5 1.00	1.5 0.06	41.0 1.61	38.0 1.50	0.80 0.03	1.60 0.06	4.6	2.61	0.0456	0.09 0.20
16.637 0.6550	12.065 0.4750	-5.6 -0.22	1.3 0.05	23.5 0.93	25.0 0.98	1.3 0.05	41.5 1.63	39.5 1.56	0.20 0.01	0.70 0.03	6.6	5.49	0.0441	0.13 0.28
14.381 0.5662	11.112 0.4375	-4.1 -0.16	1.3 0.05	23.5 0.93	25.0 0.98	1.3 0.05	42.5 1.67	40.5 1.59	0.20 0.01	1.20 0.05	5.8	5.55	0.0448	0.12 0.27
14.381 0.5662	11.112 0.4375	-4.1 -0.16	1.5 0.06	23.5 0.93	25.5 1.00	1.5 0.06	42.5 1.67	40.5 1.59	0.20 0.01	1.20 0.05	5.8	5.55	0.0448	0.12 0.27
19.050 0.7500	14.288 0.5625	-7.4 -0.29	1.3 0.05	24.0 0.94	25.5 1.00	1.3 0.05	44.5 1.75	42.0 1.65	0.50 0.02	1.30 0.05	8	4.05	0.0452	0.17 0.39
21.539 0.8480	14.288 0.5625	-9.1 -0.36	1.5 0.06	24.0 0.94	26.0 1.02	1.3 0.05	44.5 1.75	42.0 1.65	2.30 0.09	0.60 0.02	8	4.05	0.0452	0.18 0.40
21.539 0.8480	14.288 0.5625	-9.1 -0.36	1.3 0.05	24.0 0.94	25.5 1.00	1.3 0.05	44.5 1.75	42.0 1.65	2.30 0.09	0.60 0.02	8	4.05	0.0452	0.18 0.41
19.050 0.7500	17.462 0.6875	-7.4 -0.29	1.3 0.05	24.0 0.94	25.5 1.00	3.5 0.14	44.5 1.75	39.0 1.54	0.50 0.02	1.30 0.05	8	4.05	0.0452	0.19 0.42
19.050 0.7500	17.462 0.6875	-7.4 -0.29	1.3 0.05	24.0 0.94	25.5 1.00	1.5 0.06	44.5 1.75	41.5 1.63	0.50 0.02	1.30 0.05	8	4.05	0.0452	0.19 0.43
21.539 0.8480	17.462 0.6875	-9.1 -0.36	1.5 0.06	24.0 0.94	26.0 1.02	3.5 0.14	44.5 1.75	39.0 1.54	2.30 0.09	0.60 0.02	8	4.05	0.0452	0.20 0.43
21.539 0.8480	17.462 0.6875	-9.1 -0.36	1.5 0.06	24.0 0.94	26.0 1.02	1.5 0.06	44.5 1.75	41.5 1.63	2.30 0.09	0.60 0.02	8	4.05	0.0452	0.20 0.45
21.539 0.8480	17.462 0.6875	-9.1 -0.36	1.3 0.05	24.0 0.94	25.5 1.00	3.5 0.14	44.5 1.75	39.0 1.54	2.30 0.09	0.60 0.02	8	4.05	0.0452	0.20 0.44
21.539 0.8480	17.462 0.6875	-9.1 -0.36	1.3 0.05	24.0 0.94	25.5 1.00	1.5 0.06	44.5 1.75	41.5 1.63	2.30 0.09	0.60 0.02	8	4.05	0.0452	0.20 0.45
21.539 0.8480	17.462 0.6875	-9.1 -0.36	1.5 0.06	24.0 0.94	26.0 1.02	0.5 0.02	45.5 1.79	44.0 1.73	2.30 0.09	0.60 0.02	8	4.05	0.0452	0.21 0.47
16.637 0.6550	14.605 0.5750	-5.6 -0.22	1.3 0.05	23.5 0.93	25.0 0.98	1.3 0.05	45.5 1.79	42.0 1.65	0.20 0.01	0.70 0.03	6.6	5.49	0.0441	0.20 0.44
19.050 0.7500	14.684 0.5781	-7.4 -0.29	1.3 0.05	24.0 0.94	25.5 1.00	3.3 0.13	46.5 1.83	42.0 1.65	0.50 0.02	1.30 0.05	8	4.05	0.0452	0.21 0.45
21.539 0.8480	14.684 0.5781	-9.1 -0.36	1.5 0.06	24.0 0.94	26.0 1.02	3.3 0.13	46.5 1.83	42.0 1.65	2.30 0.09	0.60 0.02	8	4.05	0.0452	0.21 0.47
21.839 0.8598	15.875 0.6250	-5.8 -0.23	1.5 0.06	26.0 1.03	31.5 1.24	2.3 0.09	50.0 1.97	43.0 1.69	3.30 0.13	1.80 0.07	7	3.55	0.0558	0.25 0.54
21.839 0.8598	15.875 0.6250	-5.8 -0.23	1.5 0.06	26.0 1.03	31.5 1.24	0.5 0.02	50.0 1.97	44.5 1.75	3.30 0.13	1.80 0.07	7	3.55	0.0558	0.25 0.55
21.839 0.8598	15.875 0.6250	-5.8 -0.23	1.5 0.06	26.0 1.03	31.5 1.24	2.3 0.09	50.0 1.97	43.0 1.69	3.30 0.13	1.80 0.07	7	3.55	0.0558	0.25 0.54
19.837 0.7810	15.875 0.6250	-6.9 -0.27	1.5 0.06	25.0 0.98	27.0 1.06	1.3 0.05	51.0 2.01	49.0 1.93	1.90 0.07	0.30 0.01	10.6	5.39	0.0521	0.27 0.59
14.381 0.5662	11.112 0.4375	-4.1 -0.16	1.5 0.06	24.0 0.94	26.5 1.04	1.5 0.06	42.5 1.67	40.5 1.59	0.20 0.01	1.20 0.05	5.8	5.55	0.0448	0.12 0.26
14.381 0.5662	12.000 0.4724	-4.1 -0.16	1.5 0.06	24.0 0.94	26.5 1.04	1.5 0.06	42.5 1.67	40.5 1.59	0.20 0.01	1.20 0.05	5.8	5.55	0.0448	0.12 0.27
14.381 0.5662	11.112 0.4375	-4.1 -0.16	1.5 0.06	24.0 0.94	26.5 1.04	1.3 0.05	42.5 1.67	40.5 1.59	0.20 0.01	1.20 0.05	5.8	5.55	0.0448	0.12 0.26
14.381 0.5662	11.112 0.4375	-4.1 -0.16	1.5 0.06	24.0 0.94	26.5 1.04	1.5 0.06	42.5 1.67	40.5 1.59	0.20 0.01	1.20 0.05	5.8	5.55	0.0448	0.12 0.26

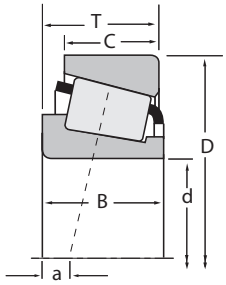
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

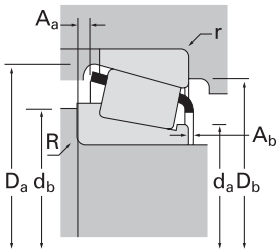
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
19.987 0.7869	51.994 2.0470	15.011 0.5910	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07079X	07204
20.000 0.7874	42.000 1.6535	15.000 0.5906	25700 5770	0.37	1.60	6660 1500	4260 959	1.56	29400 6600	XAA32004X	YAA32004X
20.000 0.7874	51.994 2.0470	15.011 0.5910	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07079	07204
20.627 0.8121	56.896 2.2400	19.368 0.7625	42000 9450	0.31	1.95	10900 2450	5740 1290	1.90	45300 10200	1778	1729
20.638 0.8125	49.225 1.9380	19.845 0.7813	40400 9080	0.32	1.86	10500 2360	5790 1300	1.81	43200 9720	12580	12520
21.430 0.8437	50.005 1.9687	17.526 0.6900	40800 9170	0.28	2.16	10600 2380	5030 1130	2.10	43500 9780	M12649	M12610
21.987 0.8656	45.237 1.7810	15.494 0.6100	30200 6780	0.31	1.96	7820 1760	4100 921	1.91	35300 7930	LM12749	LM12710
21.987 0.8656	45.974 1.8100	15.494 0.6100	30200 6780	0.31	1.96	7820 1760	4100 921	1.91	35300 7930	LM12749	LM12711
22.225 0.8750	42.070 1.6563	11.176 0.4400	15300 3450	0.40	1.51	3980 895	2700 607	1.47	16800 3770	LL52549	LL52510
22.225 0.8750	50.005 1.9687	13.495 0.5313	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07087	07196
22.225 0.8750	50.005 1.9687	13.495 0.5313	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07087X	07196
22.225 0.8750	50.005 1.9687	17.526 0.6900	40800 9170	0.28	2.16	10600 2380	5030 1130	2.10	43500 9780	M12648A	M12610
22.225 0.8750	50.005 1.9687	17.526 0.6900	40800 9170	0.28	2.16	10600 2380	5030 1130	2.10	43500 9780	M12648	M12610
22.225 0.8750	51.994 2.0470	15.011 0.5910	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07087	07204
22.225 0.8750	52.000 2.0472	15.011 0.5910	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07087X	07205
22.225 0.8750	52.388 2.0625	19.368 0.7625	44300 9960	0.29	2.05	11500 2580	5740 1290	2.00	48300 10900	1380	1328
22.225 0.8750	53.975 2.1250	19.368 0.7625	44300 9960	0.29	2.05	11500 2580	5740 1290	2.00	48300 10900	1380	1329
22.225 0.8750	53.975 2.1250	19.368 0.7625	42000 9450	0.31	1.95	10900 2450	5740 1290	1.90	45300 10200	1755	1730
22.225 0.8750	56.896 2.2400	19.368 0.7625	42000 9450	0.31	1.95	10900 2450	5740 1290	1.90	45300 10200	1755	1729
22.225 0.8750	56.896 2.2400	19.368 0.7625	42000 9450	0.31	1.95	10900 2450	5740 1290	1.90	45300 10200	1755	1729X
22.225 0.8750	57.150 2.2500	19.845 0.7813	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1975	1922
22.225 0.8750	57.150 2.2500	22.225 0.8750	51200 11500	0.35	1.73	13300 2990	7880 1770	1.69	55100 12400	1280	1220
22.225 0.8750	58.738 2.3125	19.050 0.7500	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1975	1932
22.225 0.8750	60.325 2.3750	19.845 0.7813	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1975	1931
22.225 0.8750	61.912 2.4375	36.512 1.4375	82000 18400	0.28	2.13	21300 4780	10300 2310	2.07	89800 20200	3655	3620
22.225 0.8750	62.000 2.4409	17.983 0.7080	48200 10800	0.24	2.48	12500 2810	5170 1160	2.42	49200 11100	246X	242
22.225 0.8750	66.421 2.6150	23.812 0.9375	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2684	2631
22.606 0.8900	47.000 1.8504	15.500 0.6102	27500 6170	0.47	1.27	7120 1600	5760 1300	1.24	33000 7420	LM72849	LM72810

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

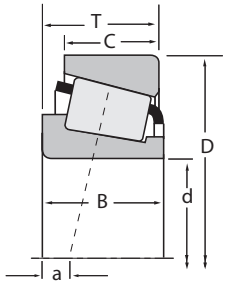
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
14.260 0.5614	12.700 0.5000	-2.8 -0.11	1.5 0.06	26.0 1.02	27.5 1.08	1.3 0.05	48.0 1.89	45.0 1.77	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.16 0.36
15.000 0.5906	12.000 0.4724	-4.6 -0.18	2.0 0.08	25.5 1.00	29.0 1.14	1.0 0.04	39.5 1.56	36.5 1.44	0.40 0.02	1.40 0.06	6.2	6.1	0.0469	0.10 0.21
14.260 0.5614	12.700 0.5000	-2.8 -0.11	1.5 0.06	26.0 1.02	27.5 1.08	1.3 0.05	48.0 1.89	45.0 1.77	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.16 0.36
19.837 0.7810	15.875 0.6250	-6.9 -0.27	0.8 0.03	26.0 1.02	27.0 1.06	1.3 0.05	51.0 2.01	49.0 1.93	* *	* *	10.6	5.39	0.0521	0.26 0.57
19.845 0.7813	15.875 0.6250	-7.1 -0.28	1.5 0.06	26.0 1.02	28.5 1.12	1.5 0.06	45.5 1.79	42.5 1.67	0.90 0.04	1.10 0.04	8.6	6.21	0.0495	0.18 0.40
18.288 0.7200	13.970 0.5500	-6.4 -0.25	1.3 0.05	27.5 1.08	29.5 1.16	1.3 0.05	46.0 1.81	44.0 1.73	0.30 0.01	1.10 0.04	9.1	5.63	0.0479	0.17 0.37
16.637 0.6550	12.065 0.4750	-5.3 -0.21	1.3 0.05	26.0 1.02	27.5 1.08	1.3 0.05	42.0 1.65	39.5 1.56	0.60 0.02	0.40 0.02	8.2	6.98	0.0480	0.12 0.26
16.637 0.6550	12.065 0.4750	-5.3 -0.21	1.3 0.05	26.0 1.02	27.5 1.08	1.3 0.05	42.5 1.67	40.0 1.57	0.60 0.02	0.40 0.02	8.2	6.98	0.0480	0.12 0.27
11.176 0.4400	8.636 0.3400	-1.8 -0.07	1.3 0.05	26.0 1.02	27.5 1.08	1.3 0.05	39.5 1.56	36.5 1.44	-0.20 -0.01	1.10 0.04	4.7	8.62	0.0431	0.07 0.14
14.260 0.5614	9.525 0.3750	-2.8 -0.11	1.3 0.05	27.0 1.06	28.5 1.12	1.0 0.04	47.0 1.85	44.5 1.75	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.13 0.28
14.260 0.5614	9.525 0.3750	-2.8 -0.11	1.5 0.06	27.0 1.06	29.0 1.14	1.0 0.04	47.0 1.85	44.5 1.75	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.13 0.28
18.288 0.7200	13.970 0.5500	-6.4 -0.25	0.4 0.02	26.5 1.04	26.5 1.04	1.3 0.05	46.0 1.81	44.0 1.73	0.30 0.01	1.10 0.04	9.1	5.63	0.0479	0.16 0.36
18.288 0.7200	13.970 0.5500	-6.4 -0.25	1.3 0.05	26.5 1.04	28.5 1.12	1.3 0.05	46.0 1.81	44.0 1.73	0.30 0.01	1.10 0.04	9.1	5.63	0.0479	0.16 0.36
14.260 0.5614	12.700 0.5000	-2.8 -0.11	1.3 0.05	27.0 1.06	28.5 1.12	1.3 0.05	48.0 1.89	45.0 1.77	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.15 0.34
14.260 0.5614	12.700 0.5000	-2.8 -0.11	1.5 0.06	27.0 1.06	29.0 1.14	2.0 0.08	48.0 1.89	44.5 1.75	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.15 0.34
20.168 0.7940	14.288 0.5625	-7.6 -0.30	1.5 0.06	27.0 1.06	29.5 1.16	1.5 0.06	48.5 1.91	45.0 1.77	1.30 0.05	1.10 0.04	10.3	5.21	0.0508	0.20 0.45
20.168 0.7940	14.288 0.5625	-7.6 -0.30	1.5 0.06	27.0 1.06	29.5 1.16	1.5 0.06	49.0 1.93	46.0 1.81	1.30 0.05	1.10 0.04	10.3	5.21	0.0508	0.22 0.48
19.837 0.7810	15.875 0.6250	-6.9 -0.27	1.3 0.05	27.5 1.08	29.0 1.14	0.8 0.03	50.0 1.97	48.5 1.91	1.90 0.07	0.30 0.01	10.6	5.39	0.0521	0.22 0.49
19.837 0.7810	15.875 0.6250	-6.9 -0.27	1.3 0.05	27.5 1.08	29.0 1.14	1.3 0.05	51.0 2.01	49.0 1.93	1.90 0.07	0.30 0.01	10.6	5.39	0.0521	0.25 0.56
19.837 0.7810	15.875 0.6250	-6.9 -0.27	1.3 0.05	27.5 1.08	29.0 1.14	1.5 0.06	51.0 2.01	49.0 1.93	1.90 0.07	0.30 0.01	10.6	5.39	0.0521	0.25 0.55
19.355 0.7620	15.875 0.6250	-5.8 -0.23	0.8 0.03	28.0 1.10	29.0 1.14	1.5 0.06	53.5 2.11	51.0 2.01	0.80 0.03	1.10 0.04	12.5	6.33	0.0565	0.26 0.57
22.225 0.8750	17.462 0.6875	-6.9 -0.27	0.8 0.03	29.0 1.14	29.5 1.16	1.5 0.06	52.0 2.05	49.0 1.93	* *	* *	11.4	5.52	0.0556	0.28 0.63
19.355 0.7620	15.080 0.5937	-5.8 -0.23	0.8 0.03	28.0 1.10	29.0 1.14	1.3 0.05	54.0 2.13	52.0 2.05	0.80 0.03	1.10 0.04	12.5	6.33	0.0565	0.27 0.60
19.355 0.7620	15.875 0.6250	-5.8 -0.23	0.8 0.03	28.0 1.10	29.0 1.14	1.3 0.05	55.0 2.17	52.0 2.05	0.80 0.03	1.10 0.04	12.5	6.33	0.0565	0.29 0.65
38.354 1.5100	23.812 0.9375	-19.8 -0.78	0.3 0.01	30.5 1.20	30.5 1.20	3.3 0.13	57.5 2.27	52.0 2.05	9.90 0.39	0.20 0.01	17	6.38	0.0592	0.51 1.12
19.000 0.7480	16.002 0.6300	-6.1 -0.24	3.5 0.14	30.0 1.18	34.5 1.36	2.0 0.08	57.0 2.24	55.0 2.17	0.10 0.00	0.70 0.03	12.8	8.24	0.0509	0.29 0.63
25.433 1.0013	19.050 0.7500	-9.4 -0.37	1.5 0.06	32.0 1.26	34.0 1.34	1.3 0.05	60.0 2.36	58.0 2.28	0.80 0.03	0.80 0.03	19.3	8	0.0598	0.46 1.02
15.500 0.6102	12.000 0.4724	-3.0 -0.12	1.5 0.06	28.0 1.10	30.0 1.18	1.0 0.04	44.0 1.73	40.5 1.59	0.60 0.02	0.90 0.04	7.5	8.95	0.0538	0.12 0.28

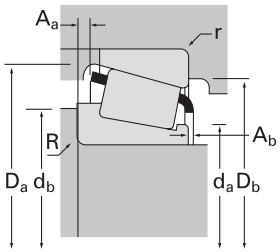
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
23.812 0.9375	50.005 1.9687	13.495 0.5313	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07093	07196
23.812 0.9375	50.292 1.9800	14.224 0.5600	27800 6260	0.37	1.60	7210 1620	4620 1040	1.56	32900 7400	L44640	L44610
23.812 0.9375	50.800 2.0000	15.011 0.5910	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07093	07210X
23.812 0.9375	51.994 2.0470	15.011 0.5910	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07093	07204
23.812 0.9375	53.975 2.1250	19.368 0.7625	42000 9450	0.31	1.95	10900 2450	5740 1290	1.90	45300 10200	1779	1730
23.812 0.9375	56.896 2.2400	19.368 0.7625	42000 9450	0.31	1.95	10900 2450	5740 1290	1.90	45300 10200	1779	1729
23.812 0.9375	61.912 2.4375	28.575 1.1250	82000 18400	0.28	2.13	21300 4780	10300 2310	2.07	89800 20200	3659	3620
23.812 0.9375	65.088 2.5625	22.225 0.8750	50600 11400	0.73	0.82	13100 2950	16400 3690	0.80	55800 12500	23092	23256
23.812 0.9375	66.421 2.6150	23.812 0.9375	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2685	2631
24.000 0.9449	55.000 2.1654	25.000 0.9842	62100 14000	0.35	1.70	16100 3620	9740 2190	1.65	71000 16000	JHM33449	JHM33410
24.384 0.9600	79.375 3.1250	25.400 1.0000	71900 16200	0.67	0.90	18600 4190	21300 4790	0.87	76200 17100	43096	43312
24.981 0.9835	50.005 1.9687	13.495 0.5313	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07098	07196
24.981 0.9835	51.994 2.0470	15.011 0.5910	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07098	07204
24.981 0.9835	52.000 2.0472	15.011 0.5910	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07098	07205
24.981 0.9835	61.981 2.4402	16.002 0.6300	40000 9000	0.38	1.57	10400 2330	6800 1530	1.53	44100 9910	17098	17244A
24.981 0.9835	62.000 2.4409	16.002 0.6300	40000 9000	0.38	1.57	10400 2330	6800 1530	1.53	44100 9910	17098	17244
25.000 0.9843	47.000 1.8504	15.000 0.5906	28500 6410	0.43	1.39	7390 1660	5440 1220	1.36	35400 7950	XAA32005X	YAA32005X
25.000 0.9843	50.005 1.9687	13.495 0.5313	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07097	07196
25.000 0.9843	51.994 2.0470	15.011 0.5910	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07097	07204
25.000 0.9843	52.000 2.0472	14.220 0.5600	27800 6260	0.37	1.60	7210 1620	4620 1040	1.56	32900 7400	JL44642A	JL44615
25.000 0.9843	52.000 2.0472	15.011 0.5910	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07097	07205
25.000 0.9843	61.912 2.4375	21.018 0.8275	48200 10800	0.24	2.48	12500 2810	5170 1160	2.42	49200 11100	247	244X
25.400 1.0000	50.005 1.9687	13.495 0.5313	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07100-S	07196
25.400 1.0000	50.292 1.9800	14.224 0.5600	27800 6260	0.37	1.60	7210 1620	4620 1040	1.56	32900 7400	L44642	L44610
25.400 1.0000	50.292 1.9800	14.224 0.5600	27800 6260	0.37	1.60	7210 1620	4620 1040	1.56	32900 7400	L44643	L44610
25.400 1.0000	50.800 2.0000	15.011 0.5910	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07100-S	07210X
25.400 1.0000	50.800 2.0000	15.011 0.5910	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07100-SA	07210X
25.400 1.0000	51.986 2.0467	15.011 0.5910	27800 6260	0.37	1.60	7210 1620	4620 1040	1.56	32900 7400	L44643	L44613

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

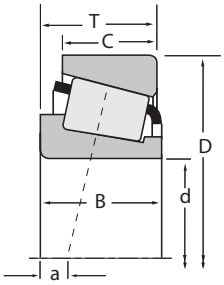
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
14.260 0.5614	9.525 0.3750	-2.8 -0.11	1.5 0.06	28.5 1.12	30.5 1.20	1.0 0.04	47.0 1.85	44.5 1.75	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.12 0.27
14.732 0.5800	10.668 0.4200	-3.3 -0.13	1.5 0.06	28.5 1.12	30.5 1.20	1.3 0.05	47.0 1.85	44.5 1.75	0.80 0.03	0.50 0.02	8.9	8.93	0.0526	0.13 0.29
14.260 0.5614	12.700 0.5000	-2.8 -0.11	1.5 0.06	28.5 1.12	30.5 1.20	1.5 0.06	47.5 1.87	44.5 1.75	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.14 0.30
14.260 0.5614	12.700 0.5000	-2.8 -0.11	1.5 0.06	28.5 1.12	30.5 1.20	1.3 0.05	48.0 1.89	45.0 1.77	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.15 0.33
19.837 0.7810	15.875 0.6250	-6.9 -0.27	0.8 0.03	28.5 1.12	29.5 1.16	0.8 0.03	50.0 1.97	48.5 1.91	1.90 0.07	0.30 0.01	10.6	5.39	0.0521	0.21 0.47
19.837 0.7810	15.875 0.6250	-6.9 -0.27	0.8 0.03	28.5 1.12	29.5 1.16	1.3 0.05	51.0 2.01	49.0 1.93	1.90 0.07	0.30 0.01	10.6	5.39	0.0521	0.24 0.54
30.416 1.1975	23.812 0.9375	-11.9 -0.47	2.3 0.09	31.5 1.24	35.5 1.40	3.3 0.13	57.5 2.27	52.0 2.05	2.00 0.08	0.20 0.01	17	6.38	0.0592	0.43 0.96
21.463 0.8450	15.875 0.6250	-2.3 -0.09	1.5 0.06	34.5 1.36	38.5 1.52	1.5 0.06	63.0 2.48	53.0 2.09	3.80 0.15	2.00 0.08	11.3	6.57	0.0700	0.37 0.81
25.433 1.0013	19.050 0.7500	-9.4 -0.37	0.8 0.03	30.0 1.18	31.0 1.22	1.3 0.05	60.0 2.36	58.0 2.28	0.80 0.03	0.80 0.03	19.3	8	0.0598	0.45 0.99
25.000 0.9843	21.000 0.8268	-8.9 -0.35	2.0 0.08	30.0 1.18	35.0 1.38	2.0 0.08	52.0 2.05	47.0 1.85	0.40 0.02	1.80 0.07	13.3	5.79	0.0592	0.29 0.65
24.074 0.9478	17.462 0.6875	-2.0 -0.08	0.8 0.03	39.5 1.56	40.5 1.59	1.5 0.06	74.0 2.91	67.0 2.64	3.40 0.13	2.30 0.09	16.8	7.57	0.0774	0.64 1.42
14.260 0.5614	9.525 0.3750	-2.8 -0.11	1.5 0.06	29.0 1.14	31.0 1.22	1.0 0.04	47.0 1.85	44.5 1.75	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.12 0.26
14.260 0.5614	12.700 0.5000	-2.8 -0.11	1.5 0.06	29.0 1.14	31.0 1.22	1.3 0.05	48.0 1.89	45.0 1.77	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.14 0.31
14.260 0.5614	12.700 0.5000	-2.8 -0.11	1.5 0.06	29.0 1.14	31.0 1.22	2.0 0.08	48.0 1.89	44.5 1.75	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.14 0.31
16.566 0.6522	14.288 0.5625	-3.6 -0.14	1.5 0.06	30.5 1.20	33.0 1.30	1.5 0.06	57.0 2.24	54.0 2.13	0.30 0.01	1.80 0.07	11.8	7.49	0.0579	0.25 0.56
16.566 0.6522	14.288 0.5625	-3.6 -0.14	1.5 0.06	30.5 1.20	33.0 1.30	1.5 0.06	57.0 2.24	54.0 2.13	0.30 0.01	1.80 0.07	11.8	7.49	0.0579	0.25 0.56
15.000 0.5906	11.500 0.4528	-3.3 -0.13	3.3 0.13	30.0 1.18	37.0 1.46	1.0 0.04	44.5 1.75	41.0 1.61	0.60 0.02	1.20 0.05	8.6	8.7	0.0546	0.11 0.25
14.260 0.5614	9.525 0.3750	-2.8 -0.11	1.5 0.06	29.0 1.14	31.0 1.22	1.0 0.04	47.0 1.85	44.5 1.75	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.12 0.26
14.260 0.5614	12.700 0.5000	-2.8 -0.11	1.5 0.06	29.0 1.14	31.0 1.22	1.3 0.05	48.0 1.89	45.0 1.77	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.14 0.31
14.732 0.5800	10.668 0.4200	-3.3 -0.13	1.3 0.05	30.0 1.18	32.0 1.26	1.3 0.05	48.0 1.89	45.5 1.79	0.80 0.03	0.50 0.02	8.9	8.93	0.0526	0.14 0.31
14.260 0.5614	12.700 0.5000	-2.8 -0.11	1.5 0.06	29.0 1.14	31.0 1.22	2.0 0.08	48.0 1.89	44.5 1.75	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.14 0.31
19.000 0.7480	17.462 0.6875	-6.1 -0.24	2.0 0.08	30.0 1.18	33.5 1.32	3.3 0.13	57.0 2.24	52.0 2.05	0.10 0.00	0.70 0.03	12.8	8.24	0.0509	0.29 0.63
14.260 0.5614	9.525 0.3750	-2.8 -0.11	1.5 0.06	29.5 1.16	31.5 1.24	1.0 0.04	47.0 1.85	44.5 1.75	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.12 0.25
14.732 0.5800	10.668 0.4200	-3.3 -0.13	3.5 0.14	29.5 1.16	36.0 1.42	1.3 0.05	47.0 1.85	44.5 1.75	0.80 0.03	0.50 0.02	8.9	8.93	0.0526	0.12 0.27
14.732 0.5800	10.668 0.4200	-3.3 -0.13	1.3 0.05	30.0 1.18	32.0 1.26	1.3 0.05	47.0 1.85	44.5 1.75	0.80 0.03	0.60 0.02	8.9	8.93	0.0526	0.13 0.28
14.260 0.5614	12.700 0.5000	-2.8 -0.11	1.5 0.06	29.5 1.16	31.5 1.24	1.5 0.06	47.5 1.87	44.5 1.75	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.13 0.29
14.260 0.5614	12.700 0.5000	-2.8 -0.11	3.3 0.13	29.5 1.16	35.0 1.38	1.5 0.06	47.5 1.87	44.5 1.75	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.13 0.28
14.732 0.5800	12.700 0.5000	-3.3 -0.13	1.3 0.05	30.0 1.18	32.0 1.26	2.0 0.08	48.0 1.89	44.5 1.75	0.80 0.03	0.60 0.02	8.9	8.93	0.0526	0.15 0.32

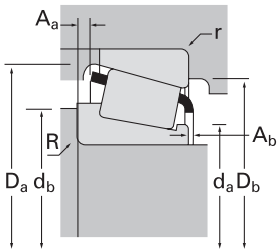
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
25.400 1.0000	52.000 2.0472	15.011 0.5910	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07100-S	07205
25.400 1.0000	52.000 2.0472	15.011 0.5910	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07100-SA	07205
25.400 1.0000	53.975 2.1250	19.368 0.7625	42000 9450	0.31	1.95	10900 2450	5740 1290	1.90	45300 10200	1780	1730
25.400 1.0000	56.896 2.2400	19.368 0.7625	42000 9450	0.31	1.95	10900 2450	5740 1290	1.90	45300 10200	1780	1729
25.400 1.0000	57.150 2.2500	17.462 0.6875	42600 9570	0.35	1.73	11000 2480	6550 1470	1.69	50100 11300	15578	15520
25.400 1.0000	57.150 2.2500	19.431 0.7650	44900 10100	0.55	1.10	11700 2620	10900 2450	1.07	52900 11900	M84548	M84510
25.400 1.0000	57.150 2.2500	19.845 0.7813	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1986	1922
25.400 1.0000	57.150 2.2500	19.845 0.7813	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1994X	1922
25.400 1.0000	57.150 2.2500	20.218 0.7960	42000 9450	0.31	1.95	10900 2450	5740 1290	1.90	45300 10200	1780	1738X
25.400 1.0000	58.738 2.3125	19.050 0.7500	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1986	1932
25.400 1.0000	59.530 2.3437	23.368 0.9200	53800 12100	0.55	1.10	13900 3140	13000 2930	1.07	63300 14200	M84249	M84210
25.400 1.0000	60.325 2.3750	19.842 0.7812	42600 9570	0.35	1.73	11000 2480	6550 1470	1.69	50100 11300	15578	15523
25.400 1.0000	60.325 2.3750	19.845 0.7813	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1986	1931
25.400 1.0000	60.325 2.3750	19.845 0.7813	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1994X	1931
25.400 1.0000	62.000 2.4409	18.161 0.7150	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15100-SR	15245
25.400 1.0000	62.000 2.4409	19.050 0.7500	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15100	15245
25.400 1.0000	62.000 2.4409	19.050 0.7500	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15101	15245
25.400 1.0000	62.000 2.4409	19.050 0.7500	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15102	15245
25.400 1.0000	62.000 2.4409	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15100	15244
25.400 1.0000	62.000 2.4409	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15101	15244
25.400 1.0000	63.100 2.4843	23.812 0.9375	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2687	2630
25.400 1.0000	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15100	15250
25.400 1.0000	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15101	15250
25.400 1.0000	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15102	15250
25.400 1.0000	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15100-S	15250X
25.400 1.0000	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15101	15250X
25.400 1.0000	63.500 2.5000	20.638 0.8125	50600 11400	0.73	0.82	13100 2950	16400 3690	0.80	55800 12500	23101X	23250X
25.400 1.0000	65.088 2.5625	22.225 0.8750	50600 11400	0.73	0.82	13100 2950	16400 3690	0.80	55800 12500	23100	23256

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	$a^{(3)}$	$R^{(4)}$	d_a	d_b	$r^{(4)}$	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
14.260 0.5614	12.700 0.5000	-2.8 -0.11	1.5 0.06	29.5 1.16	31.5 1.24	2.0 0.08	48.0 1.89	44.5 1.75	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.14 0.31
14.260 0.5614	12.700 0.5000	-2.8 -0.11	3.3 0.13	29.5 1.16	35.0 1.38	2.0 0.08	48.0 1.89	44.5 1.75	0.30 0.01	1.40 0.06	7.6	7.07	0.0509	0.14 0.30
19.837 0.7810	15.875 0.6250	-6.9 -0.27	0.8 0.03	30.0 1.18	30.5 1.20	0.8 0.03	50.0 1.97	48.5 1.91	1.90 0.07	0.30 0.01	10.6	5.39	0.0521	0.20 0.45
19.837 0.7810	15.875 0.6250	-6.9 -0.27	0.8 0.03	30.0 1.18	30.5 1.20	1.3 0.05	51.0 2.01	49.0 1.93	1.90 0.07	0.30 0.01	10.6	5.39	0.0521	0.23 0.52
17.462 0.6875	13.495 0.5313	-5.1 -0.20	1.3 0.05	30.5 1.20	32.5 1.28	1.5 0.06	53.0 2.09	51.0 2.01	0.50 0.02	1.80 0.07	12.7	10.3	0.0577	0.22 0.48
19.431 0.7650	14.732 0.5800	-3.0 -0.12	1.5 0.06	33.0 1.30	37.5 1.48	1.5 0.06	54.0 2.13	48.5 1.91	1.20 0.05	1.20 0.05	11.3	7.39	0.0644	0.24 0.53
19.355 0.7620	15.875 0.6250	-5.8 -0.23	1.3 0.05	30.5 1.20	32.5 1.28	1.5 0.06	53.5 2.11	51.0 2.01	0.80 0.03	1.10 0.04	12.5	6.33	0.0565	0.24 0.53
19.355 0.7620	15.875 0.6250	-5.8 -0.23	3.5 0.14	30.5 1.20	37.0 1.46	1.5 0.06	53.5 2.11	51.0 2.01	0.80 0.03	1.10 0.04	12.5	6.33	0.0565	0.24 0.52
19.837 0.7810	17.551 0.6910	-6.9 -0.27	0.8 0.03	30.0 1.18	30.5 1.20	2.3 0.09	51.0 2.01	48.5 1.91	1.90 0.07	0.30 0.01	10.6	5.39	0.0521	0.25 0.54
19.355 0.7620	15.080 0.5937	-5.8 -0.23	1.3 0.05	30.5 1.20	32.5 1.28	1.3 0.05	54.0 2.13	52.0 2.05	0.80 0.03	1.10 0.04	12.5	6.33	0.0565	0.25 0.56
23.114 0.9100	18.288 0.7200	-5.1 -0.20	0.8 0.03	32.5 1.27	36.0 1.42	1.5 0.06	56.0 2.20	49.5 1.95	1.30 0.05	1.60 0.06	12.7	7.56	0.0670	0.32 0.71
17.462 0.6875	15.875 0.6250	-5.1 -0.20	1.3 0.05	30.5 1.20	32.5 1.28	1.5 0.06	54.0 2.13	51.0 2.01	0.50 0.02	1.80 0.07	12.7	10.3	0.0577	0.27 0.60
19.355 0.7620	15.875 0.6250	-5.8 -0.23	1.3 0.05	30.5 1.20	32.5 1.28	1.3 0.05	55.0 2.17	52.0 2.05	0.80 0.03	1.10 0.04	12.5	6.33	0.0565	0.28 0.61
19.355 0.7620	15.875 0.6250	-5.8 -0.23	3.5 0.14	30.5 1.20	37.0 1.46	1.3 0.05	55.0 2.17	52.0 2.05	0.80 0.03	1.10 0.04	12.5	6.33	0.0565	0.27 0.60
19.050 0.7500	14.288 0.5625	-4.8 -0.19	1.3 0.05	32.5 1.28	33.5 1.32	1.3 0.05	58.0 2.28	55.0 2.17	0.30 0.01	1.70 0.07	14.6	7.58	0.0606	0.28 0.63
20.638 0.8125	14.288 0.5625	-5.8 -0.23	3.5 0.14	31.5 1.24	38.0 1.50	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.29 0.65
20.638 0.8125	14.288 0.5625	-5.8 -0.23	0.8 0.03	31.5 1.24	32.5 1.28	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.30 0.65
20.638 0.8125	14.288 0.5625	-5.8 -0.23	1.5 0.06	31.5 1.24	34.0 1.34	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.30 0.65
20.638 0.8125	15.875 0.6250	-5.8 -0.23	3.5 0.14	31.5 1.24	38.0 1.50	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.31 0.67
20.638 0.8125	15.875 0.6250	-5.8 -0.23	0.8 0.03	31.5 1.24	32.5 1.28	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.31 0.68
25.433 1.0013	19.050 0.7500	-9.4 -0.37	1.3 0.05	31.5 1.24	33.5 1.32	0.8 0.03	59.0 2.32	57.0 2.24	0.80 0.03	0.80 0.03	19.3	8	0.0598	0.39 0.86
20.638 0.8125	15.875 0.6250	-5.8 -0.23	3.5 0.14	31.5 1.24	38.0 1.50	1.3 0.05	59.0 2.32	56.0 2.20	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.32 0.71
20.638 0.8125	15.875 0.6250	-5.8 -0.23	0.8 0.03	31.5 1.24	32.5 1.28	1.3 0.05	59.0 2.32	56.0 2.20	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.33 0.72
20.638 0.8125	15.875 0.6250	-5.8 -0.23	1.5 0.06	31.5 1.24	34.0 1.34	1.3 0.05	59.0 2.32	56.0 2.20	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.33 0.72
20.638 0.8125	15.875 0.6250	-5.8 -0.23	1.3 0.05	31.5 1.24	33.5 1.32	1.5 0.06	59.0 2.32	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.33 0.72
20.638 0.8125	15.875 0.6250	-5.8 -0.23	0.8 0.03	31.5 1.24	32.5 1.28	1.5 0.06	59.0 2.32	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.33 0.72
20.650 0.8130	14.681 0.5780	-1.3 -0.05	2.3 0.09	34.5 1.36	40.5 1.59	2.3 0.09	60.0 2.36	52.0 2.05	2.70 0.11	1.80 0.07	11.3	6.57	0.0700	0.32 0.70
21.463 0.8450	15.875 0.6250	-2.3 -0.09	1.5 0.06	34.5 1.36	39.0 1.54	1.5 0.06	63.0 2.48	53.0 2.09	3.80 0.15	2.00 0.08	11.3	6.57	0.0700	0.36 0.78

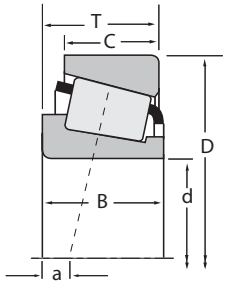
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

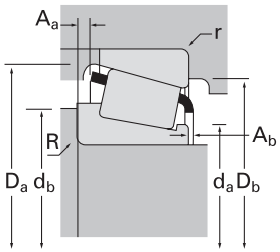
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
25.400 1.0000	66.421 2.6150	23.812 0.9375	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2687	2631
25.400 1.0000	68.262 2.6875	22.225 0.8750	62600 14100	0.34	1.77	16200 3650	9420 2120	1.72	73300 16500	2473	2420
25.400 1.0000	68.262 2.6875	22.225 0.8750	59100 13300	0.42	1.44	15300 3440	10900 2450	1.40	70200 15800	02473	02420
25.400 1.0000	68.262 2.6875	22.225 0.8750	59600 13400	0.55	1.10	15500 3470	14400 3250	1.07	77400 17400	M88036	M88010
25.400 1.0000	69.723 2.7450	19.050 0.7500	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26100	26274
25.400 1.0000	72.233 2.8438	25.400 1.0000	71100 16000	0.55	1.10	18400 4140	17200 3870	1.07	94200 21200	HM88630	HM88610
25.400 1.0000	72.233 2.8438	25.400 1.0000	71100 16000	0.55	1.10	18400 4140	17200 3870	1.07	94200 21200	HM88630	HM88610A
25.400 1.0000	72.626 2.8593	24.608 0.9688	64600 14500	0.60	1.00	16700 3760	17300 3880	0.97	64100 14400	41100	41286
25.400 1.0000	72.626 2.8593	30.162 1.1875	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3189	3120
25.400 1.0000	73.025 2.8750	26.543 1.0450	71100 16000	0.55	1.10	18400 4140	17200 3870	1.07	94200 21200	HM88630	HM88612
25.987 1.0231	51.986 2.0467	15.011 0.5910	27800 6260	0.37	1.60	7210 1620	4620 1040	1.56	32900 7400	L44645	L44613
25.987 1.0231	57.150 2.2500	17.462 0.6875	42600 9570	0.35	1.73	11000 2480	6550 1470	1.69	50100 11300	15579X	15520
26.157 1.0298	61.912 2.4375	19.050 0.7500	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15103	15243
26.157 1.0298	62.000 2.4409	19.050 0.7500	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15103	15245
26.162 1.0300	61.912 2.4375	19.050 0.7500	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15103-S	15243
26.162 1.0300	66.421 2.6150	23.812 0.9375	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2682	2631
26.975 1.0620	58.738 2.3125	19.050 0.7500	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1987	1932
26.975 1.0620	60.325 2.3750	19.355 0.7620	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1987	1931
26.987 1.0625	50.292 1.9800	14.224 0.5600	27800 6260	0.37	1.60	7210 1620	4620 1040	1.56	32900 7400	L44649	L44610
26.987 1.0625	51.986 2.0467	15.011 0.5910	27800 6260	0.37	1.60	7210 1620	4620 1040	1.56	32900 7400	L44649	L44613
26.987 1.0625	57.150 2.2500	17.462 0.6875	42600 9570	0.35	1.73	11000 2480	6550 1470	1.69	50100 11300	15580	15520
26.987 1.0625	57.150 2.2500	19.431 0.7650	44900 10100	0.55	1.10	11700 2620	10900 2450	1.07	52900 11900	M84549	M84510
26.988 1.0625	57.150 2.2500	19.845 0.7813	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1997X	1922
26.987 1.0625	60.325 2.3750	19.842 0.7812	42600 9570	0.35	1.73	11000 2480	6550 1470	1.69	50100 11300	15580	15523
26.987 1.0625	62.000 2.4409	19.050 0.7500	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15106	15245
26.987 1.0625	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15106	15250X
26.987 1.0625	66.421 2.6150	23.812 0.9375	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2688	2631
26.987 1.0625	72.626 2.8593	24.608 0.9688	64600 14500	0.60	1.00	16700 3760	17300 3880	0.97	64100 14400	41106	41286

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

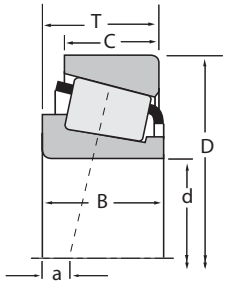
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
25.433 1.0013	19.050 0.7500	-9.4 -0.37	1.3 0.05	31.5 1.24	33.5 1.32	1.3 0.05	60.0 2.36	58.0 2.28	0.80 0.03	0.80 0.03	19.3	8	0.0598	0.44 0.97
23.812 0.9375	17.462 0.6875	-6.6 -0.26	0.8 0.03	32.5 1.28	33.5 1.32	1.5 0.06	63.0 2.48	60.0 2.36	1.00 0.04	0.30 0.01	18.8	10.5	0.0652	0.44 0.96
22.225 0.8750	17.462 0.6875	-5.1 -0.20	0.8 0.03	33.5 1.32	34.5 1.36	1.5 0.06	63.0 2.48	59.0 2.32	1.20 0.05	0.90 0.04	17.5	8.48	0.0681	0.43 0.94
22.225 0.8750	17.462 0.6875	-2.8 -0.11	0.8 0.03	36.5 1.44	37.0 1.46	1.5 0.06	65.0 2.56	58.0 2.28	1.70 0.07	0.90 0.04	19.4	10	0.0771	0.44 0.97
18.923 0.7450	19.050 0.7500	-4.1 -0.16	1.5 0.06	32.5 1.28	34.5 1.36	1.5 0.06	65.0 2.56	61.0 2.40	0.60 0.02	1.10 0.04	16.1	10.1	0.0630	0.40 0.88
25.400 1.0000	19.842 0.7812	-4.6 -0.18	0.8 0.03	39.5 1.56	39.5 1.56	2.3 0.09	69.0 2.72	60.0 2.36	1.70 0.07	1.70 0.07	23.4	10.9	0.0822	0.58 1.28
25.400 1.0000	19.842 0.7812	-4.6 -0.18	0.8 0.03	39.5 1.56	39.5 1.56	0.8 0.03	69.0 2.72	61.0 2.40	1.70 0.07	1.70 0.07	23.4	10.9	0.0822	0.58 1.29
24.257 0.9550	17.462 0.6875	-4.1 -0.16	2.3 0.09	36.5 1.44	41.0 1.61	1.5 0.06	68.0 2.68	61.0 2.40	3.00 0.12	2.30 0.09	13	5.83	0.0686	0.50 1.09
29.997 1.1810	23.812 0.9375	-10.2 -0.40	0.8 0.03	35.0 1.38	35.5 1.40	3.3 0.13	67.0 2.64	61.0 2.40	* *	* *	23.4	8.76	0.0697	0.65 1.43
25.400 1.0000	20.985 0.8262	-4.6 -0.18	0.8 0.03	39.5 1.56	39.5 1.56	2.3 0.09	69.0 2.72	60.0 2.36	1.70 0.07	1.70 0.07	23.4	10.9	0.0822	0.61 1.35
14.732 0.5800	12.700 0.5000	-3.3 -0.13	3.5 0.14	30.0 1.18	36.5 1.44	2.0 0.08	48.0 1.89	44.5 1.75	0.80 0.03	0.50 0.02	8.9	8.93	0.0526	0.14 0.30
17.462 0.6875	13.495 0.5313	-5.1 -0.20	3.5 0.14	31.0 1.22	37.5 1.48	1.5 0.06	53.0 2.09	51.0 2.01	* *	* *	12.7	10.3	0.0577	0.21 0.46
20.638 0.8125	14.288 0.5625	-5.8 -0.23	0.8 0.03	32.5 1.28	33.0 1.30	2.0 0.08	58.0 2.28	54.0 2.13	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.29 0.64
20.638 0.8125	14.288 0.5625	-5.8 -0.23	0.8 0.03	32.5 1.28	33.0 1.30	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.29 0.64
19.939 0.7850	14.288 0.5625	-5.8 -0.23	0.8 0.03	33.5 1.32	33.5 1.32	2.0 0.08	58.0 2.28	54.0 2.13	1.20 0.05	1.70 0.07	14.6	9.98	0.0606	0.29 0.64
25.433 1.0013	19.050 0.7500	-9.4 -0.37	1.5 0.06	32.0 1.26	34.5 1.36	1.3 0.05	60.0 2.36	58.0 2.28	0.80 0.03	0.80 0.03	19.3	8	0.0598	0.43 0.95
19.355 0.7620	15.080 0.5937	-5.8 -0.23	0.8 0.03	31.5 1.24	32.5 1.28	1.3 0.05	54.0 2.13	52.0 2.05	0.80 0.03	1.10 0.04	12.5	6.33	0.0565	0.24 0.54
19.355 0.7620	15.875 0.6250	-5.8 -0.23	0.8 0.03	31.5 1.24	32.5 1.28	1.3 0.05	55.0 2.17	52.0 2.05	0.80 0.03	1.10 0.04	12.5	6.33	0.0565	0.27 0.59
14.732 0.5800	10.668 0.4200	-3.3 -0.13	3.5 0.14	31.0 1.22	37.5 1.48	1.3 0.05	47.0 1.85	44.5 1.75	0.80 0.03	0.60 0.02	8.9	8.93	0.0526	0.12 0.26
14.732 0.5800	12.700 0.5000	-3.3 -0.13	3.5 0.14	31.0 1.22	37.5 1.48	2.0 0.08	48.0 1.89	44.5 1.75	0.80 0.03	0.60 0.02	8.9	8.93	0.0526	0.14 0.30
17.462 0.6875	13.495 0.5313	-5.1 -0.20	3.5 0.14	32.0 1.26	38.5 1.52	1.5 0.06	53.0 2.09	51.0 2.01	0.50 0.02	1.80 0.07	12.7	10.3	0.0577	0.20 0.45
19.431 0.7650	14.732 0.5800	-3.0 -0.12	1.5 0.06	33.0 1.30	38.5 1.52	1.5 0.06	54.0 2.13	48.5 1.91	1.20 0.05	1.20 0.05	11.3	7.39	0.0644	0.23 0.51
19.355 0.7620	15.875 0.6250	-5.8 -0.23	3.3 0.13	31.5 1.24	37.5 1.48	1.5 0.06	53.5 2.11	51.0 2.01	0.80 0.03	1.10 0.04	12.5	6.33	0.0565	0.23 0.50
17.462 0.6875	15.875 0.6250	-5.1 -0.20	3.5 0.14	32.0 1.26	38.5 1.52	1.5 0.06	54.0 2.13	51.0 2.01	0.50 0.02	1.80 0.07	12.7	10.3	0.0577	0.26 0.57
20.638 0.8125	14.288 0.5625	-5.8 -0.23	0.8 0.03	33.0 1.30	33.5 1.32	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.29 0.63
20.638 0.8125	15.875 0.6250	-5.8 -0.23	0.8 0.03	33.0 1.30	33.5 1.32	1.5 0.06	59.0 2.32	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.32 0.70
25.433 1.0013	19.050 0.7500	-9.4 -0.37	1.5 0.06	33.0 1.30	35.0 1.38	1.3 0.05	60.0 2.36	58.0 2.28	0.80 0.03	0.80 0.03	19.3	8	0.0598	0.43 0.94
24.257 0.9550	17.462 0.6875	-4.1 -0.16	2.3 0.09	36.5 1.44	42.0 1.65	1.5 0.06	68.0 2.68	61.0 2.40	3.00 0.12	2.30 0.09	13	5.83	0.0686	0.48 1.07

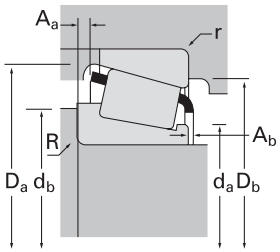
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
27.000 1.0630	59.131 2.3280	15.880 0.6250	36500 8210	0.41	1.46	9460 2130	6680 1500	1.42	44600 10000	JLM67042	LM67010
27.987 1.1019	66.987 2.6373	20.500 0.8071	59100 13300	0.42	1.44	15300 3440	10900 2450	1.40	70200 15800	02473X	02419
28.000 1.1024	57.150 2.2500	17.460 0.6875	42600 9570	0.35	1.73	11000 2480	6550 1470	1.69	50100 11300	J15585	15520
28.575 1.1250	56.896 2.2400	19.845 0.7813	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1985	1930
28.575 1.1250	57.150 2.2500	17.462 0.6875	42600 9570	0.35	1.73	11000 2480	6550 1470	1.69	50100 11300	15590	15520
28.575 1.1250	57.150 2.2500	19.845 0.7813	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1985	1922
28.575 1.1250	58.738 2.3125	19.050 0.7500	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1985	1932
28.575 1.1250	59.131 2.3280	15.875 0.6250	36500 8210	0.41	1.46	9460 2130	6680 1500	1.42	44600 10000	LM67043	LM67010
28.575 1.1250	60.325 2.3750	19.845 0.7813	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1985	1931
28.575 1.1250	62.000 2.4409	19.050 0.7500	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15112	15245
28.575 1.1250	62.000 2.4409	19.050 0.7500	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15113	15245
28.575 1.1250	62.000 2.4409	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15112	15244
28.575 1.1250	63.100 2.4843	23.812 0.9375	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2689	2630
28.575 1.1250	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15112	15250
28.575 1.1250	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15113	15250
28.575 1.1250	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15112	15250X
28.575 1.1250	64.292 2.5312	21.433 0.8438	55700 12500	0.55	1.10	14500 3250	13500 3040	1.07	71700 16100	M86647	M86610
28.575 1.1250	66.421 2.6150	19.050 0.7500	51700 11600	0.34	1.77	13400 3010	7790 1750	1.72	55200 12400	24112	24261
28.575 1.1250	66.421 2.6150	23.812 0.9375	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2689	2631
28.575 1.1250	68.262 2.6875	22.225 0.8750	62600 14100	0.34	1.77	16200 3650	9420 2120	1.72	73300 16500	2474	2420
28.575 1.1250	68.262 2.6875	22.225 0.8750	59100 13300	0.42	1.44	15300 3440	10900 2450	1.40	70200 15800	02474	02420
28.575 1.1250	69.723 2.7450	19.050 0.7500	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26112	26274
28.575 1.1250	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2578	2523
28.575 1.1250	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2578	2523-S
28.575 1.1250	72.000 2.8346	19.000 0.7480	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26112	26283
28.575 1.1250	72.626 2.8593	24.608 0.9688	64600 14500	0.60	1.00	16700 3760	17300 3880	0.97	64100 14400	41125	41286
28.575 1.1250	72.626 2.8593	24.608 0.9688	64600 14500	0.60	1.00	16700 3760	17300 3880	0.97	64100 14400	41126	41286
28.575 1.1250	72.626 2.8593	30.162 1.1875	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3192	3120

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

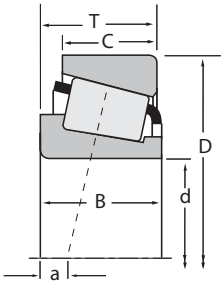
Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
16.764 0.6600	11.811 0.4650	-3.0 -0.12	0.5 0.02	33.0 1.30	33.5 1.32	1.3 0.05	56.0 2.20	52.0 2.05	0.70 0.03	0.80 0.03	12.8	9.93	0.0612	0.21 0.47
20.500 0.8071	16.000 0.6299	-5.1 -0.20	0.8 0.03	35.5 1.40	36.5 1.44	1.5 0.06	62.0 2.44	59.0 2.32	1.20 0.05	2.60 0.10	17.5	8.48	0.0681	0.36 0.80
17.462 0.6875	13.495 0.5313	-5.1 -0.20	3.5 0.14	32.5 1.28	39.0 1.54	1.5 0.06	53.0 2.09	51.0 2.01	* *	* *	12.7	10.3	0.0577	0.20 0.44
19.355 0.7620	15.875 0.6250	-5.8 -0.23	0.8 0.03	33.5 1.32	34.0 1.34	0.8 0.03	53.5 2.11	51.0 2.01	0.80 0.03	1.10 0.04	12.5	6.33	0.0565	0.22 0.48
17.462 0.6875	13.495 0.5313	-5.1 -0.20	3.5 0.14	33.5 1.32	39.5 1.56	1.5 0.06	53.0 2.09	51.0 2.01	0.50 0.02	1.80 0.07	12.7	10.3	0.0577	0.19 0.43
19.355 0.7620	15.875 0.6250	-5.8 -0.23	0.8 0.03	33.5 1.32	34.0 1.34	1.5 0.06	53.5 2.11	51.0 2.01	0.80 0.03	1.10 0.04	12.5	6.33	0.0565	0.22 0.49
19.355 0.7620	15.080 0.5937	-5.8 -0.23	0.8 0.03	33.5 1.32	34.0 1.34	1.3 0.05	54.0 2.13	52.0 2.05	0.80 0.03	1.10 0.04	12.5	6.33	0.0565	0.23 0.51
16.764 0.6600	11.811 0.4650	-3.0 -0.12	0.0 0.00	35.0 1.38	41.5 1.63	1.3 0.05	56.0 2.20	52.0 2.05	0.70 0.03	0.80 0.03	12.8	9.93	0.0612	0.20 0.44
19.355 0.7620	15.875 0.6250	-5.8 -0.23	0.8 0.03	33.5 1.32	34.0 1.34	1.3 0.05	55.0 2.17	52.0 2.05	0.80 0.03	1.10 0.04	12.5	6.33	0.0565	0.26 0.57
20.638 0.8125	14.288 0.5625	-5.8 -0.23	3.5 0.14	34.0 1.34	40.0 1.57	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.27 0.60
20.638 0.8125	14.288 0.5625	-5.8 -0.23	0.8 0.03	34.0 1.34	34.5 1.36	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.28 0.61
20.638 0.8125	15.875 0.6250	-5.8 -0.23	3.5 0.14	34.0 1.34	40.0 1.57	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.28 0.62
25.433 1.0013	19.050 0.7500	-9.4 -0.37	1.3 0.05	34.0 1.34	36.0 1.42	0.8 0.03	59.0 2.32	57.0 2.24	0.80 0.03	0.80 0.03	19.3	8	0.0598	0.36 0.80
20.638 0.8125	15.875 0.6250	-5.8 -0.23	3.5 0.14	34.0 1.34	40.0 1.57	1.3 0.05	59.0 2.32	56.0 2.20	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.30 0.66
20.638 0.8125	15.875 0.6250	-5.8 -0.23	0.8 0.03	34.0 1.34	34.5 1.36	1.3 0.05	59.0 2.32	56.0 2.20	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.31 0.67
20.638 0.8125	15.875 0.6250	-5.8 -0.23	3.5 0.14	34.0 1.34	40.0 1.57	1.5 0.06	59.0 2.32	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.30 0.66
21.433 0.8438	16.670 0.6563	-3.3 -0.13	1.5 0.06	38.0 1.50	40.0 1.57	1.5 0.06	61.0 2.40	54.0 2.13	1.40 0.05	1.20 0.05	16.8	9.36	0.0736	0.35 0.77
18.974 0.7470	15.875 0.6250	-4.8 -0.19	1.5 0.06	34.0 1.34	36.0 1.42	1.5 0.06	61.0 2.40	58.0 2.28	0.40 0.02	1.50 0.06	14	8.28	0.0589	0.31 0.69
25.433 1.0013	19.050 0.7500	-9.4 -0.37	1.3 0.05	34.0 1.34	36.0 1.42	1.3 0.05	60.0 2.36	58.0 2.28	0.80 0.03	0.80 0.03	19.3	8	0.0598	0.41 0.91
23.812 0.9375	17.462 0.6875	-6.6 -0.26	0.8 0.03	35.0 1.38	36.0 1.42	1.5 0.06	63.0 2.48	60.0 2.36	1.00 0.04	0.30 0.01	18.8	10.5	0.0652	0.41 0.90
22.225 0.8750	17.462 0.6875	-5.1 -0.20	0.8 0.03	36.0 1.42	36.5 1.44	1.5 0.06	63.0 2.48	59.0 2.32	1.20 0.05	0.90 0.04	17.5	8.48	0.0681	0.40 0.89
18.923 0.7450	19.050 0.7500	-4.1 -0.16	1.5 0.06	35.0 1.38	37.0 1.46	1.5 0.06	65.0 2.56	61.0 2.40	0.60 0.02	1.10 0.04	16.1	10.1	0.0630	0.38 0.83
25.357 0.9983	19.050 0.7500	-8.6 -0.34	2.3 0.09	35.0 1.38	39.0 1.54	1.3 0.05	64.0 2.52	61.0 2.40	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.48 1.06
25.357 0.9983	19.050 0.7500	-8.6 -0.34	2.3 0.09	35.0 1.38	39.0 1.54	1.5 0.06	64.0 2.52	61.0 2.40	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.48 1.06
18.923 0.7450	15.875 0.6250	-4.1 -0.16	1.5 0.06	35.0 1.38	37.0 1.46	1.5 0.06	65.0 2.56	62.0 2.44	0.60 0.02	1.10 0.04	16.1	10.1	0.0630	0.39 0.87
24.257 0.9550	17.462 0.6875	-4.1 -0.16	4.8 0.19	36.5 1.44	48.0 1.89	1.5 0.06	68.0 2.68	61.0 2.40	3.00 0.12	2.30 0.09	13	5.83	0.0686	0.46 1.02
24.257 0.9550	17.462 0.6875	-4.1 -0.16	1.5 0.06	36.5 1.44	41.5 1.63	1.5 0.06	68.0 2.68	61.0 2.40	3.00 0.12	2.30 0.09	13	5.83	0.0686	0.47 1.04
29.997 1.1810	23.812 0.9375	-10.2 -0.40	3.5 0.14	37.0 1.46	43.5 1.71	3.3 0.13	67.0 2.64	61.0 2.40	1.50 0.06	0.50 0.02	23.4	8.76	0.0697	0.61 1.35

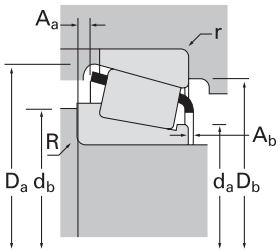
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
28.575 1.1250	72.626 2.8593	30.162 1.1875	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3198	3120
28.575 1.1250	73.025 2.8750	22.225 0.8750	60800 13700	0.45	1.32	15800 3550	12300 2750	1.29	74900 16800	02872	02820
28.575 1.1250	73.025 2.8750	22.225 0.8750	60800 13700	0.45	1.32	15800 3550	12300 2750	1.29	74900 16800	02872	02830
28.575 1.1250	76.200 3.0000	19.000 0.7480	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26112	26300
28.575 1.1250	76.200 3.0000	30.162 1.1875	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3198	3129
28.575 1.1250	79.375 3.1250	25.400 1.0000	71900 16200	0.67	0.90	18600 4190	21300 4790	0.87	76200 17100	43112	43312
29.000 1.1417	50.292 1.9800	14.224 0.5600	27700 6230	0.37	1.62	7190 1620	4550 1020	1.58	36200 8130	L45449	L45410
29.367 1.1562	66.421 2.6150	23.812 0.9375	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2690	2631
29.367 1.1562	66.421 2.6150	23.812 0.9375	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2691	2631
29.987 1.1806	61.981 2.4402	16.002 0.6300	40000 9000	0.38	1.57	10400 2330	6800 1530	1.53	44100 9910	17118	17244A
29.987 1.1806	62.000 2.4409	16.002 0.6300	40000 9000	0.38	1.57	10400 2330	6800 1530	1.53	44100 9910	17118	17244
29.987 1.1806	62.000 2.4409	18.161 0.7150	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15115	15245
29.987 1.1806	62.000 2.4409	19.050 0.7500	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15117	15245
29.987 1.1806	62.000 2.4409	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15117	15244
29.987 1.1806	62.000 2.4409	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15117	15244X
29.987 1.1806	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15117	15250
29.987 1.1806	68.262 2.6875	21.000 0.8268	59100 13300	0.42	1.44	15300 3440	10900 2450	1.40	70200 15800	02474A	02420A
29.987 1.1806	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14118AS	14276
29.987 1.1806	72.000 2.8346	19.000 0.7480	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26118	26283
29.987 1.1806	76.200 3.0000	19.000 0.7480	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26118	26300
29.987 1.1806	76.200 3.0000	24.608 0.9688	71900 16200	0.67	0.90	18600 4190	21300 4790	0.87	76200 17100	43117	43300
30.000 1.1811	62.000 2.4409	16.002 0.6300	40000 9000	0.38	1.57	10400 2330	6800 1530	1.53	44100 9910	17118-S	17244
30.000 1.1811	68.956 2.7148	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14117A	14274A
30.000 1.1811	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14118	14274
30.000 1.1811	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14118	14276
30.000 1.1811	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14117A	14276
30.000 1.1811	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14118A	14274
30.000 1.1811	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2586	2523

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

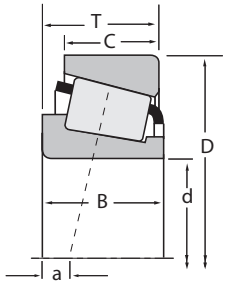
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
29.997 1.1810	23.812 0.9375	-10.2 -0.40	1.3 0.05	37.0 1.46	39.0 1.54	3.3 0.13	67.0 2.64	61.0 2.40	1.50 0.06	0.50 0.02	23.4	8.76	0.0697	0.62 1.36
22.225 0.8750	17.462 0.6875	-3.8 -0.15	0.8 0.03	37.0 1.46	37.5 1.48	3.3 0.13	68.0 2.68	62.0 2.44	1.40 0.06	0.90 0.04	20.6	10.1	0.0740	0.48 1.05
22.225 0.8750	17.462 0.6875	-3.8 -0.15	0.8 0.03	37.0 1.46	37.5 1.48	0.8 0.03	68.0 2.68	64.0 2.52	1.40 0.06	0.90 0.04	20.6	10.1	0.0740	0.48 1.07
18.923 0.7450	15.875 0.6250	-4.1 -0.16	1.5 0.06	35.0 1.38	37.0 1.46	1.5 0.06	66.0 2.60	64.0 2.52	0.60 0.02	1.10 0.04	16.1	10.1	0.0630	0.45 1.00
29.997 1.1810	23.812 0.9375	-10.2 -0.40	1.3 0.05	37.0 1.46	39.0 1.54	0.8 0.03	69.0 2.72	65.0 2.56	1.50 0.06	0.50 0.02	23.4	8.76	0.0697	0.71 1.55
24.074 0.9478	17.462 0.6875	-2.0 -0.08	0.8 0.03	41.5 1.63	42.5 1.67	1.5 0.06	74.0 2.91	67.0 2.64	3.40 0.13	2.30 0.09	16.8	7.57	0.0774	0.61 1.35
14.732 0.5800	10.668 0.4200	-3.3 -0.13	3.5 0.14	33.5 1.32	40.0 1.57	1.3 0.05	48.0 1.89	44.5 1.75	0.50 0.02	0.80 0.03	10.8	12.4	0.0559	0.11 0.25
25.433 1.0013	19.050 0.7500	-9.4 -0.37	3.5 0.14	35.0 1.38	41.0 1.61	1.3 0.05	60.0 2.36	58.0 2.28	0.80 0.03	0.80 0.03	19.3	8	0.0598	0.40 0.88
25.433 1.0013	19.050 0.7500	-9.4 -0.37	0.8 0.03	36.5 1.44	37.5 1.48	1.3 0.05	60.0 2.36	58.0 2.28	0.80 0.03	0.80 0.03	19.3	8	0.0598	0.41 0.89
16.566 0.6522	14.288 0.5625	-3.6 -0.14	1.5 0.06	34.5 1.36	37.0 1.46	1.5 0.06	57.0 2.24	54.0 2.13	0.30 0.01	1.80 0.07	11.8	7.49	0.0579	0.23 0.50
16.566 0.6522	14.288 0.5625	-3.6 -0.14	1.5 0.06	34.5 1.36	37.0 1.46	1.5 0.06	57.0 2.24	54.0 2.13	0.30 0.01	1.80 0.07	11.8	7.49	0.0579	0.23 0.50
19.050 0.7500	14.288 0.5625	-4.8 -0.19	1.3 0.05	36.0 1.42	37.5 1.48	1.3 0.05	58.0 2.28	55.0 2.17	0.30 0.01	1.70 0.07	14.6	7.58	0.0606	0.26 0.56
20.638 0.8125	14.288 0.5625	-5.8 -0.23	1.3 0.05	35.0 1.38	36.5 1.44	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.10 0.04	14.6	7.58	0.0606	0.26 0.58
20.638 0.8125	15.875 0.6250	-5.8 -0.23	1.3 0.05	35.0 1.38	36.5 1.44	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.10 0.04	14.6	7.58	0.0606	0.28 0.61
20.638 0.8125	15.875 0.6250	-5.8 -0.23	1.3 0.05	35.0 1.38	36.5 1.44	1.5 0.06	58.0 2.28	55.0 2.17	1.20 0.05	1.10 0.04	14.6	7.58	0.0606	0.28 0.61
20.638 0.8125	15.875 0.6250	-5.8 -0.23	1.3 0.05	35.0 1.38	36.5 1.44	1.3 0.05	59.0 2.32	56.0 2.20	1.20 0.05	1.10 0.04	14.6	7.58	0.0606	0.29 0.65
22.225 0.8750	16.238 0.6393	-5.1 -0.20	0.8 0.03	38.5 1.52	39.5 1.56	1.5 0.06	63.0 2.48	59.0 2.32	1.20 0.05	0.90 0.04	17.5	8.48	0.0681	0.38 0.84
19.202 0.7560	15.875 0.6250	-4.3 -0.17	0.8 0.03	37.0 1.46	37.5 1.48	1.3 0.05	63.0 2.48	60.0 2.36	1.00 0.04	1.80 0.07	18	9.4	0.0668	0.36 0.80
18.923 0.7450	15.875 0.6250	-4.1 -0.16	1.5 0.06	36.0 1.42	38.0 1.50	1.5 0.06	65.0 2.56	62.0 2.44	0.60 0.02	1.10 0.04	16.1	10.1	0.0630	0.38 0.85
18.923 0.7450	15.875 0.6250	-4.1 -0.16	1.5 0.06	36.0 1.42	38.0 1.50	1.5 0.06	66.0 2.60	64.0 2.52	0.60 0.02	1.10 0.04	16.1	10.1	0.0630	0.44 0.98
24.074 0.9478	16.670 0.6563	-2.0 -0.08	1.5 0.06	42.0 1.66	44.5 1.75	3.3 0.13	73.0 2.87	64.0 2.52	3.40 0.13	2.30 0.09	16.8	7.57	0.0774	0.53 1.16
16.566 0.6522	14.288 0.5625	-3.6 -0.14	1.5 0.06	34.5 1.36	37.0 1.46	1.5 0.06	57.0 2.24	54.0 2.13	0.30 0.01	1.80 0.07	11.8	7.49	0.0579	0.23 0.50
19.583 0.7710	15.875 0.6250	-4.3 -0.17	3.5 0.14	40.0 1.57	43.0 1.69	3.3 0.13	63.0 2.48	59.0 2.32	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.35 0.78
19.202 0.7560	15.875 0.6250	-4.3 -0.17	0.8 0.03	36.5 1.44	37.0 1.46	3.3 0.13	63.0 2.48	59.0 2.32	1.00 0.04	1.80 0.07	18	9.4	0.0668	0.35 0.78
19.202 0.7560	15.875 0.6250	-4.3 -0.17	0.8 0.03	36.5 1.44	37.0 1.46	1.3 0.05	63.0 2.48	60.0 2.36	1.00 0.04	1.80 0.07	18	9.4	0.0668	0.36 0.79
19.583 0.7710	15.875 0.6250	-4.3 -0.17	3.5 0.14	40.0 1.57	43.0 1.69	1.3 0.05	63.0 2.48	60.0 2.36	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.36 0.80
19.583 0.7710	15.875 0.6250	-4.3 -0.17	3.5 0.14	37.0 1.46	43.0 1.69	3.3 0.13	63.0 2.48	59.0 2.32	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.36 0.78
25.357 0.9983	19.050 0.7500	-8.6 -0.34	3.5 0.14	36.0 1.42	42.5 1.67	1.3 0.05	64.0 2.52	61.0 2.40	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.46 1.02

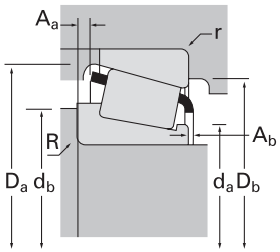
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
30.000 1.1811	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2560X	2523
30.000 1.1811	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2560X	2523-S
30.000 1.1811	72.000 2.8346	19.000 0.7480	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26118-S	26283-S
30.000 1.1811	72.000 2.8346	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2560X	2526X
30.000 1.1811	72.000 2.8346	29.370 1.1563	80600 18100	0.55	1.10	20900 4700	19500 4390	1.07	111000 24900	JHM88540	JHM88513
30.000 1.1811	72.022 2.8355	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2586	2525
30.000 1.1811	72.034 2.8360	30.162 1.1875	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3190	3126
30.000 1.1811	72.085 2.8380	22.385 0.8813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14118	14283
30.000 1.1811	72.085 2.8380	22.385 0.8813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14117A	14283
30.112 1.1855	62.000 2.4409	19.050 0.7500	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15116	15245
30.112 1.1855	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15116	15250
30.162 1.1875	58.738 2.3125	14.684 0.5781	29300 6600	0.47	1.27	7610 1710	6170 1390	1.23	35000 7880	08118	08231
30.162 1.1875	58.788 2.3145	14.684 0.5781	29300 6600	0.47	1.27	7610 1710	6170 1390	1.23	35000 7880	08118	08237
30.162 1.1875	62.000 2.4409	16.002 0.6300	40000 9000	0.38	1.57	10400 2330	6800 1530	1.53	44100 9910	17119	17244
30.162 1.1875	64.292 2.5312	21.433 0.8438	55700 12500	0.55	1.10	14500 3250	13500 3040	1.07	71700 16100	M86649	M86610
30.162 1.1875	64.292 2.5312	21.433 0.8438	55700 12500	0.55	1.10	14500 3250	13500 3040	1.07	71700 16100	M86649P	M86610P
30.162 1.1875	66.421 2.6150	19.050 0.7500	51700 11600	0.34	1.77	13400 3010	7790 1750	1.72	55200 12400	24118	24261
30.162 1.1875	66.421 2.6150	25.400 1.0000	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2558	2530
30.162 1.1875	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2558	2523
30.162 1.1875	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2558	2523-S
30.162 1.1875	72.626 2.8593	30.162 1.1875	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3187	3120
30.162 1.1875	72.626 2.8593	30.162 1.1875	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3191	3120
30.162 1.1875	76.200 3.0000	20.638 0.8125	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28118	28300
30.162 1.1875	76.200 3.0000	24.608 0.9688	71900 16200	0.67	0.90	18600 4190	21300 4790	0.87	76200 17100	43118	43300
30.162 1.1875	79.375 3.1250	25.400 1.0000	71900 16200	0.67	0.90	18600 4190	21300 4790	0.87	76200 17100	43118	43312
30.162 1.1875	80.000 3.1496	21.006 0.8270	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28118	28315
30.175 1.1880	62.000 2.4409	19.050 0.7500	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15120A	15245
30.213 1.1895	62.000 2.4409	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15118	15244

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

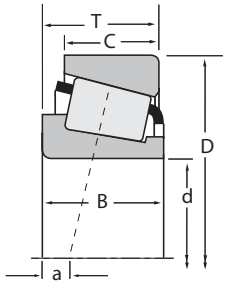
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
25.357 0.9983	19.050 0.7500	-8.6 -0.34	2.0 0.08	36.0 1.42	39.5 1.56	1.3 0.05	64.0 2.52	61.0 2.40	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.47 1.03
25.357 0.9983	19.050 0.7500	-8.6 -0.34	2.0 0.08	36.0 1.42	39.5 1.56	1.5 0.06	64.0 2.52	61.0 2.40	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.47 1.03
18.923 0.7450	15.875 0.6250	-4.1 -0.16	1.5 0.06	36.0 1.42	38.0 1.50	2.0 0.08	65.0 2.56	62.0 2.44	0.60 0.02	1.10 0.04	16.1	10.1	0.0630	0.38 0.84
25.357 0.9983	19.050 0.7500	-8.6 -0.34	2.0 0.08	36.0 1.42	39.5 1.56	2.0 0.08	65.0 2.56	61.0 2.40	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.50 1.11
27.783 1.0938	23.020 0.9063	-5.6 -0.22	1.3 0.05	42.5 1.67	44.5 1.75	3.3 0.13	69.0 2.72	58.0 2.28	1.90 0.08	1.80 0.07	26.3	11.7	0.0857	0.61 1.34
25.357 0.9983	19.050 0.7500	-8.6 -0.34	3.5 0.14	36.0 1.42	42.5 1.67	0.8 0.03	65.0 2.56	63.0 2.48	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.50 1.10
29.997 1.1810	23.812 0.9375	-10.2 -0.40	3.5 0.14	38.0 1.50	44.5 1.75	2.8 0.11	67.0 2.64	61.0 2.40	* *	* *	23.4	8.76	0.0697	0.59 1.30
19.202 0.7560	18.415 0.7250	-4.3 -0.17	0.8 0.03	36.5 1.44	37.0 1.46	2.3 0.09	65.0 2.56	60.0 2.36	1.00 0.04	1.80 0.07	18	9.4	0.0668	0.44 0.96
19.583 0.7710	18.415 0.7250	-4.3 -0.17	3.5 0.14	40.0 1.57	43.0 1.69	2.3 0.09	65.0 2.56	60.0 2.36	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.44 0.96
20.638 0.8125	14.288 0.5625	-5.8 -0.23	0.8 0.03	35.5 1.40	36.0 1.42	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.26 0.58
20.638 0.8125	15.875 0.6250	-5.8 -0.23	0.8 0.03	35.5 1.40	36.0 1.42	1.3 0.05	59.0 2.32	56.0 2.20	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.29 0.65
15.080 0.5937	10.716 0.4219	-1.3 -0.05	3.5 0.14	35.0 1.38	41.5 1.63	1.0 0.04	55.0 2.17	52.0 2.05	0.90 0.03	1.10 0.04	10.7	10.6	0.0601	0.17 0.38
15.080 0.5937	10.716 0.4219	-1.3 -0.05	3.5 0.14	35.0 1.38	41.5 1.63	1.0 0.04	55.0 2.17	52.0 2.05	0.90 0.03	1.10 0.04	10.7	10.6	0.0601	0.17 0.38
16.566 0.6522	14.288 0.5625	-3.6 -0.14	1.5 0.06	34.5 1.36	37.0 1.46	1.5 0.06	57.0 2.24	54.0 2.13	0.30 0.01	1.80 0.07	11.8	7.49	0.0579	0.23 0.50
21.433 0.8438	16.670 0.6563	-3.3 -0.13	1.5 0.06	38.0 1.50	41.0 1.61	1.5 0.06	61.0 2.40	54.0 2.13	1.40 0.05	1.20 0.05	16.8	9.36	0.0736	0.34 0.74
21.433 0.8438	16.670 0.6563	-3.3 -0.13	1.5 0.06	38.0 1.50	41.0 1.61	1.5 0.06	61.0 2.40	54.0 2.13	1.40 0.06	1.20 0.05	16.8	9.36	0.0736	0.34 0.74
18.974 0.7470	15.875 0.6250	-4.8 -0.19	1.5 0.06	35.0 1.38	37.5 1.48	1.5 0.06	61.0 2.40	58.0 2.28	0.40 0.02	1.50 0.06	14	8.28	0.0589	0.30 0.67
25.357 0.9983	20.638 0.8125	-8.6 -0.34	2.3 0.09	36.5 1.44	40.0 1.57	0.8 0.03	62.5 2.46	60.0 2.36	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.43 0.94
25.357 0.9983	19.050 0.7500	-8.6 -0.34	2.3 0.09	36.5 1.44	40.0 1.57	1.3 0.05	64.0 2.52	61.0 2.40	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.46 1.02
25.357 0.9983	19.050 0.7500	-8.6 -0.34	2.3 0.09	36.5 1.44	40.0 1.57	1.5 0.06	64.0 2.52	61.0 2.40	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.46 1.02
29.997 1.1810	23.812 0.9375	-10.2 -0.40	0.8 0.03	38.5 1.52	39.0 1.54	3.3 0.13	67.0 2.64	61.0 2.40	* *	* *	23.4	8.76	0.0697	0.60 1.33
29.997 1.1810	23.812 0.9375	-10.2 -0.40	3.5 0.14	38.5 1.52	44.5 1.75	3.3 0.13	67.0 2.64	61.0 2.40	* *	* *	23.4	8.76	0.0697	0.60 1.32
20.940 0.8244	15.507 0.6105	-4.8 -0.19	1.5 0.06	37.5 1.48	40.0 1.57	1.3 0.05	71.0 2.80	68.0 2.68	2.40 0.09	1.10 0.04	20.7	12.5	0.0709	0.47 1.04
24.074 0.9478	16.670 0.6563	-2.0 -0.08	1.5 0.06	42.0 1.65	45.0 1.77	3.3 0.13	73.0 2.87	64.0 2.52	3.40 0.13	2.30 0.09	16.8	7.57	0.0774	0.52 1.16
24.074 0.9478	17.462 0.6875	-2.0 -0.08	1.5 0.06	42.0 1.65	45.0 1.77	1.5 0.06	74.0 2.91	67.0 2.64	3.40 0.13	2.30 0.09	16.8	7.57	0.0774	0.60 1.31
20.940 0.8244	15.875 0.6250	-4.8 -0.19	1.5 0.06	37.5 1.48	40.0 1.57	1.5 0.06	73.0 2.87	69.0 2.72	2.40 0.09	1.10 0.04	20.7	12.5	0.0709	0.53 1.17
20.638 0.8125	14.288 0.5625	-5.8 -0.23	0.5 0.02	35.5 1.40	35.5 1.40	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.10 0.04	14.6	7.58	0.0606	0.26 0.58
20.638 0.8125	15.875 0.6250	-5.8 -0.23	3.5 0.14	35.5 1.40	41.5 1.63	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.10 0.04	14.6	7.58	0.0606	0.27 0.60

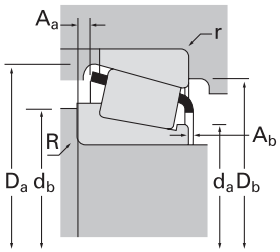
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
30.213 1.1895	62.000 2.4409	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15120	15244
30.213 1.1895	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15118	15250
30.213 1.1895	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15119	15249
30.213 1.1895	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15119	15250
30.213 1.1895	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15120	15250
30.213 1.1895	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15118	15250X
30.213 1.1895	66.421 2.6150	25.400 1.0000	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2561X	2520
30.213 1.1895	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2561X	2523
30.213 1.1895	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2561X	2523-S
30.226 1.1900	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14116	14276
30.955 1.2187	64.292 2.5312	21.433 0.8438	55700 12500	0.55	1.10	14500 3250	13500 3040	1.07	71700 16100	M86648A	M86610
31.623 1.2450	66.675 2.6250	20.638 0.8125	48600 10900	0.37	1.62	12600 2830	8010 1800	1.57	57900 13000	1674	1620
31.750 1.2500	58.738 2.3125	14.684 0.5781	29300 6600	0.47	1.27	7610 1710	6170 1390	1.23	35000 7880	08125	08231
31.750 1.2500	59.131 2.3280	15.875 0.6250	36500 8210	0.41	1.46	9460 2130	6680 1500	1.42	44600 10000	LM67045	LM67010
31.750 1.2500	59.131 2.3280	15.875 0.6250	36500 8210	0.41	1.46	9460 2130	6680 1500	1.42	44600 10000	LM67047	LM67010
31.750 1.2500	59.131 2.3280	15.875 0.6250	36500 8210	0.41	1.46	9460 2130	6680 1500	1.42	44600 10000	LM67048	LM67010
31.750 1.2500	59.131 2.3280	15.875 0.6250	36500 8210	0.41	1.46	9460 2130	6680 1500	1.42	44600 10000	LM67049A	LM67010
31.750 1.2500	61.986 2.4404	15.875 0.6250	36500 8210	0.41	1.46	9460 2130	6680 1500	1.42	44600 10000	LM67045	LM67014
31.750 1.2500	61.986 2.4404	15.875 0.6250	36500 8210	0.41	1.46	9460 2130	6680 1500	1.42	44600 10000	LM67048	LM67014
31.750 1.2500	61.986 2.4404	15.875 0.6250	36500 8210	0.41	1.46	9460 2130	6680 1500	1.42	44600 10000	LM67049A	LM67014
31.750 1.2500	62.000 2.4409	18.161 0.7150	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15123	15245
31.750 1.2500	62.000 2.4409	19.050 0.7500	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15125	15245
31.750 1.2500	62.000 2.4409	19.050 0.7500	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15126	15245
31.750 1.2500	62.000 2.4409	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15125	15244
31.750 1.2500	62.000 2.4409	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15126	15244
31.750 1.2500	63.500 2.5000	19.748 0.7775	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15123	15250
31.750 1.2500	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15125	15250
31.750 1.2500	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15126	15250

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

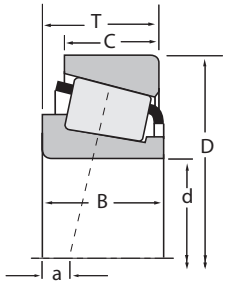
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	$a^{(3)}$	$R^{(4)}$	d_a	d_b	$r^{(4)}$	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
20.638 0.8125	15.875 0.6250	-5.8 -0.23	0.8 0.03	35.5 1.40	36.0 1.42	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.28 0.61
20.638 0.8125	15.875 0.6250	-5.8 -0.23	3.5 0.14	35.5 1.40	41.5 1.63	1.3 0.05	59.0 2.32	56.0 2.20	1.20 0.05	1.10 0.04	14.6	7.58	0.0606	0.29 0.64
20.638 0.8125	15.875 0.6250	-5.8 -0.23	1.5 0.06	35.5 1.40	37.5 1.48	1.5 0.06	59.0 2.32	55.0 2.17	* *	* *	14.6	7.58	0.0606	0.29 0.64
20.638 0.8125	15.875 0.6250	-5.8 -0.23	1.5 0.06	35.5 1.40	37.5 1.48	1.3 0.05	59.0 2.32	56.0 2.20	* *	* *	14.6	7.58	0.0606	0.29 0.64
20.638 0.8125	15.875 0.6250	-5.8 -0.23	0.8 0.03	35.5 1.40	36.0 1.42	1.3 0.05	59.0 2.32	56.0 2.20	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.29 0.65
20.638 0.8125	15.875 0.6250	-5.8 -0.23	3.5 0.14	35.5 1.40	41.5 1.63	1.5 0.06	59.0 2.32	55.0 2.17	1.20 0.05	1.10 0.04	14.6	7.58	0.0606	0.29 0.63
24.714 0.9730	20.638 0.8125	-8.6 -0.34	2.3 0.09	36.5 1.44	40.0 1.57	3.3 0.13	62.5 2.46	57.0 2.24	0.90 0.04	1.40 0.06	23.6	9.63	0.0656	0.41 0.91
24.714 0.9730	19.050 0.7500	-8.6 -0.34	2.3 0.09	36.5 1.44	40.0 1.57	1.3 0.05	64.0 2.52	61.0 2.40	0.90 0.04	1.40 0.06	23.6	9.63	0.0656	0.46 1.02
24.714 0.9730	19.050 0.7500	-8.6 -0.34	2.3 0.09	36.5 1.44	40.0 1.57	1.5 0.06	64.0 2.52	61.0 2.40	0.90 0.04	1.40 0.06	23.6	9.63	0.0656	0.46 1.02
19.583 0.7710	15.875 0.6250	-4.3 -0.17	0.8 0.03	37.0 1.46	38.0 1.50	1.3 0.05	63.0 2.48	60.0 2.36	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.36 0.80
21.433 0.8438	16.670 0.6563	-3.3 -0.13	1.5 0.06	38.0 1.50	42.0 1.65	1.5 0.06	61.0 2.40	54.0 2.13	1.40 0.05	1.20 0.05	16.8	9.36	0.0736	0.33 0.73
20.638 0.8125	15.875 0.6250	-5.3 -0.21	1.5 0.06	37.0 1.46	39.5 1.56	1.5 0.06	61.0 2.40	58.0 2.28	1.50 0.06	1.00 0.04	16.6	8.67	0.0644	0.33 0.72
15.080 0.5937	10.716 0.4219	-1.3 -0.05	1.0 0.04	36.0 1.42	37.5 1.48	1.0 0.04	55.0 2.17	52.0 2.05	0.90 0.03	1.10 0.04	10.7	10.6	0.0601	0.17 0.37
18.500 0.7283	11.811 0.4650	-3.0 -0.12	2.0 0.08	36.0 1.42	39.5 1.56	1.3 0.05	56.0 2.20	52.0 2.05	0.80 0.03	-1.10 -0.04	12.8	9.93	0.0612	0.19 0.42
16.764 0.6600	11.811 0.4650	-3.0 -0.12	2.3 0.09	36.0 1.42	40.0 1.57	1.3 0.05	56.0 2.20	52.0 2.05	0.70 0.03	0.80 0.03	12.8	9.93	0.0612	0.18 0.41
16.764 0.6600	11.811 0.4650	-3.0 -0.12	3.5 0.14	36.0 1.42	42.5 1.67	1.3 0.05	56.0 2.20	52.0 2.05	0.70 0.03	0.80 0.03	12.8	9.93	0.0612	0.18 0.39
16.764 0.6600	11.811 0.4650	-3.0 -0.12	0.8 0.03	36.0 1.42	37.0 1.46	1.3 0.05	56.0 2.20	52.0 2.05	0.70 0.03	0.80 0.03	12.8	9.93	0.0612	0.19 0.41
18.500 0.7283	11.811 0.4650	-3.0 -0.12	2.0 0.08	36.0 1.42	39.5 1.56	1.3 0.05	57.0 2.24	54.0 2.13	0.80 0.03	-1.10 -0.04	12.8	9.93	0.0612	0.21 0.47
16.764 0.6600	11.811 0.4650	-3.0 -0.12	3.5 0.14	36.0 1.42	42.5 1.67	1.3 0.05	57.0 2.24	54.0 2.13	0.70 0.03	0.80 0.03	12.8	9.93	0.0612	0.20 0.44
16.764 0.6600	11.811 0.4650	-3.0 -0.12	0.8 0.03	36.0 1.42	37.0 1.46	1.3 0.05	57.0 2.24	54.0 2.13	0.70 0.03	0.80 0.03	12.8	9.93	0.0612	0.21 0.46
19.050 0.7500	14.288 0.5625	-4.8 -0.19	0.0 0.00	36.5 1.44	42.5 1.67	1.3 0.05	58.0 2.28	55.0 2.17	0.30 0.01	1.70 0.07	14.6	7.58	0.0606	0.23 0.51
20.638 0.8125	14.288 0.5625	-5.8 -0.23	3.5 0.14	36.5 1.44	42.5 1.67	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.25 0.54
20.638 0.8125	14.288 0.5625	-5.8 -0.23	0.8 0.03	36.5 1.44	37.0 1.46	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.10 0.04	14.6	7.58	0.0606	0.25 0.55
20.638 0.8125	15.875 0.6250	-5.8 -0.23	3.5 0.14	36.5 1.44	42.5 1.67	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.26 0.57
20.638 0.8125	15.875 0.6250	-5.8 -0.23	0.8 0.03	36.5 1.44	37.0 1.46	1.3 0.05	58.0 2.28	55.0 2.17	1.20 0.05	1.10 0.04	14.6	7.58	0.0606	0.26 0.58
19.050 0.7500	15.875 0.6250	-4.8 -0.19	0.0 0.00	36.5 1.44	42.5 1.67	1.3 0.05	59.0 2.32	56.0 2.20	0.30 0.01	1.70 0.07	14.6	7.58	0.0606	0.26 0.58
20.638 0.8125	15.875 0.6250	-5.8 -0.23	3.5 0.14	36.5 1.44	42.5 1.67	1.3 0.05	59.0 2.32	56.0 2.20	1.20 0.05	1.00 0.04	14.6	7.58	0.0606	0.28 0.61
20.638 0.8125	15.875 0.6250	-5.8 -0.23	0.8 0.03	36.5 1.44	37.0 1.46	1.3 0.05	59.0 2.32	56.0 2.20	1.20 0.05	1.10 0.04	14.6	7.58	0.0606	0.28 0.62

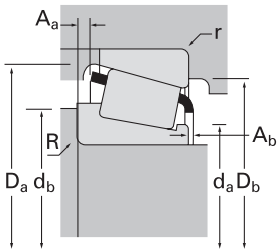
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
31.750 1.2500	63.500 2.5000	20.638 0.8125	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15126	15250X
31.750 1.2500	66.421 2.6150	25.400 1.0000	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2580	2520
31.750 1.2500	66.421 2.6150	25.400 1.0000	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2580	2530
31.750 1.2500	66.421 2.6150	25.400 1.0000	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2580	2520A
31.750 1.2500	66.421 2.6150	25.400 1.0000	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2580A	2520A
31.750 1.2500	68.262 2.6875	21.000 0.8268	59100 13300	0.42	1.44	15300 3440	10900 2450	1.40	70200 15800	02476	02420A
31.750 1.2500	68.262 2.6875	22.225 0.8750	62600 14100	0.34	1.77	16200 3650	9420 2120	1.72	73300 16500	2475	2420
31.750 1.2500	68.262 2.6875	22.225 0.8750	59100 13300	0.42	1.44	15300 3440	10900 2450	1.40	70200 15800	02475	02420
31.750 1.2500	68.262 2.6875	22.225 0.8750	59100 13300	0.42	1.44	15300 3440	10900 2450	1.40	70200 15800	02476	02420
31.750 1.2500	68.262 2.6875	22.225 0.8750	61700 13900	0.28	2.18	16000 3600	7540 1700	2.12	77900 17500	16579	16522
31.750 1.2500	68.262 2.6875	22.225 0.8750	59600 13400	0.55	1.10	15500 3470	14400 3250	1.07	77400 17400	M88046	M88010
31.750 1.2500	68.262 2.6875	26.988 1.0625	74700 16800	0.35	1.71	19400 4360	11700 2620	1.66	91000 20500	23491	23420
31.750 1.2500	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14124	14274
31.750 1.2500	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14124	14276
31.750 1.2500	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14125A	14274
31.750 1.2500	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14125A	14276
31.750 1.2500	69.012 2.7170	22.385 0.8813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14124	14277
31.750 1.2500	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2580	2523
31.750 1.2500	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2582	2523
31.750 1.2500	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2580	2523-S
31.750 1.2500	71.996 2.8345	19.002 0.7481	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14124	14282
31.750 1.2500	72.022 2.8355	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2582	2525
31.750 1.2500	72.233 2.8438	25.400 1.0000	71100 16000	0.55	1.10	18400 4140	17200 3870	1.07	94200 21200	HM88644	HM88610
31.750 1.2500	72.626 2.8593	25.400 1.0000	71100 16000	0.55	1.10	18400 4140	17200 3870	1.07	94200 21200	HM88644	HM88611AS
31.750 1.2500	72.626 2.8593	30.162 1.1875	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3188	3120
31.750 1.2500	72.626 2.8593	30.162 1.1875	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3193	3120
31.750 1.2500	72.626 2.8593	30.162 1.1875	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3199	3120
31.750 1.2500	73.025 2.8750	22.225 0.8750	67700 15200	0.37	1.63	17600 3950	11100 2490	1.59	83800 18800	2875	2820

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	$a^{(3)}$	$R^{(4)}$	d_a	d_b	$r^{(4)}$	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
20.638 0.8125	15.875 0.6250	-5.8 -0.23	0.8 0.03	36.5 1.44	37.0 1.46	1.5 0.06	59.0 2.32	55.0 2.17	1.20 0.05	1.10 0.04	14.6	7.58	0.0606	0.28 0.62
25.357 0.9983	20.638 0.8125	-8.6 -0.34	0.8 0.03	37.5 1.48	38.5 1.52	3.3 0.13	62.5 2.46	57.0 2.24	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.40 0.89
25.357 0.9983	20.638 0.8125	-8.6 -0.34	0.8 0.03	37.5 1.48	38.5 1.52	0.8 0.03	62.5 2.46	60.0 2.36	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.41 0.91
25.357 0.9983	20.638 0.8125	-8.6 -0.34	0.8 0.03	37.5 1.48	38.5 1.52	1.5 0.06	62.0 2.44	59.0 2.32	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.41 0.91
25.357 0.9983	20.638 0.8125	-8.6 -0.34	1.3 0.05	39.5 1.56	41.5 1.63	1.5 0.06	62.0 2.44	59.0 2.32	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.41 0.91
22.225 0.8750	16.238 0.6393	-5.1 -0.20	0.8 0.03	38.5 1.52	39.0 1.54	1.5 0.06	63.0 2.48	59.0 2.32	1.20 0.05	0.90 0.04	17.5	8.48	0.0681	0.37 0.81
23.812 0.9375	17.462 0.6875	-6.6 -0.26	3.5 0.14	37.5 1.48	44.0 1.73	1.5 0.06	63.0 2.48	60.0 2.36	1.00 0.04	0.30 0.01	18.8	10.5	0.0652	0.38 0.83
22.225 0.8750	17.462 0.6875	-5.1 -0.20	3.5 0.14	38.5 1.52	44.5 1.75	1.5 0.06	63.0 2.48	59.0 2.32	1.20 0.05	0.90 0.04	17.5	8.48	0.0681	0.37 0.82
22.225 0.8750	17.462 0.6875	-5.1 -0.20	0.8 0.03	38.5 1.52	39.0 1.54	1.5 0.06	63.0 2.48	59.0 2.32	1.20 0.05	0.90 0.04	17.5	8.48	0.0681	0.38 0.83
22.225 0.8750	17.462 0.6875	-7.4 -0.29	1.5 0.06	37.5 1.48	39.5 1.56	0.8 0.03	63.0 2.48	61.0 2.40	0.70 0.03	1.50 0.06	22.7	13	0.0650	0.39 0.85
22.225 0.8750	17.462 0.6875	-2.8 -0.11	1.5 0.06	40.5 1.59	43.0 1.69	1.5 0.06	65.0 2.56	58.0 2.28	1.70 0.07	0.90 0.04	19.4	10	0.0771	0.39 0.87
26.988 1.0625	22.225 0.8750	-8.6 -0.34	1.5 0.06	39.0 1.54	41.0 1.61	1.5 0.06	64.0 2.52	59.0 2.32	1.60 0.06	0.60 0.02	21.9	10.4	0.0697	0.46 1.02
19.583 0.7710	15.875 0.6250	-4.3 -0.17	0.8 0.03	38.5 1.52	39.0 1.54	3.3 0.13	63.0 2.48	59.0 2.32	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.34 0.76
19.583 0.7710	15.875 0.6250	-4.3 -0.17	0.8 0.03	38.5 1.52	39.0 1.54	1.3 0.05	63.0 2.48	60.0 2.36	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.35 0.78
19.583 0.7710	15.875 0.6250	-4.3 -0.17	3.5 0.14	38.5 1.52	44.5 1.75	3.3 0.13	63.0 2.48	59.0 2.32	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.34 0.75
19.583 0.7710	15.875 0.6250	-4.3 -0.17	3.5 0.14	38.5 1.52	44.5 1.75	1.3 0.05	63.0 2.48	60.0 2.36	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.35 0.77
19.583 0.7710	18.415 0.7250	-4.3 -0.17	0.8 0.03	38.5 1.52	39.0 1.54	2.3 0.09	63.0 2.48	59.0 2.32	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.38 0.84
25.357 0.9983	19.050 0.7500	-8.6 -0.34	0.8 0.03	37.5 1.48	38.5 1.52	1.3 0.05	64.0 2.52	61.0 2.40	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.45 1.00
25.357 0.9983	19.050 0.7500	-8.6 -0.34	3.5 0.14	37.5 1.48	44.0 1.73	1.3 0.05	64.0 2.52	61.0 2.40	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.45 0.98
25.357 0.9983	19.050 0.7500	-8.6 -0.34	0.8 0.03	37.5 1.48	38.5 1.52	1.5 0.06	64.0 2.52	61.0 2.40	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.45 0.99
19.583 0.7710	15.032 0.5918	-4.3 -0.17	0.8 0.03	38.5 1.52	39.0 1.54	1.5 0.06	65.0 2.56	62.0 2.44	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.38 0.84
25.357 0.9983	19.050 0.7500	-8.6 -0.34	3.5 0.14	37.5 1.48	44.0 1.73	0.8 0.03	65.0 2.56	63.0 2.48	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.48 1.07
25.400 1.0000	19.842 0.7812	-4.6 -0.18	1.5 0.06	42.5 1.67	44.5 1.75	2.3 0.09	69.0 2.72	60.0 2.36	1.70 0.07	1.70 0.07	23.4	10.9	0.0822	0.52 1.15
25.400 1.0000	19.842 0.7812	-4.6 -0.18	1.5 0.06	42.5 1.67	44.5 1.75	3.3 0.13	69.0 2.72	59.0 2.32	1.70 0.07	1.70 0.07	23.4	10.9	0.0822	0.53 1.16
29.997 1.1810	23.812 0.9375	-10.2 -0.40	0.8 0.03	39.5 1.56	40.0 1.57	3.3 0.13	67.0 2.64	61.0 2.40	1.50 0.06	0.50 0.02	23.4	8.76	0.0697	0.58 1.29
29.997 1.1810	23.812 0.9375	-10.2 -0.40	3.5 0.14	39.5 1.56	45.5 1.79	3.3 0.13	67.0 2.64	61.0 2.40	1.50 0.06	0.50 0.02	23.4	8.76	0.0697	0.58 1.28
29.997 1.1810	23.812 0.9375	-10.2 -0.40	2.3 0.09	39.5 1.56	43.0 1.69	3.3 0.13	67.0 2.64	61.0 2.40	* *	* *	23.4	8.76	0.0697	0.58 1.28
23.812 0.9375	17.462 0.6875	-5.6 -0.22	3.5 0.14	38.5 1.52	45.0 1.77	3.3 0.13	68.0 2.68	63.0 2.48	0.90 0.04	0.20 0.01	23.1	12.4	0.0718	0.46 1.01

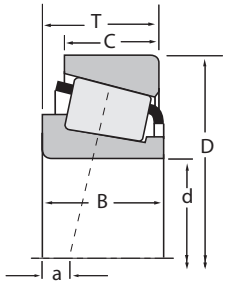
(6) For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
(7) Compound radius on inner race. Details on drawing for bearing.
(8) Pin-type cage. Please consult The Timken Company.

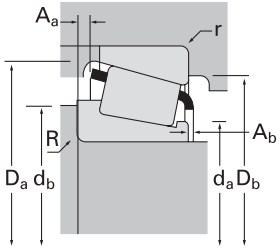
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)		Factors (5)	Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
31.750 1.2500	73.025 2.8750	22.225 0.8750	67700 15200	0.37	1.63	17600 3950	11100 2490	1.59	83800 18800	2879	2820
31.750 1.2500	73.025 2.8750	22.225 0.8750	60800 13700	0.45	1.32	15800 3550	12300 2750	1.29	74900 16800	02875	02820
31.750 1.2500	73.025 2.8750	22.225 0.8750	60800 13700	0.45	1.32	15800 3550	12300 2750	1.29	74900 16800	02876	02820
31.750 1.2500	73.025 2.8750	26.988 1.0625	82800 18600	0.37	1.62	21500 4830	13600 3050	1.58	102000 22900	23685	23620
31.750 1.2500	73.025 2.8750	29.370 1.1563	80600 18100	0.55	1.10	20900 4700	19500 4390	1.07	111000 24900	HM88542	HM88510
31.750 1.2500	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2783	2720
31.750 1.2500	76.200 3.0000	24.608 0.9688	71900 16200	0.67	0.90	18600 4190	21300 4790	0.87	76200 17100	43125	43300
31.750 1.2500	76.200 3.0000	29.370 1.1563	86200 19400	0.55	1.10	22400 5030	20900 4700	1.07	119000 26700	HM89440	HM89410
31.750 1.2500	76.200 3.0000	30.162 1.1875	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3188	3129
31.750 1.2500	76.200 3.0000	30.162 1.1875	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3193	3129
31.750 1.2500	79.375 3.1250	25.400 1.0000	71900 16200	0.67	0.90	18600 4190	21300 4790	0.87	76200 17100	43125	43312
31.750 1.2500	79.375 3.1250	29.370 1.1563	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3476	3420
31.750 1.2500	80.000 3.1496	24.176 0.9518	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	346	332A
31.750 1.2500	80.167 3.1562	26.988 1.0625	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	346	3320
31.987 1.2593	66.987 2.6373	20.500 0.8071	59100 13300	0.42	1.44	15300 3440	10900 2450	1.40	70200 15800	02476X	02419
31.987 1.2593	71.973 2.8336	27.000 1.0630	71100 16000	0.55	1.10	18400 4140	17200 3870	1.07	94200 21200	HM88638	HM88611
32.000 1.2598	72.000 2.8346	19.000 0.7480	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26126X	26283
32.004 1.2600	72.000 2.8346	19.000 0.7480	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26126	26283
32.532 1.2808	69.850 2.7500	25.400 1.0000	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2584	2523
33.338 1.3125	66.421 2.6150	25.400 1.0000	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2585	2520
33.338 1.3125	66.675 2.6250	20.638 0.8125	48600 10900	0.37	1.62	12600 2830	8010 1800	1.57	57900 13000	1680	1620
33.338 1.3125	66.675 2.6250	20.638 0.8125	57800 13000	0.35	1.70	15000 3370	9050 2030	1.66	72800 16400	M38545	M38510
33.338 1.3125	68.262 2.6875	22.225 0.8750	61700 13900	0.28	2.18	16000 3600	7540 1700	2.12	77900 17500	16582	16522
33.338 1.3125	68.262 2.6875	22.225 0.8750	59600 13400	0.55	1.10	15500 3470	14400 3250	1.07	77400 17400	M88048A	M88010
33.338 1.3125	68.262 2.6875	22.225 0.8750	59600 13400	0.55	1.10	15500 3470	14400 3250	1.07	77400 17400	M88048	M88010
33.338 1.3125	68.262 2.6875	22.225 0.8750	59600 13400	0.55	1.10	15500 3470	14400 3250	1.07	77400 17400	M88048	M88012
33.338 1.3125	68.262 2.6875	22.225 0.8750	59600 13400	0.55	1.10	15500 3470	14400 3250	1.07	77400 17400	M88048-S	M88010
33.338 1.3125	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14130	14274

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

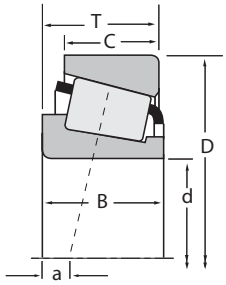
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	$a^{(3)}$	$R^{(4)}$	d_a	d_b	$r^{(4)}$	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
23.812 0.9375	17.462 0.6875	-5.6 -0.22	0.8 0.03	38.5 1.52	39.5 1.56	3.3 0.13	68.0 2.68	63.0 2.48	0.90 0.04	0.20 0.01	23.1	12.4	0.0718	0.46 1.02
22.225 0.8750	17.462 0.6875	-3.8 -0.15	3.5 0.14	39.5 1.56	45.5 1.79	3.3 0.13	68.0 2.68	62.0 2.44	1.40 0.06	0.90 0.04	20.6	10.1	0.0740	0.44 0.97
22.225 0.8750	17.462 0.6875	-3.8 -0.15	0.8 0.03	39.5 1.56	40.0 1.57	3.3 0.13	68.0 2.68	62.0 2.44	1.40 0.06	0.90 0.04	20.6	10.1	0.0740	0.45 0.99
26.975 1.0620	22.225 0.8750	-8.1 -0.32	3.5 0.14	40.0 1.57	46.0 1.81	1.5 0.06	68.0 2.68	63.0 2.48	1.80 0.07	0.70 0.03	24.4	10.7	0.0734	0.55 1.22
27.783 1.0938	23.020 0.9063	-5.6 -0.22	1.3 0.05	42.5 1.68	45.5 1.79	3.3 0.13	70.0 2.76	59.0 2.32	1.90 0.08	1.80 0.07	26.3	11.7	0.0857	0.61 1.34
25.654 1.0100	19.050 0.7500	-8.1 -0.32	1.5 0.06	38.5 1.52	41.0 1.61	3.3 0.13	70.0 2.76	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.57 1.25
24.074 0.9478	16.670 0.6563	-2.0 -0.08	1.5 0.06	41.5 1.63	44.0 1.73	3.3 0.13	73.0 2.87	64.0 2.52	3.40 0.13	2.30 0.09	16.8	7.57	0.0774	0.51 1.12
28.575 1.1250	23.020 0.9063	-5.6 -0.22	0.8 0.03	44.5 1.75	45.5 1.79	3.3 0.13	73.0 2.87	62.0 2.44	2.00 0.08	1.40 0.05	28.9	13.1	0.0883	0.68 1.50
29.997 1.1810	23.812 0.9375	-10.2 -0.40	0.8 0.03	39.5 1.56	40.0 1.57	0.8 0.03	69.0 2.72	65.0 2.56	1.50 0.06	0.50 0.02	23.4	8.76	0.0697	0.67 1.48
29.997 1.1810	23.812 0.9375	-10.2 -0.40	3.5 0.14	39.5 1.56	45.5 1.79	0.8 0.03	69.0 2.72	65.0 2.56	1.50 0.06	0.50 0.02	23.4	8.76	0.0697	0.67 1.47
24.074 0.9478	17.462 0.6875	-2.0 -0.08	1.5 0.06	41.5 1.63	44.0 1.73	1.5 0.06	74.0 2.91	67.0 2.64	3.40 0.13	2.30 0.09	16.8	7.57	0.0774	0.58 1.28
29.771 1.1721	23.812 0.9375	-8.6 -0.34	1.3 0.05	41.0 1.61	43.0 1.69	3.3 0.13	74.0 2.91	67.0 2.64	1.40 0.06	0.90 0.04	29.9	11.2	0.0781	0.74 1.64
22.403 0.8820	21.000 0.8268	-6.4 -0.25	0.8 0.03	39.5 1.56	40.0 1.57	2.3 0.09	75.0 2.95	71.0 2.80	0.70 0.03	1.10 0.04	26.5	13	0.0676	0.59 1.30
22.403 0.8820	23.812 0.9375	-6.4 -0.25	0.8 0.03	39.5 1.56	40.0 1.57	3.3 0.13	75.0 2.95	70.0 2.76	0.70 0.03	1.10 0.04	26.5	13	0.0676	0.63 1.38
20.500 0.8071	16.000 0.6299	-5.1 -0.20	0.8 0.03	38.5 1.52	39.5 1.56	1.5 0.06	62.0 2.44	59.0 2.32	1.20 0.05	2.60 0.10	17.5	8.48	0.0681	0.33 0.73
25.400 1.0000	21.443 0.8442	-4.6 -0.18	3.3 0.13	42.5 1.67	48.5 1.91	1.5 0.06	68.0 2.68	61.0 2.40	1.70 0.07	1.70 0.07	23.4	10.9	0.0822	0.55 1.21
18.923 0.7450	15.875 0.6250	-4.1 -0.16	2.0 0.08	37.5 1.48	40.5 1.59	1.5 0.06	65.0 2.56	62.0 2.44	0.60 0.02	1.10 0.04	16.1	10.1	0.0630	0.37 0.81
18.923 0.7450	15.875 0.6250	-4.1 -0.16	1.5 0.06	37.5 1.48	39.5 1.56	1.5 0.06	65.0 2.56	62.0 2.44	0.60 0.02	1.10 0.04	16.1	10.1	0.0630	0.37 0.81
26.944 1.0608	19.050 0.7500	-10.2 -0.40	5.0 0.20	38.0 1.50	47.5 1.87	1.3 0.05	64.0 2.52	61.0 2.40	2.50 0.10	0.80 0.03	23.6	9.63	0.0656	0.44 0.98
25.357 0.9983	20.638 0.8125	-8.6 -0.34	3.5 0.14	39.0 1.54	45.0 1.77	3.3 0.13	62.5 2.46	57.0 2.24	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.38 0.84
20.638 0.8125	15.875 0.6250	-5.3 -0.21	3.5 0.14	38.5 1.52	44.5 1.75	1.5 0.06	61.0 2.40	58.0 2.28	* *	* *	16.6	8.67	0.0644	0.31 0.68
20.638 0.8125	16.670 0.6563	-5.6 -0.22	3.5 0.14	39.0 1.54	45.0 1.77	2.3 0.09	62.0 2.44	58.0 2.28	0.40 0.02	2.40 0.09	20.3	11.8	0.0680	0.32 0.71
22.225 0.8750	17.462 0.6875	-7.4 -0.29	1.5 0.06	38.5 1.52	41.0 1.61	0.8 0.03	63.0 2.48	61.0 2.40	0.70 0.03	1.50 0.06	22.7	13	0.0650	0.37 0.82
22.225 0.8750	17.462 0.6875	-2.8 -0.11	1.3 0.05	41.0 1.62	43.5 1.71	1.5 0.06	65.0 2.56	58.0 2.28	1.40 0.06	1.00 0.04	19.4	10	0.0771	0.38 0.84
22.225 0.8750	17.462 0.6875	-2.8 -0.11	0.8 0.03	41.0 1.62	42.5 1.67	1.5 0.06	65.0 2.56	58.0 2.28	1.40 0.06	1.00 0.04	19.4	10	0.0771	0.38 0.84
22.225 0.8750	17.462 0.6875	-2.8 -0.11	0.8 0.03	41.0 1.62	42.5 1.67	0.8 0.03	64.0 2.52	59.0 2.32	1.40 0.06	1.00 0.04	19.4	10	0.0771	0.38 0.84
22.225 0.8750	17.462 0.6875	-2.8 -0.11	4.0 0.16	41.0 1.62	49.5 1.95	1.5 0.06	65.0 2.56	58.0 2.28	1.40 0.06	1.00 0.04	19.4	10	0.0771	0.38 0.83
19.583 0.7710	15.875 0.6250	-4.3 -0.17	3.5 0.14	39.5 1.56	46.0 1.81	3.3 0.13	63.0 2.48	59.0 2.32	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.33 0.73

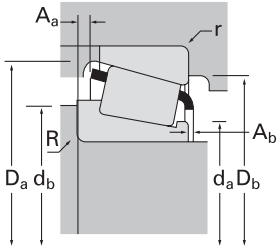
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
33.338 1.3125	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14130	14276
33.338 1.3125	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14131	14274
33.338 1.3125	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14131	14276
33.338 1.3125	69.723 2.7450	19.050 0.7500	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26132	26274
33.338 1.3125	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2581	2523
33.338 1.3125	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2585	2523
33.338 1.3125	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2581	2523-S
33.338 1.3125	69.850 2.7500	23.812 0.9375	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2585	2523-S
33.338 1.3125	71.996 2.8345	19.002 0.7481	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14130	14282
33.338 1.3125	72.000 2.8346	19.000 0.7480	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26131	26283
33.338 1.3125	72.000 2.8346	19.000 0.7480	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26131	26283-S
33.338 1.3125	72.238 2.8440	20.638 0.8125	52400 11800	0.40	1.49	13600 3060	9350 2100	1.45	65800 14800	16131	16284
33.338 1.3125	72.626 2.8593	30.162 1.1875	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3196	3120
33.338 1.3125	72.626 2.8593	30.162 1.1875	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3197	3120
33.338 1.3125	73.025 2.8750	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2790	2735X
33.338 1.3125	73.025 2.8750	29.370 1.1563	80600 18100	0.55	1.10	20900 4700	19500 4390	1.07	111000 24900	HM88547	HM88510
33.338 1.3125	73.025 2.8750	29.370 1.1563	80600 18100	0.55	1.10	20900 4700	19500 4390	1.07	111000 24900	HM88547	HM88511
33.338 1.3125	73.812 2.9060	29.370 1.1563	80600 18100	0.55	1.10	20900 4700	19500 4390	1.07	111000 24900	HM88547	HM88512
33.338 1.3125	76.200 3.0000	22.225 0.8750	59600 13400	0.55	1.10	15500 3470	14400 3250	1.07	77400 17400	M88048	M88022
33.338 1.3125	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2785	2720
33.338 1.3125	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2785	2729
33.338 1.3125	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2790	2720
33.338 1.3125	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2790	2729
33.338 1.3125	76.200 3.0000	29.370 1.1563	87700 19700	0.40	1.49	22700 5110	15600 3520	1.45	107000 24100	31590	31520
33.338 1.3125	76.200 3.0000	29.370 1.1563	86200 19400	0.55	1.10	22400 5030	20900 4700	1.07	119000 26700	HM89443	HM89410
33.338 1.3125	76.200 3.0000	29.370 1.1563	86200 19400	0.55	1.10	22400 5030	20900 4700	1.07	119000 26700	HM89443	HM89411
33.338 1.3125	76.200 3.0000	29.370 1.1563	86200 19400	0.55	1.10	22400 5030	20900 4700	1.07	119000 26700	HM89444	HM89410
33.338 1.3125	79.375 3.1250	25.400 1.0000	71900 16200	0.67	0.90	18600 4190	21300 4790	0.87	76200 17100	43131	43312

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage							
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.									
B	C	$a^{(3)}$	$R^{(4)}$	d_a	d_b	$r^{(4)}$	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
19.583 0.7710	15.875 0.6250	-4.3 -0.17	3.5 0.14	39.5 1.56	46.0 1.81	1.3 0.05	63.0 2.48	60.0 2.36	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.34 0.74
19.583 0.7710	15.875 0.6250	-4.3 -0.17	0.8 0.03	39.5 1.56	40.5 1.59	3.3 0.13	63.0 2.48	59.0 2.32	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.33 0.73
19.583 0.7710	15.875 0.6250	-4.3 -0.17	0.8 0.03	39.5 1.56	40.5 1.59	1.3 0.05	63.0 2.48	60.0 2.36	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.34 0.75
18.923 0.7450	19.050 0.7500	-4.1 -0.16	1.5 0.06	38.5 1.52	40.5 1.59	1.5 0.06	65.0 2.56	61.0 2.40	0.60 0.02	1.10 0.04	16.1	10.1	0.0630	0.34 0.76
25.357 0.9983	19.050 0.7500	-8.6 -0.34	0.8 0.03	39.0 1.54	39.5 1.56	1.3 0.05	64.0 2.52	61.0 2.40	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.44 0.96
25.357 0.9983	19.050 0.7500	-8.6 -0.34	3.5 0.14	39.0 1.54	45.0 1.77	1.3 0.05	64.0 2.52	61.0 2.40	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.43 0.95
25.357 0.9983	19.050 0.7500	-8.6 -0.34	0.8 0.03	39.0 1.54	39.5 1.56	1.5 0.06	64.0 2.52	61.0 2.40	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.43 0.96
25.357 0.9983	19.050 0.7500	-8.6 -0.34	3.5 0.14	39.0 1.54	45.0 1.77	1.5 0.06	64.0 2.52	61.0 2.40	0.90 0.04	0.80 0.03	23.6	9.63	0.0656	0.43 0.95
19.583 0.7710	15.032 0.5918	-4.3 -0.17	3.5 0.14	39.5 1.56	46.0 1.81	1.5 0.06	65.0 2.56	62.0 2.44	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.37 0.81
18.923 0.7450	15.875 0.6250	-4.1 -0.16	3.5 0.14	38.5 1.52	44.5 1.75	1.5 0.06	65.0 2.56	62.0 2.44	0.60 0.02	1.10 0.04	16.1	10.1	0.0630	0.35 0.78
18.923 0.7450	15.875 0.6250	-4.1 -0.16	3.5 0.14	38.5 1.52	44.5 1.75	2.0 0.08	65.0 2.56	62.0 2.44	0.60 0.02	1.10 0.04	16.1	10.1	0.0630	0.35 0.78
20.638 0.8125	15.875 0.6250	-4.1 -0.16	3.5 0.14	39.5 1.56	46.0 1.81	1.3 0.05	67.0 2.64	63.0 2.48	1.20 0.05	1.10 0.04	20.3	10.6	0.0707	0.40 0.87
29.997 1.1810	23.812 0.9375	-10.2 -0.40	3.5 0.14	40.5 1.59	47.0 1.85	3.3 0.13	67.0 2.64	61.0 2.40	1.50 0.06	0.50 0.02	23.4	8.76	0.0697	0.56 1.23
29.997 1.1810	23.812 0.9375	-10.2 -0.40	0.8 0.03	40.5 1.59	41.5 1.63	3.3 0.13	67.0 2.64	61.0 2.40	* *	* *	23.4	8.76	0.0697	0.56 1.25
25.654 1.0100	19.050 0.7500	-8.1 -0.32	1.5 0.06	40.0 1.57	42.0 1.65	0.8 0.03	69.0 2.72	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.51 1.11
27.783 1.0938	23.020 0.9063	-5.6 -0.22	0.8 0.03	42.5 1.68	45.5 1.79	3.3 0.13	70.0 2.76	59.0 2.32	1.90 0.08	1.80 0.07	26.3	11.7	0.0857	0.59 1.30
27.783 1.0938	23.020 0.9063	-5.6 -0.22	0.8 0.03	42.5 1.68	45.5 1.79	0.8 0.03	70.0 2.76	62.0 2.44	1.90 0.08	1.80 0.07	26.3	11.7	0.0857	0.60 1.32
27.783 1.0938	23.020 0.9063	-5.6 -0.22	0.8 0.03	42.5 1.68	45.5 1.79	3.3 0.13	70.0 2.76	60.0 2.36	1.90 0.08	1.80 0.07	26.3	11.7	0.0857	0.61 1.34
22.225 0.8750	17.462 0.6875	-2.8 -0.11	0.8 0.03	41.0 1.62	42.5 1.67	0.8 0.03	68.0 2.68	62.0 2.44	1.40 0.06	1.00 0.04	19.4	10	0.0771	0.50 1.11
25.654 1.0100	19.050 0.7500	-8.1 -0.32	3.5 0.14	40.0 1.57	46.0 1.81	3.3 0.13	70.0 2.76	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.55 1.21
25.654 1.0100	19.050 0.7500	-8.1 -0.32	3.5 0.14	40.0 1.57	46.0 1.81	0.8 0.03	70.0 2.76	68.0 2.68	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.56 1.23
25.654 1.0100	19.050 0.7500	-8.1 -0.32	1.5 0.06	40.0 1.57	42.0 1.65	3.3 0.13	70.0 2.76	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.55 1.22
25.654 1.0100	19.050 0.7500	-8.1 -0.32	1.5 0.06	40.0 1.57	42.0 1.65	0.8 0.03	70.0 2.76	68.0 2.68	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.56 1.24
28.575 1.1250	23.812 0.9375	-7.6 -0.30	0.8 0.03	42.5 1.67	43.0 1.69	3.3 0.13	72.0 2.83	64.0 2.52	1.60 0.06	1.20 0.05	26.3	9.08	0.0773	0.64 1.41
28.575 1.1250	23.020 0.9063	-5.6 -0.22	0.8 0.03	44.5 1.75	46.5 1.83	3.3 0.13	73.0 2.87	62.0 2.44	2.00 0.08	1.40 0.05	28.9	13.1	0.0883	0.66 1.46
28.575 1.1250	23.020 0.9063	-5.6 -0.22	0.8 0.03	44.5 1.75	46.5 1.83	0.8 0.03	73.0 2.87	65.0 2.56	2.00 0.08	1.40 0.05	28.9	13.1	0.0883	0.67 1.48
28.575 1.1250	23.020 0.9063	-5.6 -0.22	3.8 0.15	44.5 1.75	53.0 2.09	3.3 0.13	73.0 2.87	62.0 2.44	2.00 0.08	1.40 0.05	28.9	13.1	0.0883	0.66 1.45
24.074 0.9478	17.462 0.6875	-2.0 -0.08	3.5 0.14	42.0 1.65	51.0 2.01	1.5 0.06	74.0 2.91	67.0 2.64	3.40 0.13	2.30 0.09	16.8	7.57	0.0774	0.56 1.24

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

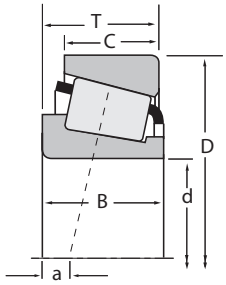
[7] Compound radius on inner race. Details on drawing for bearing.

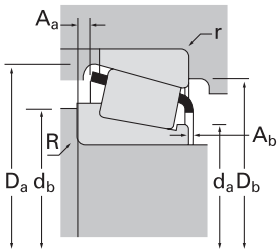
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
33.338 1.3125	79.375 3.1250	25.400 1.0000	71900 16200	0.67	0.90	18600 4190	21300 4790	0.87	76200 17100	43132	43312
33.338 1.3125	79.375 3.1250	29.370 1.1563	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3477	3420
33.338 1.3125	79.375 3.1250	29.370 1.1563	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3483	3420
33.338 1.3125	80.000 3.1496	21.000 0.8268	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	335-S	332
33.338 1.3125	80.167 3.1562	26.988 1.0625	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	335-S	3320
33.338 1.3125	88.500 3.4843	25.400 1.0000	77900 17500	0.78	0.77	20200 4540	27000 6070	0.75	88600 19900	44131	44348
34.925 1.3750	65.088 2.5625	18.034 0.7100	50500 11300	0.38	1.59	13100 2940	8430 1890	1.55	63100 14200	LM48548A	LM48510
34.925 1.3750	65.088 2.5625	18.034 0.7100	50500 11300	0.38	1.59	13100 2940	8430 1890	1.55	63100 14200	LM48548	LM48510
34.925 1.3750	65.088 2.5625	18.034 0.7100	50500 11300	0.38	1.59	13100 2940	8430 1890	1.55	63100 14200	LM48549	LM48510
34.925 1.3750	65.088 2.5625	18.034 0.7100	50500 11300	0.38	1.59	13100 2940	8430 1890	1.55	63100 14200	LM48549X	LM48510
34.925 1.3750	65.088 2.5625	21.082 0.8300	50500 11300	0.38	1.59	13100 2940	8430 1890	1.55	63100 14200	LM48548A	LM48511A
34.925 1.3750	65.088 2.5625	21.082 0.8300	50500 11300	0.38	1.59	13100 2940	8430 1890	1.55	63100 14200	LM48548	LM48511A
34.925 1.3750	65.987 2.5979	20.638 0.8125	57800 13000	0.35	1.70	15000 3370	9050 2030	1.66	72800 16400	M38549	M38511
34.925 1.3750	66.675 2.6250	20.638 0.8125	57800 13000	0.35	1.70	15000 3370	9050 2030	1.66	72800 16400	M38549	M38510
34.925 1.3750	68.262 2.6875	18.034 0.7100	50500 11300	0.38	1.59	13100 2940	8430 1890	1.55	63100 14200	LM48548	LM48514
34.925 1.3750	68.262 2.6875	20.638 0.8125	54800 12300	0.35	1.70	14200 3200	8590 1930	1.66	68100 15300	14585	14525
34.925 1.3750	68.262 2.6875	20.638 0.8125	57800 13000	0.35	1.70	15000 3370	9050 2030	1.66	72800 16400	M38549	M38514
34.925 1.3750	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14137A	14274
34.925 1.3750	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14137A	14276
34.925 1.3750	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14138A	14274
34.925 1.3750	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14138A	14276
34.925 1.3750	69.012 2.7170	22.385 0.8813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14138A	14277
34.925 1.3750	69.850 2.7500	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14137A	14275A
34.925 1.3750	71.973 2.8336	27.000 1.0630	71100 16000	0.55	1.10	18400 4140	17200 3870	1.07	94200 21200	HM88649	HM88611
34.925 1.3750	72.233 2.8438	25.400 1.0000	71100 16000	0.55	1.10	18400 4140	17200 3870	1.07	94200 21200	HM88649A	HM88610
34.925 1.3750	72.233 2.8438	25.400 1.0000	71100 16000	0.55	1.10	18400 4140	17200 3870	1.07	94200 21200	HM88649	HM88610
34.925 1.3750	72.238 2.8440	20.638 0.8125	52400 11800	0.40	1.49	13600 3060	9350 2100	1.45	65800 14800	16137	16284
34.925 1.3750	72.626 2.8593	25.400 1.0000	71100 16000	0.55	1.10	18400 4140	17200 3870	1.07	94200 21200	HM88649	HM88611AS

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	$a^{(3)}$	$R^{(4)}$	d_a	d_b	$r^{(4)}$	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
24.074 0.9478	17.462 0.6875	-2.0 -0.08	2.0 0.08	42.0 1.65	48.0 1.89	1.5 0.06	74.0 2.91	67.0 2.64	3.40 0.13	2.30 0.09	16.8	7.57	0.0774	0.57 1.25
29.771 1.1721	23.812 0.9375	-8.6 -0.34	3.5 0.14	42.5 1.67	49.0 1.93	3.3 0.13	74.0 2.91	67.0 2.64	1.40 0.06	0.90 0.04	29.9	11.2	0.0781	0.72 1.58
29.771 1.1721	23.812 0.9375	-8.6 -0.34	0.8 0.03	42.5 1.67	43.0 1.69	3.3 0.13	74.0 2.91	67.0 2.64	1.40 0.06	0.90 0.04	29.9	11.2	0.0781	0.72 1.60
22.403 0.8820	17.826 0.7018	-6.4 -0.25	0.8 0.03	40.5 1.59	41.0 1.61	1.3 0.05	75.0 2.95	73.0 2.87	0.70 0.03	1.10 0.04	26.5	13	0.0676	0.54 1.20
22.403 0.8820	23.812 0.9375	-6.4 -0.25	0.8 0.03	40.5 1.59	41.0 1.61	3.3 0.13	75.0 2.95	70.0 2.76	0.70 0.03	1.10 0.04	26.5	13	0.0676	0.61 1.35
23.698 0.9330	17.462 0.6875	2.3 0.09	2.0 0.08	48.0 1.89	51.0 2.01	1.5 0.06	84.0 3.31	75.0 2.95	3.90 0.15	2.60 0.10	22.9	8.71	0.0899	0.76 1.67
18.288 0.7200	13.970 0.5500	-3.6 -0.14	0.8 0.03	42.0 1.66	40.5 1.59	1.3 0.05	61.0 2.40	58.0 2.28	0.70 0.03	1.30 0.05	18	10.6	0.0666	0.25 0.56
18.288 0.7200	13.970 0.5500	-3.6 -0.14	3.5 0.14	41.5 1.63	48.0 1.89	1.3 0.05	61.0 2.40	58.0 2.28	0.70 0.03	1.30 0.05	18	10.6	0.0666	0.24 0.54
18.288 0.7200	13.970 0.5500	-3.6 -0.14	1.5 0.06	40.0 1.57	42.0 1.65	1.3 0.05	61.0 2.40	58.0 2.28	0.80 0.03	1.10 0.04	18	10.6	0.0666	0.25 0.56
18.288 0.7200	13.970 0.5500	-3.6 -0.14	2.3 0.09	40.0 1.57	43.5 1.71	1.3 0.05	61.0 2.40	58.0 2.28	0.80 0.03	1.10 0.04	18	10.6	0.0666	0.25 0.55
18.288 0.7200	17.018 0.6700	-3.6 -0.14	0.8 0.03	42.0 1.66	40.5 1.59	1.5 0.06	61.0 2.40	58.0 2.28	0.70 0.03	1.30 0.05	18	10.6	0.0666	0.28 0.61
18.288 0.7200	17.018 0.6700	-3.6 -0.14	3.5 0.14	41.5 1.63	48.0 1.89	1.5 0.06	61.0 2.40	58.0 2.28	0.70 0.03	1.30 0.05	18	10.6	0.0666	0.27 0.59
20.638 0.8125	16.670 0.6563	-5.6 -0.22	3.5 0.14	40.0 1.57	46.5 1.83	2.3 0.09	62.0 2.44	58.0 2.28	0.40 0.02	2.40 0.09	20.3	11.8	0.0680	0.30 0.66
20.638 0.8125	16.670 0.6563	-5.6 -0.22	3.5 0.14	40.0 1.57	46.5 1.83	2.3 0.09	62.0 2.44	58.0 2.28	0.40 0.02	2.40 0.09	20.3	11.8	0.0680	0.31 0.68
18.288 0.7200	13.970 0.5500	-3.6 -0.14	3.5 0.14	41.5 1.63	48.0 1.89	1.3 0.05	63.0 2.48	59.0 2.32	0.70 0.03	1.30 0.05	18	10.6	0.0666	0.28 0.62
20.638 0.8125	15.875 0.6250	-5.8 -0.23	3.5 0.14	40.0 1.57	46.0 1.81	2.3 0.09	63.0 2.48	59.0 2.32	0.80 0.03	2.10 0.08	19.5	12.3	0.0670	0.32 0.71
20.638 0.8125	16.670 0.6563	-5.6 -0.22	3.5 0.14	40.0 1.57	46.5 1.83	2.3 0.09	63.0 2.48	59.0 2.32	0.40 0.02	2.40 0.09	20.3	11.8	0.0680	0.33 0.73
19.583 0.7710	15.875 0.6250	-4.3 -0.17	1.5 0.06	41.0 1.61	43.0 1.69	3.3 0.13	63.0 2.48	59.0 2.32	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.32 0.70
19.583 0.7710	15.875 0.6250	-4.3 -0.17	1.5 0.06	41.0 1.61	43.0 1.69	1.3 0.05	63.0 2.48	60.0 2.36	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.33 0.72
19.583 0.7710	15.875 0.6250	-4.3 -0.17	3.5 0.14	41.0 1.61	47.0 1.85	3.3 0.13	63.0 2.48	59.0 2.32	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.32 0.70
19.583 0.7710	15.875 0.6250	-4.3 -0.17	3.5 0.14	41.0 1.61	47.0 1.85	1.3 0.05	63.0 2.48	60.0 2.36	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.32 0.71
19.583 0.7710	18.415 0.7250	-4.3 -0.17	3.5 0.14	41.0 1.61	47.0 1.85	2.3 0.09	63.0 2.48	59.0 2.32	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.35 0.77
19.583 0.7710	15.875 0.6250	-4.3 -0.17	1.5 0.06	41.0 1.61	43.0 1.69	1.5 0.06	64.0 2.52	60.0 2.36	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.34 0.74
25.400 1.0000	21.443 0.8442	-4.6 -0.18	2.3 0.09	42.5 1.68	48.5 1.91	1.5 0.06	68.0 2.68	61.0 2.40	1.70 0.07	1.70 0.07	23.4	10.9	0.0822	0.52 1.14
25.400 1.0000	19.842 0.7812	-4.6 -0.18	3.5 0.14	43.0 1.69	51.0 2.01	2.3 0.09	69.0 2.72	60.0 2.36	1.70 0.07	1.70 0.07	23.4	10.9	0.0822	0.49 1.07
25.400 1.0000	19.842 0.7812	-4.6 -0.18	2.3 0.09	42.5 1.68	48.5 1.91	2.3 0.09	69.0 2.72	60.0 2.36	1.70 0.07	1.70 0.07	23.4	10.9	0.0822	0.49 1.08
20.638 0.8125	15.875 0.6250	-4.1 -0.16	3.5 0.14	40.5 1.59	47.0 1.85	1.3 0.05	67.0 2.64	63.0 2.48	1.20 0.05	1.10 0.04	20.3	10.6	0.0707	0.38 0.84
25.400 1.0000	19.842 0.7812	-4.6 -0.18	2.3 0.09	42.5 1.68	48.5 1.91	3.3 0.13	69.0 2.72	59.0 2.32	1.70 0.07	1.70 0.07	23.4	10.9	0.0822	0.49 1.08

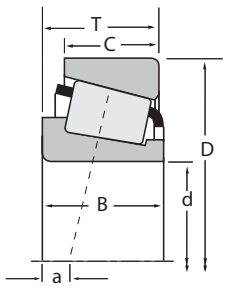
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

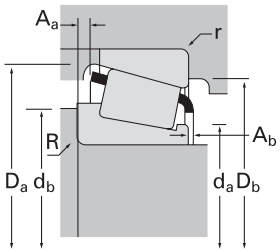
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
34.925 1.3750	73.025 2.8750	22.225 0.8750	67700 15200	0.37	1.63	17600 3950	11100 2490	1.59	83800 18800	2877	2820
34.925 1.3750	73.025 2.8750	22.225 0.8750	67700 15200	0.37	1.63	17600 3950	11100 2490	1.59	83800 18800	2878	2820
34.925 1.3750	73.025 2.8750	22.225 0.8750	67700 15200	0.37	1.63	17600 3950	11100 2490	1.59	83800 18800	2878	2821
34.925 1.3750	73.025 2.8750	22.225 0.8750	60800 13700	0.45	1.32	15800 3550	12300 2750	1.29	74900 16800	02877	02820
34.925 1.3750	73.025 2.8750	22.225 0.8750	60800 13700	0.45	1.32	15800 3550	12300 2750	1.29	74900 16800	02878	02820
34.925 1.3750	73.025 2.8750	22.225 0.8750	60800 13700	0.45	1.32	15800 3550	12300 2750	1.29	74900 16800	02878	02830
34.925 1.3750	73.025 2.8750	23.812 0.9375	78800 17700	0.29	2.07	20400 4590	10200 2280	2.01	97400 21900	25877	25820
34.925 1.3750	73.025 2.8750	23.812 0.9375	78800 17700	0.29	2.07	20400 4590	10200 2280	2.01	97400 21900	25877	25821
34.925 1.3750	73.025 2.8750	23.812 0.9375	78800 17700	0.29	2.07	20400 4590	10200 2280	2.01	97400 21900	25878	25820
34.925 1.3750	73.025 2.8750	23.812 0.9375	78800 17700	0.29	2.07	20400 4590	10200 2280	2.01	97400 21900	25878	25821
34.925 1.3750	73.025 2.8750	23.812 0.9375	78800 17700	0.29	2.07	20400 4590	10200 2280	2.01	97400 21900	25877A	25821
34.925 1.3750	73.025 2.8750	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2786	2735X
34.925 1.3750	73.025 2.8750	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2793	2735X
34.925 1.3750	73.025 2.8750	26.988 1.0625	82800 18600	0.37	1.62	21500 4830	13600 3050	1.58	102000 22900	23690	23620
34.925 1.3750	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2786	2720
34.925 1.3750	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2786	2729
34.925 1.3750	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2793	2720
34.925 1.3750	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2793	2729
34.925 1.3750	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2796	2729
34.925 1.3750	76.200 3.0000	29.370 1.1563	87700 19700	0.40	1.49	22700 5110	15600 3520	1.45	107000 24100	31593	31520
34.925 1.3750	76.200 3.0000	29.370 1.1563	87700 19700	0.40	1.49	22700 5110	15600 3520	1.45	107000 24100	31593	31521
34.925 1.3750	76.200 3.0000	29.370 1.1563	87700 19700	0.40	1.49	22700 5110	15600 3520	1.45	107000 24100	31594	31520
34.925 1.3750	76.200 3.0000	29.370 1.1563	92500 20800	0.35	1.71	24000 5390	14400 3230	1.67	111000 24900	36137	36300
34.925 1.3750	76.200 3.0000	29.370 1.1563	86200 19400	0.55	1.10	22400 5030	20900 4700	1.07	119000 26700	HM89446A	HM89410
34.925 1.3750	76.200 3.0000	29.370 1.1563	86200 19400	0.55	1.10	22400 5030	20900 4700	1.07	119000 26700	HM89446	HM89410
34.925 1.3750	79.324 3.1230	29.370 1.1563	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3482	3426
34.925 1.3750	79.375 3.1250	29.370 1.1563	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3478	3420
34.925 1.3750	79.375 3.1250	29.370 1.1563	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3482	3420

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a(3)	R(4)	d_a	d_b	r(4)	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
23.812 0.9375	17.462 0.6875	-5.6 -0.22	3.5 0.14	41.0 1.61	47.5 1.87	3.3 0.13	68.0 2.68	63.0 2.48	0.90 0.04	0.20 0.01	23.1	12.4	0.0718	0.43 0.94
23.812 0.9375	17.462 0.6875	-5.6 -0.22	0.8 0.03	41.0 1.61	42.0 1.65	3.3 0.13	68.0 2.68	63.0 2.48	0.90 0.04	0.20 0.01	23.1	12.4	0.0718	0.43 0.96
23.812 0.9375	17.462 0.6875	-5.6 -0.22	0.8 0.03	41.0 1.61	42.0 1.65	0.8 0.03	68.0 2.68	65.0 2.56	0.90 0.04	0.20 0.01	23.1	12.4	0.0718	0.44 0.97
22.225 0.8750	17.462 0.6875	-3.8 -0.15	3.5 0.14	42.0 1.65	48.5 1.91	3.3 0.13	68.0 2.68	62.0 2.44	1.40 0.06	0.90 0.04	20.6	10.1	0.0740	0.41 0.91
22.225 0.8750	17.462 0.6875	-3.8 -0.15	0.8 0.03	42.0 1.65	42.5 1.67	3.3 0.13	68.0 2.68	62.0 2.44	1.40 0.06	0.90 0.04	20.6	10.1	0.0740	0.42 0.92
22.225 0.8750	17.462 0.6875	-3.8 -0.15	0.8 0.03	42.0 1.65	42.5 1.67	0.8 0.03	68.0 2.68	64.0 2.52	1.40 0.06	0.90 0.04	20.6	10.1	0.0740	0.43 0.94
24.608 0.9688	19.050 0.7500	-8.1 -0.32	1.5 0.06	40.5 1.59	43.0 1.69	2.3 0.09	68.0 2.68	64.0 2.52	1.00 0.04	1.50 0.06	26.4	10.9	0.0695	0.47 1.03
24.608 0.9688	19.050 0.7500	-8.1 -0.32	1.5 0.06	40.5 1.59	43.0 1.69	0.8 0.03	68.0 2.68	65.0 2.56	1.00 0.04	1.50 0.06	26.4	10.9	0.0695	0.47 1.04
24.608 0.9688	19.050 0.7500	-8.1 -0.32	3.5 0.14	40.5 1.59	47.0 1.85	2.3 0.09	68.0 2.68	64.0 2.52	1.00 0.04	1.50 0.06	26.4	10.9	0.0695	0.46 1.02
24.608 0.9688	19.050 0.7500	-8.1 -0.32	3.5 0.14	40.5 1.59	47.0 1.85	0.8 0.03	68.0 2.68	65.0 2.56	1.00 0.04	1.50 0.06	26.4	10.9	0.0695	0.47 1.03
24.608 0.9688	19.050 0.7500	-8.1 -0.32	0.8 0.03	42.0 1.65	42.5 1.67	0.8 0.03	68.0 2.68	65.0 2.56	* *	* *	26.4	10.9	0.0695	0.47 1.04
25.654 1.0100	19.050 0.7500	-8.1 -0.32	5.0 0.20	41.0 1.61	51.0 2.01	0.8 0.03	69.0 2.72	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.48 1.05
25.654 1.0100	19.050 0.7500	-8.1 -0.32	0.8 0.03	41.0 1.61	42.0 1.65	0.8 0.03	69.0 2.72	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.49 1.08
26.975 1.0620	22.225 0.8750	-8.1 -0.32	3.5 0.14	42.0 1.65	49.0 1.93	1.5 0.06	68.0 2.68	63.0 2.48	1.80 0.07	0.70 0.03	24.4	10.7	0.0734	0.52 1.14
25.654 1.0100	19.050 0.7500	-8.1 -0.32	5.0 0.20	41.0 1.61	51.0 2.01	3.3 0.13	70.0 2.76	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.52 1.15
25.654 1.0100	19.050 0.7500	-8.1 -0.32	5.0 0.20	41.0 1.61	51.0 2.01	0.8 0.03	70.0 2.76	68.0 2.68	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.53 1.17
25.654 1.0100	19.050 0.7500	-8.1 -0.32	0.8 0.03	41.0 1.61	42.0 1.65	3.3 0.13	70.0 2.76	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.54 1.18
25.654 1.0100	19.050 0.7500	-8.1 -0.32	0.8 0.03	41.0 1.61	42.0 1.65	0.8 0.03	70.0 2.76	68.0 2.68	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.54 1.20
25.654 1.0100	19.050 0.7500	-8.1 -0.32	3.5 0.14	41.0 1.61	47.5 1.87	0.8 0.03	70.0 2.76	68.0 2.68	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.54 1.19
28.575 1.1250	23.812 0.9375	-7.6 -0.30	3.5 0.14	43.5 1.71	50.0 1.97	3.3 0.13	72.0 2.83	64.0 2.52	1.60 0.06	1.20 0.05	26.3	9.08	0.0773	0.61 1.35
28.575 1.1250	23.812 0.9375	-7.6 -0.30	3.5 0.14	43.5 1.71	50.0 1.97	1.3 0.05	72.0 2.83	66.0 2.60	1.60 0.06	1.20 0.05	26.3	9.08	0.0773	0.62 1.37
28.575 1.1250	23.812 0.9375	-7.6 -0.30	1.5 0.06	43.5 1.71	46.0 1.81	3.3 0.13	72.0 2.83	64.0 2.52	1.60 0.06	1.20 0.05	26.3	9.08	0.0773	0.62 1.36
29.845 1.1750	23.812 0.9375	-9.1 -0.36	1.5 0.06	42.5 1.67	45.0 1.77	3.3 0.13	71.0 2.80	66.0 2.60	* *	* *	26.7	10.5	0.0741	0.62 1.37
28.575 1.1250	23.020 0.9063	-5.6 -0.22	0.8 0.03	44.5 1.75	47.5 1.87	3.3 0.13	73.0 2.87	62.0 2.44	2.00 0.08	1.40 0.05	28.9	13.1	0.0883	0.64 1.42
28.575 1.1250	23.020 0.9063	-5.6 -0.22	3.5 0.14	44.5 1.75	56.0 2.20	3.3 0.13	73.0 2.87	62.0 2.44	2.00 0.08	1.40 0.05	28.9	13.1	0.0883	0.64 1.42
29.771 1.1721	23.812 0.9375	-8.6 -0.34	0.8 0.03	43.5 1.71	44.0 1.73	3.3 0.13	74.0 2.91	67.0 2.64	1.40 0.06	0.90 0.04	29.9	11.2	0.0781	0.70 1.55
29.771 1.1721	23.812 0.9375	-8.6 -0.34	3.5 0.14	43.5 1.71	50.0 1.97	3.3 0.13	74.0 2.91	67.0 2.64	1.40 0.06	0.90 0.04	29.9	11.2	0.0781	0.70 1.54
29.771 1.1721	23.812 0.9375	-8.6 -0.34	0.8 0.03	43.5 1.71	44.0 1.73	3.3 0.13	74.0 2.91	67.0 2.64	1.40 0.06	0.90 0.04	29.9	11.2	0.0781	0.70 1.55

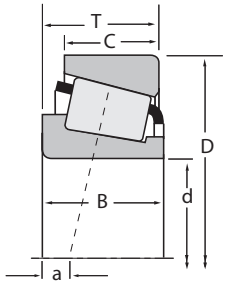
(6) For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
(7) Compound radius on inner race. Details on drawing for bearing.
(8) Pin-type cage. Please consult The Timken Company.

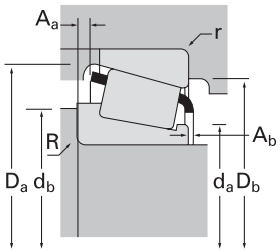
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
34.925 1.3750	80.000 3.1496	21.000 0.8268	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	335	332
34.925 1.3750	80.000 3.1496	24.176 0.9518	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	335	332A
34.925 1.3750	80.035 3.1510	21.433 0.8438	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28137	28317
34.925 1.3750	80.035 3.1510	24.608 0.9688	72200 16200	0.56	1.07	18700 4210	18000 4040	1.04	91100 20500	27875	27820
34.925 1.3750	80.035 3.1510	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3379	3339
34.925 1.3750	80.167 3.1562	26.988 1.0625	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	335	3320
34.925 1.3750	80.167 3.1562	29.367 1.1562	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3379	3320
34.925 1.3750	80.962 3.1875	22.225 0.8750	60800 13700	0.45	1.32	15800 3550	12300 2750	1.29	74900 16800	02877	02831
34.925 1.3750	81.755 3.2187	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3379	3329
34.925 1.3750	84.138 3.3125	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3379	3328
34.925 1.3750	85.725 3.3750	30.162 1.1875	115000 25900	0.40	1.49	29800 6710	20500 4610	1.45	148000 33200	3872	3820
34.925 1.3750	85.725 3.3750	30.162 1.1875	115000 25900	0.40	1.49	29800 6710	20500 4610	1.45	148000 33200	3872	3821
34.925 1.3750	85.725 3.3750	30.162 1.1875	115000 25900	0.40	1.49	29800 6710	20500 4610	1.45	148000 33200	3872A	3820
34.925 1.3750	87.312 3.4375	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3581	3525
34.925 1.3750	88.500 3.4843	26.988 1.0625	107000 24100	0.26	2.28	27800 6240	12500 2820	2.22	124000 28000	417	414
34.925 1.3750	90.488 3.5625	39.688 1.5625	155000 34900	0.28	2.11	40200 9040	19600 4400	2.05	204000 45900	4368	4335
34.925 1.3750	95.250 3.7500	27.783 1.0938	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	449	432
34.976 1.3770	68.000 2.6772	16.020 0.6307	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19138	19267X
34.976 1.3770	68.262 2.6875	15.875 0.6250	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19138	19268
34.975 1.3770	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14139	14274
34.975 1.3770	69.012 2.7170	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14139	14276
34.975 1.3770	71.996 2.8345	19.002 0.7481	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14139	14282
34.976 1.3770	72.000 2.8346	17.018 0.6700	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19138	19283
34.975 1.3770	72.085 2.8380	22.385 0.8813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14139	14283
34.975 1.3770	76.200 3.0000	20.625 0.8120	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28138	28300X
34.975 1.3770	80.000 3.1496	21.006 0.8270	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28138	28315
34.987 1.3775	59.131 2.3280	15.875 0.6250	35500 7990	0.42	1.44	9220 2070	6560 1480	1.40	48700 11000	L68149	L68110
34.987 1.3775	59.974 2.3612	15.875 0.6250	35500 7990	0.42	1.44	9220 2070	6560 1480	1.40	48700 11000	L68149	L68111

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

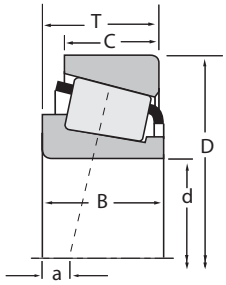
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
22.403 0.8820	17.826 0.7018	-6.4 -0.25	0.8 0.03	41.5 1.63	42.5 1.67	1.3 0.05	75.0 2.95	73.0 2.87	0.70 0.03	1.10 0.04	26.5	13	0.0676	0.53 1.17
22.403 0.8820	21.000 0.8268	-6.4 -0.25	0.8 0.03	41.5 1.63	42.5 1.67	2.3 0.09	75.0 2.95	71.0 2.80	0.70 0.03	1.10 0.04	26.5	13	0.0676	0.56 1.24
20.940 0.8244	15.875 0.6250	-4.8 -0.19	1.5 0.06	41.0 1.61	43.5 1.71	1.5 0.06	73.0 2.87	69.0 2.72	2.40 0.09	1.10 0.04	20.7	12.5	0.0709	0.49 1.09
23.698 0.9330	18.512 0.7288	-2.5 -0.10	0.8 0.03	44.5 1.75	45.5 1.79	1.5 0.06	75.0 2.95	68.0 2.68	3.20 0.13	1.50 0.06	24.6	12.6	0.0839	0.59 1.31
30.391 1.1965	23.812 0.9375	-10.9 -0.43	3.5 0.14	41.5 1.63	48.0 1.89	1.5 0.06	74.5 2.94	71.0 2.80	1.80 0.07	1.10 0.04	34.6	12.1	0.0744	0.72 1.59
22.403 0.8820	23.812 0.9375	-6.4 -0.25	0.8 0.03	41.5 1.63	42.5 1.67	3.3 0.13	75.0 2.95	70.0 2.76	0.70 0.03	1.10 0.04	26.5	13	0.0676	0.60 1.31
30.391 1.1965	23.812 0.9375	-10.9 -0.43	3.5 0.14	41.5 1.63	48.0 1.89	3.3 0.13	75.0 2.95	70.0 2.76	1.80 0.07	1.10 0.04	34.6	12.1	0.0744	0.71 1.58
22.225 0.8750	17.462 0.6875	-3.8 -0.15	3.5 0.14	42.0 1.65	48.5 1.91	0.8 0.03	72.0 2.83	67.0 2.64	1.40 0.06	0.90 0.04	20.6	10.1	0.0740	0.55 1.22
30.391 1.1965	23.812 0.9375	-10.9 -0.43	3.5 0.14	41.5 1.63	48.0 1.89	3.3 0.13	75.0 2.95	71.0 2.80	1.80 0.07	1.10 0.04	34.6	12.1	0.0744	0.75 1.66
30.391 1.1965	23.812 0.9375	-10.9 -0.43	3.5 0.14	41.5 1.63	48.0 1.89	3.3 0.13	76.0 2.99	72.0 2.83	1.80 0.07	1.10 0.04	34.6	12.1	0.0744	0.81 1.78
30.162 1.1875	23.812 0.9375	-8.1 -0.32	3.5 0.14	46.0 1.81	53.0 2.09	3.3 0.13	81.0 3.19	73.0 2.87	1.50 0.06	2.10 0.08	37.8	13.5	0.0873	0.89 1.95
30.162 1.1875	23.812 0.9375	-8.1 -0.32	3.5 0.14	46.0 1.81	53.0 2.09	1.3 0.05	81.0 3.19	75.0 2.95	1.50 0.06	2.10 0.08	37.8	13.5	0.0873	0.89 1.97
30.162 1.1875	23.812 0.9375	-8.1 -0.32	0.8 0.03	46.0 1.81	47.0 1.85	3.3 0.13	81.0 3.19	73.0 2.87	1.50 0.06	2.10 0.08	37.8	13.5	0.0873	0.89 1.96
30.886 1.2160	23.812 0.9375	-10.2 -0.40	3.5 0.14	43.0 1.69	49.5 1.95	3.3 0.13	81.0 3.19	75.0 2.95	2.30 0.09	0.70 0.03	39.5	10.5	0.0808	0.91 2.00
29.083 1.1450	22.225 0.8750	-9.7 -0.38	0.8 0.03	42.0 1.65	42.5 1.67	1.5 0.06	80.0 3.15	77.0 3.03	1.20 0.05	0.80 0.03	34.4	9.87	0.0731	0.87 1.92
40.386 1.5900	33.338 1.3125	-15.0 -0.59	3.5 0.14	49.0 1.93	55.0 2.17	3.3 0.13	85.0 3.35	77.0 3.03	2.30 0.09	0.60 0.02	52.9	16.7	0.0872	1.37 3.01
29.900 1.1772	22.225 0.8750	-9.1 -0.36	0.8 0.03	43.5 1.71	44.0 1.73	2.3 0.09	87.0 3.43	83.0 3.27	1.60 0.06	0.40 0.02	42.5	11.3	0.0805	1.08 2.38
16.520 0.6504	12.000 0.4724	-1.5 -0.06	1.5 0.06	40.5 1.59	42.5 1.67	1.5 0.06	64.0 2.52	61.0 2.40	1.20 0.05	1.50 0.06	17.5	11.5	0.0694	0.26 0.57
16.520 0.6504	11.908 0.4688	-1.5 -0.06	1.5 0.06	40.5 1.59	42.5 1.67	1.5 0.06	65.0 2.56	61.0 2.40	1.20 0.05	1.50 0.06	17.5	11.5	0.0694	0.26 0.58
19.583 0.7710	15.875 0.6250	-4.3 -0.17	1.3 0.05	41.0 1.61	42.5 1.67	3.3 0.13	63.0 2.48	59.0 2.32	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.32 0.70
19.583 0.7710	15.875 0.6250	-4.3 -0.17	1.3 0.05	41.0 1.61	42.5 1.67	1.3 0.05	63.0 2.48	60.0 2.36	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.33 0.72
19.583 0.7710	15.032 0.5918	-4.3 -0.17	1.3 0.05	41.0 1.61	42.5 1.67	1.5 0.06	65.0 2.56	62.0 2.44	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.35 0.78
16.520 0.6504	14.288 0.5625	-1.5 -0.06	1.5 0.06	40.5 1.59	42.5 1.67	1.5 0.06	66.0 2.60	63.0 2.48	1.20 0.05	1.50 0.06	17.5	11.5	0.0694	0.32 0.70
19.583 0.7710	18.415 0.7250	-4.3 -0.17	1.3 0.05	41.0 1.61	42.5 1.67	2.3 0.09	65.0 2.56	60.0 2.36	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.40 0.88
20.940 0.8244	15.494 0.6100	-4.8 -0.19	1.5 0.06	41.0 1.61	43.5 1.71	1.5 0.06	71.0 2.80	68.0 2.68	2.40 0.09	1.10 0.04	20.7	12.5	0.0709	0.43 0.95
20.940 0.8244	15.875 0.6250	-4.8 -0.19	1.5 0.06	41.0 1.61	43.5 1.71	1.5 0.06	73.0 2.87	69.0 2.72	2.40 0.09	1.10 0.04	20.7	12.5	0.0709	0.49 1.08
16.764 0.6600	11.938 0.4700	-2.5 -0.10	0.0 0.00	39.0 1.54	45.5 1.79	1.3 0.05	56.0 2.20	53.0 2.09	0.80 0.03	0.70 0.03	15.7	13.9	0.0657	0.17 0.37
16.764 0.6600	11.938 0.4700	-2.5 -0.10	0.0 0.00	39.0 1.54	45.5 1.79	1.3 0.05	56.0 2.20	53.0 2.09	0.80 0.03	0.70 0.03	15.7	13.9	0.0657	0.17 0.38

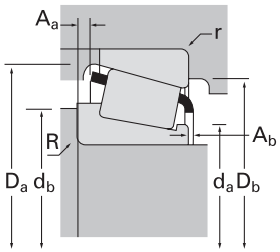
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
34.987 1.3775	61.973 2.4399	16.700 0.6575	39400 8850	0.44	1.35	10200 2290	7760 1750	1.31	52400 11800	LM78349A	LM78310A
34.987 1.3775	61.973 2.4399	16.700 0.6575	39400 8850	0.44	1.35	10200 2290	7760 1750	1.31	52400 11800	LM78349	LM78310A
34.987 1.3775	61.973 2.4399	18.000 0.7087	39400 8850	0.44	1.35	10200 2290	7760 1750	1.31	52400 11800	LM78349A	LM78310C
34.987 1.3775	61.973 2.4399	18.000 0.7087	39400 8850	0.44	1.35	10200 2290	7760 1750	1.31	52400 11800	LM78349	LM78310C
34.987 1.3775	65.987 2.5979	20.638 0.8125	57800 13000	0.35	1.70	15000 3370	9050 2030	1.66	72800 16400	M38547	M38511
35.000 1.3780	70.000 2.7559	25.270 0.9949	66600 15000	0.55	1.10	17300 3880	16100 3630	1.07	84900 19100	JS-3549A	JS-3510
35.000 1.3780	72.000 2.8346	17.018 0.6700	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19138X	19283
35.000 1.3780	72.000 2.8346	17.018 0.6700	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19138X	19283X
35.000 1.3780	73.025 2.8750	26.988 1.0625	82800 18600	0.37	1.62	21500 4830	13600 3050	1.58	102000 22900	23691	23620
35.000 1.3780	73.025 2.8750	26.988 1.0625	82800 18600	0.37	1.62	21500 4830	13600 3050	1.58	102000 22900	23691	23621
35.000 1.3780	75.311 2.9650	19.845 0.7813	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14139X	14274-S
35.000 1.3780	79.375 3.1250	23.812 0.9375	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26883	26822
35.000 1.3780	80.000 3.1496	21.000 0.8268	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	339	332
35.000 1.3780	80.000 3.1496	23.812 0.9375	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26883	26824
35.000 1.3780	80.167 3.1562	25.400 1.0000	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26883	26820
35.000 1.3780	80.167 3.1562	29.370 1.1563	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3480	3422
35.000 1.3780	82.550 3.2500	28.575 1.1250	107000 24100	0.26	2.28	27800 6240	12500 2820	2.22	124000 28000	421	412A
35.000 1.3780	88.500 3.4843	26.988 1.0625	107000 24100	0.26	2.28	27800 6240	12500 2820	2.22	124000 28000	421	414
35.128 1.3830	65.088 2.5625	18.034 0.7100	50500 11300	0.38	1.59	13100 2940	8430 1890	1.55	63100 14200	LM48545	LM48510
35.306 1.3900	73.025 2.8750	22.225 0.8750	67700 15200	0.37	1.63	17600 3950	11100 2490	1.59	83800 18800	2880	2820
35.717 1.4062	72.233 2.8438	25.400 1.0000	71100 16000	0.55	1.10	18400 4140	17200 3870	1.07	94200 21200	HM88648	HM88610
36.487 1.4365	73.025 2.8750	23.812 0.9375	78800 17700	0.29	2.07	20400 4590	10200 2280	2.01	97400 21900	25880	25820
36.487 1.4365	73.025 2.8750	23.812 0.9375	78800 17700	0.29	2.07	20400 4590	10200 2280	2.01	97400 21900	25880	25821
36.487 1.4365	73.025 2.8750	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2780	2735X
36.487 1.4365	73.025 2.8750	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2794	2735X
36.487 1.4365	74.612 2.9375	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2780	2736
36.487 1.4365	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2780	2720
36.487 1.4365	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2780	2729

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

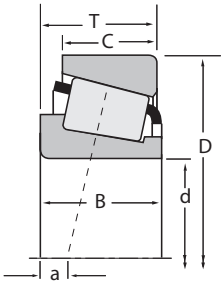
Dimensions, mm (inches)													Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage							
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.									
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g			
17.000 0.6693	13.600 0.5354	-2.5 -0.10	1.5 0.06	39.5 1.56	42.0 1.65	1.5 0.06	59.0 2.32	54.0 2.13	0.70 0.03	1.20 0.05	16.1	13.8	0.0678	0.21 0.46		
17.000 0.6693	13.600 0.5354	-2.5 -0.10	3.5 0.14	40.0 1.57	46.0 1.81	1.5 0.06	59.0 2.32	54.0 2.13	* *	* *	16.1	16.2	0.0678	0.20 0.44		
17.000 0.6693	15.000 0.5906	-2.5 -0.10	1.5 0.06	39.5 1.56	42.0 1.65	1.5 0.06	59.0 2.32	56.0 2.20	0.70 0.03	1.20 0.05	16.1	13.8	0.0678	0.22 0.48		
17.000 0.6693	15.000 0.5906	-2.5 -0.10	3.5 0.14	40.0 1.57	46.0 1.81	1.5 0.06	59.0 2.32	56.0 2.20	* *	* *	16.1	16.2	0.0678	0.21 0.46		
20.638 0.8125	16.670 0.6563	-5.6 -0.22	3.5 0.14	40.5 1.59	46.5 1.83	2.3 0.09	62.0 2.44	58.0 2.28	0.40 0.02	2.40 0.09	20.3	11.8	0.0680	0.30 0.66		
23.500 0.9252	19.000 0.7480	-3.6 -0.14	2.0 0.08	42.0 1.65	47.0 1.85	1.5 0.06	66.5 2.62	60.0 2.36	1.60 0.06	1.60 0.06	20.7	11	0.0789	0.41 0.91		
16.520 0.6504	14.288 0.5625	-1.5 -0.06	2.0 0.08	40.5 1.59	43.5 1.71	1.5 0.06	66.0 2.60	63.0 2.48	1.20 0.05	1.50 0.06	17.5	11.5	0.0694	0.32 0.70		
16.520 0.6504	14.288 0.5625	-1.5 -0.06	2.0 0.08	40.5 1.59	43.5 1.71	2.0 0.08	66.0 2.60	62.0 2.44	1.20 0.05	1.50 0.06	17.5	11.5	0.0694	0.32 0.70		
26.975 1.0620	22.225 0.8750	-8.1 -0.32	3.5 0.14	42.0 1.65	49.0 1.93	1.5 0.06	68.0 2.68	63.0 2.48	1.80 0.07	0.70 0.03	24.4	10.7	0.0734	0.52 1.14		
26.975 1.0620	22.225 0.8750	-8.1 -0.32	3.5 0.14	42.0 1.65	49.0 1.93	0.8 0.03	68.0 2.68	63.0 2.48	1.80 0.07	0.70 0.03	24.4	10.7	0.0734	0.52 1.14		
19.583 0.7710	15.875 0.6250	-4.3 -0.17	3.5 0.14	41.0 1.61	47.0 1.85	3.3 0.13	66.0 2.60	61.0 2.40	1.00 0.04	1.40 0.06	18	9.4	0.0668	0.40 0.89		
25.400 1.0000	19.050 0.7500	-7.4 -0.29	0.8 0.03	42.0 1.65	42.5 1.67	0.8 0.03	74.0 2.91	71.0 2.80	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.60 1.33		
22.403 0.8820	17.826 0.7018	-6.4 -0.25	0.8 0.03	41.5 1.63	42.5 1.67	1.3 0.05	75.0 2.95	73.0 2.87	0.70 0.03	1.10 0.04	26.5	13	0.0676	0.53 1.17		
25.400 1.0000	19.050 0.7500	-7.4 -0.29	0.8 0.03	42.0 1.65	42.5 1.67	1.3 0.05	74.0 2.91	70.0 2.76	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.62 1.36		
25.400 1.0000	20.638 0.8125	-7.4 -0.29	0.8 0.03	42.0 1.65	42.5 1.67	3.3 0.13	74.0 2.91	69.0 2.72	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.63 1.39		
29.771 1.1721	23.812 0.9375	-8.6 -0.34	1.5 0.06	43.5 1.71	46.0 1.81	3.3 0.13	74.0 2.91	68.0 2.68	1.40 0.06	0.90 0.04	29.9	11.2	0.0781	0.72 1.59		
29.083 1.1450	23.812 0.9375	-9.7 -0.38	0.8 0.03	42.0 1.65	42.5 1.67	1.5 0.06	77.5 3.06	74.0 2.91	1.20 0.05	0.80 0.03	34.4	9.87	0.0731	0.75 1.65		
29.083 1.1450	22.225 0.8750	-9.7 -0.38	0.8 0.03	42.0 1.65	42.5 1.67	1.5 0.06	80.0 3.15	77.0 3.03	1.20 0.05	0.80 0.03	34.4	9.87	0.0731	0.87 1.92		
18.288 0.7200	13.970 0.5500	-3.6 -0.14	0.8 0.03	41.0 1.61	41.5 1.63	1.3 0.05	61.0 2.40	58.0 2.28	0.80 0.03	1.10 0.04	18	10.6	0.0666	0.25 0.56		
23.812 0.9375	17.462 0.6875	-5.6 -0.22	3.5 0.14	41.5 1.63	48.0 1.89	3.3 0.13	68.0 2.68	63.0 2.48	0.90 0.04	0.20 0.01	23.1	12.4	0.0718	0.42 0.93		
25.400 1.0000	19.842 0.7812	-4.6 -0.18	3.5 0.14	42.5 1.67	54.0 2.13	2.3 0.09	69.0 2.72	60.0 2.36	1.70 0.06	1.80 0.07	23.4	10.9	0.0822	0.48 1.05		
24.608 0.9688	19.050 0.7500	-8.1 -0.32	1.5 0.06	42.0 1.65	44.0 1.73	2.3 0.09	68.0 2.68	64.0 2.52	1.00 0.04	1.50 0.06	26.4	10.9	0.0695	0.45 0.99		
24.608 0.9688	19.050 0.7500	-8.1 -0.32	1.5 0.06	42.0 1.65	44.0 1.73	0.8 0.03	68.0 2.68	65.0 2.56	1.00 0.04	1.50 0.06	26.4	10.9	0.0695	0.45 1.00		
25.654 1.0100	19.050 0.7500	-8.1 -0.32	1.5 0.06	42.5 1.67	44.5 1.75	0.8 0.03	69.0 2.72	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.47 1.04		
25.654 1.0100	19.050 0.7500	-8.1 -0.32	3.5 0.14	42.5 1.67	49.0 1.93	0.8 0.03	69.0 2.72	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.47 1.03		
25.654 1.0100	19.050 0.7500	-8.1 -0.32	1.5 0.06	42.5 1.67	44.5 1.75	0.8 0.03	70.0 2.76	67.0 2.64	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.50 1.10		
25.654 1.0100	19.050 0.7500	-8.1 -0.32	1.5 0.06	42.5 1.67	44.5 1.75	3.3 0.13	70.0 2.76	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.52 1.14		
25.654 1.0100	19.050 0.7500	-8.1 -0.32	1.5 0.06	42.5 1.67	44.5 1.75	0.8 0.03	70.0 2.76	68.0 2.68	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.53 1.16		

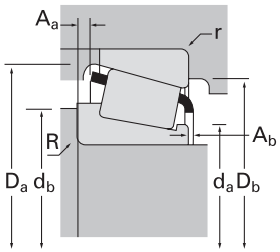
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Factors (5) Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
36.487 1.4365	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2794	2720
36.487 1.4365	79.375 3.1250	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2780	2731
36.512 1.4375	68.262 2.6875	15.875 0.6250	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19143	19268
36.512 1.4375	69.012 2.7170	19.050 0.7500	52500 11800	0.40	1.49	13600 3060	9370 2110	1.45	67900 15300	13682	13621
36.512 1.4375	72.000 2.8346	17.018 0.6700	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19143	19283
36.512 1.4375	72.000 2.8346	17.018 0.6700	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19143	19283X
36.512 1.4375	72.000 2.8346	19.000 0.7480	52400 11800	0.40	1.49	13600 3060	9350 2100	1.45	65800 14800	16143	16282
36.512 1.4375	72.238 2.8440	20.638 0.8125	52400 11800	0.40	1.49	13600 3060	9350 2100	1.45	65800 14800	16143	16284
36.512 1.4375	76.200 3.0000	29.370 1.1563	87700 19700	0.40	1.49	22700 5110	15600 3520	1.45	107000 24100	31597	31520
36.512 1.4375	76.200 3.0000	29.370 1.1563	87700 19700	0.40	1.49	22700 5110	15600 3520	1.45	107000 24100	31597	31521
36.512 1.4375	76.200 3.0000	29.370 1.1563	86200 19400	0.55	1.10	22400 5030	20900 4700	1.07	119000 26700	HM89448	HM89410
36.512 1.4375	76.200 3.0000	29.370 1.1563	86200 19400	0.55	1.10	22400 5030	20900 4700	1.07	119000 26700	HM89449	HM89410
36.512 1.4375	76.200 3.0000	29.370 1.1563	86200 19400	0.55	1.10	22400 5030	20900 4700	1.07	119000 26700	HM89449	HM89411
36.512 1.4375	79.375 3.1250	29.370 1.1563	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3479	3420
36.512 1.4375	79.375 3.1250	29.370 1.1563	98100 22100	0.55	1.10	25400 5720	23800 5350	1.07	121000 27200	HM89249	HM89210
36.512 1.4375	80.000 3.1496	23.812 0.9375	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26877	26824
36.512 1.4375	80.167 3.1562	25.400 1.0000	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26877	26820
36.512 1.4375	80.167 3.1562	29.370 1.1563	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3479	3422
36.512 1.4375	82.931 3.2650	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25570	25520
36.512 1.4375	85.725 3.3750	30.162 1.1875	115000 25900	0.40	1.49	29800 6710	20500 4610	1.45	148000 33200	3878	3820
36.512 1.4375	88.500 3.4843	25.400 1.0000	77900 17500	0.78	0.77	20200 4540	27000 6070	0.75	88600 19900	44143	44348
36.512 1.4375	93.662 3.6875	31.750 1.2500	120000 26900	0.40	1.49	31000 6980	21400 4800	1.45	158000 35500	46143	46368
38.000 1.4961	63.000 2.4803	17.000 0.6693	39800 8960	0.42	1.44	10300 2320	7360 1650	1.40	55000 12400	JL69348	JL69310
38.000 1.4961	63.000 2.4803	17.000 0.6693	39800 8960	0.42	1.44	10300 2320	7360 1650	1.40	55000 12400	JL69349A	JL69310
38.000 1.4961	63.000 2.4803	17.000 0.6693	39800 8960	0.42	1.44	10300 2320	7360 1650	1.40	55000 12400	JL69349	JL69310
38.000 1.4961	63.000 2.4803	17.000 0.6693	39800 8960	0.42	1.44	10300 2320	7360 1650	1.40	55000 12400	JL69349X	JL69310
38.000 1.4961	68.000 2.6772	16.020 0.6307	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19149X	19267X
38.100 1.5000	63.500 2.5000	12.700 0.5000	25100 5650	0.35	1.73	6520 1470	3860 869	1.69	33000 7430	13889	13830

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
25.654 1.0100	19.050 0.7500	-8.1 -0.32	3.5 0.14	42.5 1.67	49.0 1.93	3.3 0.13	70.0 2.76	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.51 1.13
25.654 1.0100	19.050 0.7500	-8.1 -0.32	1.5 0.06	42.5 1.67	44.5 1.75	3.3 0.13	72.0 2.83	67.0 2.64	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.57 1.27
16.520 0.6504	11.908 0.4688	-1.5 -0.06	1.5 0.06	41.5 1.63	44.0 1.73	1.5 0.06	65.0 2.56	61.0 2.40	1.20 0.05	1.50 0.06	17.5	11.5	0.0694	0.25 0.55
19.050 0.7500	15.083 0.5938	-3.0 -0.12	3.5 0.14	41.5 1.63	48.0 1.89	2.3 0.09	65.0 2.56	61.0 2.40	0.90 0.04	0.60 0.02	20.7	12.2	0.0713	0.30 0.65
16.520 0.6504	14.288 0.5625	-1.5 -0.06	1.5 0.06	41.5 1.63	44.0 1.73	1.5 0.06	66.0 2.60	63.0 2.48	1.20 0.05	1.50 0.06	17.5	11.5	0.0694	0.31 0.68
16.520 0.6504	14.288 0.5625	-1.5 -0.06	1.5 0.06	41.5 1.63	44.0 1.73	2.0 0.08	66.0 2.60	62.0 2.44	1.20 0.05	1.50 0.06	17.5	11.5	0.0694	0.31 0.68
20.638 0.8125	14.237 0.5605	-4.1 -0.16	3.5 0.14	42.0 1.65	48.5 1.91	1.5 0.06	67.0 2.64	63.0 2.48	1.20 0.05	1.10 0.04	20.3	10.6	0.0707	0.35 0.76
20.638 0.8125	15.875 0.6250	-4.1 -0.16	3.5 0.14	42.0 1.65	48.5 1.91	1.3 0.05	67.0 2.64	63.0 2.48	1.20 0.05	1.10 0.04	20.3	10.6	0.0707	0.37 0.81
28.575 1.1250	23.812 0.9375	-7.6 -0.30	3.5 0.14	44.5 1.75	51.0 2.01	3.3 0.13	72.0 2.83	64.0 2.52	1.60 0.06	1.20 0.05	26.3	9.08	0.0773	0.59 1.31
28.575 1.1250	23.812 0.9375	-7.6 -0.30	3.5 0.14	44.5 1.75	51.0 2.01	1.3 0.05	72.0 2.83	66.0 2.60	1.60 0.06	1.20 0.05	26.3	9.08	0.0773	0.60 1.33
28.575 1.1250	23.020 0.9063	-5.6 -0.22	0.8 0.03	44.5 1.75	48.5 1.91	3.3 0.13	73.0 2.87	62.0 2.44	2.00 0.08	1.40 0.05	28.9	13.1	0.0883	0.62 1.38
28.575 1.1250	23.020 0.9063	-5.6 -0.22	3.5 0.14	44.5 1.75	57.0 2.24	3.3 0.13	73.0 2.87	62.0 2.44	2.00 0.08	1.40 0.05	28.9	13.1	0.0883	0.62 1.37
28.575 1.1250	23.020 0.9063	-5.6 -0.22	3.5 0.14	44.5 1.75	57.0 2.24	0.8 0.03	73.0 2.87	65.0 2.56	2.00 0.08	1.40 0.05	28.9	13.1	0.0883	0.63 1.39
29.771 1.1721	23.812 0.9375	-8.6 -0.34	0.8 0.03	44.5 1.75	45.5 1.79	3.3 0.13	74.0 2.91	67.0 2.64	1.40 0.06	0.90 0.04	29.9	11.2	0.0781	0.68 1.51
28.829 1.1350	22.664 0.8923	-5.8 -0.23	3.5 0.14	44.0 1.73	55.0 2.17	3.3 0.13	75.0 2.95	66.0 2.60	2.40 0.09	2.50 0.10	27	11.1	0.0861	0.69 1.53
25.400 1.0000	19.050 0.7500	-7.4 -0.29	0.8 0.03	43.0 1.69	44.0 1.73	1.3 0.05	74.0 2.91	70.0 2.76	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.60 1.32
25.400 1.0000	20.638 0.8125	-7.4 -0.29	0.8 0.03	43.0 1.69	44.0 1.73	3.3 0.13	74.0 2.91	69.0 2.72	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.61 1.36
29.771 1.1721	23.812 0.9375	-8.6 -0.34	0.8 0.03	44.5 1.75	45.5 1.79	3.3 0.13	74.0 2.91	68.0 2.68	1.40 0.06	0.90 0.04	29.9	11.2	0.0781	0.70 1.55
25.400 1.0000	19.050 0.7500	-6.4 -0.25	3.5 0.14	45.0 1.77	51.0 2.01	0.8 0.03	77.0 3.03	74.0 2.91	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.66 1.45
30.162 1.1875	23.812 0.9375	-8.1 -0.32	0.8 0.03	47.0 1.85	48.0 1.89	3.3 0.13	81.0 3.19	73.0 2.87	1.50 0.06	2.10 0.08	37.8	13.5	0.0873	0.87 1.92
23.698 0.9330	17.462 0.6875	2.3 0.09	2.3 0.09	50.0 1.97	54.0 2.13	1.5 0.06	84.0 3.31	75.0 2.95	3.90 0.15	2.60 0.10	22.9	8.71	0.0899	0.73 1.60
31.750 1.2500	26.195 1.0313	-7.9 -0.31	1.5 0.06	48.0 1.89	50.0 1.97	3.3 0.13	87.0 3.43	79.0 3.11	2.20 0.08	1.10 0.04	44.4	13.4	0.0920	1.15 2.53
17.000 0.6693	13.500 0.5315	-2.3 -0.09	3.3 0.13	42.5 1.67	46.5 1.83	1.3 0.05	60.0 2.36	56.0 2.20	0.50 0.02	1.30 0.05	18.4	14.5	0.0692	0.20 0.45
17.000 0.6693	13.500 0.5315	-2.3 -0.09	1.3 0.05	42.5 1.67	44.5 1.75	1.3 0.05	60.0 2.36	56.0 2.20	0.60 0.02	1.30 0.05	18.4	14.5	0.0692	0.20 0.45
17.000 0.6693	13.500 0.5315	-2.3 -0.09	0.0 0.00	42.5 1.67	46.5 1.83	1.3 0.05	60.0 2.36	56.0 2.20	0.50 0.02	1.30 0.05	18.4	14.5	0.0692	0.20 0.45
17.000 0.6693	13.500 0.5315	-2.3 -0.09	2.3 0.09	43.0 1.69	47.0 1.85	1.3 0.05	60.0 2.36	56.0 2.20	0.60 0.02	1.30 0.05	18.4	15	0.0692	0.20 0.45
16.520 0.6504	12.000 0.4724	-1.5 -0.06	2.0 0.08	43.0 1.69	46.0 1.81	1.5 0.06	64.0 2.52	61.0 2.40	1.20 0.05	1.50 0.06	17.5	11.5	0.0694	0.23 0.52
11.908 0.4688	9.525 0.3750	-0.8 -0.03	1.5 0.06	42.5 1.67	45.0 1.77	0.8 0.03	60.0 2.36	59.0 2.32	0.20 0.01	1.40 0.05	14.8	23.3	0.0601	0.15 0.33

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

B

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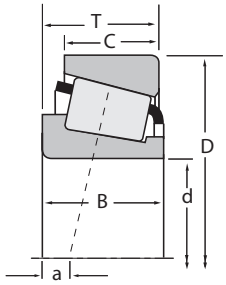
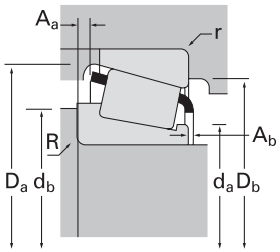
SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
38.100 1.5000	65.088 2.5625	12.700 0.5000	25100 5650	0.35	1.73	6520 1470	3860 869	1.69	33000 7430	13889	13836
38.100 1.5000	65.088 2.5625	18.034 0.7100	45000 10100	0.33	1.80	11700 2620	6640 1490	1.76	60300 13600	LM29748	LM29710
38.100 1.5000	65.088 2.5625	18.034 0.7100	45000 10100	0.33	1.80	11700 2620	6640 1490	1.76	60300 13600	LM29749	LM29710
38.100 1.5000	65.088 2.5625	19.812 0.7800	45000 10100	0.33	1.80	11700 2620	6640 1490	1.76	60300 13600	LM29749	LM29711
38.100 1.5000	68.262 2.6875	15.875 0.6250	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19150	19268
38.100 1.5000	68.262 2.6875	19.997 0.7873	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19150	19269
38.100 1.5000	69.012 2.7170	19.050 0.7500	52500 11800	0.40	1.49	13600 3060	9370 2110	1.45	67900 15300	13685	13620
38.100 1.5000	69.012 2.7170	19.050 0.7500	52500 11800	0.40	1.49	13600 3060	9370 2110	1.45	67900 15300	13685	13621
38.100 1.5000	69.012 2.7170	19.050 0.7500	52500 11800	0.40	1.49	13600 3060	9370 2110	1.45	67900 15300	13687	13620
38.100 1.5000	69.012 2.7170	19.050 0.7500	52500 11800	0.40	1.49	13600 3060	9370 2110	1.45	67900 15300	13687	13621
38.100 1.5000	69.012 2.7170	19.050 0.7500	52500 11800	0.40	1.49	13600 3060	9370 2110	1.45	67900 15300	13685A	13620
38.100 1.5000	69.012 2.7170	19.050 0.7500	52500 11800	0.40	1.49	13600 3060	9370 2110	1.45	67900 15300	13685A	13621
38.100 1.5000	69.012 2.7170	26.195 1.0313	52500 11800	0.40	1.49	13600 3060	9370 2110	1.45	67900 15300	13686	13620
38.100 1.5000	69.012 2.7170	26.195 1.0313	52500 11800	0.40	1.49	13600 3060	9370 2110	1.45	67900 15300	13686	13621
38.100 1.5000	69.969 2.7547	21.996 0.8660	52500 11800	0.40	1.49	13600 3060	9370 2110	1.45	67900 15300	13685	13624
38.100 1.5000	69.969 2.7547	21.996 0.8660	52500 11800	0.40	1.49	13600 3060	9370 2110	1.45	67900 15300	13687	13624
38.100 1.5000	71.438 2.8125	15.875 0.6250	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19150	19281
38.100 1.5000	72.000 2.8346	17.018 0.6700	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19150	19283
38.100 1.5000	72.000 2.8346	19.000 0.7480	52400 11800	0.40	1.49	13600 3060	9350 2100	1.45	65800 14800	16150	16282
38.100 1.5000	72.238 2.8440	20.638 0.8125	52400 11800	0.40	1.49	13600 3060	9350 2100	1.45	65800 14800	16150	16284
38.100 1.5000	72.238 2.8440	23.812 0.9375	52400 11800	0.40	1.49	13600 3060	9350 2100	1.45	65800 14800	16150	16283
38.100 1.5000	73.025 2.8750	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2776	2735X
38.100 1.5000	73.025 2.8750	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2788	2735X
38.100 1.5000	73.025 2.8750	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2788A	2735X
38.100 1.5000	74.612 2.9375	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2788A	2736
38.100 1.5000	76.200 3.0000	20.625 0.8120	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28150	28300X
38.100 1.5000	76.200 3.0000	20.638 0.8125	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28150	28300
38.100 1.5000	76.200 3.0000	20.638 0.8125	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28151	28300

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage							
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.									
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g			
11.908	9.525	-0.8	1.5	42.5	45.0	0.8	61.0	59.0	0.20	1.40	14.8	23.3	0.0601	0.16		
0.4688	0.3750	-0.03	0.06	1.67	1.77	0.03	2.40	2.32	0.01	0.05				0.35		
18.288	13.970	-4.1	3.5	42.5	49.0	1.3	62.0	59.0	0.70	1.10	20.4	15	0.0666	0.22		
0.7200	0.5500	-0.16	0.14	1.67	1.93	0.05	2.44	2.32	0.03	0.04				0.50		
18.288	13.970	-4.1	2.3	42.5	46.5	1.3	62.0	59.0	0.70	1.10	20.4	15	0.0666	0.23		
0.7200	0.5500	-0.16	0.09	1.67	1.83	0.05	2.44	2.32	0.03	0.04				0.51		
18.288	15.748	-4.1	2.3	42.5	46.5	1.3	62.0	58.0	0.70	1.10	20.4	15	0.0666	0.25		
0.7200	0.6200	-0.16	0.09	1.67	1.83	0.05	2.44	2.28	0.03	0.04				0.55		
16.520	11.908	-1.5	1.5	43.0	45.0	1.5	65.0	61.0	1.20	1.50	17.5	11.5	0.0694	0.24		
0.6504	0.4688	-0.06	0.06	1.69	1.77	0.06	2.56	2.40	0.05	0.06				0.53		
16.520	16.030	-1.5	1.5	43.0	45.0	1.5	65.0	60.0	1.20	1.50	17.5	11.5	0.0694	0.28		
0.6504	0.6311	-0.06	0.06	1.69	1.77	0.06	2.56	2.36	0.05	0.06				0.61		
19.050	15.083	-3.0	3.5	43.0	49.5	0.8	65.0	62.0	0.90	0.60	20.7	10.9	0.0713	0.29		
0.7500	0.5938	-0.12	0.14	1.69	1.95	0.03	2.56	2.44	0.04	0.02				0.63		
19.050	15.083	-3.0	3.5	43.0	49.5	2.3	65.0	61.0	0.90	0.60	20.7	10.9	0.0713	0.28		
0.7500	0.5938	-0.12	0.14	1.69	1.95	0.09	2.56	2.40	0.04	0.02				0.62		
19.050	15.083	-3.0	2.0	43.0	46.5	0.8	65.0	62.0	0.90	0.60	20.7	10.9	0.0713	0.29		
0.7500	0.5938	-0.12	0.08	1.69	1.83	0.03	2.56	2.44	0.04	0.02				0.64		
19.050	15.083	-3.0	2.0	43.0	46.5	2.3	65.0	61.0	0.90	0.60	20.7	10.9	0.0713	0.29		
0.7500	0.5938	-0.12	0.08	1.69	1.83	0.09	2.56	2.40	0.04	0.02				0.63		
19.050	15.083	-3.0	0.8	43.0	44.0	0.8	65.0	62.0	0.90	0.60	20.7	12.2	0.0713	0.29		
0.7500	0.5938	-0.12	0.03	1.69	1.73	0.03	2.56	2.44	0.04	0.02				0.64		
19.050	15.083	-3.0	0.8	43.0	44.0	2.3	65.0	61.0	0.90	0.60	20.7	12.2	0.0713	0.29		
0.7500	0.5938	-0.12	0.03	1.69	1.73	0.09	2.56	2.40	0.04	0.02				0.63		
26.195	15.083	-10.2	1.5	43.0	45.5	0.8	65.0	62.0	8.00	0.60	20.7	12.2	0.0713	0.35		
1.0313	0.5938	-0.40	0.06	1.69	1.79	0.03	2.56	2.44	0.32	0.02				0.77		
26.195	15.083	-10.2	1.5	43.0	45.5	2.3	65.0	61.0	8.00	0.60	20.7	12.2	0.0713	0.35		
1.0313	0.5938	-0.40	0.06	1.69	1.79	0.09	2.56	2.40	0.32	0.02				0.76		
19.050	18.029	-3.0	3.5	43.0	49.5	1.5	65.0	61.0	0.90	0.60	20.7	10.9	0.0713	0.33		
0.7500	0.7098	-0.12	0.14	1.69	1.95	0.06	2.56	2.40	0.04	0.02				0.73		
19.050	18.029	-3.0	2.0	43.0	46.5	1.5	65.0	61.0	0.90	0.60	20.7	10.9	0.0713	0.33		
0.7500	0.7098	-0.12	0.08	1.69	1.83	0.06	2.56	2.40	0.04	0.02				0.73		
16.520	11.908	-1.5	1.5	43.0	45.0	1.0	66.0	63.0	1.20	1.50	17.5	11.5	0.0694	0.27		
0.6504	0.4688	-0.06	0.06	1.69	1.77	0.04	2.60	2.48	0.05	0.06				0.60		
16.520	14.288	-1.5	1.5	43.0	45.0	1.5	66.0	63.0	1.20	1.50	17.5	11.5	0.0694	0.30		
0.6504	0.5625	-0.06	0.06	1.69	1.77	0.06	2.60	2.48	0.05	0.06				0.66		
20.638	14.237	-4.1	3.5	43.0	49.5	1.5	67.0	63.0	1.20	1.10	20.3	10.6	0.0707	0.33		
0.8125	0.5605	-0.16	0.14	1.69	1.95	0.06	2.64	2.48	0.05	0.04				0.73		
20.638	15.875	-4.1	3.5	43.0	49.5	1.3	67.0	63.0	1.20	1.10	20.3	10.6	0.0707	0.35		
0.8125	0.6250	-0.16	0.14	1.69	1.95	0.05	2.64	2.48	0.05	0.04				0.78		
20.638	19.050	-4.1	3.5	43.0	49.5	2.3	67.0	61.0	1.20	1.10	20.3	10.6	0.0707	0.39		
0.8125	0.7500	-0.16	0.14	1.69	1.95	0.09	2.64	2.40	0.05	0.04				0.86		
25.654	19.050	-8.1	4.3	43.5	52.0	0.8	69.0	66.0	1.40	0.90	28.7	12.2	0.0725	0.44		
1.0100	0.7500	-0.32	0.17	1.71	2.05	0.03	2.72	2.60	0.06	0.04				0.98		
25.654	19.050	-8.1	3.5	43.5	50.0	0.8	69.0	66.0	1.40	0.90	28.7	12.2	0.0725	0.45		
1.0100	0.7500	-0.32	0.14	1.71	1.97	0.03	2.72	2.60	0.06	0.04				0.98		
25.654	19.050	-8.1	1.5	43.5	46.0	0.8	69.0	66.0	1.40	0.90	28.7	12.2	0.0725	0.45		
1.0100	0.7500	-0.32	0.06	1.71	1.81	0.03	2.72	2.60	0.06	0.04				1.00		
25.654	19.050	-8.1	1.5	43.5	46.0	0.8	70.0	67.0	1.40	0.90	28.7	12.2	0.0725	0.48		
1.0100	0.7500	-0.32	0.06	1.71	1.81	0.03	2.76	2.64	0.06	0.04				1.06		
20.940	15.494	-4.8	1.5	43.5	45.5	1.5	71.0	68.0	2.40	1.10	20.7	12.5	0.0709	0.40		
0.8244	0.6100	-0.19	0.06	1.71	1.79	0.06	2.80	2.68	0.09	0.04				0.89		
20.940	15.507	-4.8	1.5	43.5	45.5	1.3	71.0	68.0	2.40	1.10	20.7	12.5	0.0709	0.40		
0.8244	0.6105	-0.19	0.06	1.71	1.79	0.05	2.80	2.68	0.09	0.04				0.88		
20.940	15.507	-4.8	3.5	43.5	50.0	1.3	71.0	68.0	2.40	1.10	20.7	12.5	0.0709	0.39		
0.8244	0.6105	-0.19	0.14	1.71	1.97	0.05	2.80	2.68	0.09	0.04				0.87		

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

B

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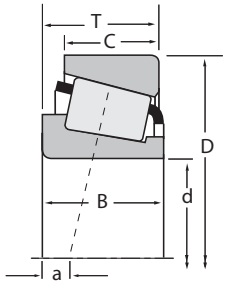
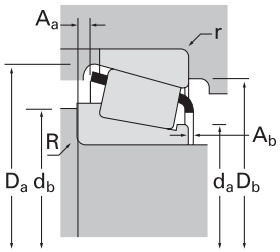
SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
38.100 1.5000	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2776	2720
38.100 1.5000	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2777	2720
38.100 1.5000	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2788	2720
38.100 1.5000	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2788	2729
38.100 1.5000	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2788	2729X
38.100 1.5000	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2788A	2720
38.100 1.5000	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2788A	2729
38.100 1.5000	76.200 3.0000	25.400 1.0000	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26878	26823
38.100 1.5000	79.375 3.1250	23.812 0.9375	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26878	26822
38.100 1.5000	79.375 3.1250	25.400 1.0000	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2776	2734
38.100 1.5000	79.375 3.1250	25.400 1.0000	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2788	2734
38.100 1.5000	79.375 3.1250	29.370 1.1563	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3490	3420
38.100 1.5000	79.974 3.1486	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3387	3325
38.100 1.5000	80.000 3.1496	21.006 0.8270	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28150	28315A
38.100 1.5000	80.000 3.1496	23.812 0.9375	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26878	26824
38.100 1.5000	80.035 3.1510	24.608 0.9688	72200 16200	0.56	1.07	18700 4210	18000 4040	1.04	91100 20500	27880	27820
38.100 1.5000	80.035 3.1510	24.608 0.9688	72200 16200	0.56	1.07	18700 4210	18000 4040	1.04	91100 20500	27881	27820
38.100 1.5000	80.035 3.1510	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3387	3339
38.100 1.5000	80.167 3.1562	25.400 1.0000	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26878	26820
38.100 1.5000	80.167 3.1562	25.400 1.0000	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26878	26830
38.100 1.5000	80.167 3.1562	26.988 1.0625	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	347	3320
38.100 1.5000	80.167 3.1562	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3381	3320
38.100 1.5000	80.167 3.1562	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3381	3331
38.100 1.5000	80.167 3.1562	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3387	3320
38.100 1.5000	81.755 3.2187	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3381	3329
38.100 1.5000	81.755 3.2187	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3387	3329
38.100 1.5000	82.550 3.2500	29.370 1.1563	95100 21400	0.55	1.10	24600 5540	23000 5180	1.07	130000 29300	HM801346	HM801310
38.100 1.5000	82.550 3.2500	29.370 1.1563	95100 21400	0.55	1.10	24600 5540	23000 5180	1.07	130000 29300	HM801346	HM801311

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
25.654 1.0100	19.050 0.7500	-8.1 -0.32	4.3 0.17	43.5 1.71	52.0 2.05	3.3 0.13	70.0 2.76	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.49 1.08
25.654 1.0100	19.050 0.7500	-8.1 -0.32	5.5 0.22	43.5 1.71	54.0 2.13	3.3 0.13	70.0 2.76	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.48 1.07
25.654 1.0100	19.050 0.7500	-8.1 -0.32	3.5 0.14	43.5 1.71	50.0 1.97	3.3 0.13	70.0 2.76	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.49 1.09
25.654 1.0100	19.050 0.7500	-8.1 -0.32	3.5 0.14	43.5 1.71	50.0 1.97	0.8 0.03	70.0 2.76	68.0 2.68	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.50 1.11
25.654 1.0100	19.050 0.7500	-8.1 -0.32	3.5 0.14	43.5 1.71	50.0 1.97	1.5 0.06	70.0 2.76	67.0 2.64	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.50 1.10
25.654 1.0100	19.050 0.7500	-8.1 -0.32	1.5 0.06	43.5 1.71	46.0 1.81	3.3 0.13	70.0 2.76	66.0 2.60	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.50 1.10
25.654 1.0100	19.050 0.7500	-8.1 -0.32	1.5 0.06	43.5 1.71	46.0 1.81	0.8 0.03	70.0 2.76	68.0 2.68	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.51 1.12
25.400 1.0000	20.638 0.8125	-7.4 -0.29	0.8 0.03	44.5 1.75	45.0 1.77	1.5 0.06	73.0 2.87	69.0 2.72	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.53 1.16
25.400 1.0000	19.050 0.7500	-7.4 -0.29	0.8 0.03	44.5 1.75	45.0 1.77	0.8 0.03	74.0 2.91	71.0 2.80	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.57 1.26
25.654 1.0100	20.638 0.8125	-8.1 -0.32	4.3 0.17	43.5 1.71	52.0 2.05	3.3 0.13	72.0 2.83	67.0 2.64	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.57 1.26
25.654 1.0100	20.638 0.8125	-8.1 -0.32	3.5 0.14	43.5 1.71	50.0 1.97	3.3 0.13	72.0 2.83	67.0 2.64	1.40 0.06	0.90 0.04	28.7	12.2	0.0725	0.58 1.27
29.771 1.1721	23.812 0.9375	-8.6 -0.34	3.5 0.14	45.5 1.80	52.0 2.05	3.3 0.13	74.0 2.91	67.0 2.64	1.40 0.06	0.90 0.04	29.9	11.2	0.0781	0.66 1.45
30.391 1.1965	23.812 0.9375	-10.9 -0.43	0.8 0.03	44.5 1.75	45.0 1.77	3.3 0.13	74.5 2.94	70.0 2.76	1.80 0.07	1.10 0.04	34.6	12.1	0.0744	0.67 1.48
20.940 0.8244	15.875 0.6250	-4.8 -0.19	1.5 0.06	43.5 1.71	45.5 1.79	2.0 0.08	73.0 2.87	69.0 2.72	2.40 0.09	1.10 0.04	20.7	12.5	0.0709	0.46 1.01
25.400 1.0000	19.050 0.7500	-7.4 -0.29	0.8 0.03	44.5 1.75	45.0 1.77	1.3 0.05	74.0 2.91	70.0 2.76	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.58 1.28
23.698 0.9330	18.512 0.7288	-2.5 -0.10	0.8 0.03	47.0 1.85	48.0 1.89	1.5 0.06	75.0 2.95	68.0 2.68	3.20 0.13	1.50 0.06	24.6	12.6	0.0839	0.56 1.23
23.698 0.9330	18.512 0.7288	-2.5 -0.10	3.5 0.14	47.0 1.85	53.0 2.09	1.5 0.06	75.0 2.95	68.0 2.68	3.20 0.13	1.50 0.06	24.6	12.6	0.0839	0.55 1.22
30.391 1.1965	23.812 0.9375	-10.9 -0.43	0.8 0.03	44.5 1.75	45.0 1.77	1.5 0.06	74.5 2.94	71.0 2.80	1.80 0.07	1.10 0.04	34.6	12.1	0.0744	0.68 1.50
25.400 1.0000	20.638 0.8125	-7.4 -0.29	0.8 0.03	44.5 1.75	45.0 1.77	3.3 0.13	74.0 2.91	69.0 2.72	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.60 1.32
25.400 1.0000	20.638 0.8125	-7.4 -0.29	0.8 0.03	44.5 1.75	45.0 1.77	0.8 0.03	74.0 2.91	71.0 2.80	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.61 1.34
22.403 0.8820	23.812 0.9375	-6.4 -0.25	3.5 0.14	44.0 1.73	50.0 1.97	3.3 0.13	75.0 2.95	70.0 2.76	0.70 0.03	1.10 0.04	26.5	13	0.0676	0.56 1.23
30.391 1.1965	23.812 0.9375	-10.9 -0.43	3.5 0.14	44.5 1.75	51.0 2.01	3.3 0.13	75.0 2.95	70.0 2.76	1.80 0.07	1.10 0.04	34.6	12.1	0.0744	0.67 1.48
30.391 1.1965	23.812 0.9375	-10.9 -0.43	3.5 0.14	44.5 1.75	51.0 2.01	0.8 0.03	74.5 2.94	72.0 2.83	1.80 0.07	1.10 0.04	34.6	12.1	0.0744	0.68 1.50
30.391 1.1965	23.812 0.9375	-10.9 -0.43	0.8 0.03	44.5 1.75	45.0 1.77	3.3 0.13	75.0 2.95	70.0 2.76	1.80 0.07	1.10 0.04	34.6	12.1	0.0744	0.68 1.49
30.391 1.1965	23.812 0.9375	-10.9 -0.43	3.5 0.14	44.5 1.75	51.0 2.01	3.3 0.13	75.0 2.95	71.0 2.80	1.80 0.07	1.10 0.04	34.6	12.1	0.0744	0.71 1.56
30.391 1.1965	23.812 0.9375	-10.9 -0.43	0.8 0.03	44.5 1.75	45.0 1.77	3.3 0.13	75.0 2.95	71.0 2.80	1.80 0.07	1.10 0.04	34.6	12.1	0.0744	0.71 1.57
28.575 1.1250	23.020 0.9063	-4.8 -0.19	0.8 0.03	49.0 1.93	51.0 2.01	3.3 0.13	78.0 3.07	68.0 2.68	2.10 0.08	1.80 0.07	33.7	14	0.0928	0.76 1.68
28.575 1.1250	23.020 0.9063	-4.8 -0.19	0.8 0.03	49.0 1.93	51.0 2.01	0.8 0.03	78.0 3.07	70.0 2.76	2.10 0.08	1.80 0.07	33.7	14	0.0928	0.77 1.71

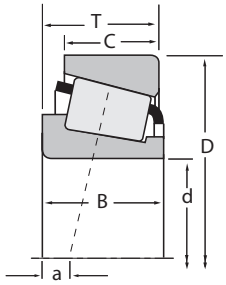
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

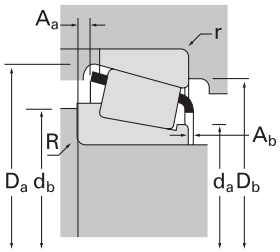
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
38.100 1.5000	82.550 3.2500	29.370 1.1563	95100 21400	0.55	1.10	24600 5540	23000 5180	1.07	130000 29300	HM801346X	HM801310
38.100 1.5000	82.931 3.2650	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25572	25520
38.100 1.5000	85.000 3.3465	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25572	25526
38.100 1.5000	85.725 3.3750	30.162 1.1875	115000 25900	0.40	1.49	29800 6710	20500 4610	1.45	148000 33200	3875	3820
38.100 1.5000	85.725 3.3750	30.162 1.1875	115000 25900	0.40	1.49	29800 6710	20500 4610	1.45	148000 33200	3876	3820
38.100 1.5000	85.725 3.3750	30.162 1.1875	115000 25900	0.40	1.49	29800 6710	20500 4610	1.45	148000 33200	3876	3821
38.100 1.5000	87.312 3.4375	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3580	3525
38.100 1.5000	87.312 3.4375	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3583	3525
38.100 1.5000	88.500 3.4843	25.400 1.0000	77900 17500	0.78	0.77	20200 4540	27000 6070	0.75	88600 19900	44150	44348
38.100 1.5000	88.500 3.4843	26.988 1.0625	107000 24100	0.26	2.28	27800 6240	12500 2820	2.22	124000 28000	418	414
38.100 1.5000	88.500 3.4843	26.988 1.0625	107000 24100	0.26	2.28	27800 6240	12500 2820	2.22	124000 28000	418	414A
38.100 1.5000	88.900 3.5000	26.988 1.0625	107000 24100	0.26	2.28	27800 6240	12500 2820	2.22	124000 28000	418	414X
38.100 1.5000	90.488 3.5625	39.688 1.5625	155000 34900	0.28	2.11	40200 9040	19600 4400	2.05	204000 45900	4375	4335
38.100 1.5000	93.662 3.6875	31.750 1.2500	126000 28200	0.36	1.67	32600 7320	20100 4510	1.62	156000 35000	49151	49368
38.100 1.5000	95.250 3.7500	27.783 1.0938	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	440	432
38.100 1.5000	95.250 3.7500	27.783 1.0938	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	444	432
38.100 1.5000	95.250 3.7500	27.783 1.0938	120000 27000	0.33	1.82	31100 7000	17600 3950	1.77	161000 36200	33880	33821
38.100 1.5000	95.250 3.7500	30.958 1.2188	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53150	53375
38.100 1.5000	95.250 3.7500	30.958 1.2188	107000 24000	0.74	0.81	27600 6210	35000 7870	0.79	132000 29700	HM903241	HM903210
38.100 1.5000	98.425 3.8750	30.958 1.2188	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53150	53387
38.100 1.5000	98.425 3.8750	30.958 1.2188	107000 24000	0.74	0.81	27600 6210	35000 7870	0.79	132000 29700	HM903241	HM903216
38.100 1.5000	101.600 4.0000	34.925 1.3750	152000 34300	0.29	2.10	39500 8880	19300 4340	2.05	191000 43000	525	522
38.100 1.5000	101.600 4.0000	34.925 1.3750	152000 34300	0.29	2.10	39500 8880	19300 4340	2.05	191000 43000	525X	522
38.100 1.5000	103.188 4.0625	38.100 1.5000	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	542	533A
38.100 1.5000	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	455A	453A
38.100 1.5000	111.125 4.3750	38.100 1.5000	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	542	532A
38.481 1.5150	63.500 2.5000	12.700 0.5000	25100 5650	0.35	1.73	6520 1470	3860 869	1.69	33000 7430	13890	13830
38.481 1.5150	65.088 2.5625	12.700 0.5000	25100 5650	0.35	1.73	6520 1470	3860 869	1.69	33000 7430	13890	13836

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
28.575 1.1250	23.020 0.9063	-4.8 -0.19	2.3 0.09	49.0 1.93	54.0 2.13	3.3 0.13	78.0 3.07	68.0 2.68	2.10 0.08	1.80 0.07	33.7	14	0.0928	0.76 1.68
25.400 1.0000	19.050 0.7500	-6.4 -0.25	0.8 0.03	46.0 1.81	46.0 1.81	0.8 0.03	77.0 3.03	74.0 2.91	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.64 1.42
25.400 1.0000	19.050 0.7500	-6.4 -0.25	0.8 0.03	46.0 1.81	46.0 1.81	2.3 0.09	78.0 3.07	74.0 2.91	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.68 1.50
30.162 1.1875	23.812 0.9375	-8.1 -0.32	0.8 0.03	48.5 1.91	49.5 1.95	3.3 0.13	81.0 3.19	73.0 2.87	1.50 0.06	2.10 0.08	37.8	13.5	0.0873	0.85 1.87
30.162 1.1875	23.812 0.9375	-8.1 -0.32	3.5 0.14	48.5 1.91	55.0 2.17	3.3 0.13	81.0 3.19	73.0 2.87	1.50 0.06	2.10 0.08	37.8	13.5	0.0873	0.84 1.86
30.162 1.1875	23.812 0.9375	-8.1 -0.32	3.5 0.14	48.5 1.91	55.0 2.17	1.3 0.05	81.0 3.19	75.0 2.95	1.50 0.06	2.10 0.08	37.8	13.5	0.0873	0.85 1.88
30.886 1.2160	23.812 0.9375	-10.2 -0.40	1.5 0.06	45.5 1.79	48.0 1.89	3.3 0.13	81.0 3.19	75.0 2.95	2.30 0.09	0.70 0.03	39.5	10.5	0.0808	0.87 1.91
30.886 1.2160	23.812 0.9375	-10.2 -0.40	3.5 0.14	45.5 1.79	52.0 2.05	3.3 0.13	81.0 3.19	75.0 2.95	2.30 0.09	0.70 0.03	39.5	10.5	0.0808	0.86 1.90
23.698 0.9330	17.462 0.6875	2.3 0.09	2.3 0.09	51.0 2.00	55.0 2.17	1.5 0.06	84.0 3.31	75.0 2.95	3.90 0.15	2.60 0.10	22.9	8.71	0.0899	0.71 1.56
29.083 1.1450	22.225 0.8750	-9.7 -0.38	3.5 0.14	44.5 1.75	51.0 2.01	1.5 0.06	80.0 3.15	77.0 3.03	1.20 0.05	0.80 0.03	34.4	9.87	0.0731	0.82 1.81
29.083 1.1450	22.225 0.8750	-9.7 -0.38	3.5 0.14	44.5 1.75	51.0 2.01	3.3 0.13	80.0 3.15	76.0 2.99	1.20 0.05	0.80 0.03	34.4	9.87	0.0731	0.81 1.80
29.083 1.1450	22.225 0.8750	-9.7 -0.38	3.5 0.14	44.5 1.75	51.0 2.01	0.8 0.03	80.0 3.15	78.0 3.07	1.20 0.05	0.80 0.03	34.4	9.87	0.0731	0.84 1.84
40.386 1.5900	33.338 1.3125	-15.0 -0.59	1.5 0.06	51.0 2.01	53.0 2.09	3.3 0.13	85.0 3.35	77.0 3.03	2.30 0.09	0.60 0.02	52.9	16.7	0.0872	1.31 2.89
31.750 1.2500	25.400 1.0000	-9.1 -0.36	0.8 0.03	48.0 1.89	48.5 1.91	3.3 0.13	87.0 3.43	82.0 3.23	3.00 0.12	0.80 0.03	42.4	13.6	0.0872	1.08 2.39
29.900 1.1772	22.225 0.8750	-9.1 -0.36	0.8 0.03	45.5 1.79	46.5 1.83	2.3 0.09	87.0 3.43	83.0 3.27	1.60 0.06	0.40 0.02	42.5	11.3	0.0805	1.04 2.29
29.900 1.1772	22.225 0.8750	-9.1 -0.36	3.5 0.14	45.5 1.79	52.0 2.05	2.3 0.09	87.0 3.43	83.0 3.27	1.60 0.06	0.40 0.02	42.5	11.3	0.0805	1.03 2.27
28.575 1.1250	22.225 0.8750	-7.6 -0.30	3.5 0.14	48.0 1.89	54.0 2.13	2.3 0.09	90.0 3.54	85.0 3.35	1.30 0.05	2.20 0.09	52.5	18.5	0.0910	1.05 2.31
28.301 1.1142	20.638 0.8125	-0.3 -0.01	1.5 0.06	52.5 2.07	55.0 2.17	0.8 0.03	89.0 3.50	81.0 3.19	5.70 0.22	2.20 0.08	26.7	9.63	0.0930	1.02 2.25
28.575 1.1250	22.225 0.8750	0.5 0.02	3.5 0.14	54.0 2.13	61.0 2.40	0.8 0.03	91.0 3.58	81.0 3.19	3.90 0.16	2.00 0.08	33.7	9.91	0.1010	1.09 2.40
28.301 1.1142	20.638 0.8125	-0.3 -0.01	1.5 0.06	52.5 2.07	55.0 2.17	0.8 0.03	91.0 3.58	82.0 3.23	5.70 0.22	2.20 0.08	26.7	9.63	0.0930	1.10 2.42
28.575 1.1250	22.225 0.8750	0.5 0.02	3.5 0.14	54.0 2.13	61.0 2.40	0.8 0.03	92.0 3.62	82.0 3.23	3.90 0.16	2.00 0.08	33.7	9.91	0.1010	1.17 2.58
36.068 1.4200	26.988 1.0625	-12.7 -0.50	3.5 0.14	48.0 1.89	54.0 2.13	3.3 0.13	95.0 3.74	89.0 3.50	2.70 0.11	1.80 0.07	57.9	13.4	0.0894	1.48 3.26
36.068 1.4200	26.988 1.0625	-12.7 -0.50	0.8 0.03	48.0 1.89	49.0 1.93	3.3 0.13	95.0 3.74	89.0 3.50	2.70 0.11	1.80 0.07	57.9	13.4	0.0894	1.49 3.28
36.957 1.4550	30.162 1.1875	-12.2 -0.48	3.5 0.14	49.0 1.93	55.0 2.17	1.5 0.06	98.0 3.86	93.0 3.66	2.80 0.11	0.90 0.04	64.3	16.1	0.0938	1.65 3.63
29.317 1.1542	22.225 0.8750	-7.1 -0.28	3.5 0.14	49.5 1.95	56.0 2.20	0.8 0.03	100.0 3.94	97.0 3.82	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.43 3.15
36.957 1.4550	30.162 1.1875	-12.2 -0.48	3.5 0.14	49.0 1.93	55.0 2.17	3.3 0.13	100.0 3.94	95.0 3.74	2.80 0.11	0.90 0.04	64.3	16.1	0.0938	1.95 4.30
11.908 0.4688	9.525 0.3750	-0.8 -0.03	0.4 0.02	43.0 1.69	43.0 1.69	0.8 0.03	60.0 2.36	59.0 2.32	0.20 0.01	1.40 0.05	14.8	23.3	0.0601	0.15 0.32
11.908 0.4688	9.525 0.3750	-0.8 -0.03	0.4 0.02	43.0 1.69	43.0 1.69	0.8 0.03	61.0 2.40	59.0 2.32	0.20 0.01	1.40 0.05	14.8	23.3	0.0601	0.16 0.35

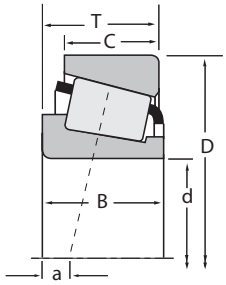
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

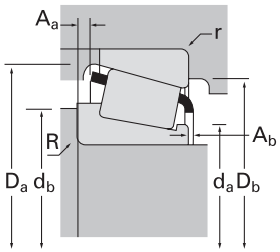
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)		Factors (5)	Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
39.000 1.5354	72.014 2.8352	21.400 0.8425	52400 11800	0.40	1.49	13600 3060	9350 2100	1.45	65800 14800	J16154	J16285
39.688 1.5625	73.025 2.8750	16.667 0.6562	47000 10600	0.35	1.71	12200 2740	7310 1640	1.67	58100 13100	18587	18520
39.688 1.5625	73.025 2.8750	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2789	2735X
39.688 1.5625	73.025 2.8750	25.654 1.0100	68000 15300	0.33	1.80	17600 3960	10000 2260	1.76	89100 20000	M201047	M201011
39.688 1.5625	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2789	2720
39.688 1.5625	76.200 3.0000	23.812 0.9375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2789	2729
39.688 1.5625	76.200 3.0000	25.400 1.0000	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26881	26823
39.688 1.5625	79.375 3.1250	23.812 0.9375	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26880	26822
39.688 1.5625	79.375 3.1250	23.812 0.9375	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26881	26822
39.688 1.5625	79.375 3.1250	23.812 0.9375	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26880	26822A
39.688 1.5625	79.974 3.1486	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3382	3325
39.688 1.5625	79.974 3.1486	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3386	3325
39.688 1.5625	80.000 3.1496	23.812 0.9375	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26881	26824
39.688 1.5625	80.035 3.1510	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3386	3339
39.688 1.5625	80.167 3.1562	25.400 1.0000	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26880	26820
39.688 1.5625	80.167 3.1562	25.400 1.0000	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26880	26830
39.688 1.5625	80.167 3.1562	25.400 1.0000	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26881	26820
39.688 1.5625	80.167 3.1562	25.400 1.0000	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26881	26830
39.688 1.5625	80.167 3.1562	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3382	3320
39.688 1.5625	80.167 3.1562	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3382	3331
39.688 1.5625	80.167 3.1562	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3386	3320
39.688 1.5625	80.167 3.1562	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3386	3331
39.688 1.5625	80.167 3.1562	29.370 1.1563	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26880	26821
39.688 1.5625	84.138 3.3125	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3382	3328
39.688 1.5625	84.138 3.3125	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3386	3328
39.688 1.5625	88.500 3.4843	25.400 1.0000	77900 17500	0.78	0.77	20200 4540	27000 6070	0.75	88600 19900	44156	44348
39.688 1.5625	88.500 3.4843	25.400 1.0000	77900 17500	0.78	0.77	20200 4540	27000 6070	0.75	88600 19900	44158	44348
39.688 1.5625	120.650 4.7500	41.275 1.6250	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	620	612

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
20.638 0.8125	**16.637** 0.6550	**-4.1** -0.16	**3.5** 0.14	**44.5** 1.75	**51.0** 2.01	**0.4** 0.02	**67.0** 2.64	**63.0** 2.48	**1.20** 0.05	**1.10** 0.04	**20.3**	**10.6**	**0.0707**	**0.36** 0.79
17.462 0.6875	**12.700** 0.5000	**-2.8** -0.11	**0.8** 0.03	**45.0** 1.77	**45.5** 1.79	**1.5** 0.06	**69.0** 2.72	**66.0** 2.60	**0.50** 0.02	**1.20** 0.05	**21**	**15.4**	**0.0681**	**0.30** 0.65
25.654 1.0100	**19.050** 0.7500	**-8.1** -0.32	**3.5** 0.14	**45.0** 1.77	**52.0** 2.05	**0.8** 0.03	**69.0** 2.72	**66.0** 2.60	**1.40** 0.06	**0.90** 0.04	**28.7**	**12.2**	**0.0725**	**0.43** 0.94
22.098 0.8700	**21.336** 0.8400	**-5.8** -0.23	**0.8** 0.03	**48.0** 1.89	**45.5** 1.79	**2.3** 0.09	**69.0** 2.72	**64.0** 2.52	**0.50** 0.02	**2.00** 0.08	**27.5**	**15**	**0.0736**	**0.43** 0.94
25.654 1.0100	**19.050** 0.7500	**-8.1** -0.32	**3.5** 0.14	**45.0** 1.77	**52.0** 2.05	**3.3** 0.13	**70.0** 2.76	**66.0** 2.60	**1.40** 0.06	**0.90** 0.04	**28.7**	**12.2**	**0.0725**	**0.47** 1.04
25.654 1.0100	**19.050** 0.7500	**-8.1** -0.32	**3.5** 0.14	**45.0** 1.77	**52.0** 2.05	**0.8** 0.03	**70.0** 2.76	**68.0** 2.68	**1.40** 0.06	**0.90** 0.04	**28.7**	**12.2**	**0.0725**	**0.48** 1.06
25.400 1.0000	**20.638** 0.8125	**-7.4** -0.29	**3.5** 0.14	**45.5** 1.79	**52.0** 2.05	**1.5** 0.06	**73.0** 2.87	**69.0** 2.72	**1.40** 0.06	**1.20** 0.05	**32.8**	**13.3**	**0.0770**	**0.50** 1.10
25.400 1.0000	**19.050** 0.7500	**-7.4** -0.29	**1.5** 0.06	**45.5** 1.79	**48.0** 1.89	**0.8** 0.03	**74.0** 2.91	**71.0** 2.80	**1.40** 0.06	**1.20** 0.05	**32.8**	**13.3**	**0.0770**	**0.55** 1.21
25.400 1.0000	**19.050** 0.7500	**-7.4** -0.29	**3.5** 0.14	**45.5** 1.79	**52.0** 2.05	**0.8** 0.03	**74.0** 2.91	**71.0** 2.80	**1.40** 0.06	**1.20** 0.05	**32.8**	**13.3**	**0.0770**	**0.54** 1.20
25.400 1.0000	**19.050** 0.7500	**-7.4** -0.29	**1.5** 0.06	**45.5** 1.79	**48.0** 1.89	**2.3** 0.09	**74.0** 2.91	**69.0** 2.72	**1.40** 0.06	**1.20** 0.05	**32.8**	**13.3**	**0.0770**	**0.54** 1.20
30.391 1.1965	**23.812** 0.9375	**-10.9** -0.43	**3.5** 0.14	**45.5** 1.79	**52.0** 2.05	**3.3** 0.13	**74.5** 2.94	**70.0** 2.76	**1.80** 0.07	**1.10** 0.04	**34.6**	**12.1**	**0.0744**	**0.64** 1.42
30.391 1.1965	**23.812** 0.9375	**-10.9** -0.43	**0.8** 0.03	**45.5** 1.79	**46.5** 1.83	**3.3** 0.13	**74.5** 2.94	**70.0** 2.76	**1.80** 0.07	**1.10** 0.04	**34.6**	**12.1**	**0.0744**	**0.65** 1.43
25.400 1.0000	**19.050** 0.7500	**-7.4** -0.29	**3.5** 0.14	**45.5** 1.79	**52.0** 2.05	**1.3** 0.05	**74.0** 2.91	**70.0** 2.76	**1.40** 0.06	**1.20** 0.05	**32.8**	**13.3**	**0.0770**	**0.55** 1.22
30.391 1.1965	**23.812** 0.9375	**-10.9** -0.43	**0.8** 0.03	**45.5** 1.79	**46.5** 1.83	**1.5** 0.06	**74.5** 2.94	**71.0** 2.80	**1.80** 0.07	**1.10** 0.04	**34.6**	**12.1**	**0.0744**	**0.66** 1.45
25.400 1.0000	**20.638** 0.8125	**-7.4** -0.29	**1.5** 0.06	**45.5** 1.79	**48.0** 1.89	**3.3** 0.13	**74.0** 2.91	**69.0** 2.72	**1.40** 0.06	**1.20** 0.05	**32.8**	**13.3**	**0.0770**	**0.58** 1.27
25.400 1.0000	**20.638** 0.8125	**-7.4** -0.29	**1.5** 0.06	**45.5** 1.79	**48.0** 1.89	**0.8** 0.03	**74.0** 2.91	**71.0** 2.80	**1.40** 0.06	**1.20** 0.05	**32.8**	**13.3**	**0.0770**	**0.59** 1.29
25.400 1.0000	**20.638** 0.8125	**-7.4** -0.29	**3.5** 0.14	**45.5** 1.79	**52.0** 2.05	**3.3** 0.13	**74.0** 2.91	**69.0** 2.72	**1.40** 0.06	**1.20** 0.05	**32.8**	**13.3**	**0.0770**	**0.57** 1.26
25.400 1.0000	**20.638** 0.8125	**-7.4** -0.29	**3.5** 0.14	**45.5** 1.79	**52.0** 2.05	**0.8** 0.03	**74.0** 2.91	**71.0** 2.80	**1.40** 0.06	**1.20** 0.05	**32.8**	**13.3**	**0.0770**	**0.58** 1.28
30.391 1.1965	**23.812** 0.9375	**-10.9** -0.43	**3.5** 0.14	**45.5** 1.79	**52.0** 2.05	**3.3** 0.13	**75.0** 2.95	**70.0** 2.76	**1.80** 0.07	**1.10** 0.04	**34.6**	**12.1**	**0.0744**	**0.65** 1.43
30.391 1.1965	**23.812** 0.9375	**-10.9** -0.43	**3.5** 0.14	**45.5** 1.79	**52.0** 2.05	**0.8** 0.03	**74.5** 2.94	**72.0** 2.83	**1.80** 0.07	**1.10** 0.04	**34.6**	**12.1**	**0.0744**	**0.66** 1.45
30.391 1.1965	**23.812** 0.9375	**-10.9** -0.43	**0.8** 0.03	**45.5** 1.79	**46.5** 1.83	**3.3** 0.13	**75.0** 2.95	**70.0** 2.76	**1.80** 0.07	**1.10** 0.04	**34.6**	**12.1**	**0.0744**	**0.65** 1.44
30.391 1.1965	**23.812** 0.9375	**-10.9** -0.43	**0.8** 0.03	**45.5** 1.79	**46.5** 1.83	**0.8** 0.03	**74.5** 2.94	**72.0** 2.83	**1.80** 0.07	**1.10** 0.04	**34.6**	**12.1**	**0.0744**	**0.66** 1.46
25.400 1.0000	**24.608** 0.9688	**-7.4** -0.29	**1.5** 0.06	**45.5** 1.79	**48.0** 1.89	**3.3** 0.13	**74.0** 2.91	**68.0** 2.68	**1.40** 0.06	**1.20** 0.05	**32.8**	**13.3**	**0.0770**	**0.64** 1.40
30.391 1.1965	**23.812** 0.9375	**-10.9** -0.43	**3.5** 0.14	**45.5** 1.79	**52.0** 2.05	**3.3** 0.13	**76.0** 2.99	**72.0** 2.83	**1.80** 0.07	**1.10** 0.04	**34.6**	**12.1**	**0.0744**	**0.74** 1.64
30.391 1.1965	**23.812** 0.9375	**-10.9** -0.43	**0.8** 0.03	**45.5** 1.79	**46.5** 1.83	**3.3** 0.13	**76.0** 2.99	**72.0** 2.83	**1.80** 0.07	**1.10** 0.04	**34.6**	**12.1**	**0.0744**	**0.75** 1.65
23.698 0.9330	**17.462** 0.6875	**2.3** 0.09	**2.3** 0.09	**51.0** 2.00	**56.0** 2.20	**1.5** 0.06	**84.0** 3.31	**75.0** 2.95	**3.90** 0.15	**2.60** 0.10	**22.9**	**8.71**	**0.0899**	**0.69** 1.52
23.698 0.9330	**17.462** 0.6875	**2.3** 0.09	**3.5** 0.14	**51.0** 2.00	**58.0** 2.28	**1.5** 0.06	**84.0** 3.31	**75.0** 2.95	**3.90** 0.15	**2.60** 0.10	**22.9**	**8.71**	**0.0899**	**0.69** 1.51
41.275 1.6250	**31.750** 1.2500	**-14.0** -0.55	**0.8** 0.03	**52.0** 2.05	**53.0** 2.09	**3.3** 0.13	**110.0** 4.33	**105.0** 4.13	**3.90** 0.15	**1.90** 0.07	**75.9**	**16.2**	**0.0694**	**2.53** 5.58

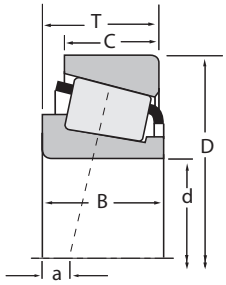
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

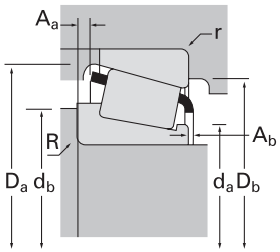
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
39.980 1.5740	76.200 3.0000	19.347 0.7617	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28156	28300
39.980 1.5740	76.200 3.0000	20.638 0.8125	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28159	28300
39.980 1.5740	80.035 3.1510	20.142 0.7930	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28156	28317
39.987 1.5743	90.975 3.5817	32.000 1.2598	133000 29900	0.33	1.80	34500 7760	19700 4420	1.76	172000 38600	HM204043	HM204010
40.000 1.5748	68.000 2.6772	19.000 0.7480	51400 11600	0.38	1.58	13300 3000	8640 1940	1.54	71600 16100	XAA32008X	Y32008X
40.000 1.5748	75.000 2.9528	26.000 1.0236	81500 18300	0.36	1.69	21100 4750	12900 2890	1.64	105000 23600	XAA33108	Y33108
40.000 1.5748	76.200 3.0000	20.625 0.8120	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28158	28300X
40.000 1.5748	80.000 3.1496	21.000 0.8268	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	344A	332
40.000 1.5748	80.000 3.1496	21.006 0.8270	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28158	28315
40.000 1.5748	80.000 3.1496	21.006 0.8270	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28158	28315A
40.000 1.5748	84.138 3.3125	26.988 1.0625	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	350	3520
40.000 1.5748	85.000 3.3465	20.638 0.8125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	350	354A
40.000 1.5748	85.000 3.3465	20.638 0.8125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	350	354X
40.000 1.5748	85.000 3.3465	20.638 0.8125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	357	354A
40.000 1.5748	85.000 3.3465	33.000 1.2992	127000 28500	0.34	1.74	32900 7400	19400 4360	1.70	160000 35900	JF4049	JF4010
40.000 1.5748	85.725 3.3750	30.162 1.1875	115000 25900	0.40	1.49	29800 6710	20500 4610	1.45	148000 33200	3879	3820
40.000 1.5748	87.312 3.4375	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3582	3525
40.000 1.5748	88.500 3.4843	24.765 0.9750	77900 17500	0.78	0.77	20200 4540	27000 6070	0.75	88600 19900	44157X	44348
40.000 1.5748	88.500 3.4843	26.988 1.0625	107000 24100	0.26	2.28	27800 6240	12500 2820	2.22	124000 28000	420	414
40.000 1.5748	88.900 3.5000	26.988 1.0625	107000 24100	0.26	2.28	27800 6240	12500 2820	2.22	124000 28000	420	414X
40.000 1.5748	90.000 3.5433	23.000 0.9055	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	350	352X
40.000 1.5748	90.000 3.5433	35.250 1.3878	123000 27500	0.55	1.10	31800 7140	29700 6670	1.07	160000 36100	XBA32308-B	Y32308-B
40.000 1.5748	90.119 3.5480	23.000 0.9055	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	350	352
40.000 1.5748	90.119 3.5480	23.000 0.9055	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	357	352
40.000 1.5748	90.119 3.5480	23.000 0.9055	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	350A	352
40.000 1.5748	95.250 3.7500	27.783 1.0938	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	442-S	432
40.000 1.5748	107.950 4.2500	36.512 1.4375	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	543	532X
40.000 1.5748	107.950 4.2500	36.512 1.4375	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	543X	532X

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

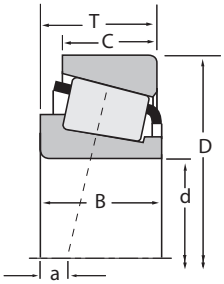
Dimensions, mm (inches)													Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage							
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.									
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g			
19.650	15.507	-3.6	2.3	45.0	49.0	1.3	71.0	68.0	1.10	1.10	20.7	12.5	0.0709	0.37		
0.7736	0.6105	-0.14	0.09	1.77	1.93	0.05	2.80	2.68	0.04	0.04				0.81		
20.940	15.507	-4.8	3.5	45.0	52.0	1.3	71.0	68.0	2.40	1.10	20.7	12.5	0.0709	0.38		
0.8244	0.6105	-0.19	0.14	1.77	2.05	0.05	2.80	2.68	0.09	0.04				0.83		
19.650	15.875	-3.6	2.3	45.0	49.0	1.5	73.0	69.0	1.10	1.10	20.7	12.5	0.0709	0.43		
0.7736	0.6250	-0.14	0.09	1.77	1.93	0.06	2.87	2.72	0.04	0.04				0.95		
32.000	26.500	-9.7	1.0	53.0	54.0	3.5	86.0	79.0	1.50	1.80	47.7	13.4	0.0885	1.03		
1.2598	1.0433	-0.38	0.04	2.09	2.13	0.14	3.39	3.11	0.06	0.07				2.26		
19.000	14.500	-3.8	3.5	45.5	52.0	1.0	65.0	61.0	0.90	1.70	23.8	16.1	0.0732	0.27		
0.7480	0.5709	-0.15	0.14	1.79	2.05	0.04	2.56	2.40	0.04	0.07				0.61		
26.000	20.500	-7.6	3.5	47.0	55.0	1.5	71.0	67.0	1.80	1.70	29.4	14.9	0.0771	0.50		
1.0236	0.8071	-0.30	0.14	1.85	2.17	0.06	2.80	2.64	0.07	0.07				1.09		
20.940	15.494	-4.8	1.5	45.0	47.5	1.5	71.0	68.0	2.40	1.10	20.7	12.5	0.0709	0.38		
0.8244	0.6100	-0.19	0.06	1.77	1.87	0.06	2.80	2.68	0.09	0.04				0.85		
22.403	17.826	-6.4	0.8	45.5	46.0	1.3	75.0	73.0	0.70	1.10	26.5	13	0.0676	0.48		
0.8820	0.7018	-0.25	0.03	1.79	1.81	0.05	2.95	2.87	0.03	0.04				1.05		
20.940	15.875	-4.8	1.5	45.0	47.5	1.5	73.0	69.0	2.40	1.10	20.7	12.5	0.0709	0.44		
0.8244	0.6250	-0.19	0.06	1.77	1.87	0.06	2.87	2.72	0.09	0.04				0.98		
20.940	15.875	-4.8	1.5	45.0	47.5	2.0	73.0	69.0	2.40	1.10	20.7	12.5	0.0709	0.44		
0.8244	0.6250	-0.19	0.06	1.77	1.87	0.08	2.87	2.72	0.09	0.04				0.97		
21.692	23.812	-4.8	4.0	46.5	54.0	3.3	79.5	74.0	0.50	1.70	30	12.2	0.0732	0.61		
0.8540	0.9375	-0.19	0.16	1.83	2.13	0.13	3.13	2.91	0.02	0.07				1.36		
21.692	17.462	-4.8	4.0	46.5	54.0	1.3	80.0	77.0	0.50	1.70	30	12.2	0.0732	0.56		
0.8540	0.6875	-0.19	0.16	1.83	2.13	0.05	3.15	3.03	0.02	0.07				1.23		
21.692	17.462	-4.8	4.0	46.5	54.0	1.5	80.0	77.0	0.50	1.70	30	12.2	0.0732	0.56		
0.8540	0.6875	-0.19	0.16	1.83	2.13	0.06	3.15	3.03	0.02	0.07				1.23		
21.692	17.462	-4.8	2.3	46.5	51.0	1.3	80.0	77.0	0.50	1.70	30	12.2	0.0732	0.56		
0.8540	0.6875	-0.19	0.09	1.83	2.01	0.05	3.15	3.03	0.02	0.07				1.24		
32.500	28.000	-10.2	2.5	49.0	55.0	2.0	80.0	75.0	1.10	2.00	39.5	13.5	0.0841	0.90		
1.2795	1.1024	-0.40	0.10	1.93	2.17	0.08	3.15	2.95	0.04	0.08				1.99		
30.162	23.812	-8.1	0.8	50.0	51.0	3.3	81.0	73.0	1.50	2.10	37.8	13.5	0.0873	0.82		
1.1875	0.9375	-0.32	0.03	1.97	2.01	0.13	3.19	2.87	0.06	0.08				1.81		
30.886	23.812	-10.2	3.5	47.0	53.0	3.3	81.0	75.0	2.30	0.70	39.5	10.5	0.0808	0.83		
1.2160	0.9375	-0.40	0.14	1.85	2.09	0.13	3.19	2.95	0.09	0.03				1.84		
23.063	17.462	3.0	2.3	51.0	56.0	1.5	84.0	75.0	3.30	3.00	22.9	8.71	0.0899	0.68		
0.9080	0.6875	0.12	0.09	2.00	2.20	0.06	3.31	2.95	0.13	0.12				1.50		
29.083	22.225	-9.7	3.5	46.0	52.0	1.5	80.0	77.0	1.20	0.80	34.4	9.87	0.0731	0.80		
1.1450	0.8750	-0.38	0.14	1.81	2.05	0.06	3.15	3.03	0.05	0.03				1.76		
29.083	22.225	-9.7	3.5	46.0	52.0	0.8	80.0	78.0	1.20	0.80	34.4	9.87	0.0731	0.81		
1.1450	0.8750	-0.38	0.14	1.81	2.05	0.03	3.15	3.07	0.05	0.03				1.78		
21.692	21.808	-4.8	4.0	46.5	54.0	2.3	82.0	78.0	0.50	1.70	30	12.2	0.0732	0.71		
0.8540	0.8586	-0.19	0.16	1.83	2.13	0.09	3.23	3.07	0.02	0.07				1.57		
33.500	27.000	-7.4	2.0	49.0	58.0	1.5	84.0	76.0	3.50	2.90	38.1	14	0.0966	1.10		
1.3189	1.0630	-0.29	0.08	1.93	2.28	0.06	3.31	2.99	0.14	0.11				2.43		
21.692	21.808	-4.8	4.0	46.5	54.0	2.3	82.0	78.0	0.50	1.70	30	12.2	0.0732	0.72		
0.8540	0.8586	-0.19	0.16	1.83	2.13	0.09	3.23	3.07	0.02	0.07				1.58		
21.692	21.808	-4.8	2.3	46.5	51.0	2.3	82.0	78.0	0.50	1.70	30	12.2	0.0732	0.72		
0.8540	0.8586	-0.19	0.09	1.83	2.01	0.09	3.23	3.07	0.02	0.07				1.59		
21.692	21.808	-4.8	0.8	46.5	47.5	2.3	82.0	78.0	0.50	1.70	30	12.2	0.0732	0.72		
0.8540	0.8586	-0.19	0.03	1.83	1.87	0.09	3.23	3.07	0.02	0.07				1.59		
29.900	22.225	-9.1	3.5	47.0	54.0	2.3	87.0	83.0	1.60	0.40	42.5	11.3	0.0805	1.00		
1.1772	0.8750	-0.36	0.14	1.85	2.13	0.09	3.43	3.27	0.06	0.02				2.21		
36.957	28.575	-12.2	3.5	50.0	57.0	3.3	100.0	94.0	2.80	0.90	64.3	16.1	0.0938	1.75		
1.4550	1.1250	-0.48	0.14	1.97	2.24	0.13	3.94	3.70	0.11	0.04				3.85		
36.957	28.575	-12.2	3.0	50.0	56.0	3.3	100.0	94.0	2.80	0.90	64.3	16.1	0.0938	1.75		
1.4550	1.1250	-0.48	0.12	1.97	2.20	0.13	3.94	3.70	0.11	0.04				3.85		

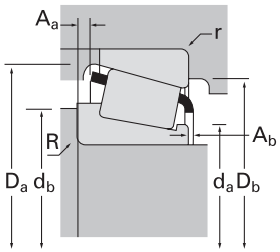
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
40.483 1.5938	82.550 3.2500	29.370 1.1563	95100 21400	0.55	1.10	24600 5540	23000 5180	1.07	130000 29300	HM801349	HM801310
40.987 1.6137	67.975 2.6762	17.500 0.6890	46100 10400	0.35	1.72	12000 2690	7140 1600	1.68	63500 14300	LM300849	LM300811
41.000 1.6142	68.000 2.6772	19.000 0.7480	53100 11900	0.38	1.58	13800 3090	8920 2010	1.54	74900 16800	XKA32008XF	Y32008XZ
41.275 1.6250	67.975 2.6762	17.500 0.6890	46100 10400	0.35	1.72	12000 2690	7140 1600	1.68	63500 14300	LM300848	LM300811
41.275 1.6250	73.025 2.8750	16.667 0.6562	47000 10600	0.35	1.71	12200 2740	7310 1640	1.67	58100 13100	18590	18520
41.275 1.6250	73.431 2.8910	19.558 0.7700	58400 13100	0.40	1.50	15100 3410	10400 2330	1.46	74200 16700	LM501349A	LM501310
41.275 1.6250	73.431 2.8910	19.558 0.7700	58400 13100	0.40	1.50	15100 3410	10400 2330	1.46	74200 16700	LM501349	LM501310
41.275 1.6250	73.431 2.8910	21.430 0.8437	58400 13100	0.40	1.50	15100 3410	10400 2330	1.46	74200 16700	LM501349	LM501314
41.275 1.6250	73.431 2.8910	23.012 0.9060	58400 13100	0.40	1.50	15100 3410	10400 2330	1.46	74200 16700	LM501349	LM501311
41.275 1.6250	76.200 3.0000	18.009 0.7090	44500 10000	0.49	1.23	11500 2600	9630 2170	1.20	55100 12400	11162	11300
41.275 1.6250	76.200 3.0000	18.009 0.7090	44500 10000	0.49	1.23	11500 2600	9630 2170	1.20	55100 12400	11163	11300
41.275 1.6250	76.200 3.0000	22.225 0.8750	69900 15700	0.39	1.53	18100 4080	12200 2740	1.49	89200 20100	24780	24720
41.275 1.6250	76.200 3.0000	22.225 0.8750	69900 15700	0.39	1.53	18100 4080	12200 2740	1.49	89200 20100	24780	24722
41.275 1.6250	76.200 3.0000	22.225 0.8750	69900 15700	0.39	1.53	18100 4080	12200 2740	1.49	89200 20100	24781	24720
41.275 1.6250	76.200 3.0000	25.400 1.0000	69900 15700	0.39	1.53	18100 4080	12200 2740	1.49	89200 20100	24780	24721
41.275 1.6250	76.200 3.0000	25.400 1.0000	69900 15700	0.39	1.53	18100 4080	12200 2740	1.49	89200 20100	24781	24721
41.275 1.6250	79.375 3.1250	23.812 0.9375	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26882	26822
41.275 1.6250	79.375 3.1250	23.812 0.9375	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26885	26822
41.275 1.6250	80.000 3.1496	18.009 0.7090	44500 10000	0.49	1.23	11500 2600	9630 2170	1.20	55100 12400	11162	11315
41.275 1.6250	80.000 3.1496	21.000 0.8268	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	336	332
41.275 1.6250	80.000 3.1496	21.000 0.8268	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	342	332
41.275 1.6250	80.035 3.1510	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3383	3339
41.275 1.6250	80.167 3.1562	25.400 1.0000	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26882	26820
41.275 1.6250	80.167 3.1562	26.988 1.0625	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	336	3320
41.275 1.6250	80.167 3.1562	26.988 1.0625	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	342	3320
41.275 1.6250	80.167 3.1562	29.370 1.1563	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26882	26821
41.275 1.6250	81.755 3.2187	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3383	3329
41.275 1.6250	82.550 3.2500	26.195 1.0313	86000 19300	0.40	1.49	22300 5010	15300 3450	1.45	115000 25800	22778	22721

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
28.575 1.1250	23.020 0.9063	-4.8 -0.19	3.5 0.14	49.0 1.93	58.0 2.28	3.3 0.13	78.0 3.07	68.0 2.68	2.10 0.08	1.80 0.07	33.7	14	0.0928	0.72 1.60
18.000 0.7087	13.500 0.5315	-3.6 -0.14	3.5 0.14	45.5 1.79	52.0 2.05	1.5 0.06	65.0 2.56	61.0 2.40	0.60 0.02	1.30 0.05	22.5	18.1	0.0698	0.24 0.53
21.000 0.8268	14.500 0.5709	-3.8 -0.15	2.0 0.08	46.0 1.81	50.0 1.97	1.0 0.04	65.0 2.56	61.0 2.40	* *	* *	24.5	20.5	0.0740	0.27 0.59
18.000 0.7087	13.500 0.5315	-3.6 -0.14	3.5 0.14	45.5 1.79	52.0 2.05	1.5 0.06	65.0 2.56	61.0 2.40	0.60 0.02	1.30 0.05	22.5	16.6	0.0698	0.24 0.53
17.462 0.6875	12.700 0.5000	-2.8 -0.11	3.5 0.14	46.0 1.81	53.0 2.09	1.5 0.06	69.0 2.72	66.0 2.60	0.50 0.02	1.20 0.05	21	15.4	0.0681	0.28 0.61
19.812 0.7800	14.732 0.5800	-3.3 -0.13	0.8 0.03	46.5 1.83	47.0 1.85	0.8 0.03	70.0 2.76	67.0 2.64	1.00 0.04	0.90 0.04	23.3	13.3	0.0739	0.33 0.73
19.812 0.7800	14.732 0.5800	-3.3 -0.13	3.5 0.14	48.0 1.89	54.0 2.13	0.8 0.03	70.0 2.76	67.0 2.64	1.00 0.04	1.00 0.04	23.3	13.3	0.0739	0.33 0.74
19.812 0.7800	16.604 0.6537	-3.3 -0.13	3.5 0.14	48.0 1.89	54.0 2.13	0.8 0.03	70.0 2.76	65.0 2.56	1.00 0.04	1.00 0.04	23.3	13.3	0.0739	0.36 0.78
19.812 0.7800	18.186 0.7160	-3.3 -0.13	3.5 0.14	48.0 1.89	54.0 2.13	2.3 0.09	70.0 2.76	64.0 2.52	1.00 0.04	1.00 0.04	23.3	13.3	0.0739	0.37 0.81
17.384 0.6844	14.288 0.5625	-0.8 -0.03	1.5 0.06	46.5 1.83	49.0 1.93	1.5 0.06	71.0 2.80	67.0 2.64	1.70 0.06	1.50 0.06	19.2	12.8	0.0735	0.34 0.75
17.384 0.6844	14.288 0.5625	-0.8 -0.03	0.8 0.03	46.5 1.83	47.0 1.85	1.5 0.06	71.0 2.80	67.0 2.64	* *	* *	19.2	12.8	0.0735	0.34 0.75
23.020 0.9063	17.462 0.6875	-4.8 -0.19	3.5 0.14	47.0 1.85	54.0 2.13	0.8 0.03	72.0 2.83	68.0 2.68	1.20 0.05	1.10 0.04	26.4	12.5	0.0767	0.42 0.94
23.020 0.9063	17.462 0.6875	-4.8 -0.19	3.5 0.14	47.0 1.85	54.0 2.13	3.3 0.13	72.0 2.83	66.0 2.60	1.20 0.05	1.10 0.04	26.4	12.5	0.0767	0.42 0.92
23.020 0.9063	17.462 0.6875	-4.8 -0.19	0.8 0.03	47.0 1.85	48.0 1.89	0.8 0.03	72.0 2.83	68.0 2.68	1.20 0.05	1.10 0.04	26.4	12.5	0.0767	0.43 0.95
23.020 0.9063	20.638 0.8125	-4.8 -0.19	3.5 0.14	47.0 1.85	54.0 2.13	2.3 0.09	72.0 2.83	66.0 2.60	1.20 0.05	1.10 0.04	26.4	12.5	0.0767	0.46 1.02
23.020 0.9063	20.638 0.8125	-4.8 -0.19	0.8 0.03	47.0 1.85	48.0 1.89	2.3 0.09	72.0 2.83	66.0 2.60	1.20 0.05	1.10 0.04	26.4	12.5	0.0767	0.47 1.03
25.400 1.0000	19.050 0.7500	-7.4 -0.29	3.5 0.14	47.0 1.85	54.0 2.13	0.8 0.03	74.0 2.91	71.0 2.80	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.52 1.15
25.400 1.0000	19.050 0.7500	-7.4 -0.29	0.8 0.03	47.0 1.85	48.0 1.89	0.8 0.03	74.0 2.91	71.0 2.80	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.53 1.17
17.384 0.6844	14.288 0.5625	-0.8 -0.03	1.5 0.06	46.5 1.83	49.0 1.93	1.5 0.06	73.0 2.87	69.0 2.72	1.70 0.06	1.50 0.06	19.2	12.8	0.0735	0.39 0.86
22.403 0.8820	17.826 0.7018	-6.4 -0.25	0.8 0.03	46.0 1.81	47.0 1.85	1.3 0.05	75.0 2.95	73.0 2.87	0.70 0.03	1.10 0.04	26.5	13	0.0676	0.46 1.02
22.403 0.8820	17.826 0.7018	-6.4 -0.25	3.5 0.14	46.0 1.81	53.0 2.09	1.3 0.05	75.0 2.95	73.0 2.87	0.70 0.03	1.10 0.04	26.5	13	0.0676	0.46 1.01
30.391 1.1965	23.812 0.9375	-10.9 -0.43	3.5 0.14	47.0 1.85	54.0 2.13	1.5 0.06	74.5 2.94	71.0 2.80	1.80 0.07	1.10 0.04	34.6	12.1	0.0744	0.63 1.39
25.400 1.0000	20.638 0.8125	-7.4 -0.29	3.5 0.14	47.0 1.85	54.0 2.13	3.3 0.13	74.0 2.91	69.0 2.72	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.55 1.21
22.403 0.8820	23.812 0.9375	-6.4 -0.25	0.8 0.03	46.0 1.81	47.0 1.85	3.3 0.13	75.0 2.95	70.0 2.76	0.70 0.03	1.10 0.04	26.5	13	0.0676	0.53 1.17
22.403 0.8820	23.812 0.9375	-6.4 -0.25	3.5 0.14	46.0 1.81	53.0 2.09	3.3 0.13	75.0 2.95	70.0 2.76	0.70 0.03	1.10 0.04	26.5	13	0.0676	0.52 1.15
25.400 1.0000	24.608 0.9688	-7.4 -0.29	3.5 0.14	47.0 1.85	54.0 2.13	3.3 0.13	74.0 2.91	68.0 2.68	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.61 1.35
30.391 1.1965	23.812 0.9375	-10.9 -0.43	3.5 0.14	47.0 1.85	54.0 2.13	3.3 0.13	75.0 2.95	71.0 2.80	1.80 0.07	1.10 0.04	34.6	12.1	0.0744	0.66 1.46
26.988 1.0625	20.638 0.8125	-6.4 -0.25	3.5 0.14	49.0 1.93	55.0 2.17	0.8 0.03	77.0 3.03	73.0 2.87	1.90 0.07	1.10 0.04	33.9	15.3	0.0841	0.63 1.40

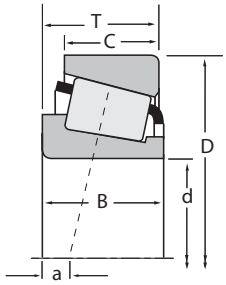
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

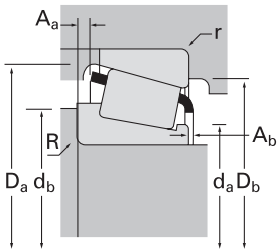
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
41.275 1.6250	82.550 3.2500	26.543 1.0450	84900 19100	0.55	1.10	22000 4950	20600 4620	1.07	112000 25300	M802047	M802011
41.275 1.6250	82.550 3.2500	26.543 1.0450	84900 19100	0.55	1.10	22000 4950	20600 4620	1.07	112000 25300	M802048	M802011
41.275 1.6250	84.138 3.3125	29.370 1.1563	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3383	3328
41.275 1.6250	84.138 3.3125	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3576	3520
41.275 1.6250	84.138 3.3125	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3576	3530
41.275 1.6250	84.138 3.3125	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3577	3530
41.275 1.6250	85.725 3.3750	30.162 1.1875	115000 25900	0.40	1.49	29800 6710	20500 4610	1.45	148000 33200	3877	3820
41.275 1.6250	85.725 3.3750	30.162 1.1875	115000 25900	0.40	1.49	29800 6710	20500 4610	1.45	148000 33200	3877	3821
41.275 1.6250	85.725 3.3750	30.162 1.1875	115000 25900	0.40	1.49	29800 6710	20500 4610	1.45	148000 33200	3880	3820
41.275 1.6250	85.725 3.3750	30.162 1.1875	115000 25900	0.40	1.49	29800 6710	20500 4610	1.45	148000 33200	3880	3821
41.275 1.6250	85.725 3.3750	30.162 1.1875	115000 25900	0.40	1.49	29800 6710	20500 4610	1.45	148000 33200	3877A	3820
41.275 1.6250	87.312 3.4375	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3576	3525
41.275 1.6250	87.312 3.4375	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3577	3525
41.275 1.6250	87.312 3.4375	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3585	3525
41.275 1.6250	88.500 3.4843	25.400 1.0000	77900 17500	0.78	0.77	20200 4540	27000 6070	0.75	88600 19900	44162	44348
41.275 1.6250	88.500 3.4843	26.988 1.0625	107000 24100	0.26	2.28	27800 6240	12500 2820	2.22	124000 28000	419	414
41.275 1.6250	88.900 3.5000	20.638 0.8125	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	365A	362A
41.275 1.6250	88.900 3.5000	30.162 1.1875	105000 23700	0.55	1.10	27300 6140	25500 5740	1.07	144000 32400	HM803145	HM803110
41.275 1.6250	88.900 3.5000	30.162 1.1875	105000 23700	0.55	1.10	27300 6140	25500 5740	1.07	144000 32400	HM803146	HM803110
41.275 1.6250	90.000 3.5433	20.000 0.7874	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	365A	362
41.275 1.6250	90.488 3.5625	39.688 1.5625	155000 34900	0.28	2.11	40200 9040	19600 4400	2.05	204000 45900	4388	4335
41.275 1.6250	92.075 3.6250	26.195 1.0313	79200 17800	0.83	0.72	20500 4620	29200 6570	0.70	92500 20800	M903345	M903310
41.275 1.6250	92.075 3.6250	30.162 1.1875	105000 23700	0.55	1.10	27300 6140	25500 5740	1.07	144000 32400	HM803145	HM803112
41.275 1.6250	92.075 3.6250	30.162 1.1875	105000 23700	0.55	1.10	27300 6140	25500 5740	1.07	144000 32400	HM803146	HM803112
41.275 1.6250	93.662 3.6875	31.750 1.2500	126000 28200	0.36	1.67	32600 7320	20100 4510	1.62	156000 35000	49162	49368
41.275 1.6250	95.250 3.7500	27.783 1.0938	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	447	432
41.275 1.6250	95.250 3.7500	30.162 1.1875	115000 25900	0.55	1.10	29900 6710	27900 6280	1.07	157000 35400	HM804840	HM804810
41.275 1.6250	95.250 3.7500	30.958 1.2188	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53162	53375

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

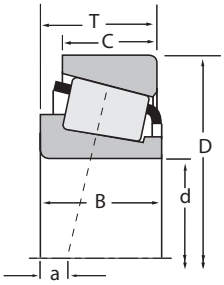
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
25.654 1.0100	20.193 0.7950	-3.0 -0.12	0.8 0.03	50.5 1.99	52.0 2.05	3.3 0.13	79.0 3.11	70.0 2.76	2.30 0.09	1.70 0.07	30.9	11.9	0.0899	0.63 1.39
25.654 1.0100	20.193 0.7950	-3.0 -0.12	3.5 0.14	50.5 1.99	57.0 2.24	3.3 0.13	79.0 3.11	70.0 2.76	2.30 0.09	1.70 0.07	30.9	11.9	0.0899	0.62 1.37
30.391 1.1965	23.812 0.9375	-10.9 -0.43	3.5 0.14	47.0 1.85	54.0 2.13	3.3 0.13	76.0 2.99	72.0 2.83	1.80 0.07	1.10 0.04	34.6	12.1	0.0744	0.72 1.58
30.886 1.2160	23.812 0.9375	-10.2 -0.40	0.8 0.03	48.0 1.89	49.0 1.93	3.3 0.13	79.5 3.13	74.0 2.91	2.30 0.09	0.70 0.03	39.5	10.5	0.0808	0.74 1.64
30.886 1.2160	23.812 0.9375	-10.2 -0.40	0.8 0.03	48.0 1.89	49.0 1.93	0.8 0.03	79.5 3.13	76.0 2.99	2.30 0.09	0.70 0.03	39.5	10.5	0.0808	0.75 1.66
30.886 1.2160	23.812 0.9375	-10.2 -0.40	3.5 0.14	48.0 1.89	54.0 2.13	0.8 0.03	79.5 3.13	76.0 2.99	2.30 0.09	0.70 0.03	39.5	10.5	0.0808	0.75 1.65
30.162 1.1875	23.812 0.9375	-8.1 -0.32	3.5 0.14	50.5 1.98	57.0 2.24	3.3 0.13	81.0 3.19	73.0 2.87	1.50 0.06	2.10 0.08	37.8	13.5	0.0873	0.79 1.75
30.162 1.1875	23.812 0.9375	-8.1 -0.32	3.5 0.14	50.5 1.98	57.0 2.24	1.3 0.05	81.0 3.19	75.0 2.95	1.50 0.06	2.10 0.08	37.8	13.5	0.0873	0.80 1.77
30.162 1.1875	23.812 0.9375	-8.1 -0.32	0.8 0.03	50.5 1.98	52.0 2.05	3.3 0.13	81.0 3.19	73.0 2.87	1.50 0.06	2.10 0.08	37.8	13.5	0.0873	0.80 1.77
30.162 1.1875	23.812 0.9375	-8.1 -0.32	0.8 0.03	50.5 1.98	52.0 2.05	1.3 0.05	81.0 3.19	75.0 2.95	1.50 0.06	2.10 0.08	37.8	13.5	0.0873	0.81 1.79
30.162 1.1875	23.812 0.9375	-8.1 -0.32	2.3 0.09	50.5 1.98	55.0 2.17	3.3 0.13	81.0 3.19	73.0 2.87	1.50 0.06	2.10 0.08	37.8	13.5	0.0873	0.80 1.76
30.886 1.2160	23.812 0.9375	-10.2 -0.40	0.8 0.03	48.0 1.89	49.0 1.93	3.3 0.13	81.0 3.19	75.0 2.95	2.30 0.09	0.70 0.03	39.5	10.5	0.0808	0.82 1.81
30.886 1.2160	23.812 0.9375	-10.2 -0.40	3.5 0.14	48.0 1.89	54.0 2.13	3.3 0.13	81.0 3.19	75.0 2.95	2.30 0.09	0.70 0.03	39.5	10.5	0.0808	0.82 1.80
30.886 1.2160	23.812 0.9375	-10.2 -0.40	1.5 0.06	48.0 1.89	50.0 1.97	3.3 0.13	81.0 3.19	75.0 2.95	2.30 0.09	0.70 0.03	39.5	10.5	0.0808	0.82 1.81
23.698 0.9330	17.462 0.6875	2.3 0.09	2.3 0.09	51.0 2.00	57.0 2.24	1.5 0.06	84.0 3.31	75.0 2.95	3.90 0.15	2.60 0.10	22.9	8.71	0.0899	0.67 1.48
29.083 1.1450	22.225 0.8750	-9.7 -0.38	3.5 0.14	47.0 1.85	54.0 2.13	1.5 0.06	80.0 3.15	77.0 3.03	1.20 0.05	0.80 0.03	34.4	9.87	0.0731	0.78 1.71
22.225 0.8750	16.513 0.6501	-4.3 -0.17	3.5 0.14	48.5 1.91	55.0 2.17	1.3 0.05	84.0 3.31	81.0 3.19	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.63 1.38
29.370 1.1563	23.020 0.9063	-4.3 -0.17	0.8 0.03	53.0 2.09	54.0 2.13	3.3 0.13	85.0 3.35	74.0 2.91	1.50 0.06	2.10 0.08	39.2	13.7	0.0974	0.90 1.98
29.370 1.1563	23.020 0.9063	-4.3 -0.17	3.5 0.14	53.0 2.09	60.0 2.36	3.3 0.13	85.0 3.35	74.0 2.91	1.50 0.06	2.10 0.08	39.2	13.7	0.0974	0.89 1.96
22.225 0.8750	15.875 0.6250	-4.3 -0.17	3.5 0.14	48.5 1.91	55.0 2.17	2.0 0.08	84.0 3.31	81.0 3.19	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.63 1.40
40.386 1.5900	33.338 1.3125	-15.0 -0.59	3.5 0.14	52.0 2.05	60.0 2.36	3.3 0.13	85.0 3.35	77.0 3.03	2.30 0.09	0.60 0.02	52.9	16.7	0.0872	1.24 2.74
23.812 0.9375	16.670 0.6563	3.6 0.14	3.5 0.14	54.0 2.13	60.0 2.36	1.5 0.06	88.0 3.46	78.0 3.07	4.80 0.19	3.40 0.13	25.6	13.1	0.0948	0.77 1.69
29.370 1.1563	23.020 0.9063	-4.3 -0.17	0.8 0.03	53.0 2.09	54.0 2.13	3.3 0.13	86.0 3.39	76.0 2.99	1.50 0.06	2.10 0.08	39.2	13.7	0.0974	0.98 2.15
29.370 1.1563	23.020 0.9063	-4.3 -0.17	3.5 0.14	53.0 2.09	60.0 2.36	3.3 0.13	86.0 3.39	76.0 2.99	1.50 0.06	2.10 0.08	39.2	13.7	0.0974	0.97 2.14
31.750 1.2500	25.400 1.0000	-9.1 -0.36	3.5 0.14	50.0 1.97	57.0 2.24	3.3 0.13	87.0 3.43	82.0 3.23	3.00 0.12	0.80 0.03	42.4	13.6	0.0872	1.03 2.27
29.900 1.1772	22.225 0.8750	-9.1 -0.36	3.5 0.14	48.5 1.91	55.0 2.17	2.3 0.09	87.0 3.43	83.0 3.27	1.60 0.06	0.40 0.02	42.5	11.3	0.0805	0.98 2.17
29.370 1.1563	23.020 0.9063	-3.8 -0.15	3.5 0.14	54.0 2.13	61.0 2.40	3.3 0.13	91.0 3.58	81.0 3.19	2.30 0.09	2.80 0.11	44.8	13.8	0.1017	1.06 2.35
28.301 1.1142	20.638 0.8125	-0.3 -0.01	1.5 0.06	52.5 2.07	57.0 2.24	0.8 0.03	89.0 3.50	81.0 3.19	5.70 0.22	2.20 0.08	26.7	9.63	0.0930	0.98 2.15

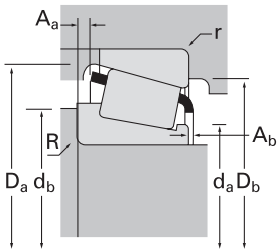
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
41.275 1.6250	95.250 3.7500	30.958 1.2188	107000 24000	0.74	0.81	27600 6210	35000 7870	0.79	132000 29700	HM903244	HM903210
41.275 1.6250	95.250 3.7500	30.958 1.2188	107000 24000	0.74	0.81	27600 6210	35000 7870	0.79	132000 29700	HM903245	HM903210
41.275 1.6250	95.250 3.7500	31.753 1.2501	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	447	432X
41.275 1.6250	98.425 3.8750	30.958 1.2188	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53162	53387
41.275 1.6250	98.425 3.8750	30.958 1.2188	107000 24000	0.74	0.81	27600 6210	35000 7870	0.79	132000 29700	HM903244	HM903216
41.275 1.6250	101.600 4.0000	34.925 1.3750	152000 34300	0.29	2.10	39500 8880	19300 4340	2.05	191000 43000	526	522
41.275 1.6250	104.775 4.1250	36.512 1.4375	159000 35700	0.49	1.23	41200 9260	34400 7730	1.20	223000 50200	HM807035	HM807010
41.275 1.6250	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	464	453A
41.275 1.6250	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	464A	453A
41.275 1.6250	107.950 4.2500	36.512 1.4375	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	541	532X
42.000 1.6535	80.000 3.1496	18.009 0.7090	44500 10000	0.49	1.23	11500 2600	9630 2170	1.20	55100 12400	11165X	11315
42.850 1.6870	104.775 4.1250	30.162 1.1875	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	461	453X
42.850 1.6870	107.950 4.2500	27.795 1.0943	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	461	453
42.850 1.6870	110.000 4.3307	27.795 1.0943	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	461	454
42.862 1.6875	76.992 3.0312	17.462 0.6875	45900 10300	0.51	1.19	11900 2670	10300 2320	1.15	58100 13100	12168	12303
42.862 1.6875	82.550 3.2500	19.842 0.7812	60500 13600	0.43	1.39	15700 3530	11500 2600	1.36	73200 16500	22168	22325
42.862 1.6875	82.550 3.2500	26.195 1.0313	86000 19300	0.40	1.49	22300 5010	15300 3450	1.45	115000 25800	22780	22720
42.862 1.6875	82.931 3.2650	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25578	25520
42.862 1.6875	82.931 3.2650	26.988 1.0625	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25578	25523
42.862 1.6875	83.058 3.2700	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25576	25521
42.862 1.6875	83.058 3.2700	23.876 0.9400	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25578	25522
42.862 1.6875	87.312 3.4375	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3579	3525
42.862 1.6875	114.300 4.5000	44.450 1.7500	207000 46500	0.43	1.39	53700 12100	39500 8880	1.36	256000 57500	65383	65320
42.875 1.6880	76.200 3.0000	25.400 1.0000	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26884	26823
42.875 1.6880	79.375 3.1250	23.812 0.9375	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26884	26822
42.875 1.6880	80.000 3.1496	21.000 0.8268	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	342-S	332
42.875 1.6880	80.000 3.1496	23.812 0.9375	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26884	26824
42.875 1.6880	80.000 3.1496	24.176 0.9518	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	342-S	332A

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
28.300 1.1142	22.225 0.8750	0.5 0.02	1.5 0.06	54.0 2.13	59.0 2.32	0.8 0.03	91.0 3.58	81.0 3.19	3.90 0.16	2.30 0.09	33.7	9.91	0.1010	1.04 2.30
28.575 1.1250	22.225 0.8750	0.5 0.02	3.5 0.14	54.0 2.13	63.0 2.48	0.8 0.03	91.0 3.58	81.0 3.19	3.90 0.16	2.00 0.08	33.7	9.91	0.1010	1.04 2.30
29.900 1.1772	26.195 1.0313	-9.1 -0.36	3.5 0.14	48.5 1.91	55.0 2.17	3.3 0.13	87.0 3.43	81.0 3.19	1.60 0.06	0.40 0.02	42.5	11.3	0.0805	1.07 2.35
28.301 1.1142	20.638 0.8125	-0.3 -0.01	1.5 0.06	52.5 2.07	57.0 2.24	0.8 0.03	91.0 3.58	82.0 3.23	5.70 0.22	2.20 0.08	26.7	9.63	0.0930	1.05 2.33
28.300 1.1142	22.225 0.8750	0.5 0.02	1.5 0.06	54.0 2.13	59.0 2.32	0.8 0.03	92.0 3.62	82.0 3.23	3.90 0.16	2.30 0.09	33.7	9.91	0.1010	1.13 2.48
36.068 1.4200	26.988 1.0625	-12.7 -0.50	3.5 0.14	50.0 1.97	57.0 2.24	3.3 0.13	95.0 3.74	89.0 3.50	2.70 0.11	1.80 0.07	57.9	13.4	0.0894	1.42 3.14
36.512 1.4375	28.575 1.1250	-7.4 -0.29	1.5 0.06	57.0 2.24	60.0 2.36	3.3 0.13	100.0 3.94	89.0 3.50	3.40 0.14	1.90 0.08	63.9	17.1	0.0760	1.66 3.66
29.317 1.1542	22.225 0.8750	-7.1 -0.28	2.3 0.09	52.0 2.05	56.0 2.20	0.8 0.03	100.0 3.94	97.0 3.82	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.39 3.06
29.317 1.1542	22.225 0.8750	-7.1 -0.28	1.5 0.06	52.0 2.05	54.0 2.13	0.8 0.03	100.0 3.94	97.0 3.82	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.39 3.06
36.957 1.4550	28.575 1.1250	-12.2 -0.48	3.5 0.14	51.0 2.01	58.0 2.28	3.3 0.13	100.0 3.94	94.0 3.70	2.80 0.11	0.90 0.04	64.3	16.1	0.0938	1.72 3.80
17.384 0.6844	14.288 0.5625	-0.8 -0.03	1.8 0.07	47.0 1.85	50.0 1.97	1.5 0.06	73.0 2.87	69.0 2.72	* *	* *	19.2	12.8	0.0735	0.38 0.84
29.317 1.1542	24.605 0.9687	-7.1 -0.28	0.8 0.03	53.0 2.09	54.0 2.13	3.3 0.13	98.0 3.86	92.0 3.62	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.31 2.89
29.317 1.1542	27.000 1.0630	-7.1 -0.28	0.8 0.03	53.0 2.09	54.0 2.13	0.8 0.03	100.0 3.94	97.0 3.82	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.42 3.13
29.317 1.1542	27.000 1.0630	-7.1 -0.28	0.8 0.03	53.0 2.09	54.0 2.13	2.0 0.08	100.0 3.94	96.0 3.78	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.49 3.29
17.145 0.6750	11.908 0.4688	0.0 0.00	1.5 0.06	48.5 1.91	51.0 2.01	1.5 0.06	73.0 2.87	68.0 2.68	1.40 0.06	2.20 0.09	21	15.8	0.0766	0.32 0.71
19.837 0.7810	15.080 0.5937	-2.5 -0.10	2.3 0.09	48.5 1.91	52.0 2.05	1.5 0.06	76.0 2.99	73.0 2.87	1.20 0.05	1.70 0.07	23.7	14.4	0.0758	0.44 0.98
26.988 1.0625	20.638 0.8125	-6.4 -0.25	3.5 0.14	50.0 1.97	56.0 2.20	3.3 0.13	77.0 3.03	71.0 2.80	1.90 0.07	1.10 0.04	33.9	15.3	0.0841	0.60 1.32
25.400 1.0000	19.050 0.7500	-6.4 -0.25	2.3 0.09	49.5 1.95	53.0 2.09	0.8 0.03	77.0 3.03	74.0 2.91	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.58 1.28
25.400 1.0000	22.225 0.8750	-6.4 -0.25	2.3 0.09	49.5 1.95	53.0 2.09	2.3 0.09	77.0 3.03	72.0 2.83	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.62 1.37
25.400 1.0000	19.050 0.7500	-6.4 -0.25	3.5 0.14	49.0 1.93	55.0 2.17	3.3 0.13	77.0 3.03	72.0 2.83	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.57 1.26
25.400 1.0000	19.114 0.7525	-6.4 -0.25	2.3 0.09	49.5 1.95	53.0 2.09	2.0 0.08	77.0 3.03	73.0 2.87	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.58 1.28
30.886 1.2160	23.812 0.9375	-10.2 -0.40	3.5 0.14	49.5 1.95	56.0 2.20	3.3 0.13	81.0 3.19	75.0 2.95	2.30 0.09	0.70 0.03	39.5	10.5	0.0808	0.79 1.74
44.450 1.7500	34.925 1.3750	-12.4 -0.49	2.0 0.08	60.0 2.36	63.0 2.48	3.3 0.13	107.0 4.21	97.0 3.82	3.70 0.14	1.00 0.04	63.1	13	0.1053	2.35 5.17
25.400 1.0000	20.638 0.8125	-7.4 -0.29	3.5 0.14	48.5 1.91	55.0 2.17	1.5 0.06	73.0 2.87	69.0 2.72	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.46 1.01
25.400 1.0000	19.050 0.7500	-7.4 -0.29	3.5 0.14	48.5 1.91	55.0 2.17	0.8 0.03	74.0 2.91	71.0 2.80	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.50 1.11
22.403 0.8820	17.826 0.7018	-6.4 -0.25	3.5 0.14	47.5 1.87	54.0 2.13	1.3 0.05	75.0 2.95	73.0 2.87	0.70 0.03	1.10 0.04	26.5	13	0.0676	0.44 0.97
25.400 1.0000	19.050 0.7500	-7.4 -0.29	3.5 0.14	48.5 1.91	55.0 2.17	1.3 0.05	74.0 2.91	70.0 2.76	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.51 1.13
22.403 0.8820	21.000 0.8268	-6.4 -0.25	3.5 0.14	47.5 1.87	54.0 2.13	2.3 0.09	75.0 2.95	71.0 2.80	0.70 0.03	1.10 0.04	26.5	13	0.0676	0.47 1.04

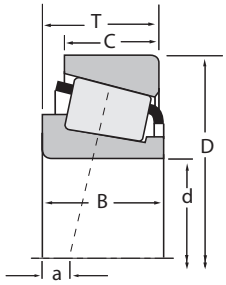
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

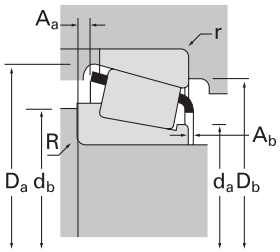
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
42.875 1.6880	80.167 3.1562	25.400 1.0000	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26886	26820
42.875 1.6880	80.167 3.1562	25.400 1.0000	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26886	26830
42.875 1.6880	81.973 3.2273	23.876 0.9400	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25577	25518
42.875 1.6880	82.550 3.2500	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25577	25519
42.875 1.6880	82.931 3.2650	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25577	25520
42.875 1.6880	82.931 3.2650	26.988 1.0625	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25577	25523
42.875 1.6880	83.058 3.2700	23.876 0.9400	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25577	25522
42.987 1.6924	74.988 2.9523	19.368 0.7625	55100 12400	0.44	1.35	14300 3210	10900 2440	1.31	73500 16500	16986	16929
42.987 1.6924	79.375 3.1250	20.638 0.8125	63800 14300	0.37	1.64	16500 3720	10400 2330	1.60	83300 18700	17886	17830
42.987 1.6924	79.985 3.1490	19.842 0.7812	63800 14300	0.37	1.64	16500 3720	10400 2330	1.60	83300 18700	17886	17831
44.450 1.7500	71.438 2.8125	12.700 0.5000	33400 7510	0.31	1.97	8660 1950	4530 1020	1.91	43600 9790	LL103049	LL103010
44.450 1.7500	73.025 2.8750	18.258 0.7188	52800 11900	0.32	1.88	13700 3080	7460 1680	1.83	78300 17600	L102849	L102810
44.450 1.7500	76.992 3.0312	17.462 0.6875	45900 10300	0.51	1.19	11900 2670	10300 2320	1.15	58100 13100	12175	12303
44.450 1.7500	79.375 3.1250	17.462 0.6875	48200 10800	0.37	1.60	12500 2810	7990 1800	1.56	61300 13800	18685	18620
44.450 1.7500	80.962 3.1875	19.050 0.7500	47000 10600	0.53	1.14	12200 2740	11000 2480	1.11	61100 13700	13175	13318
44.450 1.7500	82.550 3.2500	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25580	25519
44.450 1.7500	82.550 3.2500	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25582	25519
44.450 1.7500	82.550 3.2500	34.290 1.3500	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25583	25519
44.450 1.7500	82.931 3.2650	22.225 0.8750	76600 17200	0.30	2.02	19900 4470	10100 2270	1.96	89200 20100	35175	35326
44.450 1.7500	82.931 3.2650	22.225 0.8750	76600 17200	0.30	2.02	19900 4470	10100 2270	1.96	89200 20100	35176	35326
44.450 1.7500	82.931 3.2650	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25580	25520
44.450 1.7500	82.931 3.2650	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25580	25524
44.450 1.7500	82.931 3.2650	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25581	25520
44.450 1.7500	82.931 3.2650	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25582	25520
44.450 1.7500	82.931 3.2650	26.988 1.0625	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25580	25523
44.450 1.7500	82.931 3.2650	34.290 1.3500	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25583	25520
44.450 1.7500	82.931 3.2650	34.290 1.3500	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25583	25524
44.450 1.7500	83.058 3.2700	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25580	25521

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
25.400 1.0000	20.638 0.8125	-7.4 -0.29	1.5 0.06	48.5 1.91	51.0 2.01	3.3 0.13	74.0 2.91	69.0 2.72	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.54 1.18
25.400 1.0000	20.638 0.8125	-7.4 -0.29	1.5 0.06	48.5 1.91	51.0 2.01	0.8 0.03	74.0 2.91	71.0 2.80	1.40 0.06	1.20 0.05	32.8	13.3	0.0770	0.54 1.20
25.400 1.0000	19.114 0.7525	-6.4 -0.25	3.5 0.14	49.0 1.93	55.0 2.17	1.0 0.04	77.0 3.03	74.0 2.91	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.56 1.23
25.400 1.0000	19.050 0.7500	-6.4 -0.25	3.5 0.14	49.0 1.93	55.0 2.17	2.0 0.08	77.0 3.03	73.0 2.87	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.57 1.25
25.400 1.0000	19.050 0.7500	-6.4 -0.25	3.5 0.14	49.0 1.93	55.0 2.17	0.8 0.03	77.0 3.03	74.0 2.91	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.58 1.27
25.400 1.0000	22.225 0.8750	-6.4 -0.25	3.5 0.14	49.0 1.93	55.0 2.17	2.3 0.09	77.0 3.03	72.0 2.83	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.62 1.37
25.400 1.0000	19.114 0.7525	-6.4 -0.25	3.5 0.14	49.0 1.93	55.0 2.17	2.0 0.08	77.0 3.03	73.0 2.87	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.58 1.27
19.837 0.7810	14.288 0.5625	-2.0 -0.08	1.5 0.06	48.5 1.91	51.0 2.01	1.3 0.05	71.0 2.80	68.0 2.68	* *	* *	25.1	17.4	0.0783	0.36 0.79
20.638 0.8125	15.875 0.6250	-3.8 -0.15	1.5 0.06	49.0 1.93	51.0 2.01	2.0 0.08	75.0 2.95	71.0 2.80	1.10 0.04	1.30 0.05	28.9	17.9	0.0770	0.42 0.94
20.638 0.8125	15.080 0.5937	-3.8 -0.15	1.5 0.06	49.0 1.93	51.0 2.01	1.3 0.05	75.0 2.95	72.0 2.83	1.10 0.04	1.30 0.05	28.9	17.9	0.0770	0.43 0.94
12.700 0.5000	9.525 0.3750	-1.3 -0.05	1.5 0.06	48.5 1.91	51.0 2.01	1.5 0.06	68.0 2.68	65.0 2.56	0.10 0.00	1.50 0.06	20	23.6	0.0637	0.18 0.40
18.258 0.7188	15.083 0.5938	-3.8 -0.15	1.5 0.06	49.0 1.93	51.0 2.01	1.5 0.06	69.0 2.72	66.0 2.60	0.00 0.00	1.70 0.07	30.6	23.7	0.0751	0.30 0.65
17.145 0.6750	11.908 0.4688	0.0 0.00	1.5 0.06	49.5 1.95	52.0 2.05	1.5 0.06	73.0 2.87	68.0 2.68	1.40 0.06	2.20 0.09	21	15.8	0.0766	0.31 0.68
17.462 0.6875	13.495 0.5313	-2.0 -0.08	2.8 0.11	49.5 1.95	54.0 2.13	1.5 0.06	74.0 2.91	71.0 2.80	0.70 0.03	1.50 0.06	23.9	17.7	0.0725	0.35 0.76
17.462 0.6875	14.288 0.5625	0.8 0.03	0.1 0.01	50.0 1.97	50.0 1.97	1.5 0.06	76.0 2.99	72.0 2.83	1.60 0.06	1.90 0.08	23	15.4	0.0799	0.39 0.86
25.400 1.0000	19.050 0.7500	-6.4 -0.25	3.5 0.14	50.0 1.97	57.0 2.24	2.0 0.08	77.0 3.03	73.0 2.87	1.00 0.04	0.70 0.03	35.2	14.3	0.0801	0.54 1.20
25.400 1.0000	19.050 0.7500	-6.4 -0.25	5.0 0.20	50.0 1.97	60.0 2.36	2.0 0.08	77.0 3.03	73.0 2.87	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.54 1.18
35.878 1.4125	19.050 0.7500	-16.8 -0.66	3.8 0.15	50.0 1.97	65.0 2.56	2.0 0.08	77.0 3.03	73.0 2.87	11.50 0.45	0.60 0.03	35.2	14.3	0.0801	0.66 1.46
23.012 0.9060	17.462 0.6875	-6.1 -0.24	3.5 0.14	49.5 1.95	56.0 2.20	0.8 0.03	78.0 3.07	76.0 2.99	1.20 0.05	1.10 0.04	29.1	12	0.0718	0.49 1.07
23.012 0.9060	17.462 0.6875	-6.1 -0.24	0.8 0.03	49.5 1.95	50.0 1.97	0.8 0.03	78.0 3.07	76.0 2.99	1.20 0.05	1.10 0.04	29.1	12	0.0718	0.49 1.09
25.400 1.0000	19.050 0.7500	-6.4 -0.25	3.5 0.14	50.0 1.97	57.0 2.24	0.8 0.03	77.0 3.03	74.0 2.91	1.00 0.04	0.70 0.03	35.2	14.3	0.0801	0.55 1.22
25.400 1.0000	19.050 0.7500	-6.4 -0.25	3.5 0.14	50.0 1.97	57.0 2.24	2.3 0.09	77.0 3.03	73.0 2.87	1.00 0.04	0.70 0.03	35.2	14.3	0.0801	0.55 1.21
25.400 1.0000	19.050 0.7500	-6.4 -0.25	0.5 0.02	50.0 1.97	51.0 2.01	0.8 0.03	77.0 3.03	74.0 2.91	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.56 1.24
25.400 1.0000	19.050 0.7500	-6.4 -0.25	5.0 0.20	50.0 1.97	60.0 2.36	0.8 0.03	77.0 3.03	74.0 2.91	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.55 1.21
25.400 1.0000	22.225 0.8750	-6.4 -0.25	3.5 0.14	50.0 1.97	57.0 2.24	2.3 0.09	77.0 3.03	72.0 2.83	1.00 0.04	0.70 0.03	35.2	14.3	0.0801	0.60 1.32
35.878 1.4125	19.050 0.7500	-16.8 -0.66	3.8 0.15	50.0 1.97	65.0 2.56	0.8 0.03	77.0 3.03	74.0 2.91	11.50 0.45	0.60 0.03	35.2	14.3	0.0801	0.67 1.49
35.878 1.4125	19.050 0.7500	-16.8 -0.66	3.8 0.15	50.0 1.97	65.0 2.56	2.3 0.09	77.0 3.03	73.0 2.87	11.50 0.45	0.60 0.03	35.2	14.3	0.0801	0.67 1.48
25.400 1.0000	19.050 0.7500	-6.4 -0.25	3.5 0.14	50.0 1.97	57.0 2.24	3.3 0.13	77.0 3.03	72.0 2.83	1.00 0.04	0.70 0.03	35.2	14.3	0.0801	0.55 1.21

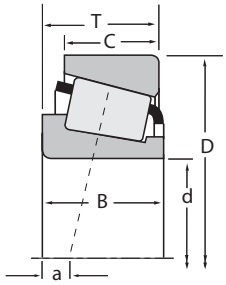
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

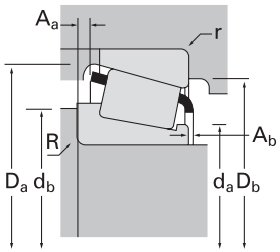
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
44.450 1.7500	83.058 3.2700	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25581	25521
44.450 1.7500	83.058 3.2700	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25582	25521
44.450 1.7500	83.058 3.2700	23.876 0.9400	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25580	25522
44.450 1.7500	84.138 3.3125	26.988 1.0625	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	355	3520
44.450 1.7500	84.138 3.3125	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3578	3520
44.450 1.7500	85.000 3.3465	20.638 0.8125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	355	354A
44.450 1.7500	85.000 3.3465	20.638 0.8125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	355A	354A
44.450 1.7500	85.000 3.3465	20.638 0.8125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	355X	354A
44.450 1.7500	85.000 3.3465	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25580	25526
44.450 1.7500	85.000 3.3465	25.400 1.0000	86400 19400	0.35	1.73	22400 5040	13300 2980	1.69	117000 26200	2975	2924
44.450 1.7500	87.312 3.4375	26.988 1.0625	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	355	3525
44.450 1.7500	87.312 3.4375	26.988 1.0625	86400 19400	0.35	1.73	22400 5040	13300 2980	1.69	117000 26200	2975	2925
44.450 1.7500	87.312 3.4375	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3578	3525
44.450 1.7500	87.312 3.4375	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3578	3526
44.450 1.7500	87.312 3.4375	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3578A	3525
44.450 1.7500	88.900 3.5000	30.162 1.1875	105000 23700	0.55	1.10	27300 6140	25500 5740	1.07	144000 32400	HM803149	HM803110
44.450 1.7500	88.900 3.5000	30.162 1.1875	105000 23700	0.55	1.10	27300 6140	25500 5740	1.07	144000 32400	HM803149	HM803111
44.450 1.7500	90.119 3.5480	23.000 0.9055	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	355X	352
44.450 1.7500	93.264 3.6718	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3782	3720
44.450 1.7500	93.662 3.6875	31.750 1.2500	120000 26900	0.40	1.49	31000 6980	21400 4800	1.45	158000 35500	46175	46368
44.450 1.7500	93.662 3.6875	31.750 1.2500	120000 26900	0.40	1.49	31000 6980	21400 4800	1.45	158000 35500	46176	46368
44.450 1.7500	93.662 3.6875	31.750 1.2500	126000 28200	0.36	1.67	32600 7320	20100 4510	1.62	156000 35000	49175	49368
44.450 1.7500	93.662 3.6875	31.750 1.2500	126000 28200	0.36	1.67	32600 7320	20100 4510	1.62	156000 35000	49176	49368
44.450 1.7500	95.250 3.7500	27.783 1.0938	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	435	432
44.450 1.7500	95.250 3.7500	27.783 1.0938	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	438	432
44.450 1.7500	95.250 3.7500	27.783 1.0938	120000 27000	0.33	1.82	31100 7000	17600 3950	1.77	161000 36200	33885	33821
44.450 1.7500	95.250 3.7500	27.783 1.0938	120000 27000	0.33	1.82	31100 7000	17600 3950	1.77	161000 36200	33885	33822
44.450 1.7500	95.250 3.7500	27.783 1.0938	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	438	432A

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
25.400 1.0000	**19.050** 0.7500	**-6.4** -0.25	**0.5** 0.02	**50.0** 1.97	**51.0** 2.01	**3.3** 0.13	**77.0** 3.03	**72.0** 2.83	**1.00** 0.04	**0.60** 0.03	**35.2**	**14.3**	**0.0801**	**0.55** 1.22
25.400 1.0000	**19.050** 0.7500	**-6.4** -0.25	**5.0** 0.20	**50.0** 1.97	**60.0** 2.36	**3.3** 0.13	**77.0** 3.03	**72.0** 2.83	**1.00** 0.04	**0.60** 0.03	**35.2**	**14.3**	**0.0801**	**0.54** 1.19
25.400 1.0000	**19.114** 0.7525	**-6.4** -0.25	**3.5** 0.14	**50.0** 1.97	**57.0** 2.24	**2.0** 0.08	**77.0** 3.03	**73.0** 2.87	**1.00** 0.04	**0.70** 0.03	**35.2**	**14.3**	**0.0801**	**0.55** 1.22
21.692 0.8540	**23.812** 0.9375	**-4.8** -0.19	**2.3** 0.09	**50.0** 1.97	**54.0** 2.13	**3.3** 0.13	**79.5** 3.13	**74.0** 2.91	**0.50** 0.02	**1.70** 0.07	**30**	**12.2**	**0.0732**	**0.57** 1.26
30.886 1.2160	**23.812** 0.9375	**-10.2** -0.40	**3.5** 0.14	**51.0** 2.01	**57.0** 2.24	**3.3** 0.13	**79.5** 3.13	**74.0** 2.91	**2.30** 0.09	**0.70** 0.03	**39.5**	**10.5**	**0.0808**	**0.68** 1.51
21.692 0.8540	**17.462** 0.6875	**-4.8** -0.19	**2.3** 0.09	**50.0** 1.97	**54.0** 2.13	**1.3** 0.05	**80.0** 3.15	**77.0** 3.03	**0.50** 0.02	**1.70** 0.07	**30**	**12.2**	**0.0732**	**0.51** 1.13
21.692 0.8540	**17.462** 0.6875	**-4.8** -0.19	**0.8** 0.03	**50.0** 1.97	**51.0** 2.01	**1.3** 0.05	**80.0** 3.15	**77.0** 3.03	**0.50** 0.02	**1.70** 0.07	**30**	**12.2**	**0.0732**	**0.52** 1.14
21.692 0.8540	**17.462** 0.6875	**-4.8** -0.19	**3.5** 0.14	**50.0** 1.97	**56.0** 2.20	**1.3** 0.05	**80.0** 3.15	**77.0** 3.03	**0.50** 0.02	**1.70** 0.07	**30**	**12.2**	**0.0732**	**0.51** 1.12
25.400 1.0000	**19.050** 0.7500	**-6.4** -0.25	**3.5** 0.14	**50.0** 1.97	**57.0** 2.24	**2.3** 0.09	**78.0** 3.07	**74.0** 2.91	**1.00** 0.04	**0.70** 0.03	**35.2**	**14.3**	**0.0801**	**0.59** 1.30
25.608 1.0082	**20.638** 0.8125	**-6.4** -0.25	**3.5** 0.14	**51.0** 2.01	**57.0** 2.24	**1.3** 0.05	**80.0** 3.15	**76.0** 2.99	**1.80** 0.07	**1.10** 0.04	**38.2**	**15.7**	**0.0832**	**0.63** 1.39
21.692 0.8540	**23.812** 0.9375	**-4.8** -0.19	**2.3** 0.09	**50.0** 1.97	**54.0** 2.13	**3.3** 0.13	**81.0** 3.19	**75.0** 2.95	**0.50** 0.02	**1.70** 0.07	**30**	**12.2**	**0.0732**	**0.65** 1.43
25.608 1.0082	**22.225** 0.8750	**-6.4** -0.25	**3.5** 0.14	**51.0** 2.01	**57.0** 2.24	**2.3** 0.09	**81.0** 3.19	**75.0** 2.95	**1.80** 0.07	**1.10** 0.04	**38.2**	**15.7**	**0.0832**	**0.70** 1.55
30.886 1.2160	**23.812** 0.9375	**-10.2** -0.40	**3.5** 0.14	**51.0** 2.01	**57.0** 2.24	**3.3** 0.13	**81.0** 3.19	**75.0** 2.95	**2.30** 0.09	**0.70** 0.03	**39.5**	**10.5**	**0.0808**	**0.76** 1.68
30.886 1.2160	**23.812** 0.9375	**-10.2** -0.40	**3.5** 0.14	**51.0** 2.01	**57.0** 2.24	**0.8** 0.03	**81.0** 3.19	**77.0** 3.03	**2.30** 0.09	**0.70** 0.03	**39.5**	**10.5**	**0.0808**	**0.77** 1.71
30.886 1.2160	**23.812** 0.9375	**-10.2** -0.40	**5.5** 0.22	**51.0** 2.01	**61.0** 2.40	**3.3** 0.13	**81.0** 3.19	**75.0** 2.95	**2.30** 0.09	**0.70** 0.03	**39.5**	**10.5**	**0.0808**	**0.75** 1.66
29.370 1.1563	**23.020** 0.9063	**-4.3** -0.17	**3.5** 0.14	**53.5** 2.10	**62.0** 2.44	**3.3** 0.13	**85.0** 3.35	**74.0** 2.91	**1.50** 0.06	**2.10** 0.08	**39.2**	**13.7**	**0.0974**	**0.84** 1.85
29.370 1.1563	**23.020** 0.9063	**-4.3** -0.17	**3.5** 0.14	**53.5** 2.10	**62.0** 2.44	**0.8** 0.03	**85.0** 3.35	**76.0** 2.99	**1.50** 0.06	**2.10** 0.08	**39.2**	**13.7**	**0.0974**	**0.85** 1.88
21.692 0.8540	**21.808** 0.8586	**-4.8** -0.19	**3.5** 0.14	**50.0** 1.97	**56.0** 2.20	**2.3** 0.09	**82.0** 3.23	**78.0** 3.07	**0.50** 0.02	**1.70** 0.07	**30**	**12.2**	**0.0732**	**0.67** 1.47
30.302 1.1930	**23.812** 0.9375	**-8.1** -0.32	**3.5** 0.14	**52.0** 2.05	**58.0** 2.28	**3.3** 0.13	**88.0** 3.46	**82.0** 3.23	**1.80** 0.07	**0.90** 0.04	**49.9**	**14.5**	**0.0903**	**0.96** 2.11
31.750 1.2500	**26.195** 1.0313	**-7.9** -0.31	**0.8** 0.03	**54.0** 2.13	**55.0** 2.17	**3.3** 0.13	**87.0** 3.43	**79.0** 3.11	**2.20** 0.08	**1.10** 0.04	**44.4**	**13.4**	**0.0920**	**1.02** 2.25
31.750 1.2500	**26.195** 1.0313	**-7.9** -0.31	**3.5** 0.14	**54.0** 2.13	**60.0** 2.36	**3.3** 0.13	**87.0** 3.43	**79.0** 3.11	**2.20** 0.08	**1.10** 0.04	**44.4**	**13.4**	**0.0920**	**1.02** 2.24
31.750 1.2500	**25.400** 1.0000	**-9.1** -0.36	**3.5** 0.14	**53.0** 2.09	**59.0** 2.32	**3.3** 0.13	**87.0** 3.43	**82.0** 3.23	**3.00** 0.12	**0.80** 0.03	**42.4**	**13.6**	**0.0872**	**0.97** 2.15
31.750 1.2500	**25.400** 1.0000	**-9.1** -0.36	**0.8** 0.03	**53.0** 2.09	**54.0** 2.13	**3.3** 0.13	**87.0** 3.43	**82.0** 3.23	**3.00** 0.12	**0.80** 0.03	**42.4**	**13.6**	**0.0872**	**0.98** 2.16
29.900 1.1772	**22.225** 0.8750	**-9.1** -0.36	**0.8** 0.03	**51.0** 2.01	**52.0** 2.05	**2.3** 0.09	**87.0** 3.43	**83.0** 3.27	**1.60** 0.06	**0.40** 0.02	**42.5**	**11.3**	**0.0805**	**0.94** 2.07
29.900 1.1772	**22.225** 0.8750	**-9.1** -0.36	**3.5** 0.14	**51.0** 2.01	**57.0** 2.24	**2.3** 0.09	**87.0** 3.43	**83.0** 3.27	**1.60** 0.06	**0.40** 0.02	**42.5**	**11.3**	**0.0805**	**0.93** 2.06
28.575 1.1250	**22.225** 0.8750	**-7.6** -0.30	**0.8** 0.03	**53.0** 2.09	**53.0** 2.09	**2.3** 0.09	**90.0** 3.54	**85.0** 3.35	**1.30** 0.05	**2.20** 0.09	**52.5**	**18.5**	**0.0910**	**0.96** 2.12
28.575 1.1250	**22.225** 0.8750	**-7.6** -0.30	**0.8** 0.03	**53.0** 2.09	**53.0** 2.09	**0.8** 0.03	**90.0** 3.54	**86.0** 3.39	**1.30** 0.05	**2.20** 0.09	**52.5**	**18.5**	**0.0910**	**0.97** 2.13
29.900 1.1772	**22.225** 0.8750	**-9.1** -0.36	**3.5** 0.14	**51.0** 2.01	**57.0** 2.24	**0.8** 0.03	**87.0** 3.43	**84.0** 3.31	**1.60** 0.06	**0.40** 0.02	**42.5**	**11.3**	**0.0805**	**0.94** 2.07

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

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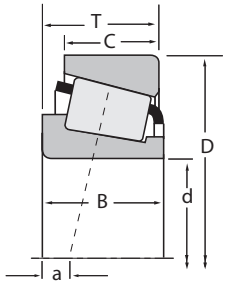
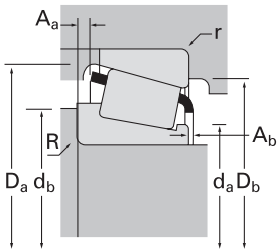
TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
44.450 1.7500	95.250 3.7500	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3782	3726
44.450 1.7500	95.250 3.7500	30.162 1.1875	115000 25900	0.55	1.10	29900 6710	27900 6280	1.07	157000 35400	HM804842	HM804810
44.450 1.7500	95.250 3.7500	30.162 1.1875	115000 25900	0.55	1.10	29900 6710	27900 6280	1.07	157000 35400	HM804842	HM804811
44.450 1.7500	95.250 3.7500	30.162 1.1875	115000 25900	0.55	1.10	29900 6710	27900 6280	1.07	157000 35400	HM804843	HM804810
44.450 1.7500	95.250 3.7500	30.958 1.2188	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53176	53375
44.450 1.7500	95.250 3.7500	30.958 1.2188	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53176	53377
44.450 1.7500	95.250 3.7500	30.958 1.2188	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53177	53375
44.450 1.7500	95.250 3.7500	30.958 1.2188	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53178	53375
44.450 1.7500	95.250 3.7500	30.958 1.2188	107000 24000	0.74	0.81	27600 6210	35000 7870	0.79	132000 29700	HM903247	HM903210
44.450 1.7500	95.250 3.7500	30.958 1.2188	107000 24000	0.74	0.81	27600 6210	35000 7870	0.79	132000 29700	HM903249A	HM903210
44.450 1.7500	95.250 3.7500	30.958 1.2188	107000 24000	0.74	0.81	27600 6210	35000 7870	0.79	132000 29700	HM903249	HM903210
44.450 1.7500	96.838 3.8125	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	386AS	382A
44.450 1.7500	98.425 3.8750	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3782	3732
44.450 1.7500	98.425 3.8750	30.958 1.2188	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53176	53387
44.450 1.7500	98.425 3.8750	30.958 1.2188	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53177	53387
44.450 1.7500	98.425 3.8750	30.958 1.2188	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53176	53387X
44.450 1.7500	98.425 3.8750	30.958 1.2188	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53177	53387X
44.450 1.7500	98.425 3.8750	30.958 1.2188	107000 24000	0.74	0.81	27600 6210	35000 7870	0.79	132000 29700	HM903247	HM903216
44.450 1.7500	98.425 3.8750	30.958 1.2188	107000 24000	0.74	0.81	27600 6210	35000 7870	0.79	132000 29700	HM903249A	HM903216
44.450 1.7500	98.425 3.8750	30.958 1.2188	107000 24000	0.74	0.81	27600 6210	35000 7870	0.79	132000 29700	HM903249	HM903216
44.450 1.7500	101.600 4.0000	30.958 1.2188	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53176	53398
44.450 1.7500	101.600 4.0000	30.958 1.2188	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53177	53398
44.450 1.7500	101.600 4.0000	31.750 1.2500	123000 27600	0.40	1.50	31900 7160	21900 4910	1.46	155000 35000	49576	49520
44.450 1.7500	101.600 4.0000	31.750 1.2500	123000 27600	0.40	1.50	31900 7160	21900 4910	1.46	155000 35000	49577	49520
44.450 1.7500	101.600 4.0000	34.925 1.3750	152000 34300	0.29	2.10	39500 8880	19300 4340	2.05	191000 43000	527	522
44.450 1.7500	103.188 4.0625	43.658 1.7188	197000 44200	0.30	2.02	51000 11500	25900 5820	1.97	267000 60100	5356	5335
44.450 1.7500	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45280	45220
44.450 1.7500	104.775 4.1250	30.162 1.1875	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	460	453X

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

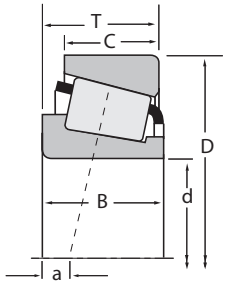
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
30.302 1.1930	23.812 0.9375	-8.1 -0.32	3.5 0.14	52.0 2.05	58.0 2.28	3.3 0.13	89.0 3.50	83.0 3.27	1.80 0.07	0.90 0.04	49.9	14.5	0.0903	1.01 2.23
29.370 1.1563	23.020 0.9063	-3.8 -0.15	0.8 0.03	57.0 2.24	57.0 2.24	3.3 0.13	91.0 3.58	81.0 3.19	2.30 0.09	2.80 0.11	44.8	13.8	0.1017	1.02 2.25
29.370 1.1563	23.020 0.9063	-3.8 -0.15	0.8 0.03	57.0 2.24	57.0 2.24	0.8 0.03	91.0 3.58	83.0 3.27	2.30 0.09	2.80 0.11	44.8	13.8	0.1017	1.03 2.28
29.370 1.1563	23.020 0.9063	-3.8 -0.15	3.5 0.14	57.0 2.24	63.0 2.48	3.3 0.13	91.0 3.58	81.0 3.19	2.30 0.09	2.80 0.11	44.8	13.8	0.1017	1.01 2.24
28.301 1.1142	20.638 0.8125	-0.3 -0.01	1.3 0.05	52.5 2.07	59.0 2.32	0.8 0.03	89.0 3.50	81.0 3.19	5.70 0.22	2.20 0.08	26.7	9.63	0.0930	0.93 2.05
28.301 1.1142	20.638 0.8125	-0.3 -0.01	1.3 0.05	52.5 2.07	59.0 2.32	2.3 0.09	89.0 3.50	80.0 3.15	5.70 0.22	2.20 0.08	26.7	9.63	0.0930	0.93 2.04
28.301 1.1142	20.638 0.8125	-0.3 -0.01	3.5 0.14	52.5 2.07	63.0 2.48	0.8 0.03	89.0 3.50	81.0 3.19	5.70 0.22	2.20 0.08	26.7	9.63	0.0930	0.92 2.04
28.301 1.1142	20.638 0.8125	-0.3 -0.01	2.0 0.08	52.5 2.07	60.0 2.36	0.8 0.03	89.0 3.50	81.0 3.19	5.70 0.22	2.20 0.08	26.7	9.63	0.0930	0.93 2.05
28.300 1.1142	22.225 0.8750	0.5 0.02	1.3 0.05	54.0 2.13	61.0 2.40	0.8 0.03	91.0 3.58	81.0 3.19	3.90 0.16	2.30 0.09	33.7	9.91	0.1010	1.00 2.20
28.300 1.1142	22.225 0.8750	0.5 0.02	3.5 0.14	54.0 2.13	65.0 2.56	0.8 0.03	91.0 3.58	81.0 3.19	3.90 0.16	2.30 0.09	33.7	9.91	0.1010	0.99 2.19
28.575 1.1250	22.225 0.8750	0.5 0.02	3.5 0.14	54.0 2.13	65.0 2.56	0.8 0.03	91.0 3.58	81.0 3.19	3.90 0.16	2.00 0.08	33.7	9.91	0.1010	1.00 2.19
21.946 0.8640	15.875 0.6250	-3.0 -0.12	3.5 0.14	53.0 2.09	59.0 2.32	0.8 0.03	92.0 3.62	89.0 3.50	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.76 1.67
30.302 1.1930	23.812 0.9375	-8.1 -0.32	3.5 0.14	52.0 2.05	58.0 2.28	3.3 0.13	90.0 3.54	84.0 3.31	1.80 0.07	0.90 0.04	49.9	14.5	0.0903	1.10 2.42
28.301 1.1142	20.638 0.8125	-0.3 -0.01	1.3 0.05	52.5 2.07	59.0 2.32	0.8 0.03	91.0 3.58	82.0 3.23	5.70 0.22	2.20 0.08	26.7	9.63	0.0930	1.01 2.22
28.301 1.1142	20.638 0.8125	-0.3 -0.01	3.5 0.14	52.5 2.07	63.0 2.48	0.8 0.03	91.0 3.58	82.0 3.23	5.70 0.22	2.20 0.08	26.7	9.63	0.0930	1.00 2.21
28.301 1.1142	20.638 0.8125	-0.3 -0.01	1.3 0.05	52.5 2.07	59.0 2.32	1.5 0.06	91.0 3.58	82.0 3.23	5.70 0.22	2.20 0.08	26.7	9.63	0.0930	1.01 2.22
28.301 1.1142	20.638 0.8125	-0.3 -0.01	3.5 0.14	52.5 2.07	63.0 2.48	1.5 0.06	91.0 3.58	82.0 3.23	5.70 0.22	2.20 0.08	26.7	9.63	0.0930	1.00 2.20
28.300 1.1142	22.225 0.8750	0.5 0.02	1.3 0.05	54.0 2.13	61.0 2.40	0.8 0.03	92.0 3.62	82.0 3.23	3.90 0.16	2.30 0.09	33.7	9.91	0.1010	1.08 2.38
28.300 1.1142	22.225 0.8750	0.5 0.02	3.5 0.14	54.0 2.13	65.0 2.56	0.8 0.03	92.0 3.62	82.0 3.23	3.90 0.16	2.30 0.09	33.7	9.91	0.1010	1.08 2.37
28.575 1.1250	22.225 0.8750	0.5 0.02	3.5 0.14	54.0 2.13	65.0 2.56	0.8 0.03	92.0 3.62	82.0 3.23	3.90 0.16	2.00 0.08	33.7	9.91	0.1010	1.08 2.38
28.301 1.1142	20.638 0.8125	-0.3 -0.01	1.3 0.05	52.5 2.07	59.0 2.32	0.8 0.03	92.0 3.62	84.0 3.31	5.70 0.22	2.20 0.08	26.7	9.63	0.0930	1.09 2.40
28.301 1.1142	20.638 0.8125	-0.3 -0.01	3.5 0.14	52.5 2.07	63.0 2.48	0.8 0.03	92.0 3.62	84.0 3.31	5.70 0.22	2.20 0.08	26.7	9.63	0.0930	1.08 2.39
31.750 1.2500	25.400 1.0000	-7.1 -0.28	0.8 0.03	54.0 2.13	55.0 2.17	3.3 0.13	96.0 3.78	88.0 3.46	2.30 0.09	1.30 0.05	49.1	14.2	0.0946	1.24 2.74
31.750 1.2500	25.400 1.0000	-7.1 -0.28	3.5 0.14	54.0 2.13	60.0 2.36	3.3 0.13	96.0 3.78	88.0 3.46	2.30 0.09	1.30 0.05	49.1	16.8	0.0946	1.24 2.73
36.068 1.4200	26.988 1.0625	-12.7 -0.50	3.5 0.14	53.0 2.09	59.0 2.32	3.3 0.13	95.0 3.74	89.0 3.50	2.70 0.11	1.80 0.07	57.9	13.4	0.0894	1.36 3.01
44.475 1.7510	36.512 1.4375	-16.0 -0.63	1.3 0.05	56.0 2.20	58.0 2.28	3.3 0.13	97.0 3.82	89.0 3.50	2.60 0.10	0.90 0.04	73.4	15.5	0.0985	1.85 4.07
30.958 1.2188	23.812 0.9375	-8.1 -0.32	0.8 0.03	54.0 2.13	55.0 2.17	3.3 0.13	99.0 3.90	93.0 3.66	2.10 0.08	1.80 0.07	63.5	16.9	0.0971	1.33 2.93
29.317 1.1542	24.605 0.9687	-7.1 -0.28	3.5 0.14	54.0 2.13	60.0 2.36	3.3 0.13	98.0 3.86	92.0 3.62	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.28 2.82

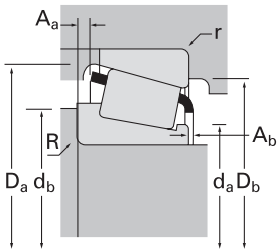
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
44.450 1.7500	104.775 4.1250	36.512 1.4375	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59175	59412
44.450 1.7500	104.775 4.1250	36.512 1.4375	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59175	59413
44.450 1.7500	104.775 4.1250	36.512 1.4375	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59176	59412
44.450 1.7500	104.775 4.1250	36.512 1.4375	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59176	59413
44.450 1.7500	104.775 4.1250	36.512 1.4375	159000 35700	0.49	1.23	41200 9260	34400 7730	1.20	223000 50200	HM807040	HM807010
44.450 1.7500	105.000 4.1339	36.873 1.4517	159000 35700	0.49	1.23	41200 9260	34400 7730	1.20	223000 50200	HM807040	JHM807012
44.450 1.7500	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	460	453A
44.450 1.7500	107.950 4.2500	36.512 1.4375	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59176	59425
44.450 1.7500	111.125 4.3750	30.162 1.1875	98500 22100	0.88	0.68	25500 5740	38600 8690	0.66	119000 26700	55175	55437
44.450 1.7500	111.125 4.3750	30.162 1.1875	118000 26500	0.88	0.68	30600 6880	46300 10400	0.66	161000 36200	55175C	55437
44.450 1.7500	111.125 4.3750	30.162 1.1875	118000 26500	0.88	0.68	30600 6880	46300 10400	0.66	161000 36200	55176C	55437
44.450 1.7500	111.125 4.3750	30.162 1.1875	114000 25600	0.88	0.68	29500 6640	44700 10000	0.66	153000 34400	HM907635	HM907614
44.450 1.7500	111.125 4.3750	38.100 1.5000	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	535	532A
44.450 1.7500	112.712 4.4375	30.162 1.1875	98500 22100	0.88	0.68	25500 5740	38600 8690	0.66	119000 26700	55175	55443
44.450 1.7500	112.712 4.4375	30.162 1.1875	118000 26500	0.88	0.68	30600 6880	46300 10400	0.66	161000 36200	55176C	55443
44.450 1.7500	112.712 4.4375	30.162 1.1875	114000 25600	0.88	0.68	29500 6640	44700 10000	0.66	153000 34400	HM907635	HM907616
44.450 1.7500	114.300 4.5000	44.450 1.7500	207000 46500	0.43	1.39	53700 12100	39500 8880	1.36	256000 57500	65384	65320
44.450 1.7500	114.300 4.5000	44.450 1.7500	207000 46500	0.43	1.39	53700 12100	39500 8880	1.36	256000 57500	65385	65320
44.450 1.7500	120.650 4.7500	41.275 1.6250	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	615	612
44.450 1.7500	127.000 5.0000	50.800 2.0000	283000 63700	0.30	2.01	73500 16500	37500 8440	1.96	370000 83300	6277	6220
44.983 1.7710	82.931 3.2650	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25584	25520
44.983 1.7710	82.931 3.2650	26.988 1.0625	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25584	25523
44.983 1.7710	83.058 3.2700	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25584	25521
44.983 1.7710	84.988 3.3460	19.000 0.7480	57800 13000	0.44	1.35	15000 3370	11400 2560	1.31	69200 15600	29177	29334
44.983 1.7710	85.000 3.3465	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25584	25526
44.983 1.7710	93.264 3.6718	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3776	3720
44.987 1.7712	81.973 3.2273	23.876 0.9400	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25584A	25518
44.987 1.7712	82.931 3.2650	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25584A	25520

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	$a^{(3)}$	$R^{(4)}$	d_a	d_b	$r^{(4)}$	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
36.512 1.4375	**28.575** 1.1250	**-9.7** -0.38	**3.5** 0.14	**56.0** 2.20	**63.0** 2.48	**3.3** 0.13	**99.0** 3.90	**92.0** 3.62	**3.40** 0.14	**1.30** 0.05	**57.3**	**14.7**	**0.0999**	**1.54** 3.39
36.512 1.4375	**28.575** 1.1250	**-9.7** -0.38	**3.5** 0.14	**56.0** 2.20	**63.0** 2.48	**0.8** 0.03	**102.0** 4.02	**87.0** 3.43	**3.40** 0.14	**1.30** 0.05	**57.3**	**14.7**	**0.0999**	**1.55** 3.42
36.512 1.4375	**28.575** 1.1250	**-9.7** -0.38	**0.8** 0.03	**56.0** 2.20	**57.0** 2.24	**3.3** 0.13	**99.0** 3.90	**92.0** 3.62	**3.40** 0.14	**1.30** 0.05	**57.3**	**14.7**	**0.0999**	**1.55** 3.41
36.512 1.4375	**28.575** 1.1250	**-9.7** -0.38	**0.8** 0.03	**56.0** 2.20	**57.0** 2.24	**0.8** 0.03	**102.0** 4.02	**87.0** 3.43	**3.40** 0.14	**1.30** 0.05	**57.3**	**14.7**	**0.0999**	**1.56** 3.44
36.512 1.4375	**28.575** 1.1250	**-7.4** -0.29	**3.5** 0.14	**59.0** 2.32	**66.0** 2.60	**3.3** 0.13	**100.0** 3.94	**89.0** 3.50	**3.40** 0.14	**1.90** 0.08	**63.9**	**17.1**	**0.0760**	**1.59** 3.52
36.512 1.4375	**29.000** 1.1417	**-7.4** -0.29	**3.5** 0.14	**59.0** 2.32	**66.0** 2.60	**2.5** 0.10	**100.0** 3.94	**90.0** 3.54	**3.40** 0.14	**1.90** 0.08	**63.9**	**17.1**	**0.0760**	**1.61** 3.55
29.317 1.1542	**22.225** 0.8750	**-7.1** -0.28	**3.5** 0.14	**54.0** 2.13	**60.0** 2.36	**0.8** 0.03	**100.0** 3.94	**97.0** 3.82	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.33** 2.94
36.512 1.4375	**28.575** 1.1250	**-9.7** -0.38	**0.8** 0.03	**56.0** 2.20	**57.0** 2.24	**3.3** 0.13	**101.0** 3.98	**93.0** 3.66	**3.40** 0.14	**1.30** 0.05	**57.3**	**14.7**	**0.0999**	**1.66** 3.67
26.909 1.0594	**20.638** 0.8125	**7.1** 0.28	**3.5** 0.14	**60.0** 2.36	**67.0** 2.64	**3.3** 0.13	**105.0** 4.13	**92.0** 3.62	**4.80** 0.19	**3.20** 0.13	**36.8**	**13.2**	**0.1085**	**1.36** 2.99
26.909 1.0594	**20.638** 0.8125	**7.6** 0.30	**3.5** 0.14	**64.0** 2.52	**70.0** 2.76	**3.3** 0.13	**105.0** 4.13	**92.0** 3.62	**5.00** 0.20	**3.60** 0.14	**48.7**	**15.4**	**0.1198**	**1.44** 3.18
26.909 1.0594	**20.638** 0.8125	**7.6** 0.30	**0.8** 0.03	**65.0** 2.56	**71.0** 2.80	**3.3** 0.13	**105.0** 4.13	**92.0** 3.62	**5.00** 0.20	**3.60** 0.14	**48.7**	**15.4**	**0.1198**	**1.44** 3.18
28.575 1.1250	**20.638** 0.8125	**7.6** 0.30	**0.8** 0.03	**65.0** 2.56	**64.0** 2.52	**3.3** 0.13	**105.0** 4.13	**91.0** 3.58	**4.60** 0.18	**2.00** 0.08	**46.9**	**13.7**	**0.1183**	**1.46** 3.21
36.957 1.4550	**30.162** 1.1875	**-12.2** -0.48	**3.5** 0.14	**54.0** 2.13	**60.0** 2.36	**3.3** 0.13	**100.0** 3.94	**95.0** 3.74	**2.80** 0.11	**0.90** 0.04	**64.3**	**16.1**	**0.0938**	**1.83** 4.04
26.909 1.0594	**20.638** 0.8125	**7.1** 0.28	**3.5** 0.14	**60.0** 2.36	**67.0** 2.64	**3.3** 0.13	**106.0** 4.17	**92.0** 3.62	**4.80** 0.19	**3.20** 0.13	**36.8**	**13.2**	**0.1085**	**1.40** 3.09
26.909 1.0594	**20.638** 0.8125	**7.6** 0.30	**0.8** 0.03	**65.0** 2.56	**71.0** 2.80	**3.3** 0.13	**106.0** 4.17	**92.0** 3.62	**5.00** 0.20	**3.60** 0.14	**48.7**	**15.4**	**0.1198**	**1.49** 3.28
28.575 1.1250	**20.638** 0.8125	**7.6** 0.30	**0.8** 0.03	**65.0** 2.56	**64.0** 2.52	**3.3** 0.13	**106.0** 4.17	**91.0** 3.58	**4.60** 0.18	**2.00** 0.08	**46.9**	**13.7**	**0.1183**	**1.52** 3.35
44.450 1.7500	**34.925** 1.3750	**-12.4** -0.49	**2.0** 0.08	**60.0** 2.36	**64.0** 2.52	**3.3** 0.13	**107.0** 4.21	**97.0** 3.82	**3.70** 0.14	**1.00** 0.04	**63.1**	**13**	**0.1053**	**2.31** 5.09
44.450 1.7500	**34.925** 1.3750	**-12.4** -0.49	**3.5** 0.14	**60.0** 2.36	**67.0** 2.64	**3.3** 0.13	**107.0** 4.21	**97.0** 3.82	**3.70** 0.14	**1.00** 0.04	**63.1**	**13**	**0.1053**	**2.30** 5.08
41.275 1.6250	**31.750** 1.2500	**-14.0** -0.55	**3.5** 0.14	**56.0** 2.20	**62.0** 2.44	**3.3** 0.13	**110.0** 4.33	**105.0** 4.13	**3.90** 0.15	**1.90** 0.07	**75.9**	**16.2**	**0.0694**	**2.42** 5.34
52.388 2.0625	**41.275** 1.6250	**-19.6** -0.77	**3.5** 0.14	**60.0** 2.36	**67.0** 2.64	**3.3** 0.13	**117.0** 4.61	**108.0** 4.25	**2.40** 0.09	**2.60** 0.10	**103**	**18.7**	**0.0757**	**3.55** 7.82
25.400 1.0000	**19.050** 0.7500	**-6.4** -0.25	**1.5** 0.06	**51.0** 2.01	**53.0** 2.09	**0.8** 0.03	**77.0** 3.03	**74.0** 2.91	**1.00** 0.04	**0.60** 0.03	**35.2**	**14.3**	**0.0801**	**0.55** 1.22
25.400 1.0000	**22.225** 0.8750	**-6.4** -0.25	**1.5** 0.06	**51.0** 2.01	**53.0** 2.09	**2.3** 0.09	**77.0** 3.03	**72.0** 2.83	**1.00** 0.04	**0.60** 0.03	**35.2**	**14.3**	**0.0801**	**0.60** 1.31
25.400 1.0000	**19.050** 0.7500	**-6.4** -0.25	**1.5** 0.06	**51.0** 2.01	**53.0** 2.09	**3.3** 0.13	**77.0** 3.03	**72.0** 2.83	**1.00** 0.04	**0.60** 0.03	**35.2**	**14.3**	**0.0801**	**0.55** 1.20
19.164 0.7545	**15.875** 0.6250	**-1.3** -0.05	**2.0** 0.08	**50.0** 1.97	**54.0** 2.13	**1.5** 0.06	**78.0** 3.07	**74.0** 2.91	***** *	***** *	**23.8**	**15.3**	**0.0766**	**0.46** 1.01
25.400 1.0000	**19.050** 0.7500	**-6.4** -0.25	**1.5** 0.06	**51.0** 2.01	**53.0** 2.09	**2.3** 0.09	**78.0** 3.07	**74.0** 2.91	**1.00** 0.04	**0.60** 0.03	**35.2**	**14.3**	**0.0801**	**0.59** 1.30
30.302 1.1930	**23.812** 0.9375	**-8.1** -0.32	**3.5** 0.14	**53.0** 2.09	**59.0** 2.32	**3.3** 0.13	**88.0** 3.46	**82.0** 3.23	**1.80** 0.07	**0.90** 0.04	**49.9**	**14.5**	**0.0903**	**0.95** 2.09
25.400 1.0000	**19.114** 0.7525	**-6.4** -0.25	**3.5** 0.14	**51.0** 2.01	**57.0** 2.24	**1.0** 0.04	**77.0** 3.03	**74.0** 2.91	**1.00** 0.04	**0.60** 0.03	**35.2**	**14.3**	**0.0801**	**0.53** 1.17
25.400 1.0000	**19.050** 0.7500	**-6.4** -0.25	**3.5** 0.14	**51.0** 2.01	**57.0** 2.24	**0.8** 0.03	**77.0** 3.03	**74.0** 2.91	**1.00** 0.04	**0.60** 0.03	**35.2**	**14.3**	**0.0801**	**0.55** 1.21

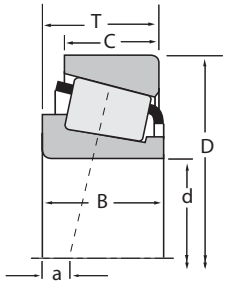
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

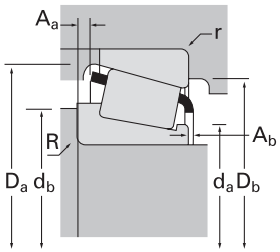
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)		Factors (5)	Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
44.987 1.7712	90.000 3.5433	25.000 0.9843	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	367X	362X
44.987 1.7712	95.250 3.7500	30.958 1.2188	107000 24000	0.74	0.81	27600 6210	35000 7870	0.79	132000 29700	HM903248	HM903210
45.000 1.7717	75.000 2.9528	20.000 0.7874	61500 13800	0.39	1.53	15900 3580	10700 2410	1.49	84300 19000	XAA32009X	Y32009X
45.000 1.7717	75.000 2.9528	20.000 0.7874	61500 13800	0.39	1.53	15900 3580	10700 2410	1.49	84300 19000	XAB-32009X	Y32009X
45.000 1.7717	85.000 3.3465	20.638 0.8125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	358	354A
45.000 1.7717	85.000 3.3465	20.638 0.8125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	358	354X
45.000 1.7717	85.000 3.3465	20.638 0.8125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	358A	354A
45.000 1.7717	85.000 3.3465	20.638 0.8125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	358X	354X
45.000 1.7717	87.312 3.4375	26.988 1.0625	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	358	3525
45.000 1.7717	88.900 3.5000	20.638 0.8125	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	367	362A
45.000 1.7717	89.980 3.5425	24.750 0.9744	91600 20600	0.38	1.59	23700 5340	15300 3450	1.55	130000 29200	J28577	28520
45.000 1.7717	90.000 3.5433	20.000 0.7874	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	367	362
45.000 1.7717	90.000 3.5433	27.783 1.0938	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	435-S	430X
45.000 1.7717	90.119 3.5480	23.000 0.9055	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	358	352
45.000 1.7717	93.264 3.6718	20.638 0.8125	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	376	374
45.000 1.7717	95.000 3.7402	29.000 1.1417	92500 20800	0.87	0.69	24000 5390	35500 7990	0.67	114000 25600	JW4549	JW4510
45.000 1.7717	96.838 3.8125	22.225 0.8750	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	376	372A
45.000 1.7717	96.838 3.8125	22.225 0.8750	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	376X	372A
45.000 1.7717	100.000 3.9370	25.000 0.9842	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	376	372
45.000 1.7717	104.775 4.1250	39.688 1.5625	167000 37500	0.34	1.79	43300 9730	24900 5590	1.74	237000 53200	4559	4535
45.000 1.7717	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	458-S	453A
45.230 1.7807	79.985 3.1490	19.842 0.7812	63800 14300	0.37	1.64	16500 3720	10400 2330	1.60	83300 18700	17887	17831
45.237 1.7810	84.138 3.3125	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3586	3520
45.237 1.7810	87.312 3.4375	30.162 1.1875	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3586	3525
45.242 1.7812	73.431 2.8910	19.558 0.7700	56900 12800	0.31	1.97	14800 3320	7710 1730	1.91	81800 18400	LM102949	LM102910
45.242 1.7812	73.431 2.8910	21.430 0.8437	56900 12800	0.31	1.97	14800 3320	7710 1730	1.91	81800 18400	LM102949	LM102911
45.242 1.7812	77.788 3.0625	19.842 0.7812	59600 13400	0.43	1.41	15500 3470	11300 2540	1.37	77900 17500	LM603049AS	LM603011
45.242 1.7812	77.788 3.0625	19.842 0.7812	59600 13400	0.43	1.41	15500 3470	11300 2540	1.37	77900 17500	LM603049	LM603011

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
22.225 0.8750	20.000 0.7874	-4.3 -0.17	1.5 0.06	51.0 2.01	54.0 2.13	2.0 0.08	84.0 3.31	80.0 3.15	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.67 1.47
28.575 1.1250	22.225 0.8750	0.5 0.02	3.5 0.14	54.0 2.13	66.0 2.60	0.8 0.03	91.0 3.58	81.0 3.19	* *	* *	33.7	9.91	0.1010	0.99 2.18
20.000 0.7874	15.500 0.6102	-3.3 -0.13	3.0 0.12	51.0 2.01	57.0 2.24	1.0 0.04	72.0 2.83	68.0 2.68	0.60 0.02	2.10 0.08	28.7	16.2	0.0788	0.34 0.76
20.000 0.7874	15.500 0.6102	-3.3 -0.13	0.0 0.00	51.0 2.01	58.0 2.28	1.0 0.04	72.0 2.83	68.0 2.68	0.60 0.02	2.10 0.08	28.7	16.2	0.0788	0.34 0.75
21.692 0.8540	17.462 0.6875	-4.8 -0.19	1.5 0.06	50.0 1.97	53.0 2.09	1.3 0.05	80.0 3.15	77.0 3.03	0.50 0.02	1.70 0.07	30	12.2	0.0732	0.51 1.12
21.692 0.8540	17.462 0.6875	-4.8 -0.19	1.5 0.06	50.0 1.97	53.0 2.09	1.5 0.06	80.0 3.15	77.0 3.03	0.50 0.02	1.70 0.07	30	12.2	0.0732	0.51 1.12
21.692 0.8540	17.462 0.6875	-4.8 -0.19	3.5 0.14	50.0 1.97	57.0 2.24	1.3 0.05	80.0 3.15	77.0 3.03	0.50 0.02	1.70 0.07	30	12.2	0.0732	0.50 1.11
21.692 0.8540	17.462 0.6875	-4.8 -0.19	2.0 0.08	50.0 1.97	54.0 2.13	1.5 0.06	80.0 3.15	77.0 3.03	0.50 0.02	1.70 0.07	30	12.2	0.0732	0.51 1.12
21.692 0.8540	23.812 0.9375	-4.8 -0.19	1.5 0.06	50.0 1.97	53.0 2.09	3.3 0.13	81.0 3.19	75.0 2.95	0.50 0.02	1.70 0.07	30	12.2	0.0732	0.64 1.42
22.225 0.8750	16.513 0.6501	-4.3 -0.17	2.0 0.08	51.0 2.01	55.0 2.17	1.3 0.05	84.0 3.31	81.0 3.19	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.58 1.29
25.400 1.0000	19.987 0.7869	-4.8 -0.19	0.8 0.03	57.0 2.24	55.0 2.17	2.3 0.09	86.0 3.39	81.0 3.19	1.40 0.06	1.00 0.04	46.4	22.6	0.0912	0.75 1.65
22.225 0.8750	15.875 0.6250	-4.3 -0.17	2.0 0.08	51.0 2.01	55.0 2.17	2.0 0.08	84.0 3.31	81.0 3.19	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.59 1.31
29.900 1.1772	22.225 0.8750	-9.1 -0.36	2.0 0.08	51.0 2.01	55.0 2.17	2.0 0.08	84.0 3.31	81.0 3.19	1.60 0.06	0.40 0.02	42.5	11.3	0.0805	0.80 1.76
21.692 0.8540	21.808 0.8586	-4.8 -0.19	1.5 0.06	50.0 1.97	53.0 2.09	2.3 0.09	82.0 3.23	78.0 3.07	0.50 0.02	1.70 0.07	30	12.2	0.0732	0.67 1.47
22.225 0.8750	15.083 0.5938	-3.8 -0.15	0.8 0.03	52.0 2.05	53.0 2.09	1.3 0.05	88.0 3.46	85.0 3.35	0.80 0.03	1.40 0.06	37.6	15.4	0.0816	0.67 1.48
26.500 1.0433	20.000 0.7874	4.1 0.16	2.5 0.10	54.0 2.13	64.0 2.52	2.5 0.10	90.5 3.56	78.0 3.07	4.60 0.18	3.00 0.12	30.7	12.9	0.1021	0.91 2.00
22.225 0.8750	19.050 0.7500	-3.8 -0.15	0.8 0.03	52.0 2.05	53.0 2.09	1.5 0.06	90.0 3.54	86.0 3.39	0.80 0.03	1.40 0.06	37.6	15.4	0.0816	0.79 1.75
22.225 0.8750	19.050 0.7500	-3.8 -0.15	2.0 0.08	52.0 2.05	56.0 2.20	1.5 0.06	90.0 3.54	86.0 3.39	0.80 0.03	1.40 0.06	37.6	15.4	0.0816	0.79 1.74
22.225 0.8750	21.824 0.8592	-3.8 -0.15	0.8 0.03	52.0 2.05	53.0 2.09	2.0 0.08	90.0 3.54	86.0 3.39	0.80 0.03	1.40 0.06	37.6	15.4	0.0816	0.93 2.05
40.157 1.5810	33.338 1.3125	-12.4 -0.49	3.5 0.14	56.0 2.20	62.0 2.44	3.3 0.13	99.0 3.90	90.0 3.54	1.70 0.07	1.30 0.05	73.6	18.5	0.1027	1.76 3.88
29.317 1.1542	22.225 0.8750	-7.1 -0.28	2.3 0.09	55.0 2.17	58.0 2.28	0.8 0.03	100.0 3.94	97.0 3.82	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.33 2.93
20.638 0.8125	15.080 0.5937	-3.8 -0.15	2.0 0.08	50.0 1.97	54.0 2.13	1.3 0.05	75.0 2.95	72.0 2.83	1.10 0.04	1.30 0.05	28.9	17.9	0.0770	0.40 0.88
30.886 1.2160	23.812 0.9375	-10.2 -0.40	3.5 0.14	52.0 2.05	58.0 2.28	3.3 0.13	79.5 3.13	74.0 2.91	2.30 0.09	0.70 0.03	39.5	10.5	0.0808	0.67 1.48
30.886 1.2160	23.812 0.9375	-10.2 -0.40	3.5 0.14	52.0 2.05	58.0 2.28	3.3 0.13	81.0 3.19	75.0 2.95	2.30 0.09	0.70 0.03	39.5	10.5	0.0808	0.75 1.65
19.812 0.7800	15.748 0.6200	-4.6 -0.18	3.5 0.14	50.0 1.97	56.0 2.20	0.8 0.03	70.0 2.76	68.0 2.68	0.70 0.03	1.10 0.04	31.1	18	0.0744	0.32 0.70
19.812 0.7800	17.620 0.6937	-4.6 -0.18	3.5 0.14	50.0 1.97	56.0 2.20	0.8 0.03	70.0 2.76	67.0 2.64	0.70 0.03	1.10 0.04	31.1	18	0.0744	0.33 0.74
19.842 0.7812	15.080 0.5937	-2.3 -0.09	0.8 0.03	52.0 2.05	53.0 2.09	0.8 0.03	74.0 2.91	71.0 2.80	1.30 0.05	1.50 0.06	26.4	14.4	0.0785	0.37 0.81
19.842 0.7812	15.080 0.5937	-2.3 -0.09	3.5 0.14	52.0 2.05	58.0 2.28	0.8 0.03	74.0 2.91	71.0 2.80	1.30 0.05	1.40 0.06	26.4	14.4	0.0785	0.37 0.81

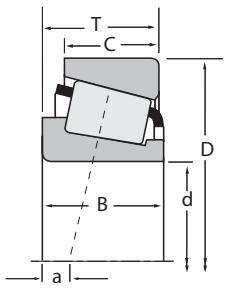
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

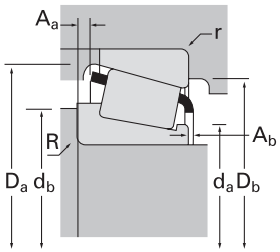
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
45.242 1.7812	77.788 3.0625	21.430 0.8437	59600 13400	0.43	1.41	15500 3470	11300 2540	1.37	77900 17500	LM603049	LM603012
45.242 1.7812	79.974 3.1486	19.842 0.7812	59600 13400	0.43	1.41	15500 3470	11300 2540	1.37	77900 17500	LM603049	LM603014
45.242 1.7812	79.974 3.1486	21.430 0.8437	59600 13400	0.43	1.41	15500 3470	11300 2540	1.37	77900 17500	LM603049	LM603015
45.618 1.7960	82.931 3.2650	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25590	25520
45.618 1.7960	82.931 3.2650	26.988 1.0625	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25590	25523
45.618 1.7960	83.058 3.2700	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25590	25521
45.618 1.7960	83.058 3.2700	23.876 0.9400	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25590	25522
45.618 1.7960	85.000 3.3465	26.988 1.0625	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25590	25527
45.618 1.7960	92.075 3.6250	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25590	25528
45.987 1.8105	74.976 2.9518	18.000 0.7087	52600 11800	0.40	1.49	13600 3070	9390 2110	1.45	75400 17000	LM503349A	LM503310
45.987 1.8105	74.976 2.9518	18.000 0.7087	52600 11800	0.40	1.49	13600 3070	9390 2110	1.45	75400 17000	LM503349	LM503310
45.987 1.8105	90.975 3.5817	32.000 1.2598	133000 29900	0.33	1.80	34500 7760	19700 4420	1.76	172000 38600	HM204049	HM204010
46.038 1.8125	77.788 3.0625	12.700 0.5000	34600 7770	0.34	1.78	8960 2010	5160 1160	1.74	47200 10600	LL205442	LL205410
46.038 1.8125	79.375 3.1250	17.462 0.6875	48200 10800	0.37	1.60	12500 2810	7990 1800	1.56	61300 13800	18690	18620
46.038 1.8125	80.962 3.1875	19.050 0.7500	47000 10600	0.53	1.14	12200 2740	11000 2480	1.11	61100 13700	13181	13318
46.038 1.8125	82.931 3.2650	23.812 0.9375	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25592	25520
46.038 1.8125	84.138 3.3125	26.995 1.0628	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	359-S	3520
46.038 1.8125	85.000 3.3465	20.638 0.8125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	359A	354A
46.038 1.8125	85.000 3.3465	20.638 0.8125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	359-S	354A
46.038 1.8125	85.000 3.3465	20.638 0.8125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	359-S	354X
46.038 1.8125	85.000 3.3465	25.400 1.0000	86400 19400	0.35	1.73	22400 5040	13300 2980	1.69	117000 26200	2984	2924
46.038 1.8125	85.000 3.3465	25.400 1.0000	86400 19400	0.35	1.73	22400 5040	13300 2980	1.69	117000 26200	2984A	2924
46.038 1.8125	87.312 3.4375	26.988 1.0625	86400 19400	0.35	1.73	22400 5040	13300 2980	1.69	117000 26200	2984	2925
46.038 1.8125	87.312 3.4375	26.988 1.0625	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	359-S	3525
46.038 1.8125	88.875 3.4990	23.000 0.9055	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	359-S	352A
46.038 1.8125	90.119 3.5480	23.000 0.9055	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	359-S	352
46.038 1.8125	93.264 3.6718	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3777	3720
46.038 1.8125	95.250 3.7500	27.783 1.0938	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	436	432

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
19.842 0.7812	16.667 0.6562	-2.3 -0.09	3.5 0.14	52.0 2.05	58.0 2.28	0.8 0.03	74.0 2.91	70.0 2.76	1.30 0.05	1.40 0.06	26.4	14.4	0.0785	0.38 0.85
19.842 0.7812	15.080 0.5937	-2.3 -0.09	3.5 0.14	52.0 2.05	58.0 2.28	0.8 0.03	75.0 2.95	71.0 2.80	1.30 0.05	1.40 0.06	26.4	14.4	0.0785	0.40 0.88
19.842 0.7812	16.667 0.6562	-2.3 -0.09	3.5 0.14	52.0 2.05	58.0 2.28	0.8 0.03	75.0 2.95	71.0 2.80	1.30 0.05	1.40 0.06	26.4	14.4	0.0785	0.42 0.92
25.400 1.0000	19.050 0.7500	-6.4 -0.25	3.5 0.14	51.0 2.01	58.0 2.28	0.8 0.03	77.0 3.03	74.0 2.91	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.54 1.19
25.400 1.0000	22.225 0.8750	-6.4 -0.25	3.5 0.14	51.0 2.01	58.0 2.28	2.3 0.09	77.0 3.03	72.0 2.83	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.58 1.28
25.400 1.0000	19.050 0.7500	-6.4 -0.25	3.5 0.14	51.0 2.01	58.0 2.28	3.3 0.13	77.0 3.03	72.0 2.83	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.53 1.17
25.400 1.0000	19.114 0.7525	-6.4 -0.25	3.5 0.14	51.0 2.01	58.0 2.28	2.0 0.08	77.0 3.03	73.0 2.87	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.54 1.19
25.400 1.0000	22.225 0.8750	-6.4 -0.25	3.5 0.14	51.0 2.01	58.0 2.28	2.3 0.09	78.0 3.07	73.0 2.87	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.63 1.39
25.400 1.0000	19.050 0.7500	-6.4 -0.25	3.5 0.14	51.0 2.01	58.0 2.28	0.8 0.03	80.0 3.15	78.0 3.07	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.73 1.60
18.000 0.7087	14.000 0.5512	-2.0 -0.08	0.0 0.00	51.0 2.01	57.0 2.24	1.5 0.06	71.0 2.80	67.0 2.64	0.90 0.04	1.50 0.06	28.3	18.2	0.0789	0.30 0.65
18.000 0.7087	14.000 0.5512	-2.0 -0.08	2.3 0.09	51.0 2.01	55.0 2.17	1.5 0.06	71.0 2.80	67.0 2.64	0.90 0.04	1.50 0.06	28.3	18.2	0.0789	0.30 0.67
32.000 1.2598	26.500 1.0433	-9.7 -0.38	3.5 0.14	55.0 2.17	63.0 2.48	3.5 0.14	86.0 3.39	79.0 3.11	1.50 0.06	1.80 0.07	47.7	13.4	0.0885	0.92 2.02
12.700 0.5000	9.525 0.3750	0.0 0.00	1.5 0.06	52.0 2.05	54.0 2.13	1.5 0.06	74.0 2.91	71.0 2.80	0.20 0.01	1.70 0.07	24.2	29.1	0.0699	0.24 0.52
17.462 0.6875	13.495 0.5313	-2.0 -0.08	2.8 0.11	51.0 2.01	56.0 2.20	1.5 0.06	74.0 2.91	71.0 2.80	0.70 0.03	1.60 0.06	23.9	17.7	0.0725	0.33 0.73
17.462 0.6875	14.288 0.5625	0.8 0.03	0.8 0.03	52.0 2.05	52.0 2.05	1.5 0.06	76.0 2.99	72.0 2.83	1.60 0.06	1.90 0.08	23	15.4	0.0799	0.37 0.83
25.400 1.0000	19.050 0.7500	-6.4 -0.25	3.5 0.14	52.0 2.05	58.0 2.28	0.8 0.03	77.0 3.03	74.0 2.91	1.00 0.04	0.60 0.03	35.2	14.3	0.0801	0.53 1.17
21.692 0.8540	23.812 0.9375	-4.8 -0.19	2.3 0.09	51.0 2.01	55.0 2.17	3.3 0.13	79.5 3.13	74.0 2.91	0.50 0.02	1.70 0.07	30	12.2	0.0732	0.55 1.21
21.692 0.8540	17.462 0.6875	-4.8 -0.19	3.5 0.14	51.0 2.01	57.0 2.24	1.3 0.05	80.0 3.15	77.0 3.03	0.50 0.02	1.70 0.07	30	12.2	0.0732	0.49 1.08
21.692 0.8540	17.462 0.6875	-4.8 -0.19	2.3 0.09	51.0 2.01	55.0 2.17	1.3 0.05	80.0 3.15	77.0 3.03	0.50 0.02	1.70 0.07	30	12.2	0.0732	0.49 1.09
21.692 0.8540	17.462 0.6875	-4.8 -0.19	2.3 0.09	51.0 2.01	55.0 2.17	1.5 0.06	80.0 3.15	77.0 3.03	0.50 0.02	1.70 0.07	30	12.2	0.0732	0.49 1.09
25.608 1.0082	20.638 0.8125	-6.4 -0.25	3.5 0.14	52.0 2.05	58.0 2.28	1.3 0.05	80.0 3.15	76.0 2.99	1.80 0.07	1.10 0.04	38.2	15.7	0.0832	0.61 1.34
25.608 1.0082	20.638 0.8125	-6.4 -0.25	0.8 0.03	52.0 2.05	53.0 2.09	1.3 0.05	80.0 3.15	76.0 2.99	1.80 0.07	1.10 0.04	38.2	15.7	0.0832	0.61 1.35
25.608 1.0082	22.225 0.8750	-6.4 -0.25	3.5 0.14	52.0 2.05	58.0 2.28	2.3 0.09	81.0 3.19	75.0 2.95	1.80 0.07	1.10 0.04	38.2	15.7	0.0832	0.68 1.50
21.692 0.8540	23.812 0.9375	-4.8 -0.19	2.3 0.09	51.0 2.01	55.0 2.17	3.3 0.13	81.0 3.19	75.0 2.95	0.50 0.02	1.70 0.07	30	12.2	0.0732	0.63 1.39
21.692 0.8540	21.808 0.8586	-4.8 -0.19	2.3 0.09	51.0 2.01	55.0 2.17	2.3 0.09	81.0 3.19	78.0 3.07	0.50 0.02	1.70 0.07	30	12.2	0.0732	0.62 1.37
21.692 0.8540	21.808 0.8586	-4.8 -0.19	2.3 0.09	51.0 2.01	55.0 2.17	2.3 0.09	82.0 3.23	78.0 3.07	0.50 0.02	1.70 0.07	30	12.2	0.0732	0.65 1.44
30.302 1.1930	23.812 0.9375	-8.1 -0.32	3.5 0.14	53.0 2.09	60.0 2.36	3.3 0.13	88.0 3.46	82.0 3.23	1.80 0.07	0.90 0.04	49.9	14.5	0.0903	0.93 2.05
29.900 1.1772	22.225 0.8750	-9.1 -0.36	3.5 0.14	52.0 2.05	59.0 2.32	2.3 0.09	87.0 3.43	83.0 3.27	1.60 0.06	0.40 0.02	42.5	11.3	0.0805	0.91 2.00

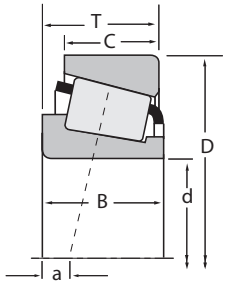
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

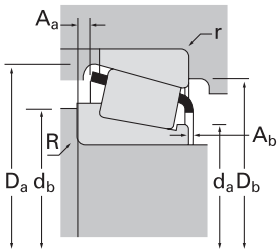
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
46.038 1.8125	95.250 3.7500	31.753 1.2501	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	436	432X
47.625 1.8750	88.900 3.5000	20.638 0.8125	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	369A	362A
47.625 1.8750	88.900 3.5000	20.638 0.8125	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	369-S	362A
47.625 1.8750	88.900 3.5000	25.400 1.0000	91300 20500	0.55	1.10	23700 5320	22100 4970	1.07	116000 26100	M804048	M804010
47.625 1.8750	88.900 3.5000	25.400 1.0000	91300 20500	0.55	1.10	23700 5320	22100 4970	1.07	116000 26100	M804049	M804010
47.625 1.8750	90.000 3.5433	20.000 0.7874	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	369A	362
47.625 1.8750	90.000 3.5433	20.000 0.7874	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	369-S	362
47.625 1.8750	93.264 3.6718	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3778	3720
47.625 1.8750	93.264 3.6718	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3779	3720
47.625 1.8750	93.264 3.6718	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3779	3730
47.625 1.8750	95.250 3.7500	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3779	3726
47.625 1.8750	95.250 3.7500	30.162 1.1875	115000 25900	0.55	1.10	29900 6710	27900 6280	1.07	157000 35400	HM804846	HM804810
47.625 1.8750	96.838 3.8125	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	386A	382A
47.625 1.8750	98.425 3.8750	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3779	3732
47.625 1.8750	100.000 3.9370	34.925 1.3750	152000 34300	0.29	2.10	39500 8880	19300 4340	2.05	191000 43000	528	520X
47.625 1.8750	101.600 4.0000	31.750 1.2500	123000 27600	0.40	1.50	31900 7160	21900 4910	1.46	155000 35000	49580	49520
47.625 1.8750	101.600 4.0000	34.925 1.3750	152000 34300	0.29	2.10	39500 8880	19300 4340	2.05	191000 43000	528	522
47.625 1.8750	101.600 4.0000	34.925 1.3750	123000 27600	0.40	1.50	31900 7160	21900 4910	1.46	155000 35000	49580	49521
47.625 1.8750	101.600 4.0000	34.925 1.3750	152000 34300	0.29	2.10	39500 8880	19300 4340	2.05	191000 43000	528A	522
47.625 1.8750	101.600 4.0000	34.925 1.3750	152000 34300	0.29	2.10	39500 8880	19300 4340	2.05	191000 43000	528R	522
47.625 1.8750	103.188 4.0625	43.658 1.7188	197000 44200	0.30	2.02	51000 11500	25900 5820	1.97	267000 60100	5358	5335
47.625 1.8750	103.188 4.0625	43.658 1.7188	197000 44200	0.30	2.02	51000 11500	25900 5820	1.97	267000 60100	5361	5335
47.625 1.8750	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45282	45220
47.625 1.8750	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45282	45221
47.625 1.8750	104.775 4.1250	36.512 1.4375	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59187	59412
47.625 1.8750	104.775 4.1250	36.512 1.4375	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59188	59412
47.625 1.8750	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	467	453A
47.625 1.8750	107.950 4.2500	36.512 1.4375	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	536	532X

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

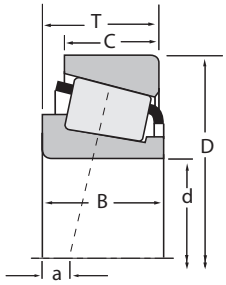
Dimensions, mm (inches)													Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage							
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.									
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g			
29.900 1.1772	**26.195** 1.0313	**-9.1** -0.36	**3.5** 0.14	**52.0** 2.05	**59.0** 2.32	**3.3** 0.13	**87.0** 3.43	**81.0** 3.19	**1.60** 0.06	**0.40** 0.02	**42.5**	**11.3**	**0.0805**	**0.99** 2.18		
22.225 0.8750	**16.513** 0.6501	**-4.3** -0.17	**3.5** 0.14	**53.0** 2.09	**60.0** 2.36	**1.3** 0.05	**84.0** 3.31	**81.0** 3.19	**0.50** 0.02	**1.00** 0.04	**33.8**	**14**	**0.0773**	**0.55** 1.21		
22.225 0.8750	**16.513** 0.6501	**-4.3** -0.17	**2.3** 0.09	**53.0** 2.09	**57.0** 2.24	**1.3** 0.05	**84.0** 3.31	**81.0** 3.19	**0.50** 0.02	**1.00** 0.04	**33.8**	**14**	**0.0773**	**0.55** 1.21		
25.400 1.0000	**19.050** 0.7500	**-1.8** -0.07	**0.8** 0.03	**56.0** 2.20	**59.0** 2.32	**3.3** 0.13	**85.0** 3.35	**77.0** 3.03	**1.70** 0.07	**2.00** 0.08	**33.9**	**12.5**	**0.0924**	**0.66** 1.46		
25.400 1.0000	**19.050** 0.7500	**-1.8** -0.07	**3.5** 0.14	**56.0** 2.20	**65.0** 2.56	**3.3** 0.13	**85.0** 3.35	**77.0** 3.03	**1.70** 0.07	**2.00** 0.08	**33.9**	**12.5**	**0.0924**	**0.66** 1.45		
22.225 0.8750	**15.875** 0.6250	**-4.3** -0.17	**3.5** 0.14	**53.0** 2.09	**60.0** 2.36	**2.0** 0.08	**84.0** 3.31	**81.0** 3.19	**0.50** 0.02	**1.00** 0.04	**33.8**	**14**	**0.0773**	**0.56** 1.23		
22.225 0.8750	**15.875** 0.6250	**-4.3** -0.17	**2.3** 0.09	**53.0** 2.09	**57.0** 2.24	**2.0** 0.08	**84.0** 3.31	**81.0** 3.19	**0.50** 0.02	**1.00** 0.04	**33.8**	**14**	**0.0773**	**0.56** 1.23		
30.302 1.1930	**23.812** 0.9375	**-8.1** -0.32	**6.4** 0.25	**55.0** 2.17	**67.0** 2.64	**3.3** 0.13	**88.0** 3.46	**82.0** 3.23	**1.80** 0.07	**0.90** 0.04	**49.9**	**14.5**	**0.0903**	**0.88** 1.95		
30.302 1.1930	**23.812** 0.9375	**-8.1** -0.32	**3.5** 0.14	**55.0** 2.17	**61.0** 2.40	**3.3** 0.13	**88.0** 3.46	**82.0** 3.23	**1.80** 0.07	**0.90** 0.04	**49.9**	**14.5**	**0.0903**	**0.90** 1.98		
30.302 1.1930	**23.812** 0.9375	**-8.1** -0.32	**3.5** 0.14	**55.0** 2.17	**61.0** 2.40	**0.8** 0.03	**88.0** 3.46	**84.0** 3.31	**1.80** 0.07	**0.90** 0.04	**49.9**	**14.5**	**0.0903**	**0.91** 2.01		
30.302 1.1930	**23.812** 0.9375	**-8.1** -0.32	**3.5** 0.14	**55.0** 2.17	**61.0** 2.40	**3.3** 0.13	**89.0** 3.50	**83.0** 3.27	**1.80** 0.07	**0.90** 0.04	**49.9**	**14.5**	**0.0903**	**0.95** 2.10		
29.370 1.1563	**23.020** 0.9063	**-3.8** -0.15	**3.5** 0.14	**57.5** 2.26	**66.0** 2.60	**3.3** 0.13	**91.0** 3.58	**81.0** 3.19	**2.30** 0.09	**2.80** 0.11	**44.8**	**14.6**	**0.1017**	**0.96** 2.12		
21.946 0.8640	**15.875** 0.6250	**-3.0** -0.12	**0.8** 0.03	**55.0** 2.17	**56.0** 2.20	**0.8** 0.03	**92.0** 3.62	**89.0** 3.50	**1.10** 0.04	**2.00** 0.08	**42**	**15.7**	**0.0859**	**0.73** 1.60		
30.302 1.1930	**23.812** 0.9375	**-8.1** -0.32	**3.5** 0.14	**55.0** 2.17	**61.0** 2.40	**3.3** 0.13	**90.0** 3.54	**84.0** 3.31	**1.80** 0.07	**0.90** 0.04	**49.9**	**14.5**	**0.0903**	**1.04** 2.30		
36.068 1.4200	**26.988** 1.0625	**-12.7** -0.50	**3.5** 0.14	**55.0** 2.17	**62.0** 2.44	**3.3** 0.13	**94.0** 3.70	**88.0** 3.46	**2.70** 0.11	**1.80** 0.07	**57.9**	**13.4**	**0.0894**	**1.25** 2.75		
31.750 1.2500	**25.400** 1.0000	**-7.1** -0.28	**3.5** 0.14	**56.0** 2.20	**63.0** 2.48	**3.3** 0.13	**96.0** 3.78	**88.0** 3.46	**2.30** 0.09	**1.30** 0.05	**49.1**	**16.8**	**0.0946**	**1.18** 2.60		
36.068 1.4200	**26.988** 1.0625	**-12.7** -0.50	**3.5** 0.14	**55.0** 2.17	**62.0** 2.44	**3.3** 0.13	**95.0** 3.74	**89.0** 3.50	**2.70** 0.11	**1.80** 0.07	**57.9**	**13.4**	**0.0894**	**1.30** 2.86		
31.750 1.2500	**28.575** 1.1250	**-7.1** -0.28	**3.5** 0.14	**56.0** 2.20	**63.0** 2.48	**3.3** 0.13	**96.0** 3.78	**87.0** 3.43	**2.30** 0.09	**1.30** 0.05	**49.1**	**16.8**	**0.0946**	**1.25** 2.76		
36.068 1.4200	**26.988** 1.0625	**-12.7** -0.50	**1.5** 0.06	**55.0** 2.17	**58.0** 2.28	**3.3** 0.13	**95.0** 3.74	**89.0** 3.50	**2.70** 0.11	**1.80** 0.07	**57.9**	**13.4**	**0.0894**	**1.30** 2.88		
36.068 1.4200	**26.988** 1.0625	**-12.7** -0.50	**8.0** 0.31	**55.0** 2.17	**70.0** 2.76	**3.3** 0.13	**95.0** 3.74	**89.0** 3.50	**2.70** 0.11	**1.80** 0.07	**57.9**	**13.4**	**0.0894**	**1.27** 2.79		
44.475 1.7510	**36.512** 1.4375	**-16.0** -0.63	**1.3** 0.05	**58.0** 2.28	**60.0** 2.36	**3.3** 0.13	**97.0** 3.82	**89.0** 3.50	**2.60** 0.10	**0.90** 0.04	**73.4**	**15.5**	**0.0985**	**1.77** 3.89		
44.475 1.7510	**36.512** 1.4375	**-16.0** -0.63	**3.5** 0.14	**58.0** 2.28	**65.0** 2.56	**3.3** 0.13	**97.0** 3.82	**89.0** 3.50	**2.60** 0.10	**0.90** 0.04	**73.4**	**15.5**	**0.0985**	**1.76** 3.88		
30.958 1.2188	**23.812** 0.9375	**-8.1** -0.32	**3.5** 0.14	**57.0** 2.24	**63.0** 2.48	**3.3** 0.13	**99.0** 3.90	**93.0** 3.66	**2.10** 0.08	**1.80** 0.07	**63.5**	**16.9**	**0.0971**	**1.27** 2.79		
30.958 1.2188	**23.812** 0.9375	**-8.1** -0.32	**3.5** 0.14	**57.0** 2.24	**63.0** 2.48	**0.8** 0.03	**99.0** 3.90	**95.0** 3.74	**2.10** 0.08	**1.80** 0.07	**63.5**	**16.9**	**0.0971**	**1.27** 2.80		
36.512 1.4375	**28.575** 1.1250	**-9.7** -0.38	**3.5** 0.14	**59.0** 2.32	**65.0** 2.56	**3.3** 0.13	**99.0** 3.90	**92.0** 3.62	**3.40** 0.14	**1.30** 0.05	**57.3**	**14.7**	**0.0999**	**1.47** 3.25		
36.512 1.4375	**28.575** 1.1250	**-9.7** -0.38	**1.5** 0.06	**59.0** 2.32	**61.0** 2.40	**3.3** 0.13	**99.0** 3.90	**92.0** 3.62	**3.40** 0.14	**1.30** 0.05	**57.3**	**14.7**	**0.0999**	**1.48** 3.26		
29.317 1.1542	**22.225** 0.8750	**-7.1** -0.28	**0.8** 0.03	**56.0** 2.20	**57.0** 2.24	**0.8** 0.03	**100.0** 3.94	**97.0** 3.82	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.29** 2.84		
36.957 1.4550	**28.575** 1.1250	**-12.2** -0.48	**3.5** 0.14	**56.0** 2.20	**62.0** 2.44	**3.3** 0.13	**100.0** 3.94	**94.0** 3.70	**2.80** 0.11	**0.90** 0.04	**64.3**	**16.1**	**0.0938**	**1.59** 3.51		

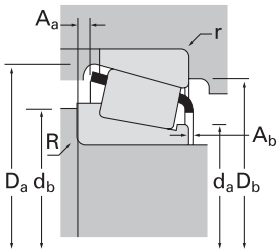
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
47.625 1.8750	108.966 4.2900	34.925 1.3750	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59187	59429
47.625 1.8750	108.966 4.2900	34.925 1.3750	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59188	59429
47.625 1.8750	111.125 4.3750	30.162 1.1875	118000 26500	0.88	0.68	30600 6880	46300 10400	0.66	161000 36200	55187C	55437
47.625 1.8750	111.125 4.3750	30.162 1.1875	114000 25600	0.88	0.68	29500 6640	44700 10000	0.66	153000 34400	HM907639	HM907614
47.625 1.8750	111.125 4.3750	38.100 1.5000	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	536	532
47.625 1.8750	112.712 4.4375	30.162 1.1875	98500 22100	0.88	0.68	25500 5740	38600 8690	0.66	119000 26700	55187	55443
47.625 1.8750	112.712 4.4375	30.162 1.1875	118000 26500	0.88	0.68	30600 6880	46300 10400	0.66	161000 36200	55187C	55443
47.625 1.8750	112.712 4.4375	30.162 1.1875	114000 25600	0.88	0.68	29500 6640	44700 10000	0.66	153000 34400	HM907639	HM907616
47.625 1.8750	117.475 4.6250	33.338 1.3125	138000 31000	0.63	0.96	35800 8040	38300 8620	0.93	166000 37300	66187	66462
47.625 1.8750	120.650 4.7500	41.275 1.6250	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	617	612
47.625 1.8750	123.825 4.8750	36.512 1.4375	153000 34400	0.74	0.81	39600 8910	50000 11200	0.79	175000 39400	72187	72487
47.625 1.8750	123.825 4.8750	36.512 1.4375	167000 37600	0.74	0.81	43400 9760	54800 12300	0.79	208000 46800	72187C	72487
47.625 1.8750	123.825 4.8750	36.512 1.4375	167000 37600	0.74	0.81	43400 9760	54800 12300	0.79	208000 46800	72188C	72487
48.412 1.9060	95.250 3.7500	30.162 1.1875	115000 25900	0.55	1.10	29900 6710	27900 6280	1.07	157000 35400	HM804848A	HM804810
48.412 1.9060	95.250 3.7500	30.162 1.1875	115000 25900	0.55	1.10	29900 6710	27900 6280	1.07	157000 35400	HM804848	HM804810
48.412 1.9060	95.250 3.7500	30.162 1.1875	115000 25900	0.55	1.10	29900 6710	27900 6280	1.07	157000 35400	HM804849	HM804810
48.600 1.9134	88.000 3.4646	21.500 0.8465	75200 16900	0.31	1.97	19500 4390	10200 2290	1.91	104000 23400	JLM104942A	JLM104914
49.212 1.9375	88.900 3.5000	20.638 0.8125	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	365-S	362A
49.212 1.9375	90.000 3.5433	25.000 0.9843	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	365-S	362X
49.212 1.9375	93.264 3.6718	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3781	3720
49.212 1.9375	103.188 4.0625	43.658 1.7188	197000 44200	0.30	2.02	51000 11500	25900 5820	1.97	267000 60100	5395	5335
49.212 1.9375	104.775 4.1250	36.512 1.4375	159000 35700	0.49	1.23	41200 9260	34400 7730	1.20	223000 50200	HM807044	HM807010
49.212 1.9375	114.300 4.5000	44.450 1.7500	207000 46500	0.43	1.39	53700 12100	39500 8880	1.36	256000 57500	65390	65320
49.212 1.9375	114.300 4.5000	44.450 1.7500	228000 51200	0.40	1.49	59000 13300	40600 9130	1.45	290000 65100	HH506348	HH506310
49.212 1.9375	114.300 4.5000	44.450 1.7500	228000 51200	0.40	1.49	59000 13300	40600 9130	1.45	290000 65100	HH506348	HH506311
49.213 1.9375	122.238 4.8125	43.658 1.7188	219000 49200	0.36	1.67	56800 12800	34800 7830	1.63	327000 73500	5562	5535
49.975 1.9675	111.125 4.3750	30.162 1.1875	98500 22100	0.88	0.68	25500 5740	38600 8690	0.66	119000 26700	55196	55437
49.982 1.9678	107.950 4.2500	36.512 1.4375	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	546	532X

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
36.512 1.4375	26.988 1.0625	-9.7 -0.38	3.5 0.14	59.0 2.32	65.0 2.56	3.3 0.13	101.0 3.98	93.0 3.66	3.40 0.14	1.30 0.05	57.3	14.7	0.0999	1.58 3.49
36.512 1.4375	26.988 1.0625	-9.7 -0.38	1.5 0.06	59.0 2.32	61.0 2.40	3.3 0.13	101.0 3.98	93.0 3.66	3.40 0.14	1.30 0.05	57.3	14.7	0.0999	1.59 3.51
26.909 1.0594	20.638 0.8125	7.6 0.30	3.5 0.14	62.0 2.44	69.0 2.72	3.3 0.13	105.0 4.13	92.0 3.62	5.00 0.20	3.60 0.14	48.7	15.4	0.1198	1.39 3.07
28.575 1.1250	20.638 0.8125	7.6 0.30	3.5 0.14	65.0 2.56	72.0 2.83	3.3 0.13	105.0 4.13	91.0 3.58	4.60 0.18	2.00 0.08	46.9	13.7	0.1183	1.40 3.08
36.957 1.4550	33.338 1.3125	-12.2 -0.48	3.5 0.14	56.0 2.20	62.0 2.44	3.3 0.13	100.0 3.94	95.0 3.74	2.80 0.11	0.90 0.04	64.3	16.1	0.0938	1.82 4.01
26.909 1.0594	20.638 0.8125	7.1 0.28	3.5 0.14	62.0 2.44	69.0 2.72	3.3 0.13	106.0 4.17	92.0 3.62	4.80 0.19	3.20 0.13	36.8	13.2	0.1085	1.35 2.98
26.909 1.0594	20.638 0.8125	7.6 0.30	3.5 0.14	62.0 2.44	69.0 2.72	3.3 0.13	106.0 4.17	92.0 3.62	5.00 0.20	3.60 0.14	48.7	15.4	0.1198	1.44 3.17
28.575 1.1250	20.638 0.8125	7.6 0.30	3.5 0.14	65.0 2.56	72.0 2.83	3.3 0.13	106.0 4.17	91.0 3.58	4.60 0.18	2.00 0.08	46.9	13.7	0.1183	1.46 3.22
31.750 1.2500	23.812 0.9375	-0.3 -0.01	3.5 0.14	62.0 2.44	69.0 2.72	3.3 0.13	111.0 4.37	100.0 3.94	5.00 0.20	2.00 0.08	50.2	16.4	0.0751	1.70 3.74
41.275 1.6250	31.750 1.2500	-14.0 -0.55	3.5 0.14	58.0 2.28	65.0 2.56	3.3 0.13	110.0 4.33	105.0 4.13	3.90 0.15	1.90 0.07	75.9	16.2	0.0694	2.35 5.18
32.791 1.2910	25.400 1.0000	1.3 0.05	3.5 0.14	66.0 2.59	72.0 2.83	3.3 0.13	116.0 4.57	102.0 4.02	5.40 0.21	4.00 0.16	47.7	14.1	0.0772	2.05 4.52
32.791 1.2910	25.400 1.0000	2.0 0.08	3.5 0.14	66.0 2.60	75.0 2.95	3.3 0.13	116.0 4.57	102.0 4.02	4.70 0.19	4.40 0.17	57.4	13.5	0.0825	2.15 4.74
32.791 1.2910	25.400 1.0000	2.0 0.08	0.8 0.03	67.0 2.64	69.0 2.72	3.3 0.13	116.0 4.57	102.0 4.02	4.70 0.19	4.40 0.17	57.4	13.5	0.0825	2.18 4.80
29.370 1.1563	23.020 0.9063	-3.8 -0.15	2.3 0.09	57.5 2.26	63.0 2.48	3.3 0.13	91.0 3.58	81.0 3.19	2.30 0.09	2.80 0.11	44.8	13.8	0.1017	0.95 2.10
29.370 1.1563	23.020 0.9063	-3.8 -0.15	2.3 0.09	57.5 2.26	63.0 2.48	3.3 0.13	91.0 3.58	81.0 3.19	2.30 0.09	2.80 0.11	44.8	13.8	0.1017	0.95 2.10
29.370 1.1563	23.020 0.9063	-3.8 -0.15	3.5 0.14	57.5 2.26	66.0 2.60	3.3 0.13	91.0 3.58	81.0 3.19	2.30 0.09	2.80 0.11	44.8	13.8	0.1017	0.95 2.09
21.500 0.8465	17.000 0.6693	-5.3 -0.21	0.4 0.02	55.0 2.17	54.0 2.13	0.8 0.03	81.0 3.19	78.0 3.07	0.80 0.03	2.10 0.08	38.8	23.2	0.0801	0.56 1.23
22.225 0.8750	16.513 0.6501	-4.3 -0.17	0.8 0.03	54.0 2.13	55.0 2.17	1.3 0.05	84.0 3.31	81.0 3.19	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.53 1.17
22.225 0.8750	20.000 0.7874	-4.3 -0.17	0.8 0.03	54.0 2.13	55.0 2.17	2.0 0.08	84.0 3.31	80.0 3.15	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.62 1.36
30.302 1.1930	23.812 0.9375	-8.1 -0.32	3.5 0.14	56.0 2.20	62.0 2.44	3.3 0.13	88.0 3.46	82.0 3.23	1.80 0.07	0.90 0.04	49.9	14.5	0.0903	0.87 1.92
44.475 1.7510	36.512 1.4375	-16.0 -0.63	3.5 0.14	60.0 2.36	66.0 2.60	3.3 0.13	97.0 3.82	89.0 3.50	2.60 0.10	0.90 0.04	73.4	15.5	0.0985	1.72 3.78
36.512 1.4375	28.575 1.1250	-7.4 -0.29	3.5 0.14	63.0 2.48	69.0 2.72	3.3 0.13	100.0 3.94	89.0 3.50	3.40 0.14	1.90 0.08	63.9	17.1	0.0760	1.49 3.29
44.450 1.7500	34.925 1.3750	-12.4 -0.49	3.5 0.14	60.0 2.36	70.0 2.76	3.3 0.13	107.0 4.21	97.0 3.82	3.70 0.14	1.00 0.04	63.1	13	0.1053	2.18 4.81
44.450 1.7500	36.068 1.4200	-13.5 -0.53	3.5 0.14	61.0 2.40	71.0 2.80	3.3 0.13	107.0 4.21	97.0 3.82	2.70 0.11	3.20 0.13	72	15.6	0.1078	2.26 4.97
44.450 1.7500	36.068 1.4200	-13.5 -0.53	3.5 0.14	61.0 2.40	71.0 2.80	0.8 0.03	107.0 4.21	99.0 3.90	2.70 0.11	3.20 0.13	72	15.6	0.1078	2.27 5.00
43.764 1.7230	36.512 1.4375	-12.2 -0.48	1.3 0.05	63.0 2.48	65.0 2.56	3.3 0.13	116.0 4.57	106.0 4.17	2.50 0.10	1.20 0.05	110	24.2	0.0825	2.73 6.02
26.909 1.0594	20.638 0.8125	7.1 0.28	3.5 0.14	64.0 2.51	71.0 2.80	3.3 0.13	105.0 4.13	92.0 3.62	4.80 0.19	3.20 0.13	36.8	13.2	0.1085	1.27 2.80
36.957 1.4550	28.575 1.1250	-12.2 -0.48	3.5 0.14	58.0 2.28	65.0 2.56	3.3 0.13	100.0 3.94	94.0 3.70	2.80 0.11	0.90 0.04	64.3	16.1	0.0938	1.54 3.40

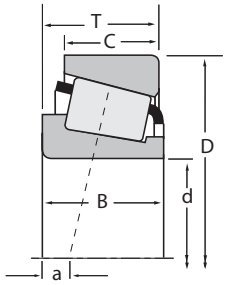
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

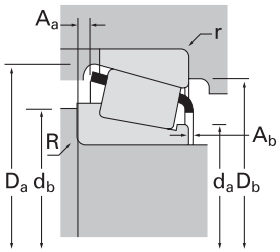
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)		Factors (5)	Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
49.987 1.9680	79.974 3.1486	18.258 0.7188	56300 12700	0.36	1.69	14600 3280	8880 2000	1.64	88800 20000	L305648	L305611
49.987 1.9680	80.962 3.1875	18.258 0.7188	56300 12700	0.36	1.69	14600 3280	8880 2000	1.64	88800 20000	L305648	L305610
49.987 1.9680	82.000 3.2283	21.976 0.8652	75200 16900	0.31	1.97	19500 4390	10200 2290	1.91	104000 23400	LM104947A	JLM104910
49.987 1.9680	89.980 3.5425	24.750 0.9744	91600 20600	0.38	1.59	23700 5340	15300 3450	1.55	130000 29200	28579	28520
49.987 1.9680	92.075 3.6250	24.608 0.9688	91600 20600	0.38	1.59	23700 5340	15300 3450	1.55	130000 29200	28579	28521
49.987 1.9680	96.838 3.8125	22.225 0.8750	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	378A	372A
49.987 1.9680	114.300 4.5000	44.450 1.7500	228000 51200	0.40	1.49	59000 13300	40600 9130	1.45	290000 65100	HH506349	HH506311
50.000 1.9685	80.000 3.1496	20.000 0.7874	64700 14500	0.42	1.42	16800 3770	12200 2730	1.38	92700 20800	XAA32010X	Y32010X
50.000 1.9685	80.000 3.1496	20.000 0.7874	64700 14500	0.42	1.42	16800 3770	12200 2730	1.38	92700 20800	XAB-32010X	Y32010X
50.000 1.9685	80.000 3.1496	20.000 0.7874	64700 14500	0.42	1.42	16800 3770	12200 2730	1.38	92700 20800	XAD32010X	Y32010X
50.000 1.9685	80.000 3.1496	20.000 0.7874	64700 14500	0.42	1.42	16800 3770	12200 2730	1.38	92700 20800	XAE32010X	Y32010X
50.000 1.9685	82.000 3.2283	21.500 0.8465	75200 16900	0.31	1.97	19500 4390	10200 2290	1.91	104000 23400	JLM104948	JLM104910
50.000 1.9685	82.000 3.2283	21.500 0.8465	64700 14500	0.42	1.42	16800 3770	12200 2730	1.38	92700 20800	XAB-32010X	YKB-32010X
50.000 1.9685	82.550 3.2500	21.120 0.8313	75200 16900	0.31	1.97	19500 4390	10200 2290	1.91	104000 23400	JLM104948	LM104911
50.000 1.9685	82.550 3.2500	23.150 0.9113	75200 16900	0.31	1.97	19500 4390	10200 2290	1.91	104000 23400	JLM104948	LM104911A
50.000 1.9685	82.931 3.2650	21.120 0.8313	75200 16900	0.31	1.97	19500 4390	10200 2290	1.91	104000 23400	JLM104948	LM104912
50.000 1.9685	84.000 3.3071	22.000 0.8661	75400 16900	0.44	1.37	19500 4390	14600 3290	1.34	104000 23500	JLM704649	JLM704610
50.000 1.9685	88.900 3.5000	20.638 0.8125	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	365	362A
50.000 1.9685	88.900 3.5000	20.638 0.8125	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	366	362A
50.000 1.9685	90.000 3.5433	20.000 0.7874	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	365	362
50.000 1.9685	90.000 3.5433	20.000 0.7874	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	365	363
50.000 1.9685	90.000 3.5433	20.000 0.7874	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	366	362
50.000 1.9685	90.000 3.5433	20.000 0.7874	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	366	363
50.000 1.9685	90.000 3.5433	28.000 1.1024	115000 25700	0.33	1.82	29700 6670	16700 3760	1.78	154000 34600	JM205149A	JM205110
50.000 1.9685	90.000 3.5433	28.000 1.1024	115000 25700	0.33	1.82	29700 6670	16700 3760	1.78	154000 34600	JM205149AS	JM205110
50.000 1.9685	90.000 3.5433	28.000 1.1024	115000 25700	0.33	1.82	29700 6670	16700 3760	1.78	154000 34600	JM205149	JM205110
50.000 1.9685	90.000 3.5433	28.000 1.1024	115000 25700	0.33	1.82	29700 6670	16700 3760	1.78	154000 34600	JM205149	JM205110A
50.000 1.9685	100.000 3.9370	33.500 1.3189	150000 33700	0.40	1.50	38900 8750	26600 5980	1.46	202000 45300	XLA33211	Y33211

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
18.258 0.7188	14.288 0.5625	-2.5 -0.10	1.5 0.06	55.0 2.17	57.0 2.24	1.5 0.06	76.0 2.99	73.0 2.87	0.20 0.01	1.90 0.08	38.8	27.8	0.0841	0.34 0.76
18.258 0.7188	14.288 0.5625	-2.5 -0.10	1.5 0.06	55.0 2.17	57.0 2.24	1.5 0.06	77.0 3.03	73.0 2.87	0.20 0.01	1.90 0.08	38.8	27.8	0.0841	0.36 0.79
22.225 0.8750	17.000 0.6693	-5.8 -0.23	0.5 0.02	55.0 2.17	55.0 2.17	0.5 0.02	78.0 3.07	76.0 2.99	1.20 0.05	2.00 0.08	38.8	23.2	0.0801	0.44 0.97
25.400 1.0000	19.987 0.7869	-4.8 -0.19	2.3 0.09	56.0 2.20	60.0 2.36	2.3 0.09	86.0 3.39	81.0 3.19	1.40 0.06	1.00 0.04	46.4	18.9	0.0912	0.66 1.47
25.400 1.0000	19.845 0.7813	-4.8 -0.19	2.3 0.09	56.0 2.20	60.0 2.36	0.8 0.03	87.0 3.43	83.0 3.27	1.40 0.06	1.00 0.04	46.4	18.9	0.0912	0.71 1.57
22.225 0.8750	19.050 0.7500	-3.8 -0.15	2.3 0.09	56.0 2.20	60.0 2.36	1.5 0.06	90.0 3.54	86.0 3.39	0.80 0.03	1.40 0.06	37.6	15.4	0.0816	0.72 1.60
44.450 1.7500	36.068 1.4200	-13.5 -0.53	3.5 0.14	61.0 2.40	72.0 2.83	0.8 0.03	107.0 4.21	99.0 3.90	2.70 0.11	3.20 0.13	72	15.6	0.1078	2.25 4.96
20.000 0.7874	15.500 0.6102	-2.0 -0.08	2.3 0.09	56.0 2.20	60.0 2.36	1.0 0.04	77.0 3.03	73.0 2.87	0.90 0.04	2.10 0.08	34	20.3	0.0853	0.37 0.82
20.000 0.7874	15.500 0.6102	-2.0 -0.08	3.0 0.12	55.0 2.17	62.0 2.44	1.0 0.04	77.0 3.03	73.0 2.87	0.90 0.04	2.10 0.08	34	20.3	0.0853	0.37 0.82
20.000 0.7874	15.500 0.6102	-2.0 -0.08	1.5 0.06	56.0 2.20	59.0 2.32	1.0 0.04	77.0 3.03	73.0 2.87	0.90 0.04	2.10 0.08	34	20.3	0.0853	0.37 0.82
20.000 0.7874	15.500 0.6102	-2.0 -0.08	0.3 0.01	55.0 2.17	56.0 2.20	1.0 0.04	77.0 3.03	73.0 2.87	0.90 0.04	2.10 0.08	34	20.3	0.0853	0.37 0.82
21.500 0.8465	17.000 0.6693	-5.3 -0.21	3.0 0.12	55.0 2.17	60.0 2.36	0.5 0.02	78.0 3.07	76.0 2.99	0.80 0.03	2.10 0.08	38.8	19.3	0.0801	0.43 0.94
20.000 0.7874	17.000 0.6693	-2.0 -0.08	3.0 0.12	55.0 2.17	62.0 2.44	0.5 0.02	77.0 3.03	76.0 2.99	0.90 0.04	2.10 0.08	34	20.3	0.0853	0.42 0.93
21.500 0.8465	16.510 0.6500	-5.3 -0.21	3.0 0.12	55.0 2.17	60.0 2.36	1.3 0.05	78.0 3.07	75.0 2.95	0.80 0.03	2.10 0.08	38.8	19.3	0.0801	0.43 0.95
21.500 0.8465	18.542 0.7300	-5.3 -0.21	3.0 0.12	55.0 2.17	60.0 2.36	0.8 0.03	78.0 3.07	75.0 2.95	0.80 0.03	2.10 0.08	38.8	19.3	0.0801	0.45 1.00
21.500 0.8465	16.510 0.6500	-5.3 -0.21	3.0 0.12	55.0 2.17	60.0 2.36	1.3 0.05	77.5 3.06	75.0 2.95	0.80 0.03	2.10 0.08	38.8	19.3	0.0801	0.44 0.96
22.000 0.8661	17.500 0.6890	-2.3 -0.09	3.5 0.14	56.0 2.20	64.0 2.52	1.5 0.06	80.0 3.15	76.0 2.99	1.10 0.04	1.60 0.06	35.6	16.7	0.0876	0.47 1.03
22.225 0.8750	16.513 0.6501	-4.3 -0.17	2.0 0.08	55.0 2.17	58.0 2.28	1.3 0.05	84.0 3.31	81.0 3.19	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.52 1.14
22.225 0.8750	16.513 0.6501	-4.3 -0.17	2.3 0.09	55.0 2.17	59.0 2.32	1.3 0.05	84.0 3.31	81.0 3.19	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.52 1.14
22.225 0.8750	15.875 0.6250	-4.3 -0.17	2.0 0.08	55.0 2.17	58.0 2.28	2.0 0.08	84.0 3.31	81.0 3.19	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.53 1.16
22.225 0.8750	20.000 0.7874	-4.3 -0.17	2.0 0.08	55.0 2.17	58.0 2.28	0.8 0.03	85.0 3.34	82.0 3.23	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.56 1.24
22.225 0.8750	15.875 0.6250	-4.3 -0.17	2.3 0.09	55.0 2.17	59.0 2.32	2.0 0.08	84.0 3.31	81.0 3.19	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.53 1.16
22.225 0.8750	20.000 0.7874	-4.3 -0.17	2.3 0.09	55.0 2.17	59.0 2.32	0.8 0.03	85.0 3.34	82.0 3.23	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.56 1.24
28.000 1.1024	23.000 0.9055	-7.6 -0.30	5.0 0.20	57.0 2.24	67.0 2.64	2.5 0.10	85.0 3.35	80.0 3.15	0.80 0.03	2.30 0.09	48.2	14.1	0.0885	0.74 1.63
28.000 1.1024	23.000 0.9055	-7.6 -0.30	2.5 0.10	57.0 2.24	63.0 2.48	2.5 0.10	85.0 3.35	80.0 3.15	0.80 0.03	2.30 0.09	48.2	14.1	0.0885	0.74 1.64
28.000 1.1024	23.000 0.9055	-7.6 -0.30	3.0 0.12	57.0 2.24	63.0 2.48	2.5 0.10	85.0 3.35	80.0 3.15	0.80 0.03	2.30 0.09	48.2	14.1	0.0885	0.74 1.64
28.000 1.1024	23.000 0.9055	-7.6 -0.30	3.0 0.12	57.0 2.24	63.0 2.48	0.8 0.03	85.0 3.35	81.0 3.19	0.80 0.03	2.30 0.09	48.2	14.1	0.0885	0.74 1.64
33.500 1.3189	27.000 1.0630	-8.1 -0.32	2.0 0.08	62.0 2.44	67.0 2.64	1.5 0.06	96.0 3.78	89.0 3.50	1.40 0.05	2.80 0.11	59.3	15.3	0.1010	1.24 2.73

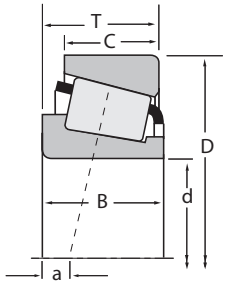
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

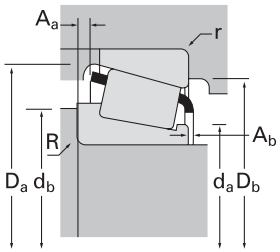
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
50.000 1.9685	105.000 4.1339	32.000 1.2598	111000 24900	0.87	0.69	28700 6440	42500 9560	0.67	138000 31000	JW5049	JW5010
50.000 1.9685	105.000 4.1339	37.000 1.4567	159000 35700	0.49	1.23	41200 9260	34400 7730	1.20	223000 50200	JHM807045	JHM807012
50.800 2.0000	77.788 3.0625	12.700 0.5000	34600 7770	0.34	1.78	8960 2010	5160 1160	1.74	47200 10600	LL205449	LL205410
50.800 2.0000	80.962 3.1875	18.258 0.7188	56300 12700	0.36	1.69	14600 3280	8880 2000	1.64	88800 20000	L305649	L305610
50.800 2.0000	82.000 3.2283	21.976 0.8652	75200 16900	0.31	1.97	19500 4390	10200 2290	1.91	104000 23400	LM104949	JLM104910
50.800 2.0000	82.550 3.2500	21.590 0.8500	75200 16900	0.31	1.97	19500 4390	10200 2290	1.91	104000 23400	LM104949	LM104911
50.800 2.0000	82.550 3.2500	23.622 0.9300	75200 16900	0.31	1.97	19500 4390	10200 2290	1.91	104000 23400	LM104949	LM104911A
50.800 2.0000	82.931 3.2650	21.590 0.8500	75200 16900	0.31	1.97	19500 4390	10200 2290	1.91	104000 23400	LM104949	LM104912
50.800 2.0000	83.312 3.2800	17.462 0.6875	50600 11400	0.41	1.48	13100 2950	9110 2050	1.44	67500 15200	18790	18721
50.800 2.0000	85.000 3.3465	17.462 0.6875	50600 11400	0.41	1.48	13100 2950	9110 2050	1.44	67500 15200	18790	18720
50.800 2.0000	85.725 3.3750	19.050 0.7500	47800 10700	0.57	1.06	12400 2780	12000 2710	1.03	63900 14400	18200	18337
50.800 2.0000	88.900 3.5000	17.462 0.6875	50600 11400	0.41	1.48	13100 2950	9110 2050	1.44	67500 15200	18790	18724
50.800 2.0000	88.900 3.5000	20.638 0.8125	50600 11400	0.41	1.48	13100 2950	9110 2050	1.44	67500 15200	18790	18723
50.800 2.0000	88.900 3.5000	20.638 0.8125	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	368	362A
50.800 2.0000	88.900 3.5000	20.638 0.8125	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	368A	362A
50.800 2.0000	88.900 3.5000	20.638 0.8125	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	370A	362A
50.800 2.0000	88.900 3.5000	23.812 0.9375	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	368A	362AX
50.800 2.0000	89.980 3.5425	24.750 0.9744	91600 20600	0.38	1.59	23700 5340	15300 3450	1.55	130000 29200	28580	28520
50.800 2.0000	90.000 3.5433	20.000 0.7874	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	368	362
50.800 2.0000	90.000 3.5433	20.000 0.7874	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	368	363
50.800 2.0000	90.000 3.5433	20.000 0.7874	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	368A	362
50.800 2.0000	90.000 3.5433	20.000 0.7874	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	370A	362
50.800 2.0000	92.075 3.6250	24.608 0.9688	91600 20600	0.38	1.59	23700 5340	15300 3450	1.55	130000 29200	28580	28521
50.800 2.0000	92.075 3.6250	27.780 1.0937	91600 20600	0.38	1.59	23700 5340	15300 3450	1.55	130000 29200	28580	28523
50.800 2.0000	93.264 3.6718	20.638 0.8125	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	375	374
50.400 2.0000	93.264 3.6718	20.638 0.8125	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	375-S	374
50.800 2.0000	93.264 3.6718	26.988 1.0625	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	375	3720
50.800 2.0000	93.264 3.6718	26.988 1.0625	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	375	3730

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
29.000 1.1417	22.000 0.8661	4.3 0.17	3.0 0.12	60.0 2.36	76.0 2.99	3.0 0.12	100.0 3.94	86.0 3.39	4.90 0.19	3.60 0.14	39	14.6	0.1105	1.23 2.72
36.000 1.4173	29.000 1.1417	-7.6 -0.30	3.0 0.12	63.0 2.48	69.0 2.72	2.5 0.10	100.0 3.94	90.0 3.54	3.60 0.14	2.60 0.10	63.9	17.1	0.0760	1.49 3.28
12.700 0.5000	9.525 0.3750	0.0 0.00	1.5 0.06	55.0 2.17	57.0 2.24	1.5 0.06	74.0 2.91	71.0 2.80	0.20 0.01	1.70 0.07	24.2	29.1	0.0699	0.20 0.45
18.258 0.7188	14.288 0.5625	-2.5 -0.10	1.5 0.06	56.0 2.20	58.0 2.28	1.5 0.06	77.0 3.03	73.0 2.87	0.30 0.01	1.90 0.08	38.8	27.8	0.0841	0.35 0.77
22.225 0.8750	17.000 0.6693	-5.8 -0.23	3.5 0.14	56.0 2.20	63.0 2.48	0.5 0.02	78.0 3.07	76.0 2.99	1.20 0.05	2.00 0.08	38.8	19.3	0.0801	0.42 0.93
22.225 0.8750	16.510 0.6500	-5.8 -0.23	3.5 0.14	56.0 2.20	63.0 2.48	1.3 0.05	78.0 3.07	75.0 2.95	1.20 0.05	2.00 0.08	38.8	19.3	0.0801	0.42 0.93
22.225 0.8750	18.542 0.7300	-5.8 -0.23	3.5 0.14	56.0 2.20	63.0 2.48	0.8 0.03	78.0 3.07	75.0 2.95	1.20 0.05	2.00 0.08	38.8	19.3	0.0801	0.45 0.99
22.225 0.8750	16.510 0.6500	-5.8 -0.23	3.5 0.14	56.0 2.20	63.0 2.48	1.3 0.05	77.5 3.06	75.0 2.95	1.20 0.05	2.00 0.08	38.8	19.3	0.0801	0.43 0.95
17.462 0.6875	13.495 0.5313	-0.8 -0.03	3.5 0.14	56.0 2.20	62.0 2.44	0.8 0.03	79.0 3.11	77.0 3.03	0.80 0.03	1.50 0.06	28.6	21.5	0.0789	0.34 0.76
17.462 0.6875	13.495 0.5313	-0.8 -0.03	3.5 0.14	56.0 2.20	62.0 2.44	1.5 0.06	80.0 3.15	77.0 3.03	0.80 0.03	1.50 0.06	28.6	21.5	0.0789	0.37 0.81
18.263 0.7190	12.700 0.5000	2.0 0.08	1.5 0.06	56.0 2.20	59.0 2.32	1.5 0.06	81.0 3.19	76.0 2.99	* *	* *	26.1	20.3	0.0852	0.40 0.88
17.462 0.6875	13.495 0.5313	-0.8 -0.03	3.5 0.14	56.0 2.20	62.0 2.44	1.3 0.05	82.0 3.23	78.0 3.07	0.80 0.03	1.50 0.06	28.6	21.5	0.0789	0.42 0.93
17.462 0.6875	16.670 0.6563	-0.8 -0.03	3.5 0.14	56.0 2.20	62.0 2.44	1.3 0.05	82.0 3.23	78.0 3.07	0.80 0.03	1.50 0.06	28.6	21.5	0.0789	0.48 1.06
22.225 0.8750	16.513 0.6501	-4.3 -0.17	1.5 0.06	56.0 2.20	58.0 2.28	1.3 0.05	84.0 3.31	81.0 3.19	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.51 1.12
22.225 0.8750	16.513 0.6501	-4.3 -0.17	3.5 0.14	56.0 2.20	62.0 2.44	1.3 0.05	84.0 3.31	81.0 3.19	0.40 0.02	1.10 0.04	33.8	12.7	0.0773	0.50 1.10
22.225 0.8750	16.513 0.6501	-4.3 -0.17	5.0 0.20	56.0 2.20	65.0 2.56	1.3 0.05	84.0 3.31	81.0 3.19	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.49 1.08
22.225 0.8750	19.688 0.7751	-4.3 -0.17	3.5 0.14	56.0 2.20	62.0 2.44	1.3 0.05	84.0 3.31	80.0 3.15	0.40 0.02	1.10 0.04	33.8	12.7	0.0773	0.55 1.21
25.400 1.0000	19.987 0.7869	-4.8 -0.19	3.5 0.14	57.0 2.24	63.0 2.48	2.3 0.09	86.0 3.39	81.0 3.19	1.40 0.06	1.00 0.04	46.4	22.6	0.0912	0.66 1.45
22.225 0.8750	15.875 0.6250	-4.3 -0.17	1.5 0.06	56.0 2.20	58.0 2.28	2.0 0.08	84.0 3.31	81.0 3.19	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.52 1.14
22.225 0.8750	20.000 0.7874	-4.3 -0.17	1.5 0.06	56.0 2.20	58.0 2.28	0.8 0.03	85.0 3.34	82.0 3.23	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.55 1.21
22.225 0.8750	15.875 0.6250	-4.3 -0.17	3.5 0.14	56.0 2.20	62.0 2.44	2.0 0.08	84.0 3.31	81.0 3.19	0.40 0.02	1.10 0.04	33.8	12.7	0.0773	0.51 1.12
22.225 0.8750	15.875 0.6250	-4.3 -0.17	5.0 0.20	56.0 2.20	65.0 2.56	2.0 0.08	84.0 3.31	81.0 3.19	0.50 0.02	1.00 0.04	33.8	14	0.0773	0.50 1.10
25.400 1.0000	19.845 0.7813	-4.8 -0.19	3.5 0.14	57.0 2.24	63.0 2.48	0.8 0.03	87.0 3.43	83.0 3.27	1.40 0.06	1.00 0.04	46.4	22.6	0.0912	0.71 1.56
25.400 1.0000	23.017 0.9062	-4.8 -0.19	3.5 0.14	57.0 2.24	63.0 2.48	2.3 0.09	87.0 3.43	81.0 3.19	1.40 0.06	1.00 0.04	46.4	22.6	0.0912	0.76 1.67
22.225 0.8750	15.083 0.5938	-3.8 -0.15	2.3 0.09	57.0 2.24	60.0 2.36	1.3 0.05	88.0 3.46	85.0 3.35	0.80 0.03	1.40 0.06	37.6	15.4	0.0816	0.59 1.31
22.225 0.8750	15.083 0.5938	-3.8 -0.15	3.5 0.14	57.0 2.24	63.0 2.48	1.3 0.05	88.0 3.46	85.0 3.35	0.80 0.03	1.40 0.06	37.6	15.4	0.0816	0.59 1.30
22.225 0.8750	23.812 0.9375	-3.8 -0.15	2.3 0.09	57.0 2.24	60.0 2.36	3.3 0.13	88.0 3.46	82.0 3.23	0.80 0.03	1.40 0.06	37.6	15.4	0.0816	0.70 1.55
22.225 0.8750	23.812 0.9375	-3.8 -0.15	2.3 0.09	57.0 2.24	60.0 2.36	0.8 0.03	88.0 3.46	84.0 3.31	0.80 0.03	1.40 0.06	37.6	15.4	0.0816	0.72 1.58

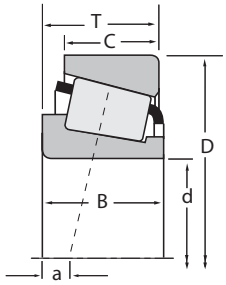
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

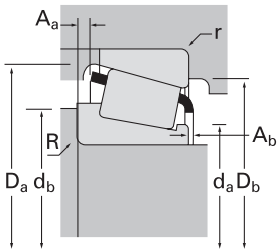
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
50.800 2.0000	93.264 3.6718	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3775	3720
50.800 2.0000	93.264 3.6718	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3780	3720
50.800 2.0000	93.264 3.6718	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3780	3730
50.800 2.0000	93.264 3.6718	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3784	3720
50.800 2.0000	93.662 3.6875	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3784	3727
50.800 2.0000	95.250 3.7500	27.783 1.0938	120000 27000	0.33	1.82	31100 7000	17600 3950	1.77	161000 36200	33889	33821
50.800 2.0000	95.250 3.7500	27.783 1.0938	120000 27000	0.33	1.82	31100 7000	17600 3950	1.77	161000 36200	33889	33822
50.800 2.0000	95.250 3.7500	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3780	3726
50.800 2.0000	96.838 3.8125	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	385A	382A
50.800 2.0000	96.838 3.8125	22.225 0.8750	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	375	372A
50.400 2.0000	96.838 3.8125	22.225 0.8750	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	375-S	372A
50.800 2.0000	96.838 3.8125	25.400 1.0000	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	385A	382-S
50.800 2.0000	98.425 3.8750	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	385A	382
50.800 2.0000	98.425 3.8750	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3780	3732
50.800 2.0000	100.000 3.9370	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	385A	383A
50.800 2.0000	100.000 3.9370	25.000 0.9842	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	375	372
50.800 2.0000	100.000 3.9370	25.400 1.0000	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	385A	383X
50.800 2.0000	100.000 3.9370	34.925 1.3750	152000 34300	0.29	2.10	39500 8880	19300 4340	2.05	191000 43000	529	520X
50.800 2.0000	100.000 3.9370	34.925 1.3750	152000 34300	0.29	2.10	39500 8880	19300 4340	2.05	191000 43000	529X	520X
50.800 2.0000	100.000 3.9370	34.925 1.3750	152000 34300	0.29	2.10	39500 8880	19300 4340	2.05	191000 43000	529X	J520
50.800 2.0000	101.600 4.0000	31.750 1.2500	123000 27600	0.40	1.50	31900 7160	21900 4910	1.46	155000 35000	49585	49520
50.800 2.0000	101.600 4.0000	31.750 1.2500	123000 27600	0.40	1.50	31900 7160	21900 4910	1.46	155000 35000	49585	49522
50.800 2.0000	101.600 4.0000	34.925 1.3750	152000 34300	0.29	2.10	39500 8880	19300 4340	2.05	191000 43000	529	522
50.800 2.0000	101.600 4.0000	34.925 1.3750	152000 34300	0.29	2.10	39500 8880	19300 4340	2.05	191000 43000	529X	522
50.800 2.0000	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45284	45220
50.800 2.0000	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45284	45221
50.800 2.0000	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45285	45220
50.800 2.0000	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45285	45221

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

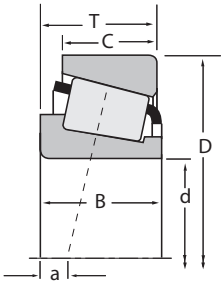
Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
30.302 1.1930	**23.812** 0.9375	**-8.1** -0.32	**0.8** 0.03	**58.0** 2.28	**58.0** 2.28	**3.3** 0.13	**88.0** 3.46	**82.0** 3.23	**1.90** 0.07	**0.90** 0.04	**49.9**	**14.5**	**0.0903**	**0.85** 1.87
30.302 1.1930	**23.812** 0.9375	**-8.1** -0.32	**3.5** 0.14	**58.0** 2.28	**64.0** 2.52	**3.3** 0.13	**88.0** 3.46	**82.0** 3.23	**1.80** 0.07	**0.90** 0.04	**49.9**	**14.5**	**0.0903**	**0.84** 1.86
30.302 1.1930	**23.812** 0.9375	**-8.1** -0.32	**3.5** 0.14	**58.0** 2.28	**64.0** 2.52	**0.8** 0.03	**88.0** 3.46	**84.0** 3.31	**1.80** 0.07	**0.90** 0.04	**49.9**	**14.5**	**0.0903**	**0.85** 1.88
30.302 1.1930	**23.812** 0.9375	**-8.1** -0.32	**6.4** 0.25	**58.0** 2.28	**70.0** 2.76	**3.3** 0.13	**88.0** 3.46	**82.0** 3.23	**1.80** 0.07	**0.90** 0.04	**49.9**	**14.5**	**0.0903**	**0.82** 1.81
30.302 1.1930	**23.812** 0.9375	**-8.1** -0.32	**6.4** 0.25	**58.0** 2.28	**70.0** 2.76	**3.3** 0.13	**88.0** 3.46	**82.0** 3.23	**1.80** 0.07	**0.90** 0.04	**49.9**	**14.5**	**0.0903**	**0.83** 1.84
28.575 1.1250	**22.225** 0.8750	**-7.6** -0.30	**3.5** 0.14	**58.0** 2.28	**64.0** 2.52	**2.3** 0.09	**90.0** 3.54	**85.0** 3.35	**1.30** 0.05	**2.20** 0.09	**52.5**	**18.5**	**0.0910**	**0.85** 1.87
28.575 1.1250	**22.225** 0.8750	**-7.6** -0.30	**3.5** 0.14	**58.0** 2.28	**64.0** 2.52	**0.8** 0.03	**90.0** 3.54	**86.0** 3.39	**1.30** 0.05	**2.20** 0.09	**52.5**	**18.5**	**0.0910**	**0.85** 1.88
30.302 1.1930	**23.812** 0.9375	**-8.1** -0.32	**3.5** 0.14	**58.0** 2.28	**64.0** 2.52	**3.3** 0.13	**89.0** 3.50	**83.0** 3.27	**1.80** 0.07	**0.90** 0.04	**49.9**	**14.5**	**0.0903**	**0.90** 1.98
21.946 0.8640	**15.875** 0.6250	**-3.0** -0.12	**2.3** 0.09	**60.0** 2.36	**61.0** 2.40	**0.8** 0.03	**92.0** 3.62	**89.0** 3.50	**1.10** 0.04	**2.00** 0.08	**42**	**15.7**	**0.0859**	**0.68** 1.50
22.225 0.8750	**19.050** 0.7500	**-3.8** -0.15	**2.3** 0.09	**57.0** 2.24	**60.0** 2.36	**1.5** 0.06	**90.0** 3.54	**86.0** 3.39	**0.80** 0.03	**1.40** 0.06	**37.6**	**15.4**	**0.0816**	**0.71** 1.57
22.225 0.8750	**19.050** 0.7500	**-3.8** -0.15	**3.5** 0.14	**57.0** 2.24	**63.0** 2.48	**1.5** 0.06	**90.0** 3.54	**86.0** 3.39	**0.80** 0.03	**1.40** 0.06	**37.6**	**15.4**	**0.0816**	**0.71** 1.56
21.946 0.8640	**20.274** 0.7982	**-3.0** -0.12	**2.3** 0.09	**60.0** 2.36	**61.0** 2.40	**2.3** 0.09	**91.0** 3.58	**87.0** 3.43	**1.10** 0.04	**2.00** 0.08	**42**	**15.7**	**0.0859**	**0.74** 1.64
21.946 0.8640	**17.826** 0.7018	**-3.0** -0.12	**2.3** 0.09	**60.0** 2.36	**61.0** 2.40	**0.8** 0.03	**92.0** 3.62	**90.0** 3.54	**1.10** 0.04	**2.00** 0.08	**42**	**15.7**	**0.0859**	**0.73** 1.60
30.302 1.1930	**23.812** 0.9375	**-8.1** -0.32	**3.5** 0.14	**58.0** 2.28	**64.0** 2.52	**3.3** 0.13	**90.0** 3.54	**84.0** 3.31	**1.80** 0.07	**0.90** 0.04	**49.9**	**14.5**	**0.0903**	**0.99** 2.17
21.946 0.8640	**17.826** 0.7018	**-3.0** -0.12	**2.3** 0.09	**60.0** 2.36	**61.0** 2.40	**2.0** 0.08	**93.0** 3.66	**89.0** 3.50	**1.10** 0.04	**2.00** 0.08	**42**	**15.7**	**0.0859**	**0.76** 1.67
22.225 0.8750	**21.824** 0.8592	**-3.8** -0.15	**2.3** 0.09	**57.0** 2.24	**60.0** 2.36	**2.0** 0.08	**90.0** 3.54	**86.0** 3.39	**0.80** 0.03	**1.40** 0.06	**37.6**	**15.4**	**0.0816**	**0.85** 1.88
21.946 0.8640	**22.225** 0.8750	**-3.0** -0.12	**2.3** 0.09	**60.0** 2.36	**61.0** 2.40	**1.3** 0.05	**93.0** 3.66	**89.0** 3.50	**1.10** 0.04	**2.00** 0.08	**42**	**15.7**	**0.0859**	**0.85** 1.87
36.068 1.4200	**26.988** 1.0625	**-12.7** -0.50	**0.8** 0.03	**58.0** 2.28	**59.0** 2.32	**3.3** 0.13	**94.0** 3.70	**88.0** 3.46	**2.70** 0.11	**1.80** 0.07	**57.9**	**13.4**	**0.0894**	**1.18** 2.61
36.068 1.4200	**26.988** 1.0625	**-12.7** -0.50	**3.5** 0.14	**58.0** 2.28	**65.0** 2.56	**3.3** 0.13	**94.0** 3.70	**88.0** 3.46	**2.70** 0.11	**1.80** 0.07	**57.9**	**13.4**	**0.0894**	**1.18** 2.59
36.068 1.4200	**26.988** 1.0625	**-12.7** -0.50	**3.5** 0.14	**58.0** 2.28	**65.0** 2.56	**3.3** 0.13	**94.0** 3.70	**88.0** 3.46	**2.70** 0.11	**1.80** 0.07	**57.9**	**13.4**	**0.0894**	**1.19** 2.63
31.750 1.2500	**25.400** 1.0000	**-7.1** -0.28	**3.5** 0.14	**59.0** 2.32	**66.0** 2.60	**3.3** 0.13	**96.0** 3.78	**88.0** 3.46	**2.30** 0.09	**1.30** 0.05	**49.1**	**14.2**	**0.0946**	**1.12** 2.46
31.750 1.2500	**25.400** 1.0000	**-7.1** -0.28	**3.5** 0.14	**59.0** 2.32	**66.0** 2.60	**0.8** 0.03	**96.0** 3.78	**90.0** 3.54	**2.30** 0.09	**1.30** 0.05	**49.1**	**14.2**	**0.0946**	**1.13** 2.49
36.068 1.4200	**26.988** 1.0625	**-12.7** -0.50	**0.8** 0.03	**58.0** 2.28	**59.0** 2.32	**3.3** 0.13	**95.0** 3.74	**89.0** 3.50	**2.70** 0.11	**1.80** 0.07	**57.9**	**13.4**	**0.0894**	**1.24** 2.73
36.068 1.4200	**26.988** 1.0625	**-12.7** -0.50	**3.5** 0.14	**58.0** 2.28	**65.0** 2.56	**3.3** 0.13	**95.0** 3.74	**89.0** 3.50	**2.70** 0.11	**1.80** 0.07	**57.9**	**13.4**	**0.0894**	**1.23** 2.71
30.958 1.2188	**23.812** 0.9375	**-8.1** -0.32	**6.4** 0.25	**59.0** 2.32	**71.0** 2.80	**3.3** 0.13	**99.0** 3.90	**93.0** 3.66	**2.10** 0.08	**1.80** 0.07	**63.5**	**16.9**	**0.0971**	**1.19** 2.62
30.958 1.2188	**23.812** 0.9375	**-8.1** -0.32	**6.4** 0.25	**59.0** 2.32	**71.0** 2.80	**0.8** 0.03	**99.0** 3.90	**95.0** 3.74	**2.10** 0.08	**1.80** 0.07	**63.5**	**16.9**	**0.0971**	**1.19** 2.62
30.958 1.2188	**23.812** 0.9375	**-8.1** -0.32	**2.3** 0.09	**59.0** 2.32	**63.0** 2.48	**3.3** 0.13	**99.0** 3.90	**93.0** 3.66	**2.10** 0.08	**1.80** 0.07	**63.5**	**16.9**	**0.0971**	**1.21** 2.68
30.958 1.2188	**23.812** 0.9375	**-8.1** -0.32	**2.3** 0.09	**59.0** 2.32	**63.0** 2.48	**0.8** 0.03	**99.0** 3.90	**95.0** 3.74	**2.10** 0.08	**1.80** 0.07	**63.5**	**16.9**	**0.0971**	**1.22** 2.69

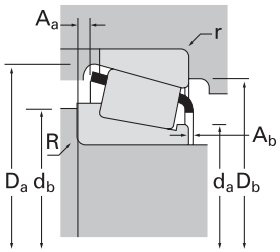
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
50.800 2.0000	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45285A	45220
50.800 2.0000	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45285A	45221
50.800 2.0000	104.775 4.1250	30.162 1.1875	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	455	453X
50.800 2.0000	104.775 4.1250	30.162 1.1875	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	455-S	453X
50.800 2.0000	104.775 4.1250	36.512 1.4375	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59200	59412
50.800 2.0000	104.775 4.1250	36.512 1.4375	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59200	59413
50.800 2.0000	104.775 4.1250	36.512 1.4375	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59201	59412
50.800 2.0000	104.775 4.1250	36.512 1.4375	159000 35700	0.49	1.23	41200 9260	34400 7730	1.20	223000 50200	HM807046	HM807010
50.800 2.0000	104.775 4.1250	36.512 1.4375	159000 35700	0.49	1.23	41200 9260	34400 7730	1.20	223000 50200	HM807046	HM807011
50.800 2.0000	104.775 4.1250	39.688 1.5625	167000 37500	0.34	1.79	43300 9730	24900 5590	1.74	237000 53200	4580	4535
50.800 2.0000	105.000 4.1339	36.873 1.4517	159000 35700	0.49	1.23	41200 9260	34400 7730	1.20	223000 50200	HM807046	JHM807012
50.800 2.0000	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	455	453A
50.800 2.0000	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	455-S	453A
50.800 2.0000	107.950 4.2500	27.795 1.0943	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	455	453
50.800 2.0000	107.950 4.2500	36.512 1.4375	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59200	59425
50.800 2.0000	110.000 4.3307	27.795 1.0943	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	455	454
50.800 2.0000	111.125 4.3750	30.162 1.1875	98500 22100	0.88	0.68	25500 5740	38600 8690	0.66	119000 26700	55200	55437
50.800 2.0000	111.125 4.3750	30.162 1.1875	118000 26500	0.88	0.68	30600 6880	46300 10400	0.66	161000 36200	55200C	55437
50.800 2.0000	111.125 4.3750	30.162 1.1875	114000 25600	0.88	0.68	29500 6640	44700 10000	0.66	153000 34400	HM907643	HM907614
50.800 2.0000	111.125 4.3750	38.108 1.5003	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	455	4536
50.800 2.0000	111.125 4.3750	38.108 1.5003	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	455-S	4536
50.800 2.0000	112.712 4.4375	30.162 1.1875	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39573	39520
50.800 2.0000	112.712 4.4375	30.162 1.1875	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39573	39521
50.800 2.0000	112.712 4.4375	30.162 1.1875	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39575	39520
50.800 2.0000	112.712 4.4375	30.162 1.1875	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39575	39521
50.800 2.0000	112.712 4.4375	30.162 1.1875	98500 22100	0.88	0.68	25500 5740	38600 8690	0.66	119000 26700	55200	55443
50.800 2.0000	114.300 4.5000	44.450 1.7500	207000 46500	0.43	1.39	53700 12100	39500 8880	1.36	256000 57500	65395	65320
50.800 2.0000	117.475 4.6250	33.338 1.3125	138000 31000	0.63	0.96	35800 8040	38300 8620	0.93	166000 37300	66200	66462

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
30.958 1.2188	**23.812** 0.9375	**-8.1** -0.32	**0.8** 0.03	**59.0** 2.32	**60.0** 2.36	**3.3** 0.13	**99.0** 3.90	**93.0** 3.66	**2.10** 0.08	**1.80** 0.07	**63.5**	**16.9**	**0.0971**	**1.21** 2.68
30.958 1.2188	**23.812** 0.9375	**-8.1** -0.32	**0.8** 0.03	**59.0** 2.32	**60.0** 2.36	**0.8** 0.03	**99.0** 3.90	**95.0** 3.74	**2.10** 0.08	**1.80** 0.07	**63.5**	**16.9**	**0.0971**	**1.22** 2.68
29.317 1.1542	**24.605** 0.9687	**-7.1** -0.28	**0.8** 0.03	**59.0** 2.32	**60.0** 2.36	**3.3** 0.13	**98.0** 3.86	**92.0** 3.62	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.18** 2.59
29.317 1.1542	**24.605** 0.9687	**-7.1** -0.28	**3.5** 0.14	**59.0** 2.32	**65.0** 2.56	**3.3** 0.13	**98.0** 3.86	**92.0** 3.62	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.17** 2.57
36.512 1.4375	**28.575** 1.1250	**-9.7** -0.38	**3.5** 0.14	**61.0** 2.40	**68.0** 2.68	**3.3** 0.13	**99.0** 3.90	**92.0** 3.62	**3.40** 0.14	**1.30** 0.05	**57.3**	**14.7**	**0.0999**	**1.40** 3.09
36.512 1.4375	**28.575** 1.1250	**-9.7** -0.38	**3.5** 0.14	**61.0** 2.40	**68.0** 2.68	**0.8** 0.03	**102.0** 4.02	**87.0** 3.43	**3.40** 0.14	**1.30** 0.05	**57.3**	**14.7**	**0.0999**	**1.42** 3.12
36.512 1.4375	**28.575** 1.1250	**-9.7** -0.38	**0.8** 0.03	**61.0** 2.40	**62.0** 2.44	**3.3** 0.13	**99.0** 3.90	**92.0** 3.62	**3.40** 0.14	**1.30** 0.05	**57.3**	**14.7**	**0.0999**	**1.41** 3.11
36.512 1.4375	**28.575** 1.1250	**-7.4** -0.29	**3.5** 0.14	**63.0** 2.48	**70.0** 2.76	**3.3** 0.13	**100.0** 3.94	**89.0** 3.50	**3.40** 0.14	**1.90** 0.08	**63.9**	**17.1**	**0.0760**	**1.47** 3.24
36.512 1.4375	**28.575** 1.1250	**-7.4** -0.29	**3.5** 0.14	**63.0** 2.48	**70.0** 2.76	**0.8** 0.03	**100.0** 3.94	**91.0** 3.58	**3.40** 0.14	**1.90** 0.08	**63.9**	**17.1**	**0.0760**	**1.47** 3.25
40.157 1.5810	**33.338** 1.3125	**-12.4** -0.49	**3.5** 0.14	**61.0** 2.40	**67.0** 2.64	**3.3** 0.13	**99.0** 3.90	**90.0** 3.54	**1.70** 0.07	**1.30** 0.05	**73.6**	**18.5**	**0.1027**	**1.62** 3.58
36.512 1.4375	**29.000** 1.1417	**-7.4** -0.29	**3.5** 0.14	**63.0** 2.48	**70.0** 2.76	**2.5** 0.10	**100.0** 3.94	**90.0** 3.54	**3.40** 0.14	**1.90** 0.08	**63.9**	**17.1**	**0.0760**	**1.49** 3.28
29.317 1.1542	**22.225** 0.8750	**-7.1** -0.28	**0.8** 0.03	**59.0** 2.32	**60.0** 2.36	**0.8** 0.03	**100.0** 3.94	**97.0** 3.82	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.23** 2.71
29.317 1.1542	**22.225** 0.8750	**-7.1** -0.28	**3.5** 0.14	**59.0** 2.32	**65.0** 2.56	**0.8** 0.03	**100.0** 3.94	**97.0** 3.82	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.22** 2.70
29.317 1.1542	**27.000** 1.0630	**-7.1** -0.28	**0.8** 0.03	**59.0** 2.32	**60.0** 2.36	**0.8** 0.03	**100.0** 3.94	**97.0** 3.82	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.29** 2.84
36.512 1.4375	**28.575** 1.1250	**-9.7** -0.38	**3.5** 0.14	**61.0** 2.40	**68.0** 2.68	**3.3** 0.13	**101.0** 3.98	**93.0** 3.66	**3.40** 0.14	**1.30** 0.05	**57.3**	**14.7**	**0.0999**	**1.52** 3.35
29.317 1.1542	**27.000** 1.0630	**-7.1** -0.28	**0.8** 0.03	**59.0** 2.32	**60.0** 2.36	**2.0** 0.08	**100.0** 3.94	**96.0** 3.78	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.36** 2.99
26.909 1.0594	**20.638** 0.8125	**7.1** 0.28	**3.5** 0.14	**64.0** 2.51	**71.0** 2.80	**3.3** 0.13	**105.0** 4.13	**92.0** 3.62	**4.80** 0.19	**3.20** 0.13	**36.8**	**13.2**	**0.1085**	**1.26** 2.77
26.909 1.0594	**20.638** 0.8125	**7.6** 0.30	**3.5** 0.14	**64.5** 2.54	**71.0** 2.80	**3.3** 0.13	**105.0** 4.13	**92.0** 3.62	**5.00** 0.20	**3.60** 0.14	**48.7**	**15.4**	**0.1198**	**1.34** 2.96
28.575 1.1250	**20.638** 0.8125	**7.6** 0.30	**3.5** 0.14	**65.0** 2.56	**74.0** 2.91	**3.3** 0.13	**105.0** 4.13	**91.0** 3.58	**4.60** 0.18	**2.00** 0.08	**46.9**	**13.7**	**0.1183**	**1.34** 2.96
29.317 1.1542	**32.545** 1.2813	**-7.1** -0.28	**0.8** 0.03	**59.0** 2.32	**60.0** 2.36	**3.3** 0.13	**100.0** 3.94	**93.0** 3.66	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.63** 3.60
29.317 1.1542	**32.545** 1.2813	**-7.1** -0.28	**3.5** 0.14	**59.0** 2.32	**65.0** 2.56	**3.3** 0.13	**100.0** 3.94	**93.0** 3.66	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.63** 3.59
30.162 1.1875	**23.812** 0.9375	**-6.6** -0.26	**0.8** 0.03	**61.0** 2.40	**62.0** 2.44	**3.3** 0.13	**107.0** 4.21	**101.0** 3.98	**1.60** 0.06	**2.60** 0.10	**84.3**	**23.7**	**0.1074**	**1.51** 3.33
30.162 1.1875	**23.812** 0.9375	**-6.6** -0.26	**0.8** 0.03	**61.0** 2.40	**62.0** 2.44	**0.8** 0.03	**107.0** 4.21	**103.0** 4.06	**1.60** 0.06	**2.60** 0.10	**84.3**	**23.7**	**0.1074**	**1.52** 3.34
30.162 1.1875	**23.812** 0.9375	**-6.6** -0.26	**3.5** 0.14	**61.0** 2.40	**68.0** 2.68	**3.3** 0.13	**107.0** 4.21	**101.0** 3.98	**1.60** 0.06	**2.60** 0.10	**84.3**	**23.7**	**0.1074**	**1.50** 3.32
30.162 1.1875	**23.812** 0.9375	**-6.6** -0.26	**3.5** 0.14	**61.0** 2.40	**68.0** 2.68	**0.8** 0.03	**107.0** 4.21	**103.0** 4.06	**1.60** 0.06	**2.60** 0.10	**84.3**	**23.7**	**0.1074**	**1.51** 3.32
26.909 1.0594	**20.638** 0.8125	**7.1** 0.28	**3.5** 0.14	**64.0** 2.51	**71.0** 2.80	**3.3** 0.13	**106.0** 4.17	**92.0** 3.62	**4.80** 0.19	**3.20** 0.13	**36.8**	**13.2**	**0.1085**	**1.30** 2.87
44.450 1.7500	**34.925** 1.3750	**-12.4** -0.49	**3.5** 0.14	**60.0** 2.36	**72.0** 2.83	**3.3** 0.13	**107.0** 4.21	**97.0** 3.82	**3.70** 0.14	**1.00** 0.04	**63.1**	**13**	**0.1053**	**2.14** 4.71
31.750 1.2500	**23.812** 0.9375	**-0.3** -0.01	**3.5** 0.14	**65.0** 2.56	**71.0** 2.80	**3.3** 0.13	**111.0** 4.37	**100.0** 3.94	**5.00** 0.20	**2.00** 0.08	**50.2**	**16.4**	**0.0751**	**1.64** 3.61

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

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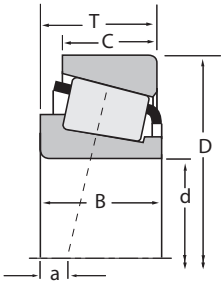
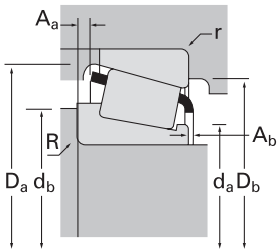
TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
50.800 2.0000	120.650 4.7500	41.275 1.6250	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	619	612
50.800 2.0000	122.238 4.8125	43.658 1.7188	219000 49200	0.36	1.67	56800 12800	34800 7830	1.63	327000 73500	5565	5535
50.800 2.0000	123.825 4.8750	36.512 1.4375	167000 37600	0.74	0.81	43400 9760	54800 12300	0.79	208000 46800	72200C	72487
50.800 2.0000	123.825 4.8750	36.512 1.4375	167000 37600	0.74	0.81	43400 9760	54800 12300	0.79	208000 46800	72201C	72487
50.800 2.0000	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	555	552
50.800 2.0000	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	555	552A
50.800 2.0000	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813836	HM813810
50.800 2.0000	127.000 5.0000	44.450 1.7500	225000 50700	0.49	1.23	58500 13100	48800 11000	1.20	297000 66700	65200	65500
50.800 2.0000	127.000 5.0000	50.800 2.0000	283000 63700	0.30	2.01	73500 16500	37500 8440	1.96	370000 83300	6279	6220
50.815 2.0006	100.000 3.9370	35.000 1.3780	150000 33700	0.40	1.50	38900 8750	26600 5980	1.46	202000 45300	XGA33211	Y33211
51.592 2.0312	88.900 3.5000	20.638 0.8125	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	368-S	362A
51.592 2.0312	90.000 3.5433	20.000 0.7874	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	368-S	362
52.000 2.0472	85.000 3.3465	19.050 0.7500	47800 10700	0.57	1.06	12400 2780	12000 2710	1.03	63900 14400	18204X	18335X
52.000 2.0472	90.000 3.5433	21.750 0.8563	73600 16500	0.42	1.43	19100 4290	13700 3080	1.39	87400 19700	XGA30210	Y30210
52.388 2.0625	89.980 3.5425	24.750 0.9744	91600 20600	0.38	1.59	23700 5340	15300 3450	1.55	130000 29200	28584	28520
52.388 2.0625	92.075 3.6250	24.608 0.9688	91600 20600	0.38	1.59	23700 5340	15300 3450	1.55	130000 29200	28584	28521
52.388 2.0625	93.264 3.6718	20.638 0.8125	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	377	374
52.388 2.0625	93.264 3.6718	20.638 0.8125	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	377A	374
52.388 2.0625	93.264 3.6718	26.988 1.0625	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	377	3720
52.388 2.0625	93.264 3.6718	26.988 1.0625	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	377	3730
52.388 2.0625	93.264 3.6718	26.988 1.0625	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	377A	3720
52.388 2.0625	93.264 3.6718	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3767	3720
52.388 2.0625	93.264 3.6718	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3767	3730
52.388 2.0625	95.250 3.7500	27.783 1.0938	120000 27000	0.33	1.82	31100 7000	17600 3950	1.77	161000 36200	33890	33821
52.388 2.0625	95.250 3.7500	27.783 1.0938	120000 27000	0.33	1.82	31100 7000	17600 3950	1.77	161000 36200	33891	33821
52.388 2.0625	96.838 3.8125	22.225 0.8750	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	377	372A
52.388 2.0625	98.425 3.8750	30.162 1.1875	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3767	3732
52.388 2.0625	100.000 3.9370	25.000 0.9842	81400 18300	0.34	1.77	21100 4750	12200 2750	1.73	101000 22700	377	372

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage							
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.									
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g			
41.275	31.750	-14.0	3.5	61.0	67.0	3.3	110.0	105.0	3.90	1.90	75.9	16.2	0.0694	2.27		
1.6250	1.2500	-0.55	0.14	2.40	2.64	0.13	4.33	4.13	0.15	0.07				5.00		
43.764	36.512	-12.2	1.3	65.0	67.0	3.3	116.0	106.0	2.50	1.20	110	24.2	0.0825	2.69		
1.7230	1.4375	-0.48	0.05	2.56	2.64	0.13	4.57	4.17	0.10	0.05				5.92		
32.791	25.400	2.0	3.5	67.0	77.0	3.3	116.0	102.0	4.70	4.40	57.4	13.5	0.0825	2.11		
1.2910	1.0000	0.08	0.14	2.64	3.03	0.13	4.57	4.02	0.19	0.17				4.66		
32.791	25.400	2.0	0.8	67.0	77.0	3.3	116.0	102.0	4.70	4.40	57.4	13.5	0.0825	2.11		
1.2910	1.0000	0.08	0.03	2.64	3.03	0.13	4.57	4.02	0.19	0.17				4.66		
36.678	33.338	-9.4	2.3	62.0	66.0	3.3	116.0	109.0	2.30	1.20	91	21.1	0.1108	2.36		
1.4440	1.3125	-0.37	0.09	2.44	2.60	0.13	4.57	4.29	0.09	0.05				5.20		
36.678	30.162	-9.4	2.3	62.0	66.0	3.3	116.0	109.0	2.30	1.20	91	21.1	0.1108	2.31		
1.4440	1.1875	-0.37	0.09	2.44	2.60	0.13	4.57	4.29	0.09	0.05				5.09		
36.512	26.988	-3.8	3.5	69.0	75.0	3.3	121.0	111.0	4.00	1.30	91.7	24.3	0.1252	2.42		
1.4375	1.0625	-0.15	0.14	2.72	2.95	0.13	4.76	4.37	0.16	0.05				5.33		
44.450	34.925	-9.4	3.5	69.0	75.0	3.3	119.0	107.0	4.10	1.00	83.2	17.2	0.0827	2.88		
1.7500	1.3750	-0.37	0.14	2.72	2.95	0.13	4.69	4.21	0.16	0.04				6.34		
52.388	41.275	-19.6	3.5	65.0	71.0	3.3	117.0	108.0	2.40	2.60	103	18.7	0.0757	3.35		
2.0625	1.6250	-0.77	0.14	2.56	2.80	0.13	4.61	4.25	0.09	0.10				7.39		
35.000	27.000	-9.7	2.0	62.0	67.0	1.5	96.0	89.0	2.90	2.80	59.3	15.3	0.1010	1.25		
1.3780	1.0630	-0.38	0.08	2.44	2.64	0.06	3.78	3.50	0.11	0.11				2.76		
22.225	16.513	-4.3	2.0	56.0	59.0	1.3	84.0	81.0	0.50	1.00	33.8	14	0.0773	0.50		
0.8750	0.6501	-0.17	0.08	2.20	2.32	0.05	3.31	3.19	0.02	0.04				1.10		
22.225	15.875	-4.3	2.0	56.0	59.0	2.0	84.0	81.0	0.50	1.00	33.8	14	0.0773	0.51		
0.8750	0.6250	-0.17	0.08	2.20	2.32	0.08	3.31	3.19	0.02	0.04				1.11		
18.263	12.500	2.0	2.0	57.0	60.0	1.5	81.0	76.0	2.50	1.60	26.1	20.3	0.0852	0.37		
0.7190	0.4921	0.08	0.08	2.24	2.36	0.06	3.19	2.99	0.10	0.06				0.82		
20.000	17.000	-2.0	4.0	59.0	66.0	1.5	85.0	81.0	1.40	3.10	30.3	15.9	0.0814	0.51		
0.7874	0.6693	-0.08	0.16	2.32	2.60	0.06	3.35	3.19	0.05	0.12				1.13		
25.400	19.987	-4.8	3.5	58.0	65.0	2.3	86.0	81.0	1.40	1.00	46.4	22.6	0.0912	0.62		
1.0000	0.7869	-0.19	0.14	2.28	2.56	0.09	3.39	3.19	0.06	0.04				1.37		
25.400	19.845	-4.8	3.5	58.0	65.0	0.8	87.0	83.0	1.40	1.00	46.4	22.6	0.0912	0.67		
1.0000	0.7813	-0.19	0.14	2.28	2.56	0.03	3.43	3.27	0.06	0.04				1.48		
22.225	15.083	-3.8	2.3	58.0	62.0	1.3	88.0	85.0	0.80	1.40	37.6	15.4	0.0816	0.57		
0.8750	0.5938	-0.15	0.09	2.28	2.44	0.05	3.46	3.35	0.03	0.06				1.26		
22.225	15.083	-3.8	4.8	58.0	67.0	1.3	88.0	85.0	0.80	1.40	37.6	15.4	0.0816	0.56		
0.8750	0.5938	-0.15	0.19	2.28	2.64	0.05	3.46	3.35	0.03	0.06				1.23		
22.225	23.812	-3.8	2.3	58.0	62.0	3.3	88.0	82.0	0.80	1.40	37.6	15.4	0.0816	0.68		
0.8750	0.9375	-0.15	0.09	2.28	2.44	0.13	3.46	3.23	0.03	0.06				1.50		
22.225	23.812	-3.8	2.3	58.0	62.0	0.8	88.0	84.0	0.80	1.40	37.6	15.4	0.0816	0.69		
0.8750	0.9375	-0.15	0.09	2.28	2.44	0.03	3.46	3.31	0.03	0.06				1.53		
22.225	23.812	-3.8	4.8	58.0	67.0	3.3	88.0	82.0	0.80	1.40	37.6	15.4	0.0816	0.67		
0.8750	0.9375	-0.15	0.19	2.28	2.64	0.13	3.46	3.23	0.03	0.06				1.48		
30.302	23.812	-8.1	2.3	59.0	63.0	3.3	88.0	82.0	1.80	0.90	49.9	14.5	0.0903	0.82		
1.1930	0.9375	-0.32	0.09	2.32	2.48	0.13	3.46	3.23	0.07	0.04				1.80		
30.302	23.812	-8.1	2.3	59.0	63.0	0.8	88.0	84.0	1.80	0.90	49.9	14.5	0.0903	0.83		
1.1930	0.9375	-0.32	0.09	2.32	2.48	0.03	3.46	3.31	0.07	0.04				1.82		
28.575	22.225	-7.6	1.5	59.0	61.0	2.3	90.0	85.0	1.30	2.20	52.5	18.5	0.0910	0.82		
1.1250	0.8750	-0.30	0.06	2.32	2.40	0.09	3.54	3.35	0.05	0.09				1.82		
28.575	22.225	-7.6	3.5	59.0	66.0	2.3	90.0	85.0	1.30	2.20	52.5	18.5	0.0910	0.82		
1.1250	0.8750	-0.30	0.14	2.32	2.60	0.09	3.54	3.35	0.05	0.09				1.80		
22.225	19.050	-3.8	2.3	58.0	62.0	1.5	90.0	86.0	0.80	1.40	37.6	15.4	0.0816	0.69		
0.8750	0.7500	-0.15	0.09	2.28	2.44	0.06	3.54	3.39	0.03	0.06				1.52		
30.302	23.812	-8.1	2.3	59.0	63.0	3.3	90.0	84.0	1.80	0.90	49.9	14.5	0.0903	0.96		
1.1930	0.9375	-0.32	0.09	2.32	2.48	0.13	3.54	3.31	0.07	0.04				2.12		
22.225	21.824	-3.8	2.3	58.0	62.0	2.0	90.0	86.0	0.80	1.40	37.6	15.4	0.0816	0.83		
0.8750	0.8592	-0.15	0.09	2.28	2.44	0.08	3.54	3.39	0.03	0.06				1.83		

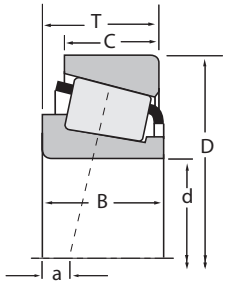
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

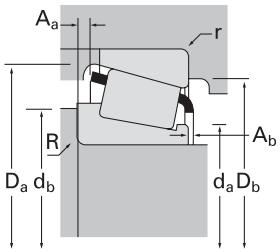
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
52.388 2.0625	104.775 4.1250	30.162 1.1875	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	468	453X
52.388 2.0625	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	468	453A
52.388 2.0625	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	468	453AS
52.388 2.0625	107.950 4.2500	36.512 1.4375	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	540	532X
52.388 2.0625	110.000 4.3307	34.130 1.3437	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	540	534
52.388 2.0625	111.125 4.3750	30.162 1.1875	98500 22100	0.88	0.68	25500 5740	38600 8690	0.66	119000 26700	55206	55437
52.388 2.0625	111.125 4.3750	30.162 1.1875	118000 26500	0.88	0.68	30600 6880	46300 10400	0.66	161000 36200	55206C	55437
52.388 2.0625	111.125 4.3750	38.100 1.5000	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	540	532A
52.388 2.0625	112.712 4.4375	30.162 1.1875	98500 22100	0.88	0.68	25500 5740	38600 8690	0.66	119000 26700	55206	55443
53.975 2.1250	87.312 3.4375	18.258 0.7188	58100 13100	0.39	1.54	15100 3380	10000 2250	1.50	95600 21500	L507945	L507910
53.975 2.1250	88.900 3.5000	19.050 0.7500	60600 13600	0.55	1.10	15700 3530	14700 3300	1.07	81800 18400	LM806649	LM806610
53.975 2.1250	95.250 3.7500	27.783 1.0938	120000 27000	0.33	1.82	31100 7000	17600 3950	1.77	161000 36200	33895	33821
53.975 2.1250	95.250 3.7500	27.783 1.0938	120000 27000	0.33	1.82	31100 7000	17600 3950	1.77	161000 36200	33895	33822
53.975 2.1250	96.838 3.8125	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	389A	382A
53.975 2.1250	98.425 3.8750	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	389A	382
53.975 2.1250	100.000 3.9370	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	389A	383A
53.975 2.1250	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45287	45220
53.975 2.1250	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45287	45221
53.975 2.1250	104.775 4.1250	30.162 1.1875	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	456	453X
53.975 2.1250	104.775 4.1250	36.512 1.4375	159000 35700	0.49	1.23	41200 9260	34400 7730	1.20	223000 50200	HM807049A	HM807011
53.975 2.1250	104.775 4.1250	36.512 1.4375	159000 35700	0.49	1.23	41200 9260	34400 7730	1.20	223000 50200	HM807049	HM807010
53.975 2.1250	104.775 4.1250	36.512 1.4375	159000 35700	0.49	1.23	41200 9260	34400 7730	1.20	223000 50200	HM807049	HM807011
53.975 2.1250	104.775 4.1250	39.688 1.5625	167000 37500	0.34	1.79	43300 9730	24900 5590	1.74	237000 53200	4595	4535
53.975 2.1250	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	456	453A
53.975 2.1250	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	456	453AS
53.975 2.1250	107.950 4.2500	27.795 1.0943	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	456	453
53.975 2.1250	107.950 4.2500	32.558 1.2818	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	456	452A
53.975 2.1250	107.950 4.2500	36.512 1.4375	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	539	532X

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

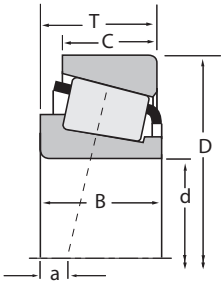
Dimensions, mm (inches)													Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage							
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.									
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g			
29.317 1.1542	**24.605** 0.9687	**-7.1** -0.28	**1.5** 0.06	**60.0** 2.36	**62.0** 2.44	**3.3** 0.13	**98.0** 3.86	**92.0** 3.62	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.13** 2.49		
29.317 1.1542	**22.225** 0.8750	**-7.1** -0.28	**1.5** 0.06	**60.0** 2.36	**62.0** 2.44	**0.8** 0.03	**100.0** 3.94	**97.0** 3.82	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.19** 2.61		
29.317 1.1542	**22.225** 0.8750	**-7.1** -0.28	**1.5** 0.06	**60.0** 2.36	**62.0** 2.44	**2.3** 0.09	**100.0** 3.94	**95.0** 3.74	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.18** 2.61		
36.957 1.4550	**28.575** 1.1250	**-12.2** -0.48	**3.5** 0.14	**60.0** 2.36	**67.0** 2.64	**3.3** 0.13	**100.0** 3.94	**94.0** 3.70	**2.80** 0.11	**0.90** 0.04	**64.3**	**16.1**	**0.0938**	**1.48** 3.27		
36.957 1.4550	**26.988** 1.0625	**-12.2** -0.48	**3.5** 0.14	**60.0** 2.36	**67.0** 2.64	**3.3** 0.13	**100.0** 3.94	**94.0** 3.70	**2.80** 0.11	**0.90** 0.04	**64.3**	**16.1**	**0.0938**	**1.51** 3.33		
26.909 1.0594	**20.638** 0.8125	**7.1** 0.28	**3.5** 0.14	**64.0** 2.51	**72.0** 2.83	**3.3** 0.13	**105.0** 4.13	**92.0** 3.62	**4.80** 0.19	**3.20** 0.13	**36.8**	**13.2**	**0.1085**	**1.23** 2.71		
26.909 1.0594	**20.638** 0.8125	**7.6** 0.30	**3.5** 0.14	**64.5** 2.54	**72.0** 2.83	**3.3** 0.13	**105.0** 4.13	**92.0** 3.62	**5.00** 0.20	**3.60** 0.14	**48.7**	**15.4**	**0.1198**	**1.32** 2.90		
36.957 1.4550	**30.162** 1.1875	**-12.2** -0.48	**3.5** 0.14	**60.0** 2.36	**67.0** 2.64	**3.3** 0.13	**100.0** 3.94	**95.0** 3.74	**2.80** 0.11	**0.90** 0.04	**64.3**	**16.1**	**0.0938**	**1.65** 3.65		
26.909 1.0594	**20.638** 0.8125	**7.1** 0.28	**3.5** 0.14	**64.0** 2.51	**72.0** 2.83	**3.3** 0.13	**106.0** 4.17	**92.0** 3.62	**4.80** 0.19	**3.20** 0.13	**36.8**	**13.2**	**0.1085**	**1.27** 2.81		
18.258 0.7188	**14.288** 0.5625	**-0.8** -0.03	**1.5** 0.06	**60.0** 2.36	**62.0** 2.44	**1.5** 0.06	**83.0** 3.27	**79.0** 3.11	**0.30** 0.01	**2.00** 0.08	**46.1**	**36.9**	**0.0914**	**0.43** 0.94		
19.050 0.7500	**13.492** 0.5312	**2.3** 0.09	**2.3** 0.09	**61.0** 2.40	**65.0** 2.56	**2.0** 0.08	**85.0** 3.35	**80.0** 3.15	**1.50** 0.06	**1.60** 0.06	**31.8**	**22.1**	**0.0900**	**0.42** 0.94		
28.575 1.1250	**22.225** 0.8750	**-7.6** -0.30	**1.5** 0.06	**60.0** 2.36	**63.0** 2.48	**2.3** 0.09	**90.0** 3.54	**85.0** 3.35	**1.30** 0.05	**2.20** 0.09	**52.5**	**18.5**	**0.0910**	**0.80** 1.75		
28.575 1.1250	**22.225** 0.8750	**-7.6** -0.30	**1.5** 0.06	**60.0** 2.36	**63.0** 2.48	**0.8** 0.03	**90.0** 3.54	**86.0** 3.39	**1.30** 0.05	**2.20** 0.09	**52.5**	**18.5**	**0.0910**	**0.80** 1.77		
21.946 0.8640	**15.875** 0.6250	**-3.0** -0.12	**0.8** 0.03	**60.0** 2.36	**61.0** 2.40	**0.8** 0.03	**92.0** 3.62	**89.0** 3.50	**1.10** 0.04	**2.00** 0.08	**42**	**15.7**	**0.0859**	**0.64** 1.41		
21.946 0.8640	**17.826** 0.7018	**-3.0** -0.12	**0.8** 0.03	**60.0** 2.36	**61.0** 2.40	**0.8** 0.03	**92.0** 3.62	**90.0** 3.54	**1.10** 0.04	**2.00** 0.08	**42**	**15.7**	**0.0859**	**0.69** 1.51		
21.946 0.8640	**17.826** 0.7018	**-3.0** -0.12	**0.8** 0.03	**60.0** 2.36	**61.0** 2.40	**2.0** 0.08	**93.0** 3.66	**89.0** 3.50	**1.10** 0.04	**2.00** 0.08	**42**	**15.7**	**0.0859**	**0.72** 1.58		
30.958 1.2188	**23.812** 0.9375	**-8.1** -0.32	**0.8** 0.03	**62.0** 2.44	**62.0** 2.44	**3.3** 0.13	**99.0** 3.90	**93.0** 3.66	**2.10** 0.08	**1.80** 0.07	**63.5**	**16.9**	**0.0971**	**1.15** 2.54		
30.958 1.2188	**23.812** 0.9375	**-8.1** -0.32	**0.8** 0.03	**62.0** 2.44	**62.0** 2.44	**0.8** 0.03	**99.0** 3.90	**95.0** 3.74	**2.10** 0.08	**1.80** 0.07	**63.5**	**16.9**	**0.0971**	**1.15** 2.54		
29.317 1.1542	**24.605** 0.9687	**-7.1** -0.28	**3.5** 0.14	**61.0** 2.40	**68.0** 2.68	**3.3** 0.13	**98.0** 3.86	**92.0** 3.62	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.11** 2.44		
36.512 1.4375	**28.575** 1.1250	**-7.4** -0.29	**1.5** 0.06	**63.0** 2.48	**69.0** 2.72	**0.8** 0.03	**100.0** 3.94	**91.0** 3.58	**3.40** 0.14	**1.90** 0.08	**63.9**	**17.1**	**0.0760**	**1.39** 3.07		
36.512 1.4375	**28.575** 1.1250	**-7.4** -0.29	**3.5** 0.14	**63.0** 2.48	**73.0** 2.87	**3.3** 0.13	**100.0** 3.94	**89.0** 3.50	**3.40** 0.14	**1.90** 0.08	**63.9**	**17.1**	**0.0760**	**1.40** 3.08		
36.512 1.4375	**28.575** 1.1250	**-7.4** -0.29	**3.5** 0.14	**63.0** 2.48	**73.0** 2.87	**0.8** 0.03	**100.0** 3.94	**91.0** 3.58	**3.40** 0.14	**1.90** 0.08	**63.9**	**17.1**	**0.0760**	**1.40** 3.08		
40.157 1.5810	**33.338** 1.3125	**-12.4** -0.49	**3.5** 0.14	**63.0** 2.48	**70.0** 2.76	**3.3** 0.13	**99.0** 3.90	**90.0** 3.54	**1.70** 0.07	**1.30** 0.05	**73.6**	**18.5**	**0.1027**	**1.54** 3.39		
29.317 1.1542	**22.225** 0.8750	**-7.1** -0.28	**3.5** 0.14	**61.0** 2.40	**68.0** 2.68	**0.8** 0.03	**100.0** 3.94	**97.0** 3.82	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.16** 2.56		
29.317 1.1542	**22.225** 0.8750	**-7.1** -0.28	**3.5** 0.14	**61.0** 2.40	**68.0** 2.68	**2.3** 0.09	**100.0** 3.94	**95.0** 3.74	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.16** 2.56		
29.317 1.1542	**27.000** 1.0630	**-7.1** -0.28	**3.5** 0.14	**61.0** 2.40	**68.0** 2.68	**0.8** 0.03	**100.0** 3.94	**97.0** 3.82	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.22** 2.69		
29.317 1.1542	**27.000** 1.0630	**-7.1** -0.28	**3.5** 0.14	**61.0** 2.40	**68.0** 2.68	**3.3** 0.13	**100.0** 3.94	**93.0** 3.66	**2.20** 0.09	**1.40** 0.05	**58.6**	**17.1**	**0.0946**	**1.27** 2.80		
36.957 1.4550	**28.575** 1.1250	**-12.2** -0.48	**3.5** 0.14	**61.0** 2.40	**68.0** 2.68	**3.3** 0.13	**100.0** 3.94	**94.0** 3.70	**2.80** 0.11	**0.90** 0.04	**64.3**	**16.1**	**0.0938**	**1.45** 3.19		

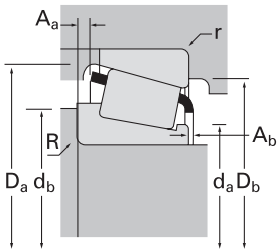
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
53.975 2.1250	107.950 4.2500	36.512 1.4375	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	539A	532X
53.975 2.1250	110.000 4.3307	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	456	454
53.975 2.1250	110.000 4.3307	34.130 1.3437	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	539	534
53.975 2.1250	111.125 4.3750	38.100 1.5000	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	539A	532A
53.975 2.1250	111.125 4.3750	38.895 1.5313	167000 37500	0.34	1.79	43300 9730	24900 5590	1.74	237000 53200	4595	4536
53.975 2.1250	112.712 4.4375	30.162 1.1875	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39578	39520
53.975 2.1250	117.475 4.6250	33.338 1.3125	138000 31000	0.63	0.96	35800 8040	38300 8620	0.93	166000 37300	66212	66461
53.975 2.1250	117.475 4.6250	33.338 1.3125	138000 31000	0.63	0.96	35800 8040	38300 8620	0.93	166000 37300	66212	66462
53.975 2.1250	120.650 4.7500	41.275 1.6250	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	621	612
53.975 2.1250	120.650 4.7500	41.275 1.6250	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	624	612
53.975 2.1250	120.650 4.7500	41.275 1.6250	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	621	612-S
53.975 2.1250	122.238 4.8125	33.338 1.3125	143000 32200	0.67	0.90	37100 8340	42300 9500	0.88	178000 39900	66584	66520
53.975 2.1250	122.238 4.8125	43.658 1.7188	219000 49200	0.36	1.67	56800 12800	34800 7830	1.63	327000 73500	5577	5535
53.975 2.1250	122.238 4.8125	43.658 1.7188	219000 49200	0.36	1.67	56800 12800	34800 7830	1.63	327000 73500	5578	5535
53.975 2.1250	123.825 4.8750	36.512 1.4375	167000 37600	0.74	0.81	43400 9760	54800 12300	0.79	208000 46800	72212C	72487
53.975 2.1250	123.825 4.8750	36.512 1.4375	167000 37600	0.74	0.81	43400 9760	54800 12300	0.79	208000 46800	72213C	72487
53.975 2.1250	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	557-S	552A
53.975 2.1250	127.000 5.0000	36.512 1.4375	167000 37600	0.74	0.81	43400 9760	54800 12300	0.79	208000 46800	72213C	72500
53.975 2.1250	127.000 5.0000	44.450 1.7500	225000 50700	0.49	1.23	58500 13100	48800 11000	1.20	297000 66700	65212	65500
53.975 2.1250	127.000 5.0000	50.800 2.0000	283000 63700	0.30	2.01	73500 16500	37500 8440	1.96	370000 83300	6280	6220
53.975 2.1250	130.175 5.1250	34.100 1.3425	154000 34700	0.82	0.73	40000 9000	56200 12600	0.71	183000 41100	HM911243	HM911210
53.975 2.1250	130.175 5.1250	36.512 1.4375	154000 34700	0.82	0.73	40000 9000	56200 12600	0.71	183000 41100	HM911242	HM911210
53.975 2.1250	134.983 5.3143	33.449 1.3169	154000 34700	0.82	0.73	40000 9000	56200 12600	0.71	183000 41100	HM911243	HM911216
53.975 2.1250	136.525 5.3750	36.512 1.4375	185000 41500	0.87	0.69	47900 10800	71000 16000	0.67	234000 52600	78215C	78537
53.975 2.1250	136.525 5.3750	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	636	632
53.975 2.1250	140.030 5.5130	36.512 1.4375	185000 41500	0.87	0.69	47900 10800	71000 16000	0.67	234000 52600	78214C	78551
53.975 2.1250	140.030 5.5130	36.512 1.4375	185000 41500	0.87	0.69	47900 10800	71000 16000	0.67	234000 52600	78215C	78551
54.487 2.1452	104.775 4.1250	36.512 1.4375	159000 35700	0.49	1.23	41200 9260	34400 7730	1.20	223000 50200	HM807048	HM807010

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

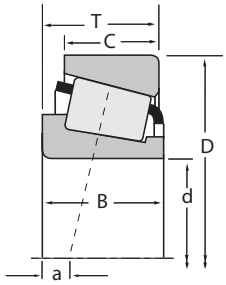
Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
36.957 1.4550	28.575 1.1250	-12.2 -0.48	5.5 0.22	61.0 2.40	72.0 2.83	3.3 0.13	100.0 3.94	94.0 3.70	2.80 0.11	0.90 0.04	64.3	16.1	0.0938	1.43 3.16
29.317 1.1542	27.000 1.0630	-7.1 -0.28	3.5 0.14	61.0 2.40	68.0 2.68	2.0 0.08	100.0 3.94	96.0 3.78	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.29 2.84
36.957 1.4550	26.988 1.0625	-12.2 -0.48	3.5 0.14	61.0 2.40	68.0 2.68	3.3 0.13	100.0 3.94	94.0 3.70	2.80 0.11	0.90 0.04	64.3	16.1	0.0938	1.47 3.24
36.957 1.4550	30.162 1.1875	-12.2 -0.48	5.5 0.22	61.0 2.40	72.0 2.83	3.3 0.13	100.0 3.94	95.0 3.74	2.80 0.11	0.90 0.04	64.3	16.1	0.0938	1.60 3.53
40.157 1.5810	32.545 1.2813	-12.4 -0.49	3.5 0.14	63.0 2.48	70.0 2.76	3.3 0.13	100.0 3.94	93.0 3.66	1.70 0.07	1.30 0.05	73.6	18.5	0.1027	1.79 3.95
30.162 1.1875	23.812 0.9375	-6.6 -0.26	3.5 0.14	64.0 2.52	70.0 2.76	3.3 0.13	107.0 4.21	101.0 3.98	1.60 0.06	2.60 0.10	84.3	23.7	0.1074	1.44 3.18
31.750 1.2500	23.812 0.9375	-0.3 -0.01	3.5 0.14	67.0 2.64	73.0 2.87	0.8 0.03	111.0 4.37	102.0 4.02	5.00 0.20	2.00 0.08	50.2	16.4	0.0751	1.59 3.50
31.750 1.2500	23.812 0.9375	-0.3 -0.01	3.5 0.14	67.0 2.64	73.0 2.87	3.3 0.13	111.0 4.37	100.0 3.94	5.00 0.20	2.00 0.08	50.2	16.4	0.0751	1.57 3.46
41.275 1.6250	31.750 1.2500	-14.0 -0.55	3.5 0.14	63.0 2.48	70.0 2.76	3.3 0.13	110.0 4.33	105.0 4.13	3.90 0.15	1.90 0.07	75.9	16.2	0.0694	2.18 4.82
41.275 1.6250	31.750 1.2500	-14.0 -0.55	0.8 0.03	63.0 2.48	64.0 2.52	3.3 0.13	110.0 4.33	105.0 4.13	3.90 0.15	1.90 0.07	75.9	16.2	0.0694	2.19 4.84
41.275 1.6250	31.750 1.2500	-14.0 -0.55	3.5 0.14	63.0 2.48	70.0 2.76	0.8 0.03	110.0 4.33	107.0 4.21	3.90 0.15	1.90 0.07	75.9	16.2	0.0694	2.20 4.85
31.750 1.2500	23.812 0.9375	2.0 0.08	3.5 0.14	68.0 2.68	75.0 2.95	3.3 0.13	116.0 4.57	105.0 4.13	5.20 0.21	2.00 0.08	57	18.3	0.0797	1.76 3.89
43.764 1.7230	36.512 1.4375	-12.2 -0.48	1.3 0.05	67.0 2.64	69.0 2.72	3.3 0.13	116.0 4.57	106.0 4.17	2.50 0.10	1.20 0.05	110	24.2	0.0825	2.60 5.72
43.764 1.7230	36.512 1.4375	-12.2 -0.48	3.5 0.14	67.0 2.64	73.0 2.87	3.3 0.13	116.0 4.57	106.0 4.17	2.50 0.10	1.20 0.05	110	24.2	0.0825	2.59 5.71
32.791 1.2910	25.400 1.0000	2.0 0.08	3.5 0.14	67.0 2.64	79.0 3.11	3.3 0.13	116.0 4.57	102.0 4.02	4.70 0.19	4.40 0.17	57.4	13.5	0.0825	2.05 4.51
32.791 1.2910	25.400 1.0000	2.0 0.08	3.5 0.14	67.0 2.64	79.0 3.11	3.3 0.13	116.0 4.57	102.0 4.02	4.70 0.19	4.40 0.17	57.4	13.5	0.0825	2.05 4.51
36.678 1.4440	30.162 1.1875	-9.4 -0.37	3.5 0.14	65.0 2.56	71.0 2.80	3.3 0.13	116.0 4.57	109.0 4.29	2.30 0.09	1.20 0.05	91	21.1	0.1108	2.23 4.92
32.791 1.2910	25.400 1.0000	2.0 0.08	3.5 0.14	67.0 2.64	79.0 3.11	3.3 0.13	116.0 4.57	103.0 4.06	4.70 0.19	4.40 0.17	57.4	13.5	0.0825	2.17 4.79
44.450 1.7500	34.925 1.3750	-9.4 -0.37	3.5 0.14	71.0 2.80	77.0 3.03	3.3 0.13	119.0 4.69	107.0 4.21	4.10 0.16	1.00 0.04	83.2	17.2	0.0827	2.79 6.14
52.388 2.0625	41.275 1.6250	-19.6 -0.77	3.5 0.14	67.0 2.64	74.0 2.91	3.3 0.13	117.0 4.61	108.0 4.25	2.40 0.09	2.60 0.10	103	18.7	0.0757	3.25 7.16
30.924 1.2175	23.812 0.9375	7.9 0.31	3.5 0.14	74.0 2.91	79.0 3.11	3.3 0.13	123.5 4.87	109.0 4.29	5.00 0.20	4.20 0.17	56.4	16.5	0.0842	2.13 4.69
33.338 1.3125	23.812 0.9375	5.3 0.21	3.5 0.14	74.0 2.91	79.0 3.11	3.3 0.13	123.5 4.87	109.0 4.29	7.40 0.29	4.20 0.17	56.4	16.5	0.0842	2.22 4.90
30.924 1.2175	21.948 0.8641	7.9 0.31	3.5 0.14	74.0 2.91	79.0 3.11	3.5 0.14	123.0 4.84	112.0 4.41	5.00 0.20	4.20 0.17	56.4	16.5	0.0842	2.25 4.96
33.236 1.3085	23.520 0.9260	8.4 0.33	3.5 0.14	77.5 3.05	84.0 3.31	3.3 0.13	130.0 5.12	115.0 4.53	6.40 0.25	4.90 0.19	71.3	17.6	0.0926	2.59 5.72
41.275 1.6250	31.750 1.2500	-11.2 -0.44	3.5 0.14	67.0 2.64	73.0 2.87	3.3 0.13	125.0 4.92	118.0 4.65	4.20 0.16	1.90 0.08	106	21	0.0814	3.12 6.88
33.236 1.3085	23.520 0.9260	8.4 0.33	0.8 0.03	77.5 3.05	79.0 3.11	2.3 0.09	132.0 5.20	117.0 4.61	6.40 0.25	4.90 0.19	71.3	17.6	0.0926	2.75 6.07
33.236 1.3085	23.520 0.9260	8.4 0.33	3.5 0.14	77.5 3.05	84.0 3.31	2.3 0.09	132.0 5.20	117.0 4.61	6.40 0.25	4.90 0.19	71.3	17.6	0.0926	2.75 6.06
36.512 1.4375	28.575 1.1250	-7.4 -0.29	3.5 0.14	63.0 2.48	73.0 2.87	3.3 0.13	100.0 3.94	89.0 3.50	3.40 0.14	1.90 0.08	63.9	17.1	0.0760	1.37 3.02

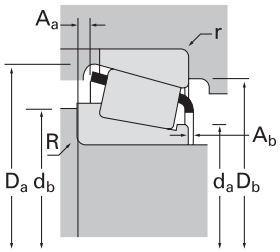
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
54.987 2.1649	103.188 4.0625	38.100 1.5000	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	538	533A
54.987 2.1649	110.000 4.3307	38.100 1.5000	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	538	533X
54.987 2.1649	135.755 5.3447	53.975 2.1250	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	6381	6320
55.000 2.1654	90.000 3.5433	23.000 0.9055	85000 19100	0.40	1.49	22000 4960	15200 3410	1.45	123000 27600	JLM506849A	JLM506810
55.000 2.1654	90.000 3.5433	23.000 0.9055	85000 19100	0.40	1.49	22000 4960	15200 3410	1.45	123000 27600	JLM506849	JLM506810
55.000 2.1654	90.000 3.5433	25.000 0.9843	85000 19100	0.40	1.49	22000 4960	15200 3410	1.45	123000 27600	JLM506849A	JLM506811
55.000 2.1654	95.000 3.7402	29.000 1.1417	121000 27200	0.33	1.79	31300 7040	18000 4040	1.74	168000 37700	JM207049A	JM207010
55.000 2.1654	95.000 3.7402	29.000 1.1417	121000 27200	0.33	1.79	31300 7040	18000 4040	1.74	168000 37700	JM207049	JM207010
55.000 2.1654	95.000 3.7402	30.000 1.1811	121000 27200	0.33	1.79	31300 7040	18000 4040	1.74	168000 37700	JM207049	JM207010A
55.000 2.1654	96.838 3.8125	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	385	382A
55.000 2.1654	96.838 3.8125	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	385X	382A
55.000 2.1654	98.425 3.8750	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	385	382
55.000 2.1654	100.000 3.9370	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	385	383A
55.000 2.1654	110.000 4.3307	39.000 1.5354	194000 43700	0.35	1.73	50400 11300	29900 6720	1.69	251000 56500	JH307749	JH307710
55.000 2.1654	115.000 4.5276	34.000 1.3386	135000 30200	0.87	0.69	34900 7840	51700 11600	0.67	175000 39200	JW5549	JW5510
55.000 2.1654	115.000 4.5276	41.021 1.6150	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	622X	614X
55.000 2.1654	120.000 4.7244	29.002 1.1418	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	475	472A
55.000 2.1654	120.000 4.7244	29.794 1.1730	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	475	472
55.000 2.1654	120.000 4.7244	29.794 1.1730	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	475	473
55.000 2.1654	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	557	552A
55.006 2.1656	120.040 4.7260	41.275 1.6250	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	622A	612A
55.562 2.1875	97.630 3.8437	24.608 0.9688	96300 21600	0.40	1.49	25000 5610	17200 3870	1.45	142000 32000	28680	28622
55.562 2.1875	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	466-S	453A
55.562 2.1875	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	466-S	453AS
55.562 2.1875	122.238 4.8125	43.658 1.7188	219000 49200	0.36	1.67	56800 12800	34800 7830	1.63	327000 73500	5566	5535
55.562 2.1875	123.825 4.8750	36.512 1.4375	167000 37600	0.74	0.81	43400 9760	54800 12300	0.79	208000 46800	72218C	72487
55.562 2.1875	123.825 4.8750	36.512 1.4375	167000 37600	0.74	0.81	43400 9760	54800 12300	0.79	208000 46800	72219C	72487
55.562 2.1875	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813840	HM813810

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a(3)	R(4)	d_a	d_b	r(4)	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
36.957 1.4550	30.162 1.1875	-12.2 -0.48	0.8 0.03	62.0 2.44	63.0 2.48	1.5 0.06	98.0 3.86	93.0 3.66	2.80 0.11	0.90 0.04	64.3	16.1	0.0938	1.30 2.86
36.957 1.4550	30.162 1.1875	-12.2 -0.48	0.8 0.03	62.0 2.44	63.0 2.48	3.3 0.13	100.0 3.94	95.0 3.74	2.80 0.11	0.90 0.04	64.3	16.1	0.0938	1.55 3.43
56.007 2.2050	44.450 1.7500	-19.3 -0.76	3.5 0.14	70.0 2.76	76.0 2.99	3.3 0.13	126.0 4.96	117.0 4.61	4.00 0.16	0.50 0.02	124	22.4	0.0827	4.04 8.90
23.000 0.9055	18.500 0.7283	-2.8 -0.11	3.5 0.14	60.0 2.36	67.0 2.64	0.5 0.02	86.0 3.39	82.0 3.23	1.10 0.04	1.50 0.06	45.6	20.4	0.0925	0.54 1.20
23.000 0.9055	18.500 0.7283	-2.8 -0.11	1.5 0.06	61.0 2.40	63.0 2.48	0.5 0.02	86.0 3.39	82.0 3.23	1.10 0.04	1.50 0.06	45.6	20.4	0.0925	0.55 1.21
23.000 0.9055	20.500 0.8071	-2.8 -0.11	3.5 0.14	60.0 2.36	67.0 2.64	0.5 0.02	86.0 3.39	82.0 3.23	1.10 0.04	1.50 0.06	45.6	20.4	0.0925	0.58 1.27
29.000 1.1417	23.500 0.9252	-7.6 -0.30	6.0 0.24	62.0 2.44	73.0 2.87	2.5 0.10	91.0 3.58	85.0 3.35	1.30 0.05	2.40 0.09	56.4	19.9	0.0937	0.81 1.79
29.000 1.1417	23.500 0.9252	-7.6 -0.30	1.5 0.06	62.0 2.44	64.0 2.52	2.5 0.10	91.0 3.58	85.0 3.35	1.30 0.05	2.40 0.09	56.4	19.9	0.0937	0.84 1.84
29.000 1.1417	24.500 0.9646	-7.6 -0.30	1.5 0.06	62.0 2.44	64.0 2.52	2.0 0.08	91.0 3.58	87.0 3.43	1.30 0.05	2.40 0.09	56.4	19.9	0.0937	0.86 1.90
21.946 0.8640	15.875 0.6250	-3.0 -0.12	2.3 0.09	61.0 2.40	65.0 2.56	0.8 0.03	92.0 3.62	89.0 3.50	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.62 1.37
21.946 0.8640	15.875 0.6250	-3.0 -0.12	3.5 0.14	61.0 2.40	67.0 2.64	0.8 0.03	92.0 3.62	89.0 3.50	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.62 1.36
21.946 0.8640	17.826 0.7018	-3.0 -0.12	2.3 0.09	61.0 2.40	65.0 2.56	0.8 0.03	92.0 3.62	90.0 3.54	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.67 1.47
21.946 0.8640	17.826 0.7018	-3.0 -0.12	2.3 0.09	61.0 2.40	65.0 2.56	2.0 0.08	93.0 3.66	89.0 3.50	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.70 1.54
39.000 1.5354	32.000 1.2598	-11.7 -0.46	3.0 0.12	64.0 2.52	71.0 2.80	2.5 0.10	104.0 4.09	97.0 3.82	0.80 0.03	3.10 0.12	72	16.9	0.0706	1.68 3.71
31.000 1.2205	23.500 0.9252	5.8 0.23	3.0 0.12	66.0 2.59	78.0 3.07	3.0 0.12	109.0 4.29	95.0 3.74	5.30 0.21	3.80 0.15	51.1	17.8	0.0831	1.57 3.46
41.275 1.6250	31.496 1.2400	-14.0 -0.55	3.0 0.12	64.0 2.52	70.0 2.76	3.0 0.12	108.0 4.25	101.0 3.98	3.90 0.15	1.90 0.07	75.9	16.2	0.0694	1.90 4.18
29.007 1.1420	23.444 0.9230	-4.1 -0.16	0.8 0.03	66.0 2.60	67.0 2.64	3.3 0.13	114.0 4.49	106.0 4.17	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.62 3.57
29.007 1.1420	24.237 0.9542	-4.1 -0.16	0.8 0.03	66.0 2.60	67.0 2.64	2.0 0.08	114.0 4.49	107.0 4.21	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.65 3.64
29.007 1.1420	29.000 1.1417	-4.1 -0.16	0.8 0.03	66.0 2.60	67.0 2.64	2.0 0.08	114.0 4.49	107.0 4.21	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.70 3.75
36.678 1.4440	30.162 1.1875	-9.4 -0.37	3.5 0.14	66.0 2.60	72.0 2.83	3.3 0.13	116.0 4.57	109.0 4.29	2.30 0.09	1.20 0.05	91	21.1	0.1108	2.20 4.86
41.275 1.6250	31.750 1.2500	-14.0 -0.55	0.8 0.03	64.0 2.52	65.0 2.56	3.3 0.13	110.0 4.33	103.0 4.06	3.90 0.15	1.90 0.07	75.9	16.2	0.0694	2.14 4.72
24.608 0.9688	19.446 0.7656	-3.3 -0.13	3.5 0.14	62.0 2.44	68.0 2.68	0.8 0.03	92.0 3.62	88.0 3.46	1.60 0.06	1.80 0.07	54	20.2	0.0979	0.76 1.67
29.317 1.1542	22.225 0.8750	-7.1 -0.28	2.3 0.09	62.0 2.44	66.0 2.60	0.8 0.03	100.0 3.94	97.0 3.82	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.14 2.51
29.317 1.1542	22.225 0.8750	-7.1 -0.28	2.3 0.09	62.0 2.44	66.0 2.60	2.3 0.09	100.0 3.94	95.0 3.74	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.13 2.50
43.764 1.7230	36.512 1.4375	-12.2 -0.48	1.3 0.05	68.0 2.68	70.0 2.76	3.3 0.13	116.0 4.57	106.0 4.17	2.50 0.10	1.20 0.05	110	24.2	0.0825	2.55 5.62
32.791 1.2910	25.400 1.0000	2.0 0.08	3.5 0.14	67.0 2.64	80.0 3.15	3.3 0.13	116.0 4.57	102.0 4.02	4.70 0.19	4.40 0.17	57.4	13.5	0.0825	2.01 4.43
32.791 1.2910	25.400 1.0000	2.0 0.08	3.5 0.14	67.0 2.64	80.0 3.15	3.3 0.13	116.0 4.57	102.0 4.02	4.70 0.19	4.40 0.17	57.4	13.5	0.0825	2.01 4.43
36.512 1.4375	26.988 1.0625	-3.8 -0.15	3.5 0.14	72.0 2.83	78.0 3.07	3.3 0.13	121.0 4.76	111.0 4.37	4.00 0.16	1.30 0.05	91.7	24.3	0.1252	2.30 5.08

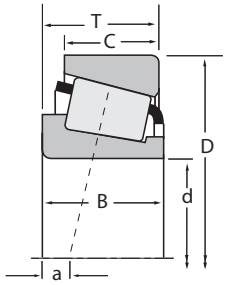
(6) For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
(7) Compound radius on inner race. Details on drawing for bearing.
(8) Pin-type cage. Please consult The Timken Company.

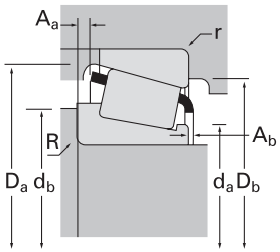
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
55.562 2.1875	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813840	HM813811
55.575 2.1880	96.838 3.8125	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	389	382A
55.575 2.1880	100.000 3.9370	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	389	383A
57.150 2.2500	87.312 3.4375	18.258 0.7188	58100 13100	0.39	1.54	15100 3380	10000 2250	1.50	95600 21500	L507949	L507910
57.150 2.2500	96.838 3.8125	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	387	382A
57.150 2.2500	96.838 3.8125	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	387A	382A
57.150 2.2500	96.838 3.8125	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	387AS	382A
57.150 2.2500	96.838 3.8125	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	387-S	382A
57.150 2.2500	96.838 3.8125	24.608 0.9688	96300 21600	0.40	1.49	25000 5610	17200 3870	1.45	142000 32000	28682	28621
57.150 2.2500	96.838 3.8125	25.400 1.0000	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	387A	382-S
57.150 2.2500	97.630 3.8437	24.608 0.9688	96300 21600	0.40	1.49	25000 5610	17200 3870	1.45	142000 32000	28682	28622
57.150 2.2500	98.425 3.8750	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	387	382
57.150 2.2500	98.425 3.8750	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	387A	382
57.150 2.2500	98.425 3.8750	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	387AS	382
57.150 2.2500	98.425 3.8750	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	387-S	382
57.150 2.2500	98.425 3.8750	24.608 0.9688	96300 21600	0.40	1.49	25000 5610	17200 3870	1.45	142000 32000	28682	28623
57.150 2.2500	100.000 3.9370	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	387A	383A
57.150 2.2500	100.000 3.9370	25.400 1.0000	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	387	383X
57.150 2.2500	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45289	45220
57.150 2.2500	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45289	45221
57.150 2.2500	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45290	45220
57.150 2.2500	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45290	45221
57.150 2.2500	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45291	45220
57.150 2.2500	104.775 4.1250	30.162 1.1875	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45291	45221
57.150 2.2500	104.775 4.1250	30.162 1.1875	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	462	453X
57.150 2.2500	104.775 4.1250	30.162 1.1875	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	462A	453X
57.150 2.2500	104.775 4.1250	30.162 1.1875	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	469	453X
57.150 2.2500	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	462	453A

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
36.512 1.4375	26.988 1.0625	-3.8 -0.15	3.5 0.14	72.0 2.83	78.0 3.07	1.5 0.06	121.0 4.76	113.0 4.45	4.00 0.16	1.30 0.05	91.7	24.3	0.1252	2.30 5.08
21.946 0.8640	15.875 0.6250	-3.0 -0.12	2.3 0.09	61.0 2.40	65.0 2.56	0.8 0.03	92.0 3.62	89.0 3.50	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.61 1.35
21.946 0.8640	17.826 0.7018	-3.0 -0.12	2.3 0.09	61.0 2.40	65.0 2.56	2.0 0.08	93.0 3.66	89.0 3.50	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.69 1.52
18.258 0.7188	14.288 0.5625	-0.8 -0.03	1.5 0.06	62.0 2.44	65.0 2.56	1.5 0.06	83.0 3.27	79.0 3.11	0.30 0.01	2.00 0.08	46.1	36.9	0.0914	0.39 0.85
21.946 0.8640	15.875 0.6250	-3.0 -0.12	2.3 0.09	62.0 2.44	66.0 2.60	0.8 0.03	92.0 3.62	89.0 3.50	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.59 1.30
21.946 0.8640	15.875 0.6250	-3.0 -0.12	3.5 0.14	62.0 2.44	69.0 2.72	0.8 0.03	92.0 3.62	89.0 3.50	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.58 1.29
21.946 0.8640	15.875 0.6250	-3.0 -0.12	5.0 0.20	62.0 2.44	72.0 2.83	0.8 0.03	92.0 3.62	89.0 3.50	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.57 1.26
21.946 0.8640	15.875 0.6250	-3.0 -0.12	0.8 0.03	62.0 2.44	63.0 2.48	0.8 0.03	92.0 3.62	89.0 3.50	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.59 1.31
24.608 0.9688	19.446 0.7656	-3.3 -0.13	3.5 0.14	63.0 2.48	70.0 2.76	0.8 0.03	92.0 3.62	88.0 3.46	1.60 0.06	1.80 0.07	54	20.2	0.0979	0.71 1.57
21.946 0.8640	20.274 0.7982	-3.0 -0.12	3.5 0.14	62.0 2.44	69.0 2.72	2.3 0.09	91.0 3.58	87.0 3.43	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.65 1.43
24.608 0.9688	19.446 0.7656	-3.3 -0.13	3.5 0.14	63.0 2.48	70.0 2.76	0.8 0.03	92.0 3.62	88.0 3.46	1.60 0.06	1.80 0.07	54	20.2	0.0979	0.73 1.61
21.946 0.8640	17.826 0.7018	-3.0 -0.12	2.3 0.09	62.0 2.44	66.0 2.60	0.8 0.03	92.0 3.62	90.0 3.54	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.63 1.40
21.946 0.8640	17.826 0.7018	-3.0 -0.12	3.5 0.14	62.0 2.44	69.0 2.72	0.8 0.03	92.0 3.62	90.0 3.54	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.63 1.39
21.946 0.8640	17.826 0.7018	-3.0 -0.12	5.0 0.20	62.0 2.44	72.0 2.83	0.8 0.03	92.0 3.62	90.0 3.54	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.62 1.36
21.946 0.8640	17.826 0.7018	-3.0 -0.12	0.8 0.03	62.0 2.44	63.0 2.48	0.8 0.03	92.0 3.62	90.0 3.54	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.64 1.41
24.608 0.9688	19.446 0.7656	-3.3 -0.13	3.5 0.14	63.0 2.48	70.0 2.76	0.8 0.03	93.0 3.66	88.0 3.46	1.60 0.06	1.80 0.07	54	20.2	0.0979	0.75 1.65
21.946 0.8640	17.826 0.7018	-3.0 -0.12	3.5 0.14	62.0 2.44	69.0 2.72	2.0 0.08	93.0 3.66	89.0 3.50	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.66 1.45
21.946 0.8640	22.225 0.8750	-3.0 -0.12	2.3 0.09	62.0 2.44	66.0 2.60	1.3 0.05	93.0 3.66	89.0 3.50	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.76 1.67
30.958 1.2188	23.812 0.9375	-8.1 -0.32	0.8 0.03	65.0 2.56	65.0 2.56	3.3 0.13	99.0 3.90	93.0 3.66	2.10 0.08	1.80 0.07	63.5	16.9	0.0971	1.08 2.39
30.958 1.2188	23.812 0.9375	-8.1 -0.32	0.8 0.03	65.0 2.56	65.0 2.56	0.8 0.03	99.0 3.90	95.0 3.74	2.10 0.08	1.80 0.07	63.5	16.9	0.0971	1.09 2.40
30.958 1.2188	23.812 0.9375	-8.1 -0.32	2.3 0.09	65.0 2.56	68.0 2.68	3.3 0.13	99.0 3.90	93.0 3.66	2.10 0.08	1.80 0.07	63.5	16.9	0.0971	1.08 2.39
30.958 1.2188	23.812 0.9375	-8.1 -0.32	2.3 0.09	65.0 2.56	68.0 2.68	0.8 0.03	99.0 3.90	95.0 3.74	2.10 0.08	1.80 0.07	63.5	16.9	0.0971	1.09 2.40
30.958 1.2188	23.812 0.9375	-8.1 -0.32	6.4 0.25	65.0 2.56	76.0 2.99	3.3 0.13	99.0 3.90	93.0 3.66	2.10 0.08	1.80 0.07	63.5	16.9	0.0971	1.05 2.32
30.958 1.2188	23.812 0.9375	-8.1 -0.32	6.4 0.25	65.0 2.56	76.0 2.99	0.8 0.03	99.0 3.90	95.0 3.74	2.10 0.08	1.80 0.07	63.5	16.9	0.0971	1.06 2.33
29.317 1.1542	24.605 0.9687	-7.1 -0.28	2.3 0.09	63.0 2.48	67.0 2.64	3.3 0.13	98.0 3.86	92.0 3.62	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.05 2.31
29.317 1.1542	24.605 0.9687	-7.1 -0.28	2.3 0.09	68.0 2.68	67.0 2.64	3.3 0.13	98.0 3.86	92.0 3.62	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.04 2.29
29.317 1.1542	24.605 0.9687	-7.1 -0.28	3.5 0.14	63.0 2.48	70.0 2.76	3.3 0.13	98.0 3.86	92.0 3.62	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.04 2.30
29.317 1.1542	22.225 0.8750	-7.1 -0.28	2.3 0.09	63.0 2.48	67.0 2.64	0.8 0.03	100.0 3.94	97.0 3.82	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.10 2.43

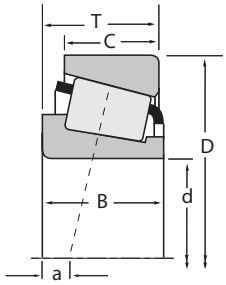
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

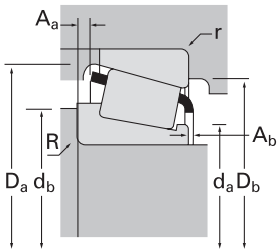
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
57.150 2.2500	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	462	453AS
57.150 2.2500	107.950 4.2500	27.783 1.0938	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	469	453A
57.150 2.2500	107.950 4.2500	32.558 1.2818	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	462	452A
57.150 2.2500	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	390	394A
57.150 2.2500	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	390	394AS
57.150 2.2500	110.000 4.3307	27.795 1.0943	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	462	454
57.150 2.2500	112.712 4.4375	25.400 1.0000	102000 23000	0.49	1.23	26500 5960	22100 4980	1.20	166000 37200	29665	29620
57.150 2.2500	112.712 4.4375	26.967 1.0617	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	390	3920
57.150 2.2500	112.712 4.4375	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3979	3920
57.150 2.2500	112.712 4.4375	30.162 1.1875	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39580	39520
57.150 2.2500	112.712 4.4375	30.162 1.1875	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39580	39521
57.150 2.2500	112.712 4.4375	30.162 1.1875	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39581	39520
57.150 2.2500	117.475 4.6250	33.338 1.3125	138000 31000	0.63	0.96	35800 8040	38300 8620	0.93	166000 37300	66225	66462
57.150 2.2500	120.650 4.7500	41.275 1.6250	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	623	612
57.150 2.2500	120.650 4.7500	41.275 1.6250	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	623	612-S
57.150 2.2500	120.650 4.7500	41.275 1.6250	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	623A	612
57.150 2.2500	122.238 4.8125	33.338 1.3125	143000 32200	0.67	0.90	37100 8340	42300 9500	0.88	178000 39900	66587	66520
57.150 2.2500	123.825 4.8750	36.512 1.4375	167000 37600	0.74	0.81	43400 9760	54800 12300	0.79	208000 46800	72225C	72487
57.150 2.2500	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	555-S	552
57.150 2.2500	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	555-S	552A
57.150 2.2500	125.000 4.9213	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	555-S	553A
57.150 2.2500	127.000 5.0000	44.450 1.7500	225000 50700	0.49	1.23	58500 13100	48800 11000	1.20	297000 66700	65225	65500
57.150 2.2500	129.944 5.1159	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	555-S	553-SA
57.150 2.2500	135.755 5.3447	53.975 2.1250	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	6375	6320
57.150 2.2500	135.755 5.3447	53.975 2.1250	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	6387	6320
57.150 2.2500	136.525 5.3750	36.512 1.4375	185000 41500	0.87	0.69	47900 10800	71000 16000	0.67	234000 52600	78225C	78537
57.150 2.2500	136.525 5.3750	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	635	632
57.150 2.2500	140.030 5.5130	36.512 1.4375	158000 35600	0.87	0.69	41100 9230	60900 13700	0.67	193000 43400	78225	78551

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
29.317 1.1542	22.225 0.8750	-7.1 -0.28	2.3 0.09	63.0 2.48	67.0 2.64	2.3 0.09	100.0 3.94	95.0 3.74	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.10 2.43
29.317 1.1542	22.225 0.8750	-7.1 -0.28	3.5 0.14	63.0 2.48	70.0 2.76	0.8 0.03	100.0 3.94	97.0 3.82	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.10 2.42
29.317 1.1542	27.000 1.0630	-7.1 -0.28	2.3 0.09	63.0 2.48	67.0 2.64	3.3 0.13	100.0 3.94	93.0 3.66	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.21 2.67
21.996 0.8660	18.825 0.7411	-0.8 -0.03	2.3 0.09	66.0 2.60	70.0 2.76	1.3 0.05	105.0 4.13	101.0 3.98	1.70 0.07	2.30 0.09	56	21.4	0.0984	0.94 2.07
21.996 0.8660	18.825 0.7411	-0.8 -0.03	2.3 0.09	66.0 2.60	70.0 2.76	3.3 0.13	104.5 4.11	99.0 3.90	1.70 0.07	2.30 0.09	56	21.4	0.0984	0.92 2.04
29.317 1.1542	27.000 1.0630	-7.1 -0.28	2.3 0.09	63.0 2.48	67.0 2.64	2.0 0.08	100.0 3.94	96.0 3.78	2.20 0.09	1.40 0.05	58.6	17.1	0.0946	1.23 2.71
25.400 1.0000	19.050 0.7500	1.0 0.04	3.5 0.14	69.0 2.72	75.0 2.95	3.3 0.13	109.0 4.29	101.0 3.98	2.30 0.09	1.50 0.06	77.7	43.3	0.1170	1.21 2.67
21.996 0.8660	23.812 0.9375	-0.8 -0.03	2.3 0.09	66.0 2.60	70.0 2.76	3.3 0.13	106.0 4.17	99.0 3.90	1.70 0.07	2.30 0.09	56	21.4	0.0984	1.12 2.47
30.048 1.1830	23.812 0.9375	-4.6 -0.18	3.5 0.14	66.0 2.60	72.0 2.83	3.3 0.13	106.0 4.17	99.0 3.90	2.20 0.09	1.10 0.04	75.2	21.3	0.1092	1.37 3.01
30.162 1.1875	23.812 0.9375	-6.6 -0.26	3.5 0.14	66.0 2.60	72.0 2.83	3.3 0.13	107.0 4.21	101.0 3.98	1.60 0.06	2.60 0.10	84.3	23.7	0.1074	1.38 3.03
30.162 1.1875	23.812 0.9375	-6.6 -0.26	3.5 0.14	66.0 2.60	72.0 2.83	0.8 0.03	107.0 4.21	103.0 4.06	1.60 0.06	2.60 0.10	84.3	23.7	0.1074	1.38 3.04
30.162 1.1875	23.812 0.9375	-6.6 -0.26	8.0 0.31	66.0 2.60	81.0 3.19	3.3 0.13	107.0 4.21	101.0 3.98	1.60 0.06	2.60 0.10	84.3	23.7	0.1074	1.34 2.95
31.750 1.2500	23.812 0.9375	-0.3 -0.01	3.5 0.14	69.0 2.71	76.0 2.99	3.3 0.13	111.0 4.37	100.0 3.94	5.00 0.20	2.00 0.08	50.2	16.4	0.0751	1.50 3.31
41.275 1.6250	31.750 1.2500	-14.0 -0.55	3.5 0.14	66.0 2.60	72.0 2.83	3.3 0.13	110.0 4.33	105.0 4.13	3.90 0.15	1.90 0.07	75.9	16.2	0.0694	2.10 4.62
41.275 1.6250	31.750 1.2500	-14.0 -0.55	3.5 0.14	66.0 2.60	72.0 2.83	0.8 0.03	110.0 4.33	107.0 4.21	3.90 0.15	1.90 0.07	75.9	16.2	0.0694	2.11 4.65
41.275 1.6250	31.750 1.2500	-14.0 -0.55	6.4 0.25	66.0 2.60	78.0 3.07	3.3 0.13	110.0 4.33	105.0 4.13	3.90 0.15	1.90 0.07	75.9	16.2	0.0694	2.07 4.57
31.750 1.2500	23.812 0.9375	2.0 0.08	3.5 0.14	71.0 2.80	77.0 3.03	3.3 0.13	116.0 4.57	105.0 4.13	5.20 0.21	2.00 0.08	57	18.3	0.0797	1.69 3.74
32.791 1.2910	25.400 1.0000	2.0 0.08	3.5 0.14	67.0 2.64	81.0 3.19	3.3 0.13	116.0 4.57	102.0 4.02	4.70 0.19	4.40 0.17	57.4	13.5	0.0825	1.98 4.36
36.678 1.4440	33.338 1.3125	-9.4 -0.37	3.5 0.14	67.0 2.64	73.0 2.87	3.3 0.13	116.0 4.57	109.0 4.29	2.30 0.09	1.20 0.05	91	21.1	0.1108	2.20 4.84
36.678 1.4440	30.162 1.1875	-9.4 -0.37	3.5 0.14	67.0 2.64	73.0 2.87	3.3 0.13	116.0 4.57	109.0 4.29	2.30 0.09	1.20 0.05	91	21.1	0.1108	2.15 4.74
36.678 1.4440	30.162 1.1875	-9.4 -0.37	3.5 0.14	67.0 2.64	73.0 2.87	3.3 0.13	116.0 4.57	109.0 4.29	2.30 0.09	1.20 0.05	91	21.1	0.1108	2.20 4.85
44.450 1.7500	34.925 1.3750	-9.4 -0.37	3.5 0.14	71.0 2.79	80.0 3.15	3.3 0.13	119.0 4.69	107.0 4.21	4.10 0.16	1.00 0.04	83.2	17.2	0.0827	2.69 5.93
36.678 1.4440	30.162 1.1875	-9.4 -0.37	3.5 0.14	67.0 2.64	73.0 2.87	3.3 0.13	116.0 4.57	111.0 4.37	2.30 0.09	1.20 0.05	91	21.1	0.1108	2.43 5.37
56.007 2.2050	44.450 1.7500	-19.3 -0.76	4.3 0.17	72.0 2.83	80.0 3.15	3.3 0.13	126.0 4.96	117.0 4.61	4.00 0.16	0.50 0.02	124	22.4	0.0827	3.95 8.71
56.007 2.2050	44.450 1.7500	-19.3 -0.76	0.8 0.03	72.0 2.83	72.0 2.83	3.3 0.13	126.0 4.96	117.0 4.61	4.00 0.16	0.50 0.02	124	22.4	0.0827	3.96 8.74
33.236 1.3085	23.520 0.9260	8.4 0.33	3.5 0.14	77.5 3.05	86.0 3.39	3.3 0.13	130.0 5.12	115.0 4.53	6.40 0.25	4.80 0.19	71.3	17.6	0.0926	2.52 5.56
41.275 1.6250	31.750 1.2500	-11.2 -0.44	3.5 0.14	69.0 2.72	75.0 2.95	3.3 0.13	125.0 4.92	118.0 4.65	4.20 0.16	1.90 0.08	106	21	0.0814	3.03 6.68
33.236 1.3085	23.520 0.9260	7.9 0.31	3.5 0.14	77.0 3.03	83.0 3.27	2.3 0.09	132.0 5.20	117.0 4.61	6.90 0.27	4.10 0.16	62.6	19.1	0.0884	2.57 5.66

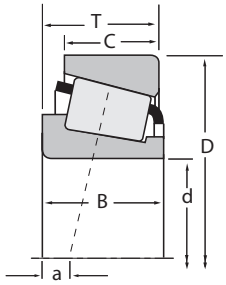
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

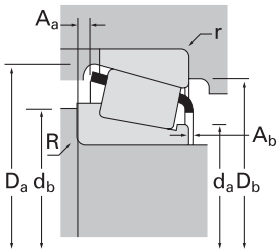
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
57.150 2.2500	140.030 5.5130	36.512 1.4375	185000 41500	0.87	0.69	47900 10800	71000 16000	0.67	234000 52600	78225C	78551
57.150 2.2500	149.225 5.8750	53.975 2.1250	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6455	6420
57.150 2.2500	149.225 5.8750	53.975 2.1250	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6465	6420
57.150 2.2500	149.225 5.8750	53.975 2.1250	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6465	6420A
57.150 2.2500	152.400 6.0000	53.975 2.1250	313000 70500	0.49	1.23	81300 18300	67800 15200	1.20	423000 95000	HH814540	HH814510
57.531 2.2650	96.838 3.8125	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	388A	382A
57.531 2.2650	98.425 3.8750	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	388A	382
57.531 2.2650	100.000 3.9370	21.000 0.8268	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	388A	383A
58.738 2.3125	112.712 4.4375	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3981	3920
58.738 2.3125	127.000 5.0000	44.450 1.7500	225000 50700	0.49	1.23	58500 13100	48800 11000	1.20	297000 66700	65231	65500
59.530 2.3437	112.712 4.4375	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3978	3920
59.880 2.3575	127.000 5.0000	44.450 1.7500	225000 50700	0.49	1.23	58500 13100	48800 11000	1.20	297000 66700	65235	65500
59.931 2.3595	150.089 5.9090	44.450 1.7500	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	745	742
59.977 2.3613	100.000 3.9370	25.400 1.0000	98200 22100	0.43	1.41	25500 5720	18500 4170	1.37	149000 33500	28980	28921
59.977 2.3613	122.238 4.8125	33.338 1.3125	143000 32200	0.67	0.90	37100 8340	42300 9500	0.88	178000 39900	66586	66520
59.987 2.3617	104.775 4.1250	21.433 0.8438	89600 20100	0.39	1.55	23200 5220	15400 3470	1.51	120000 27000	39236	39412
59.987 2.3617	109.985 4.3301	29.751 1.1713	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3977X	3921XA
59.987 2.3617	110.058 4.3330	22.000 0.8661	89600 20100	0.39	1.55	23200 5220	15400 3470	1.51	120000 27000	39236	39433
59.987 2.3617	112.712 4.4375	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3977X	3920
59.987 2.3617	125.000 4.9213	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	558-S	553A
59.987 2.3617	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813839	HM813810
59.987 2.3617	129.944 5.1159	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	558-S	553-SA
59.987 2.3617	130.175 5.1250	34.100 1.3425	154000 34700	0.82	0.73	40000 9000	56200 12600	0.71	183000 41100	HM911244	HM911210
59.987 2.3617	134.983 5.3143	33.449 1.3169	154000 34700	0.82	0.73	40000 9000	56200 12600	0.71	183000 41100	HM911244	HM911216
59.987 2.3617	146.050 5.7500	41.275 1.6250	213000 47900	0.78	0.77	55200 12400	74000 16600	0.75	256000 57500	H913840	H913810
60.000 2.3622	95.000 3.7402	24.000 0.9449	90400 20300	0.40	1.49	23400 5270	16100 3620	1.45	135000 30400	JLM508748	JLM508710
60.000 2.3622	100.000 3.9370	21.000 0.8268	80900 18200	0.47	1.27	21000 4710	17000 3820	1.24	101000 22800	JP6049	JP6010
60.000 2.3622	107.950 4.2500	25.400 1.0000	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29580	29520

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

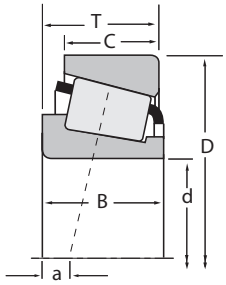
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
33.236 1.3085	23.520 0.9260	8.4 0.33	3.5 0.14	77.5 3.05	86.0 3.39	2.3 0.09	132.0 5.20	117.0 4.61	6.40 0.25	4.80 0.19	71.3	17.6	0.0926	2.68 5.90
54.229 2.1350	44.450 1.7500	-15.0 -0.59	3.5 0.14	75.0 2.95	81.0 3.19	3.3 0.13	140.0 5.51	129.0 5.08	2.70 0.11	0.70 0.03	158	29.1	0.0931	5.08 11.20
54.229 2.1350	44.450 1.7500	-15.0 -0.59	6.8 0.27	75.0 2.95	88.0 3.46	3.3 0.13	140.0 5.51	129.0 5.08	2.70 0.11	0.70 0.03	158	29.1	0.0931	5.05 11.14
54.229 2.1350	44.450 1.7500	-15.0 -0.59	6.8 0.27	75.0 2.95	88.0 3.46	0.8 0.03	140.0 5.51	131.0 5.16	2.70 0.11	0.70 0.03	158	29.1	0.0931	5.07 11.18
57.150 2.2500	41.275 1.6250	-12.2 -0.48	3.5 0.14	81.0 3.19	87.0 3.43	3.3 0.13	143.0 5.63	130.0 5.12	5.30 0.21	0.20 0.01	130	23.5	0.0957	5.28 11.65
21.946 0.8640	15.875 0.6250	-3.0 -0.12	3.5 0.14	63.0 2.48	69.0 2.72	0.8 0.03	92.0 3.62	89.0 3.50	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.58 1.27
21.946 0.8640	17.826 0.7018	-3.0 -0.12	3.5 0.14	63.0 2.48	69.0 2.72	0.8 0.03	92.0 3.62	90.0 3.54	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.62 1.37
21.946 0.8640	17.826 0.7018	-3.0 -0.12	3.5 0.14	63.0 2.48	69.0 2.72	2.0 0.08	93.0 3.66	89.0 3.50	1.10 0.04	2.00 0.08	42	15.7	0.0859	0.65 1.44
30.048 1.1830	23.812 0.9375	-4.6 -0.18	3.5 0.14	67.0 2.64	73.0 2.87	3.3 0.13	106.0 4.17	99.0 3.90	2.20 0.09	1.10 0.04	75.2	21.3	0.1092	1.33 2.94
44.450 1.7500	34.925 1.3750	-9.4 -0.37	3.5 0.14	71.0 2.79	81.0 3.19	3.3 0.13	119.0 4.69	107.0 4.21	4.10 0.16	1.00 0.04	83.2	17.2	0.0827	2.64 5.82
30.048 1.1830	23.812 0.9375	-4.6 -0.18	1.5 0.06	68.0 2.68	70.0 2.76	3.3 0.13	106.0 4.17	99.0 3.90	2.20 0.09	1.10 0.04	75.2	21.3	0.1092	1.32 2.92
44.450 1.7500	34.925 1.3750	-9.4 -0.37	3.5 0.14	71.0 2.79	82.0 3.23	3.3 0.13	119.0 4.69	107.0 4.21	4.10 0.16	1.00 0.04	83.2	17.2	0.0827	2.60 5.74
46.672 1.8375	36.512 1.4375	-11.9 -0.47	3.5 0.14	75.0 2.95	81.0 3.19	3.3 0.13	142.0 5.59	134.0 5.28	1.90 0.07	1.20 0.05	160	26.3	0.0898	4.28 9.44
25.400 1.0000	19.845 0.7813	-2.5 -0.10	3.5 0.14	67.0 2.64	73.0 2.87	3.3 0.13	96.0 3.78	89.0 3.50	2.00 0.08	1.40 0.05	60.1	24.5	0.1032	0.76 1.67
31.750 1.2500	23.812 0.9375	2.0 0.08	1.5 0.06	73.0 2.87	75.0 2.95	3.3 0.13	116.0 4.57	105.0 4.13	5.20 0.21	2.00 0.08	57	18.3	0.0797	1.64 3.61
22.000 0.8661	15.875 0.6250	-1.5 -0.06	2.3 0.09	67.0 2.64	71.0 2.80	2.0 0.08	100.0 3.94	96.0 3.78	1.70 0.07	2.30 0.09	51.7	19.5	0.0947	0.74 1.63
28.000 1.1024	23.812 0.9375	-4.6 -0.18	2.3 0.09	68.0 2.68	72.0 2.83	0.5 0.02	104.5 4.12	100.0 3.94	2.20 0.09	3.10 0.12	75.2	21.3	0.1092	1.20 2.65
22.000 0.8661	17.236 0.6786	-1.5 -0.06	2.3 0.09	67.0 2.64	71.0 2.80	2.3 0.09	103.0 4.06	98.0 3.86	1.70 0.07	2.30 0.09	51.7	19.5	0.0947	0.87 1.92
28.000 1.1024	23.812 0.9375	-4.6 -0.18	2.3 0.09	68.0 2.68	72.0 2.83	3.3 0.13	106.0 4.17	99.0 3.90	2.20 0.09	3.10 0.12	75.2	21.3	0.1092	1.28 2.83
36.678 1.4440	30.162 1.1875	-9.4 -0.37	3.5 0.14	69.0 2.72	75.0 2.95	3.3 0.13	116.0 4.57	109.0 4.29	2.30 0.09	1.20 0.05	91	21.1	0.1108	2.13 4.69
36.512 1.4375	26.988 1.0625	-3.8 -0.15	3.5 0.14	75.0 2.95	82.0 3.23	3.3 0.13	121.0 4.76	111.0 4.37	4.00 0.16	1.30 0.05	91.7	24.3	0.1252	2.19 4.82
36.678 1.4440	30.162 1.1875	-9.4 -0.37	3.5 0.14	69.0 2.72	75.0 2.95	3.3 0.13	116.0 4.57	111.0 4.37	2.30 0.09	1.20 0.05	91	21.1	0.1108	2.36 5.20
30.924 1.2175	23.812 0.9375	7.9 0.31	3.5 0.14	74.5 2.93	84.0 3.31	3.3 0.13	123.5 4.87	109.0 4.29	5.00 0.20	4.20 0.17	56.4	16.5	0.0842	2.00 4.40
30.924 1.2175	21.948 0.8641	7.9 0.31	3.5 0.14	74.5 2.93	84.0 3.31	3.5 0.14	123.0 4.84	112.0 4.41	5.00 0.20	4.20 0.17	56.4	16.5	0.0842	2.12 4.67
39.688 1.5625	25.400 1.0000	4.3 0.17	3.5 0.14	82.5 3.24	88.0 3.46	3.3 0.13	138.0 5.43	124.0 4.88	8.20 0.32	3.60 0.14	78.5	17.3	0.0927	3.17 6.99
24.000 0.9449	19.000 0.7480	-2.8 -0.11	5.0 0.20	66.0 2.60	75.0 2.95	2.5 0.10	91.0 3.58	85.0 3.35	1.50 0.06	1.60 0.06	54.2	25.3	0.0979	0.59 1.30
20.000 0.7874	15.500 0.6102	1.3 0.05	2.0 0.08	66.0 2.60	69.0 2.72	2.0 0.08	95.5 3.76	91.0 3.58	1.40 0.06	2.80 0.11	39.5	22.5	0.0922	0.60 1.32
25.400 1.0000	19.050 0.7500	-0.8 -0.03	3.5 0.14	68.0 2.68	75.0 2.95	3.3 0.13	103.0 4.06	96.0 3.78	2.20 0.08	1.40 0.05	70.3	25.8	0.1112	0.98 2.16

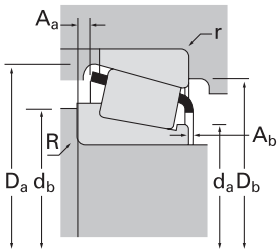
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
60.000 2.3622	107.950 4.2500	25.400 1.0000	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29582	29520
60.000 2.3622	107.950 4.2500	25.400 1.0000	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29582	29522
60.000 2.3622	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	397	394A
60.000 2.3622	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	397	394AS
60.000 2.3622	110.000 4.3307	25.400 1.0000	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29580	29521
60.000 2.3622	110.000 4.3307	38.000 1.4961	183000 41200	0.40	1.48	47500 10700	32800 7380	1.44	253000 56800	XAA33212	Y33212
60.000 2.3622	110.000 4.3307	38.000 1.4961	183000 41200	0.40	1.48	47500 10700	32800 7380	1.44	253000 56800	XAB-33212	Y33212
60.000 2.3622	112.712 4.4375	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3977	3920
60.000 2.3622	112.712 4.4375	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3977	3925
60.000 2.3622	120.000 4.7244	29.794 1.1730	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	476	472
60.000 2.3622	122.238 4.8125	33.338 1.3125	143000 32200	0.67	0.90	37100 8340	42300 9500	0.88	178000 39900	66585	66520
60.000 2.3622	125.000 4.9213	37.000 1.4567	159000 35800	0.82	0.73	41200 9270	57900 13000	0.71	210000 47100	JW6049	JW6010
60.325 2.3750	100.000 3.9370	25.400 1.0000	98200 22100	0.43	1.41	25500 5720	18500 4170	1.37	149000 33500	28985	28921
60.325 2.3750	100.000 3.9370	25.400 1.0000	98200 22100	0.43	1.41	25500 5720	18500 4170	1.37	149000 33500	28985	28921A
60.325 2.3750	101.600 4.0000	25.400 1.0000	98200 22100	0.43	1.41	25500 5720	18500 4170	1.37	149000 33500	28985	28920
60.325 2.3750	112.712 4.4375	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3980	3920
60.325 2.3750	112.712 4.4375	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3980	3925
60.325 2.3750	122.238 4.8125	38.100 1.5000	209000 46900	0.34	1.78	54100 12200	31300 7030	1.73	279000 62700	HM212044	HM212010
60.325 2.3750	122.238 4.8125	38.100 1.5000	209000 46900	0.34	1.78	54100 12200	31300 7030	1.73	279000 62700	HM212044	HM212011
60.325 2.3750	122.238 4.8125	43.658 1.7188	219000 49200	0.36	1.67	56800 12800	34800 7830	1.63	327000 73500	5582	5535
60.325 2.3750	122.238 4.8125	43.658 1.7188	219000 49200	0.36	1.67	56800 12800	34800 7830	1.63	327000 73500	5583	5535
60.325 2.3750	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	558	552
60.325 2.3750	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	558	552A
60.325 2.3750	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	558A	552A
60.325 2.3750	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813841A	HM813811
60.325 2.3750	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813841	HM813810
60.325 2.3750	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813841	HM813811
60.325 2.3750	127.000 5.0000	44.450 1.7500	225000 50700	0.49	1.23	58500 13100	48800 11000	1.20	297000 66700	65237	65500

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
25.400 1.0000	**19.050** 0.7500	**-0.8** -0.03	**0.8** 0.03	**68.0** 2.68	**69.0** 2.72	**3.3** 0.13	**103.0** 4.06	**96.0** 3.78	**2.20** 0.08	**1.40** 0.05	**70.3**	**25.8**	**0.1112**	**0.99** 2.19
25.400 1.0000	**19.050** 0.7500	**-0.8** -0.03	**0.8** 0.03	**68.0** 2.68	**69.0** 2.72	**0.8** 0.03	**103.0** 4.06	**98.0** 3.86	**2.20** 0.08	**1.40** 0.05	**70.3**	**25.8**	**0.1112**	**1.00** 2.21
21.996 0.8660	**18.825** 0.7411	**-0.8** -0.03	**0.8** 0.03	**68.0** 2.68	**69.0** 2.72	**1.3** 0.05	**105.0** 4.13	**101.0** 3.98	**1.70** 0.07	**2.30** 0.09	**56**	**21.4**	**0.0984**	**0.90** 1.98
21.996 0.8660	**18.825** 0.7411	**-0.8** -0.03	**0.8** 0.03	**68.0** 2.68	**69.0** 2.72	**3.3** 0.13	**104.5** 4.11	**99.0** 3.90	**1.70** 0.07	**2.30** 0.09	**56**	**21.4**	**0.0984**	**0.88** 1.95
25.400 1.0000	**19.050** 0.7500	**-0.8** -0.03	**3.5** 0.14	**68.0** 2.68	**75.0** 2.95	**1.3** 0.05	**104.0** 4.09	**99.0** 3.90	**2.20** 0.08	**1.40** 0.05	**70.3**	**25.8**	**0.1112**	**1.05** 2.31
38.000 1.4961	**29.000** 1.1417	**-9.9** -0.39	**6.0** 0.24	**68.0** 2.68	**85.0** 3.35	**1.5** 0.06	**105.0** 4.13	**98.0** 3.86	**4.00** 0.16	**2.50** 0.10	**76.2**	**18.1**	**0.0758**	**1.53** 3.37
38.000 1.4961	**29.000** 1.1417	**-9.9** -0.39	**5.0** 0.20	**68.0** 2.68	**83.0** 3.27	**1.5** 0.06	**105.0** 4.13	**98.0** 3.86	**4.00** 0.16	**2.50** 0.10	**76.2**	**18.1**	**0.0758**	**1.53** 3.37
30.048 1.1830	**23.812** 0.9375	**-4.6** -0.18	**3.5** 0.14	**68.0** 2.68	**74.0** 2.91	**3.3** 0.13	**106.0** 4.17	**99.0** 3.90	**2.20** 0.09	**1.10** 0.04	**75.2**	**21.3**	**0.1092**	**1.30** 2.88
30.048 1.1830	**23.812** 0.9375	**-4.6** -0.18	**3.5** 0.14	**68.0** 2.68	**74.0** 2.91	**0.8** 0.03	**106.0** 4.17	**101.0** 3.98	**2.20** 0.09	**1.10** 0.04	**75.2**	**21.3**	**0.1092**	**1.32** 2.91
29.007 1.1420	**24.237** 0.9542	**-4.1** -0.16	**2.0** 0.08	**69.0** 2.72	**73.0** 2.87	**2.0** 0.08	**114.0** 4.49	**107.0** 4.21	**1.50** 0.06	**2.20** 0.08	**77.2**	**23**	**0.1083**	**1.54** 3.40
31.750 1.2500	**23.812** 0.9375	**2.0** 0.08	**3.5** 0.14	**73.0** 2.87	**79.0** 3.11	**3.3** 0.13	**116.0** 4.57	**105.0** 4.13	**5.20** 0.21	**2.00** 0.08	**57**	**18.3**	**0.0797**	**1.63** 3.59
33.500 1.3189	**26.000** 1.0236	**4.8** 0.19	**3.0** 0.12	**72.0** 2.83	**89.0** 3.50	**3.0** 0.12	**119.0** 4.69	**104.0** 4.09	**6.00** 0.24	**4.00** 0.16	**64.1**	**18.5**	**0.0883**	**2.02** 4.46
25.400 1.0000	**19.845** 0.7813	**-2.5** -0.10	**3.5** 0.14	**67.0** 2.64	**73.0** 2.87	**3.3** 0.13	**96.0** 3.78	**89.0** 3.50	**2.00** 0.08	**1.40** 0.05	**60.1**	**24.5**	**0.1032**	**0.75** 1.65
25.400 1.0000	**19.845** 0.7813	**-2.5** -0.10	**3.5** 0.14	**67.0** 2.64	**73.0** 2.87	**0.8** 0.03	**96.0** 3.78	**91.0** 3.58	**2.00** 0.08	**1.40** 0.05	**60.1**	**24.5**	**0.1032**	**0.76** 1.68
25.400 1.0000	**19.845** 0.7813	**-2.5** -0.10	**3.5** 0.14	**67.0** 2.64	**73.0** 2.87	**3.3** 0.13	**97.0** 3.82	**90.0** 3.54	**2.00** 0.08	**1.40** 0.05	**60.1**	**24.5**	**0.1032**	**0.79** 1.74
30.048 1.1830	**23.812** 0.9375	**-4.6** -0.18	**3.5** 0.14	**68.0** 2.68	**75.0** 2.95	**3.3** 0.13	**106.0** 4.17	**99.0** 3.90	**2.20** 0.09	**1.10** 0.04	**75.2**	**21.3**	**0.1092**	**1.30** 2.86
30.048 1.1830	**23.812** 0.9375	**-4.6** -0.18	**3.5** 0.14	**68.0** 2.68	**75.0** 2.95	**0.8** 0.03	**106.0** 4.17	**101.0** 3.98	**2.20** 0.09	**1.10** 0.04	**75.2**	**21.3**	**0.1092**	**1.31** 2.89
38.354 1.5100	**29.718** 1.1700	**-10.9** -0.43	**8.0** 0.31	**70.0** 2.76	**85.0** 3.35	**1.5** 0.06	**116.0** 4.57	**110.0** 4.33	**2.20** 0.09	**3.00** 0.12	**92.2**	**18.1**	**0.0759**	**2.02** 4.46
38.354 1.5100	**29.718** 1.1700	**-10.9** -0.43	**8.0** 0.31	**70.0** 2.76	**85.0** 3.35	**3.3** 0.13	**116.0** 4.57	**108.0** 4.25	**2.20** 0.09	**3.00** 0.12	**92.2**	**18.1**	**0.0759**	**2.02** 4.45
43.764 1.7230	**36.512** 1.4375	**-12.2** -0.48	**0.8** 0.03	**72.0** 2.83	**73.0** 2.87	**3.3** 0.13	**116.0** 4.57	**106.0** 4.17	**2.50** 0.10	**1.20** 0.05	**110**	**24.2**	**0.0825**	**2.40** 5.30
43.764 1.7230	**36.512** 1.4375	**-12.2** -0.48	**3.5** 0.14	**72.0** 2.83	**78.0** 3.07	**3.3** 0.13	**116.0** 4.57	**106.0** 4.17	**2.50** 0.10	**1.20** 0.05	**110**	**24.2**	**0.0825**	**2.39** 5.28
36.678 1.4440	**33.338** 1.3125	**-9.4** -0.37	**2.3** 0.09	**69.0** 2.72	**73.0** 2.87	**3.3** 0.13	**116.0** 4.57	**109.0** 4.29	**2.30** 0.09	**1.20** 0.05	**91**	**21.1**	**0.1108**	**2.12** 4.67
36.678 1.4440	**30.162** 1.1875	**-9.4** -0.37	**2.3** 0.09	**69.0** 2.72	**73.0** 2.87	**3.3** 0.13	**116.0** 4.57	**109.0** 4.29	**2.30** 0.09	**1.20** 0.05	**91**	**21.1**	**0.1108**	**2.07** 4.57
36.678 1.4440	**30.162** 1.1875	**-9.4** -0.37	**3.5** 0.14	**69.0** 2.72	**76.0** 2.99	**3.3** 0.13	**116.0** 4.57	**109.0** 4.29	**2.30** 0.09	**1.20** 0.05	**91**	**21.1**	**0.1108**	**2.07** 4.55
36.512 1.4375	**26.988** 1.0625	**-3.8** -0.15	**1.5** 0.06	**76.0** 2.99	**78.0** 3.07	**1.5** 0.06	**121.0** 4.76	**113.0** 4.45	**4.00** 0.16	**1.30** 0.05	**91.7**	**24.3**	**0.1252**	**2.18** 4.81
36.512 1.4375	**26.988** 1.0625	**-3.8** -0.15	**3.5** 0.14	**76.5** 3.02	**83.0** 3.27	**3.3** 0.13	**121.0** 4.76	**111.0** 4.37	**4.00** 0.16	**1.30** 0.05	**91.7**	**24.3**	**0.1252**	**2.18** 4.80
36.512 1.4375	**26.988** 1.0625	**-3.8** -0.15	**3.5** 0.14	**76.5** 3.02	**83.0** 3.27	**1.5** 0.06	**121.0** 4.76	**113.0** 4.45	**4.00** 0.16	**1.30** 0.05	**91.7**	**24.3**	**0.1252**	**2.18** 4.80
44.450 1.7500	**34.925** 1.3750	**-9.4** -0.37	**3.5** 0.14	**71.0** 2.80	**82.0** 3.23	**3.3** 0.13	**119.0** 4.69	**107.0** 4.21	**4.10** 0.16	**1.00** 0.04	**83.2**	**17.2**	**0.0827**	**2.59** 5.70

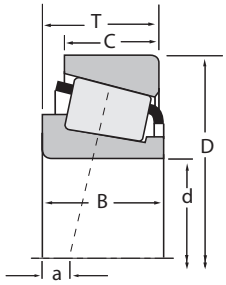
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

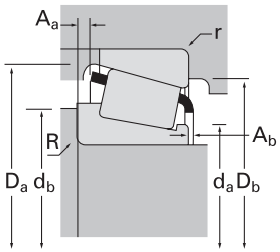
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
60.325 2.3750	127.000 5.0000	44.450 1.7500	225000 50700	0.49	1.23	58500 13100	48800 11000	1.20	297000 66700	65237	65501
60.325 2.3750	127.000 5.0000	44.450 1.7500	225000 50700	0.49	1.23	58500 13100	48800 11000	1.20	297000 66700	65237A	65500
60.325 2.3750	130.175 5.1250	36.512 1.4375	154000 34700	0.82	0.73	40000 9000	56200 12600	0.71	183000 41100	HM911245	HM911210
60.325 2.3750	130.175 5.1250	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	637	633
60.325 2.3750	135.755 5.3447	53.975 2.1250	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	6376	6320
60.325 2.3750	136.525 5.3750	36.512 1.4375	185000 41500	0.87	0.69	47900 10800	71000 16000	0.67	234000 52600	78238C	78537
60.325 2.3750	136.525 5.3750	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	637	632
60.325 2.3750	136.525 5.3750	46.038 1.8125	225000 50700	0.49	1.23	58500 13100	48800 11000	1.20	297000 66700	65237	65537
60.325 2.3750	136.525 5.3750	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715332	H715311
60.325 2.3750	139.700 5.5000	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715332	H715310
60.325 2.3750	140.030 5.5130	36.512 1.4375	185000 41500	0.87	0.69	47900 10800	71000 16000	0.67	234000 52600	78238C	78551
60.325 2.3750	152.400 6.0000	52.705 2.0750	328000 73700	0.49	1.23	85000 19100	70900 15900	1.20	451000 101000	HH814542	HH814510
61.912 2.4375	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	392	394A
61.912 2.4375	112.712 4.4375	26.967 1.0617	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	392	3920
61.912 2.4375	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	554	552A
61.912 2.4375	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813843	HM813810
61.912 2.4375	130.175 5.1250	36.512 1.4375	154000 34700	0.82	0.73	40000 9000	56200 12600	0.71	183000 41100	HM911249	HM911210
61.912 2.4375	136.525 5.3750	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715334	H715311
61.912 2.4375	139.700 5.5000	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715334	H715310
61.912 2.4375	146.050 5.7500	41.275 1.6250	213000 47900	0.78	0.77	55200 12400	74000 16600	0.75	256000 57500	H913842	H913810
61.912 2.4375	146.050 5.7500	41.275 1.6250	213000 47900	0.78	0.77	55200 12400	74000 16600	0.75	256000 57500	H913843	H913810
61.912 2.4375	152.400 6.0000	47.625 1.8750	264000 59400	0.66	0.91	68500 15400	76900 17300	0.89	306000 68700	9180	9121
61.912 2.4375	152.400 6.0000	47.625 1.8750	264000 59400	0.66	0.91	68500 15400	76900 17300	0.89	306000 68700	9181	9121
61.912 2.4375	158.750 6.2500	50.800 2.0000	264000 59400	0.66	0.91	68500 15400	76900 17300	0.89	306000 68700	9180	9120
61.912 2.4375	158.750 6.2500	50.800 2.0000	264000 59400	0.66	0.91	68500 15400	76900 17300	0.89	306000 68700	9181	9120
61.912 2.4375	158.750 6.2500	55.562 2.1875	264000 59400	0.66	0.91	68500 15400	76900 17300	0.89	306000 68700	9178	9120
61.976 2.4400	99.979 3.9362	23.812 0.9375	98200 22100	0.43	1.41	25500 5720	18500 4170	1.37	149000 33500	28990	28919
62.738 2.4700	100.000 3.9370	25.400 1.0000	98200 22100	0.43	1.41	25500 5720	18500 4170	1.37	149000 33500	28995	28921

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	$a^{(3)}$	$R^{(4)}$	d_a	d_b	$r^{(4)}$	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
44.450 1.7500	34.925 1.3750	-9.4 -0.37	3.5 0.14	71.0 2.80	82.0 3.23	1.3 0.05	119.0 4.69	108.0 4.25	4.10 0.16	1.00 0.04	83.2	17.2	0.0827	2.60 5.73
44.450 1.7500	34.925 1.3750	-9.4 -0.37	1.5 0.06	71.0 2.80	78.0 3.07	3.3 0.13	119.0 4.69	107.0 4.21	4.10 0.16	1.00 0.04	83.2	17.2	0.0827	2.59 5.72
33.338 1.3125	23.812 0.9375	5.3 0.21	5.0 0.20	74.5 2.93	87.0 3.43	3.3 0.13	123.5 4.87	109.0 4.29	7.40 0.29	4.20 0.17	56.4	16.5	0.0842	2.06 4.55
41.275 1.6250	31.750 1.2500	-11.2 -0.44	3.5 0.14	72.0 2.83	78.0 3.07	3.3 0.13	124.0 4.88	116.0 4.57	4.20 0.16	1.90 0.08	106	21	0.0814	2.59 5.71
56.007 2.2050	44.450 1.7500	-19.3 -0.76	3.5 0.14	74.0 2.91	81.0 3.19	3.3 0.13	126.0 4.96	117.0 4.61	4.00 0.16	0.50 0.02	124	22.4	0.0827	3.82 8.43
33.236 1.3085	23.520 0.9260	8.4 0.33	5.0 0.20	77.5 3.05	91.0 3.58	3.3 0.13	130.0 5.12	115.0 4.53	6.40 0.25	4.90 0.19	71.3	17.6	0.0926	2.44 5.37
41.275 1.6250	31.750 1.2500	-11.2 -0.44	3.5 0.14	72.0 2.83	78.0 3.07	3.3 0.13	125.0 4.92	118.0 4.65	4.20 0.16	1.90 0.08	106	21	0.0814	2.93 6.47
44.450 1.7500	36.512 1.4375	-9.4 -0.37	3.5 0.14	71.0 2.80	82.0 3.23	3.0 0.12	120.0 4.72	112.0 4.41	4.10 0.16	1.00 0.04	83.2	17.2	0.0827	3.22 7.10
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	80.0 3.15	86.0 3.39	3.3 0.13	132.0 5.20	118.0 4.65	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.52 7.77
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	80.0 3.15	86.0 3.39	3.3 0.13	133.0 5.24	120.0 4.72	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.71 8.17
33.236 1.3085	23.520 0.9260	8.4 0.33	5.0 0.20	77.5 3.05	91.0 3.58	2.3 0.09	132.0 5.20	117.0 4.61	6.40 0.25	4.90 0.19	71.3	17.6	0.0926	2.59 5.71
52.705 2.0750	41.275 1.6250	-10.9 -0.43	3.5 0.14	83.0 3.27	89.0 3.50	3.3 0.13	143.0 5.63	130.0 5.12	4.10 0.16	2.40 0.10	136	24.6	0.0973	5.02 11.06
21.996 0.8660	18.825 0.7411	-0.8 -0.03	0.8 0.03	69.0 2.72	70.0 2.76	1.3 0.05	105.0 4.13	101.0 3.98	1.80 0.07	2.00 0.08	56	21.4	0.0984	0.87 1.91
21.996 0.8660	23.812 0.9375	-0.8 -0.03	0.8 0.03	69.0 2.72	70.0 2.76	3.3 0.13	106.0 4.17	99.0 3.90	1.80 0.07	2.00 0.08	56	21.4	0.0984	1.05 2.31
36.678 1.4440	30.162 1.1875	-9.4 -0.37	3.5 0.14	71.0 2.80	77.0 3.03	3.3 0.13	116.0 4.57	109.0 4.29	2.30 0.09	1.20 0.05	91	21.1	0.1108	2.02 4.46
36.512 1.4375	26.988 1.0625	-3.8 -0.15	3.5 0.14	78.0 3.07	85.0 3.35	3.3 0.13	121.0 4.76	111.0 4.37	4.00 0.16	1.30 0.05	91.7	24.3	0.1252	2.13 4.71
33.338 1.3125	23.812 0.9375	5.3 0.21	3.5 0.14	74.0 2.91	91.0 3.58	3.3 0.13	123.5 4.87	109.0 4.29	7.40 0.29	4.20 0.17	56.4	16.5	0.0842	2.03 4.48
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	81.0 3.19	87.0 3.43	3.3 0.13	132.0 5.20	118.0 4.65	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.47 7.65
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	81.0 3.19	87.0 3.43	3.3 0.13	133.0 5.24	120.0 4.72	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.65 8.05
39.688 1.5625	25.400 1.0000	4.3 0.17	3.5 0.14	82.5 3.24	90.0 3.54	3.3 0.13	138.0 5.43	124.0 4.88	8.20 0.32	3.60 0.14	78.5	17.3	0.0927	3.12 6.87
39.688 1.5625	25.400 1.0000	4.3 0.17	7.0 0.28	82.5 3.24	97.0 3.82	3.3 0.13	138.0 5.43	124.0 4.88	8.20 0.32	3.60 0.14	78.5	17.3	0.0927	3.08 6.80
46.038 1.8125	31.750 1.2500	-3.8 -0.15	3.5 0.14	81.5 3.20	90.0 3.54	3.3 0.13	145.0 5.71	130.0 5.12	8.10 0.32	4.00 0.16	87.6	13.7	0.0912	3.98 8.78
46.038 1.8125	31.750 1.2500	-3.8 -0.15	0.8 0.03	81.5 3.20	85.0 3.35	3.3 0.13	145.0 5.71	130.0 5.12	8.10 0.32	4.00 0.16	87.6	13.7	0.0912	3.99 8.80
46.038 1.8125	34.925 1.3750	-3.8 -0.15	3.5 0.14	81.5 3.20	90.0 3.54	3.3 0.13	146.0 5.75	131.0 5.16	8.10 0.32	4.00 0.16	87.6	13.7	0.0912	4.60 10.14
46.038 1.8125	34.925 1.3750	-3.8 -0.15	0.8 0.03	81.5 3.20	85.0 3.35	3.3 0.13	146.0 5.75	131.0 5.16	8.10 0.32	4.00 0.16	87.6	13.7	0.0912	4.61 10.17
52.388 2.0625	34.925 1.3750	-8.4 -0.33	3.5 0.14	81.5 3.20	90.0 3.54	3.3 0.13	146.0 5.75	131.0 5.16	12.90 0.51	2.40 0.10	87.6	13.7	0.0912	4.86 10.71
24.608 0.9688	19.050 0.7500	-1.8 -0.07	2.0 0.08	68.0 2.68	72.0 2.83	1.5 0.06	96.0 3.78	90.0 3.54	1.20 0.05	1.40 0.05	60.1	24.5	0.1032	0.71 1.56
25.400 1.0000	19.845 0.7813	-2.5 -0.10	3.5 0.14	69.0 2.72	75.0 2.95	3.3 0.13	96.0 3.78	89.0 3.50	2.00 0.08	1.40 0.05	60.1	24.5	0.1032	0.70 1.55

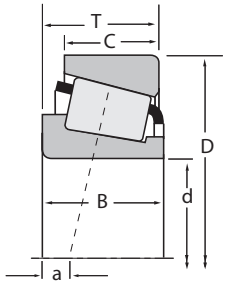
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

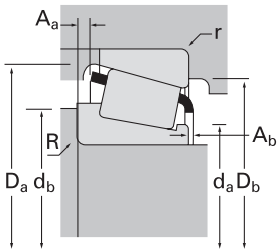
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
62.738 2.4700	101.600 4.0000	25.400 1.0000	98200 22100	0.43	1.41	25500 5720	18500 4170	1.37	149000 33500	28995	28920
63.500 2.5000	92.075 3.6250	13.495 0.5313	35800 8060	0.41	1.48	9290 2090	6450 1450	1.44	53300 12000	LL510749	LL510710
63.500 2.5000	94.458 3.7188	19.050 0.7500	62000 13900	0.42	1.41	16100 3620	11700 2630	1.38	108000 24300	L610549	L610510
63.500 2.5000	104.775 4.1250	21.433 0.8438	89600 20100	0.39	1.55	23200 5220	15400 3470	1.51	120000 27000	39250	39412
63.500 2.5000	107.158 4.2188	22.000 0.8661	89600 20100	0.39	1.55	23200 5220	15400 3470	1.51	120000 27000	39250	39422
63.500 2.5000	107.950 4.2500	25.400 1.0000	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29585	29520
63.500 2.5000	107.950 4.2500	25.400 1.0000	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29585	29522
63.500 2.5000	107.950 4.2500	25.400 1.0000	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29586	29520
63.500 2.5000	107.950 4.2500	25.400 1.0000	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29586	29522
63.500 2.5000	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	395	394
63.500 2.5000	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	390A	394A
63.500 2.5000	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	390A	394AS
63.500 2.5000	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	395	394A
63.500 2.5000	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	395	394AS
63.500 2.5000	110.000 4.3307	25.400 1.0000	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29585	29521
63.500 2.5000	110.000 4.3307	25.400 1.0000	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29586	29521
63.500 2.5000	110.000 4.3307	29.370 1.1563	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3982X	3927AS
63.500 2.5000	110.000 4.3307	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3982	3927X
63.500 2.5000	110.058 4.3330	22.000 0.8661	89600 20100	0.39	1.55	23200 5220	15400 3470	1.51	120000 27000	39250	39433
63.500 2.5000	112.712 4.4375	26.967 1.0617	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	395	3920
63.500 2.5000	112.712 4.4375	26.967 1.0617	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	390A	3920
63.500 2.5000	112.712 4.4375	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3982	3920
63.500 2.5000	112.712 4.4375	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3982	3925
63.500 2.5000	112.712 4.4375	30.162 1.1875	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39585	39520
63.500 2.5000	112.712 4.4375	30.162 1.1875	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39585A	39520
63.500 2.5000	112.712 4.4375	33.338 1.3125	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3982	3926
63.500 2.5000	117.475 4.6250	30.162 1.1875	128000 28800	0.44	1.38	33200 7470	24800 5570	1.34	197000 44300	33251	33462
63.500 2.5000	120.000 4.7244	29.002 1.1418	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	477	472A

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
25.400 1.0000	19.845 0.7813	-2.5 -0.10	3.5 0.14	69.0 2.72	75.0 2.95	3.3 0.13	97.0 3.82	90.0 3.54	2.00 0.08	1.40 0.05	60.1	24.5	0.1032	0.74 1.64
12.700 0.5000	9.525 0.3750	3.0 0.12	1.5 0.06	68.0 2.68	70.0 2.76	1.5 0.06	88.0 3.46	86.0 3.39	0.60 0.02	1.80 0.07	33.9	45.9	0.0827	0.26 0.58
19.050 0.7500	15.083 0.5938	0.5 0.02	1.5 0.06	69.0 2.72	71.0 2.80	1.5 0.06	91.0 3.58	86.0 3.39	0.90 0.04	1.40 0.06	56.7	43.6	0.1006	0.45 0.99
22.000 0.8661	15.875 0.6250	-1.5 -0.06	2.0 0.08	69.0 2.72	73.0 2.87	2.0 0.08	100.0 3.94	96.0 3.78	1.70 0.07	2.30 0.09	51.7	19.5	0.0947	0.68 1.51
22.000 0.8661	21.204 0.8348	-1.5 -0.06	2.0 0.08	69.0 2.72	73.0 2.87	2.3 0.09	102.0 4.02	97.0 3.82	1.70 0.07	2.30 0.09	51.7	19.5	0.0947	0.78 1.72
25.400 1.0000	19.050 0.7500	-0.8 -0.03	3.5 0.14	71.0 2.80	77.0 3.03	3.3 0.13	103.0 4.06	96.0 3.78	2.20 0.08	1.40 0.05	70.3	25.8	0.1112	0.91 2.02
25.400 1.0000	19.050 0.7500	-0.8 -0.03	3.5 0.14	71.0 2.80	77.0 3.03	0.8 0.03	103.0 4.06	98.0 3.86	2.20 0.08	1.40 0.05	70.3	25.8	0.1112	0.93 2.04
25.400 1.0000	19.050 0.7500	-0.8 -0.03	1.5 0.06	71.0 2.80	73.0 2.87	3.3 0.13	103.0 4.06	96.0 3.78	2.20 0.08	1.40 0.05	70.3	25.8	0.1112	0.92 2.03
25.400 1.0000	19.050 0.7500	-0.8 -0.03	1.5 0.06	71.0 2.80	73.0 2.87	0.8 0.03	103.0 4.06	98.0 3.86	2.20 0.08	1.40 0.05	70.3	25.8	0.1112	0.94 2.06
21.996 0.8660	22.000 0.8661	-0.8 -0.03	3.5 0.14	70.0 2.76	77.0 3.03	0.8 0.03	106.0 4.18	101.0 3.98	1.80 0.07	2.00 0.08	56	21.4	0.0984	0.85 1.87
21.996 0.8660	18.825 0.7411	-0.8 -0.03	1.5 0.06	70.0 2.76	73.0 2.87	1.3 0.05	105.0 4.13	101.0 3.98	1.70 0.07	2.30 0.09	56	21.4	0.0984	0.84 1.85
21.996 0.8660	18.825 0.7411	-0.8 -0.03	1.5 0.06	70.0 2.76	73.0 2.87	3.3 0.13	104.5 4.11	99.0 3.90	1.70 0.07	2.30 0.09	56	21.4	0.0984	0.82 1.81
21.996 0.8660	18.825 0.7411	-0.8 -0.03	3.5 0.14	70.0 2.76	77.0 3.03	1.3 0.05	105.0 4.13	101.0 3.98	1.80 0.07	2.00 0.08	56	21.4	0.0984	0.83 1.83
21.996 0.8660	18.825 0.7411	-0.8 -0.03	3.5 0.14	70.0 2.76	77.0 3.03	3.3 0.13	104.5 4.11	99.0 3.90	1.80 0.07	2.00 0.08	56	21.4	0.0984	0.81 1.80
25.400 1.0000	19.050 0.7500	-0.8 -0.03	3.5 0.14	71.0 2.80	77.0 3.03	1.3 0.05	104.0 4.09	99.0 3.90	2.20 0.08	1.40 0.05	70.3	25.8	0.1112	0.98 2.16
25.400 1.0000	19.050 0.7500	-0.8 -0.03	1.5 0.06	71.0 2.80	73.0 2.87	1.3 0.05	104.0 4.09	99.0 3.90	2.20 0.08	1.40 0.05	70.3	25.8	0.1112	0.99 2.17
30.048 1.1830	23.020 0.9063	-4.6 -0.18	7.0 0.28	71.0 2.80	84.0 3.31	0.5 0.02	105.0 4.13	100.0 3.94	2.20 0.09	1.10 0.04	75.2	21.3	0.1092	1.10 2.42
30.048 1.1830	23.812 0.9375	-4.6 -0.18	3.5 0.14	71.0 2.80	77.0 3.03	3.3 0.13	105.0 4.13	99.0 3.90	2.20 0.09	1.10 0.04	75.2	21.3	0.1092	1.13 2.50
22.000 0.8661	17.236 0.6786	-1.5 -0.06	2.0 0.08	69.0 2.72	73.0 2.87	2.3 0.09	103.0 4.06	98.0 3.86	1.70 0.07	2.30 0.09	51.7	19.5	0.0947	0.81 1.80
21.996 0.8660	23.812 0.9375	-0.8 -0.03	3.5 0.14	70.0 2.76	77.0 3.03	3.3 0.13	106.0 4.17	99.0 3.90	1.80 0.07	2.00 0.08	56	21.4	0.0984	1.01 2.23
21.996 0.8660	23.812 0.9375	-0.8 -0.03	1.5 0.06	70.0 2.76	73.0 2.87	3.3 0.13	106.0 4.17	99.0 3.90	1.70 0.07	2.30 0.09	56	21.4	0.0984	1.02 2.24
30.048 1.1830	23.812 0.9375	-4.6 -0.18	3.5 0.14	71.0 2.80	77.0 3.03	3.3 0.13	106.0 4.17	99.0 3.90	2.20 0.09	1.10 0.04	75.2	21.3	0.1092	1.22 2.70
30.048 1.1830	23.812 0.9375	-4.6 -0.18	3.5 0.14	71.0 2.80	77.0 3.03	0.8 0.03	106.0 4.17	101.0 3.98	2.20 0.09	1.10 0.04	75.2	21.3	0.1092	1.24 2.73
30.162 1.1875	23.812 0.9375	-6.6 -0.26	3.5 0.14	71.0 2.80	77.0 3.03	3.3 0.13	107.0 4.21	101.0 3.98	1.60 0.06	2.60 0.10	84.3	23.7	0.1074	1.23 2.72
30.162 1.1875	23.812 0.9375	-6.6 -0.26	0.8 0.03	71.0 2.80	72.0 2.83	3.3 0.13	107.0 4.21	101.0 3.98	1.60 0.06	2.60 0.10	84.3	23.7	0.1074	1.24 2.74
30.048 1.1830	26.988 1.0625	-4.6 -0.18	3.5 0.14	71.0 2.80	77.0 3.03	3.3 0.13	106.0 4.17	98.0 3.86	2.20 0.09	1.10 0.04	75.2	21.3	0.1092	1.31 2.89
30.162 1.1875	23.812 0.9375	-2.8 -0.11	0.8 0.03	72.0 2.83	73.0 2.87	3.3 0.13	112.0 4.41	104.0 4.09	2.30 0.09	1.10 0.04	84.2	25.9	0.1162	1.42 3.13
29.007 1.1420	23.444 0.9230	-4.1 -0.16	0.8 0.03	72.0 2.83	73.0 2.87	3.3 0.13	114.0 4.49	106.0 4.17	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.44 3.17

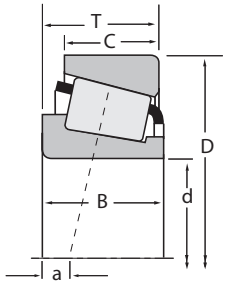
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

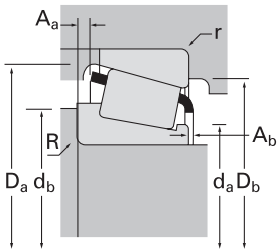
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
63.500 2.5000	120.000 4.7244	29.002 1.1418	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	483	472A
63.500 2.5000	120.000 4.7244	29.794 1.1730	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	477	472
63.500 2.5000	120.000 4.7244	29.794 1.1730	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	477	473
63.500 2.5000	120.000 4.7244	29.794 1.1730	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	483	472
63.500 2.5000	122.238 4.8125	38.100 1.5000	209000 46900	0.34	1.78	54100 12200	31300 7030	1.73	279000 62700	HM212046	HM212010
63.500 2.5000	122.238 4.8125	38.100 1.5000	209000 46900	0.34	1.78	54100 12200	31300 7030	1.73	279000 62700	HM212046	HM212011
63.500 2.5000	122.238 4.8125	38.100 1.5000	209000 46900	0.34	1.78	54100 12200	31300 7030	1.73	279000 62700	HM212047	HM212010
63.500 2.5000	122.238 4.8125	38.100 1.5000	209000 46900	0.34	1.78	54100 12200	31300 7030	1.73	279000 62700	HM212047	HM212011
63.500 2.5000	122.238 4.8125	43.658 1.7188	219000 49200	0.36	1.67	56800 12800	34800 7830	1.63	327000 73500	5564	5535
63.500 2.5000	122.238 4.8125	43.658 1.7188	219000 49200	0.36	1.67	56800 12800	34800 7830	1.63	327000 73500	5584	5535
63.500 2.5000	123.825 4.8750	30.162 1.1875	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	483	472X
63.500 2.5000	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	559	552
63.500 2.5000	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	559	552A
63.500 2.5000	127.000 5.0000	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	565	563
63.500 2.5000	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813842A	HM813810
63.500 2.5000	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813842	HM813810
63.500 2.5000	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813842	HM813811
63.500 2.5000	130.000 5.1181	36.937 1.4542	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	565	562X
63.500 2.5000	130.000 5.1181	36.937 1.4542	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	565-S	562X
63.500 2.5000	130.000 5.1181	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	639	633X
63.500 2.5000	130.175 5.1250	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	639	633
63.500 2.5000	135.755 5.3447	53.975 2.1250	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	6382	6320
63.500 2.5000	136.525 5.3750	36.512 1.4375	158000 35600	0.87	0.69	41100 9230	60900 13700	0.67	193000 43400	78250	78537
63.500 2.5000	136.525 5.3750	36.512 1.4375	185000 41500	0.87	0.69	47900 10800	71000 16000	0.67	234000 52600	78248C	78537
63.500 2.5000	136.525 5.3750	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	639	632
63.500 2.5000	136.525 5.3750	41.275 1.6250	252000 56700	0.36	1.67	65400 14700	40300 9060	1.62	335000 75400	H414235	H414210
63.500 2.5000	136.525 5.3750	41.275 1.6250	252000 56700	0.36	1.67	65400 14700	40300 9060	1.62	335000 75400	H414236	H414210
63.500 2.5000	136.525 5.3750	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715336	H715311

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
29.007 1.1420	**23.444** 0.9230	**-4.1** -0.16	**3.5** 0.14	**72.0** 2.83	**78.0** 3.07	**3.3** 0.13	**114.0** 4.49	**106.0** 4.17	**1.50** 0.06	**2.20** 0.08	**77.2**	**23**	**0.1083**	**1.43** 3.15
29.007 1.1420	**24.237** 0.9542	**-4.1** -0.16	**0.8** 0.03	**72.0** 2.83	**73.0** 2.87	**2.0** 0.08	**114.0** 4.49	**107.0** 4.21	**1.50** 0.06	**2.20** 0.08	**77.2**	**23**	**0.1083**	**1.47** 3.24
29.007 1.1420	**29.000** 1.1417	**-4.1** -0.16	**0.8** 0.03	**72.0** 2.83	**73.0** 2.87	**2.0** 0.08	**114.0** 4.49	**107.0** 4.21	**1.50** 0.06	**2.20** 0.08	**77.2**	**23**	**0.1083**	**1.52** 3.35
29.007 1.1420	**24.237** 0.9542	**-4.1** -0.16	**3.5** 0.14	**72.0** 2.83	**78.0** 3.07	**2.0** 0.08	**114.0** 4.49	**107.0** 4.21	**1.50** 0.06	**2.20** 0.08	**77.2**	**23**	**0.1083**	**1.46** 3.22
38.354 1.5100	**29.718** 1.1700	**-10.9** -0.43	**3.5** 0.14	**73.0** 2.87	**80.0** 3.15	**1.5** 0.06	**116.0** 4.57	**110.0** 4.33	**2.20** 0.09	**3.00** 0.12	**92.2**	**18.1**	**0.0759**	**1.95** 4.29
38.354 1.5100	**29.718** 1.1700	**-10.9** -0.43	**3.5** 0.14	**73.0** 2.87	**80.0** 3.15	**3.3** 0.13	**116.0** 4.57	**108.0** 4.25	**2.20** 0.09	**3.00** 0.12	**92.2**	**18.1**	**0.0759**	**1.94** 4.29
38.354 1.5100	**29.718** 1.1700	**-10.9** -0.43	**7.0** 0.28	**73.0** 2.87	**87.0** 3.43	**1.5** 0.06	**116.0** 4.57	**110.0** 4.33	**2.20** 0.09	**3.00** 0.12	**92.2**	**18.1**	**0.0759**	**1.93** 4.26
38.354 1.5100	**29.718** 1.1700	**-10.9** -0.43	**7.0** 0.28	**73.0** 2.87	**87.0** 3.43	**3.3** 0.13	**116.0** 4.57	**108.0** 4.25	**2.20** 0.09	**3.00** 0.12	**92.2**	**18.1**	**0.0759**	**1.93** 4.26
43.764 1.7230	**36.512** 1.4375	**-12.2** -0.48	**5.0** 0.20	**75.0** 2.95	**84.0** 3.31	**3.3** 0.13	**116.0** 4.57	**106.0** 4.17	**2.50** 0.10	**1.20** 0.05	**110**	**24.2**	**0.0825**	**2.28** 5.02
43.764 1.7230	**36.512** 1.4375	**-12.2** -0.48	**3.5** 0.14	**75.0** 2.95	**81.0** 3.19	**3.3** 0.13	**116.0** 4.57	**106.0** 4.17	**2.50** 0.10	**1.20** 0.05	**110**	**24.2**	**0.0825**	**2.29** 5.04
29.007 1.1420	**24.605** 0.9687	**-4.1** -0.16	**3.5** 0.14	**72.0** 2.83	**78.0** 3.07	**3.3** 0.13	**115.0** 4.53	**109.0** 4.29	**1.50** 0.06	**2.20** 0.08	**77.2**	**23**	**0.1083**	**1.60** 3.52
36.678 1.4440	**33.338** 1.3125	**-9.4** -0.37	**3.5** 0.14	**72.0** 2.83	**78.0** 3.07	**3.3** 0.13	**116.0** 4.57	**109.0** 4.29	**2.30** 0.09	**1.20** 0.05	**91**	**21.1**	**0.1108**	**2.02** 4.46
36.678 1.4440	**30.162** 1.1875	**-9.4** -0.37	**3.5** 0.14	**72.0** 2.83	**78.0** 3.07	**3.3** 0.13	**116.0** 4.57	**109.0** 4.29	**2.30** 0.09	**1.20** 0.05	**91**	**21.1**	**0.1108**	**1.98** 4.36
36.170 1.4240	**28.575** 1.1250	**-8.1** -0.32	**3.5** 0.14	**73.0** 2.87	**80.0** 3.15	**3.3** 0.13	**120.0** 4.72	**112.0** 4.41	**3.20** 0.13	**1.80** 0.07	**101**	**24**	**0.1167**	**2.08** 4.59
36.512 1.4375	**26.988** 1.0625	**-3.8** -0.15	**0.8** 0.03	**78.0** 3.07	**78.0** 3.07	**3.3** 0.13	**121.0** 4.76	**111.0** 4.37	**4.00** 0.16	**1.30** 0.05	**91.7**	**24.3**	**0.1252**	**2.09** 4.62
36.512 1.4375	**26.988** 1.0625	**-3.8** -0.15	**3.5** 0.14	**78.0** 3.07	**84.0** 3.31	**3.3** 0.13	**121.0** 4.76	**111.0** 4.37	**4.00** 0.16	**1.30** 0.05	**91.7**	**24.3**	**0.1252**	**2.09** 4.61
36.512 1.4375	**26.988** 1.0625	**-3.8** -0.15	**3.5** 0.14	**78.0** 3.07	**84.0** 3.31	**1.5** 0.06	**121.0** 4.76	**113.0** 4.45	**4.00** 0.16	**1.30** 0.05	**91.7**	**24.3**	**0.1252**	**2.09** 4.61
36.170 1.4240	**29.000** 1.1417	**-8.1** -0.32	**3.5** 0.14	**73.0** 2.87	**80.0** 3.15	**3.0** 0.12	**121.0** 4.76	**114.0** 4.49	**3.20** 0.13	**1.80** 0.07	**101**	**24**	**0.1167**	**2.24** 4.93
36.170 1.4240	**29.000** 1.1417	**-8.1** -0.32	**6.4** 0.25	**73.0** 2.87	**85.0** 3.35	**3.0** 0.12	**121.0** 4.76	**114.0** 4.49	**3.20** 0.13	**1.80** 0.07	**101**	**24**	**0.1167**	**2.21** 4.88
41.275 1.6250	**31.750** 1.2500	**-11.2** -0.44	**3.5** 0.14	**74.0** 2.91	**81.0** 3.19	**3.0** 0.12	**123.0** 4.84	**117.0** 4.61	**4.20** 0.16	**1.90** 0.08	**106**	**21**	**0.0814**	**2.49** 5.48
41.275 1.6250	**31.750** 1.2500	**-11.2** -0.44	**3.5** 0.14	**74.0** 2.91	**81.0** 3.19	**3.3** 0.13	**124.0** 4.88	**116.0** 4.57	**4.20** 0.16	**1.90** 0.08	**106**	**21**	**0.0814**	**2.49** 5.49
56.007 2.2050	**44.450** 1.7500	**-19.3** -0.76	**4.3** 0.17	**77.0** 3.03	**84.0** 3.31	**3.3** 0.13	**126.0** 4.96	**117.0** 4.61	**4.00** 0.16	**0.50** 0.02	**124**	**22.4**	**0.0827**	**3.68** 8.12
33.236 1.3085	**23.520** 0.9260	**7.9** 0.31	**2.3** 0.09	**78.5** 3.10	**85.0** 3.35	**3.3** 0.13	**130.0** 5.12	**115.0** 4.53	**6.90** 0.27	**4.10** 0.16	**62.6**	**19.1**	**0.0884**	**2.26** 4.99
33.236 1.3085	**23.520** 0.9260	**8.4** 0.33	**0.8** 0.03	**77.0** 3.03	**92.0** 3.62	**3.3** 0.13	**130.0** 5.12	**115.0** 4.53	**6.40** 0.25	**4.90** 0.19	**71.3**	**17.6**	**0.0926**	**2.38** 5.24
41.275 1.6250	**31.750** 1.2500	**-11.2** -0.44	**3.5** 0.14	**74.0** 2.91	**81.0** 3.19	**3.3** 0.13	**125.0** 4.92	**118.0** 4.65	**4.20** 0.16	**1.90** 0.08	**106**	**21**	**0.0814**	**2.83** 6.25
41.275 1.6250	**31.750** 1.2500	**-10.9** -0.43	**3.5** 0.14	**78.0** 3.07	**82.0** 3.23	**3.3** 0.13	**129.0** 5.08	**121.0** 4.76	**3.70** 0.15	**3.00** 0.12	**113**	**22.8**	**0.0827**	**2.84** 6.25
41.275 1.6250	**31.750** 1.2500	**-10.9** -0.43	**7.0** 0.28	**78.0** 3.07	**89.0** 3.50	**3.3** 0.13	**129.0** 5.08	**121.0** 4.76	**3.70** 0.15	**3.00** 0.12	**113**	**22.8**	**0.0827**	**2.80** 6.18
46.038 1.8125	**36.512** 1.4375	**-8.6** -0.34	**3.5** 0.14	**82.0** 3.23	**88.0** 3.46	**3.3** 0.13	**132.0** 5.20	**118.0** 4.65	**4.20** 0.16	**2.00** 0.08	**147**	**32.8**	**0.0993**	**3.41** 7.52

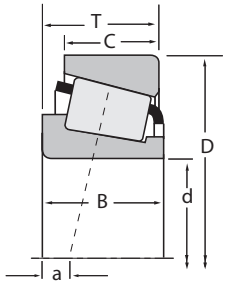
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

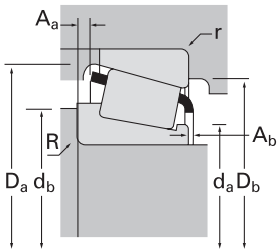
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
63.500 2.5000	139.700 5.5000	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715336	H715310
63.500 2.5000	140.030 5.5130	36.512 1.4375	158000 35600	0.87	0.69	41100 9230	60900 13700	0.67	193000 43400	78250	78551
63.500 2.5000	149.225 5.8750	53.975 2.1250	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6475	6420
63.500 2.5000	150.089 5.9090	44.450 1.7500	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	745-S	742
63.500 2.5000	177.800 7.0000	56.642 2.2300	352000 79200	0.80	0.75	91300 20500	125000 28000	0.73	413000 92900	HH914447	HH914412
64.960 2.5575	149.225 5.8750	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	656	652A
64.960 2.5575	149.225 5.8750	53.975 2.1250	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6464	6420
64.963 2.5576	127.000 5.0000	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	569	563
64.987 2.5586	107.950 4.2500	25.400 1.0000	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29588	29520
64.987 2.5586	112.712 4.4375	30.162 1.1875	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39586	39520
64.987 2.5586	119.985 4.7238	32.751 1.2894	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39586	39528
64.987 2.5586	140.030 5.5130	36.512 1.4375	158000 35600	0.87	0.69	41100 9230	60900 13700	0.67	193000 43400	78255X	78551
64.987 2.5586	144.983 5.7080	36.000 1.4173	158000 35600	0.87	0.69	41100 9230	60900 13700	0.67	193000 43400	78255X	78571
65.000 2.5591	105.000 4.1339	24.000 0.9449	100000 22500	0.45	1.32	26000 5840	20200 4540	1.29	139000 31300	JLM710949C	JLM710910
65.000 2.5591	110.000 4.3307	28.000 1.1024	131000 29400	0.40	1.49	33900 7610	23300 5240	1.45	195000 43900	JM511946	JM511910
65.000 2.5591	112.712 4.4375	22.225 0.8750	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	399	393A
65.000 2.5591	112.712 4.4375	29.020 1.1425	131000 29400	0.40	1.49	33900 7610	23300 5240	1.45	195000 43900	JM511945	3920
65.000 2.5591	112.712 4.4375	29.020 1.1425	131000 29400	0.40	1.49	33900 7610	23300 5240	1.45	195000 43900	JM511946	3920
65.000 2.5591	120.000 4.7244	29.002 1.1418	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	478	472A
65.000 2.5591	120.000 4.7244	29.794 1.1730	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	478	472
65.000 2.5591	120.000 4.7244	29.794 1.1730	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	478	473
65.000 2.5591	120.000 4.7244	39.000 1.5354	207000 46400	0.34	1.78	53500 12000	30900 6950	1.73	283000 63600	JH211749A	JH211710
65.000 2.5591	120.000 4.7244	39.000 1.5354	207000 46400	0.34	1.78	53500 12000	30900 6950	1.73	283000 63600	JH211749	JH211710
65.000 2.5591	123.825 4.8750	30.162 1.1875	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	478	472X
65.000 2.5591	140.000 5.5118	53.980 2.1250	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	J6392	J6327
65.088 2.5625	135.755 5.3447	53.975 2.1250	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	6379	6320
65.088 2.5625	136.525 5.3750	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715340	H715311
65.088 2.5625	139.700 5.5000	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715340	H715310

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
46.038 1.8125	**36.512** 1.4375	**-8.6** -0.34	**3.5** 0.14	**82.0** 3.23	**88.0** 3.46	**3.3** 0.13	**133.0** 5.24	**120.0** 4.72	**4.20** 0.16	**2.00** 0.08	**147**	**32.8**	**0.0993**	**3.59** 7.93
33.236 1.3085	**23.520** 0.9260	**7.9** 0.31	**2.3** 0.09	**78.5** 3.10	**85.0** 3.35	**2.3** 0.09	**132.0** 5.20	**117.0** 4.61	**6.90** 0.27	**4.10** 0.16	**62.6**	**19.1**	**0.0884**	**2.42** 5.32
54.229 2.1350	**44.450** 1.7500	**-15.0** -0.59	**3.5** 0.14	**80.0** 3.15	**86.0** 3.39	**3.3** 0.13	**140.0** 5.51	**129.0** 5.08	**2.70** 0.11	**0.70** 0.03	**158**	**29.1**	**0.0931**	**4.82** 10.63
46.672 1.8375	**36.512** 1.4375	**-11.9** -0.47	**3.5** 0.14	**77.0** 3.03	**84.0** 3.31	**3.3** 0.13	**142.0** 5.59	**134.0** 5.28	**1.90** 0.07	**1.20** 0.05	**160**	**26.3**	**0.0898**	**4.16** 9.16
53.975 2.1250	**37.308** 1.4688	**-0.3** -0.01	**3.5** 0.14	**85.5** 3.36	**105.0** 4.13	**3.3** 0.13	**165.0** 6.50	**146.0** 5.75	**9.90** 0.39	**4.70** 0.18	**111**	**17.7**	**0.1044**	**6.79** 14.97
41.275 1.6250	**31.750** 1.2500	**-7.9** -0.31	**3.5** 0.14	**78.0** 3.07	**85.0** 3.35	**3.3** 0.13	**141.0** 5.55	**132.0** 5.20	**4.50** 0.18	**2.00** 0.08	**137**	**27.3**	**0.0919**	**3.58** 7.88
54.229 2.1350	**44.450** 1.7500	**-15.0** -0.59	**3.5** 0.14	**81.0** 3.19	**87.0** 3.43	**3.3** 0.13	**140.0** 5.51	**129.0** 5.08	**2.70** 0.11	**0.70** 0.03	**158**	**29.1**	**0.0931**	**4.76** 10.49
36.170 1.4240	**28.575** 1.1250	**-8.1** -0.32	**3.5** 0.14	**74.0** 2.91	**81.0** 3.19	**3.3** 0.13	**120.0** 4.72	**112.0** 4.41	**3.20** 0.13	**1.80** 0.07	**101**	**24**	**0.1167**	**2.04** 4.50
25.400 1.0000	**19.050** 0.7500	**-0.8** -0.03	**3.5** 0.14	**72.0** 2.83	**78.0** 3.07	**3.3** 0.13	**103.0** 4.06	**96.0** 3.78	**2.20** 0.08	**1.40** 0.05	**70.3**	**25.8**	**0.1112**	**0.88** 1.95
30.925 1.2175	**23.812** 0.9375	**-6.6** -0.26	**2.3** 0.09	**72.0** 2.83	**76.0** 2.99	**3.3** 0.13	**107.0** 4.21	**101.0** 3.98	**1.60** 0.06	**1.80** 0.07	**84.3**	**23.7**	**0.1074**	**1.21** 2.67
30.925 1.2175	**26.950** 1.0610	**-6.6** -0.26	**2.3** 0.09	**72.0** 2.83	**76.0** 2.99	**0.8** 0.03	**110.0** 4.33	**107.0** 4.21	**1.60** 0.06	**1.80** 0.07	**84.3**	**23.7**	**0.1074**	**1.56** 3.43
32.923 1.2962	**23.520** 0.9260	**7.9** 0.31	**3.5** 0.14	**79.0** 3.11	**89.0** 3.50	**2.3** 0.09	**132.0** 5.20	**117.0** 4.61	**6.90** 0.27	**4.40** 0.18	**62.6**	**19.1**	**0.0884**	**2.37** 5.22
32.923 1.2962	**23.007** 0.9058	**7.9** 0.31	**3.5** 0.14	**79.0** 3.11	**89.0** 3.50	**3.5** 0.14	**132.0** 5.20	**118.0** 4.65	**6.90** 0.27	**4.40** 0.18	**62.6**	**19.1**	**0.0884**	**2.52** 5.56
23.000 0.9055	**18.500** 0.7283	**-0.3** -0.01	**3.0** 0.12	**72.0** 2.83	**78.0** 3.07	**1.0** 0.04	**100.5** 3.96	**96.0** 3.78	**1.50** 0.06	**2.90** 0.12	**55.5**	**22.4**	**0.1023**	**0.75** 1.65
28.000 1.1024	**22.500** 0.8858	**-3.3** -0.13	**3.0** 0.12	**72.0** 2.83	**78.0** 3.07	**2.5** 0.10	**105.0** 4.13	**99.0** 3.90	**1.20** 0.05	**1.90** 0.08	**76.3**	**23.5**	**0.1098**	**1.05** 2.32
21.996 0.8660	**15.875** 0.6250	**-0.8** -0.03	**2.0** 0.08	**71.0** 2.80	**75.0** 2.95	**3.3** 0.13	**105.0** 4.13	**100.0** 3.94	**1.70** 0.07	**2.30** 0.09	**56**	**21.4**	**0.0984**	**0.84** 1.85
30.000 1.1811	**23.812** 0.9375	**-3.3** -0.13	**3.0** 0.12	**74.0** 2.91	**80.0** 3.15	**3.3** 0.13	**106.0** 4.17	**99.0** 3.90	**1.20** 0.05	**0.10** 0.00	**76.3**	**23.5**	**0.1098**	**1.18** 2.61
28.000 1.1024	**23.812** 0.9375	**-3.3** -0.13	**3.0** 0.12	**72.0** 2.83	**78.0** 3.07	**3.3** 0.13	**106.0** 4.17	**99.0** 3.90	**1.20** 0.05	**1.90** 0.08	**76.3**	**23.5**	**0.1098**	**1.16** 2.56
29.007 1.1420	**23.444** 0.9230	**-4.1** -0.16	**2.3** 0.09	**73.0** 2.87	**77.0** 3.03	**3.3** 0.13	**114.0** 4.49	**106.0** 4.17	**1.50** 0.06	**2.20** 0.08	**77.2**	**23**	**0.1083**	**1.40** 3.08
29.007 1.1420	**24.237** 0.9542	**-4.1** -0.16	**2.3** 0.09	**73.0** 2.87	**77.0** 3.03	**2.0** 0.08	**114.0** 4.49	**107.0** 4.21	**1.50** 0.06	**2.20** 0.08	**77.2**	**23**	**0.1083**	**1.43** 3.15
29.007 1.1420	**29.000** 1.1417	**-4.1** -0.16	**2.3** 0.09	**73.0** 2.87	**77.0** 3.03	**2.0** 0.08	**114.0** 4.49	**107.0** 4.21	**1.50** 0.06	**2.20** 0.08	**77.2**	**23**	**0.1083**	**1.48** 3.27
38.500 1.5157	**32.000** 1.2598	**-10.7** -0.42	**7.0** 0.28	**74.0** 2.91	**88.0** 3.46	**2.5** 0.10	**114.0** 4.49	**107.0** 4.21	**1.20** 0.05	**3.40** 0.13	**94**	**22.5**	**0.0764**	**1.83** 4.04
38.500 1.5157	**32.000** 1.2598	**-10.7** -0.42	**3.0** 0.12	**74.0** 2.91	**80.0** 3.15	**2.5** 0.10	**114.0** 4.49	**107.0** 4.21	**1.20** 0.05	**3.40** 0.13	**94**	**22.5**	**0.0764**	**1.87** 4.12
29.007 1.1420	**24.605** 0.9687	**-4.1** -0.16	**2.3** 0.09	**73.0** 2.87	**77.0** 3.03	**3.3** 0.13	**115.0** 4.53	**109.0** 4.29	**1.50** 0.06	**2.20** 0.08	**77.2**	**23**	**0.1083**	**1.57** 3.46
56.000 2.2050	**44.450** 1.7500	**-19.3** -0.76	**3.0** 0.12	**77.0** 3.04	**83.0** 3.27	**3.3** 0.13	**136.0** 5.35	**119.0** 4.69	**4.00** 0.16	**0.50** 0.02	**124**	**22.4**	**0.0827**	**3.94** 8.70
56.007 2.2050	**44.450** 1.7500	**-19.3** -0.76	**3.5** 0.14	**77.0** 3.04	**84.0** 3.31	**3.3** 0.13	**126.0** 4.96	**117.0** 4.61	**4.00** 0.16	**0.50** 0.02	**124**	**22.4**	**0.0827**	**3.62** 7.98
46.038 1.8125	**36.512** 1.4375	**-8.6** -0.34	**3.5** 0.14	**83.0** 3.27	**89.0** 3.50	**3.3** 0.13	**132.0** 5.20	**118.0** 4.65	**4.20** 0.16	**2.00** 0.08	**147**	**32.8**	**0.0993**	**3.36** 7.40
46.038 1.8125	**36.512** 1.4375	**-8.6** -0.34	**3.5** 0.14	**83.0** 3.27	**89.0** 3.50	**3.3** 0.13	**133.0** 5.24	**120.0** 4.72	**4.20** 0.16	**2.00** 0.08	**147**	**32.8**	**0.0993**	**3.54** 7.80

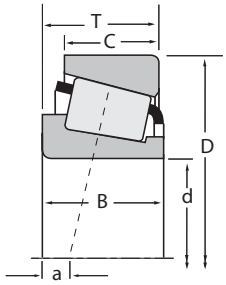
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

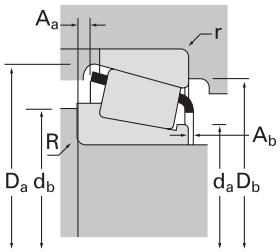
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
65.883 2.5938	122.238 4.8125	43.655 1.7187	219000 49200	0.36	1.67	56800 12800	34800 7830	1.63	327000 73500	5595	5535
66.675 2.6250	103.213 4.0635	17.247 0.6790	64800 14600	0.49	1.23	16800 3780	14000 3150	1.20	89100 20000	L812147	L812111
66.675 2.6250	103.213 4.0635	17.602 0.6930	64800 14600	0.49	1.23	16800 3780	14000 3150	1.20	89100 20000	L812148	L812111
66.675 2.6250	107.950 4.2500	25.400 1.0000	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29590	29520
66.675 2.6250	107.950 4.2500	25.400 1.0000	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29590	29522
66.675 2.6250	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	395A	394
66.675 2.6250	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	395A	394A
66.675 2.6250	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	395-S	394
66.675 2.6250	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	395-S	394A
66.675 2.6250	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	395-S	394AS
66.675 2.6250	110.000 4.3307	25.400 1.0000	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29590	29521
66.675 2.6250	110.000 4.3307	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3984	3927X
66.675 2.6250	110.000 4.3307	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3994	3927X
66.675 2.6250	112.712 4.4375	22.225 0.8750	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	395A	393A
66.675 2.6250	112.712 4.4375	26.967 1.0617	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	395A	3920
66.675 2.6250	112.712 4.4375	26.967 1.0617	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	395-S	3920
66.675 2.6250	112.712 4.4375	29.337 1.1550	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3992	3920
66.675 2.6250	112.712 4.4375	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3984	3920
66.675 2.6250	112.712 4.4375	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3984	3925
66.675 2.6250	112.712 4.4375	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3994	3920
66.675 2.6250	112.712 4.4375	30.162 1.1875	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3994	3925
66.675 2.6250	112.712 4.4375	30.162 1.1875	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39589	39520
66.675 2.6250	112.712 4.4375	30.162 1.1875	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39590	39520
66.675 2.6250	112.712 4.4375	30.162 1.1875	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39590	39521
66.675 2.6250	112.712 4.4375	30.162 1.1875	155000 34700	0.34	1.77	40100 9010	23300 5230	1.72	224000 50300	39591	39520
66.675 2.6250	112.712 4.4375	33.338 1.3125	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3984	3926
66.675 2.6250	112.712 4.4375	33.338 1.3125	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3994	3926
66.675 2.6250	117.475 4.6250	30.162 1.1875	128000 28800	0.44	1.38	33200 7470	24800 5570	1.34	197000 44300	33261	33462

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
43.764 1.7230	36.512 1.4375	-12.2 -0.48	3.5 0.14	77.0 3.03	83.0 3.27	3.3 0.13	116.0 4.57	106.0 4.17	2.50 0.10	1.20 0.05	110	24.2	0.0825	2.20 4.86
17.247 0.6790	11.989 0.4720	4.1 0.16	1.5 0.06	72.0 2.83	75.0 2.95	0.8 0.03	99.0 3.90	96.0 3.78	1.20 0.05	1.40 0.06	43.5	26.8	0.0958	0.50 1.10
17.602 0.6930	11.989 0.4720	3.6 0.14	1.5 0.06	72.0 2.83	75.0 2.95	0.8 0.03	99.0 3.90	96.0 3.78	1.60 0.06	1.40 0.06	43.5	26.8	0.0958	0.51 1.11
25.400 1.0000	19.050 0.7500	-0.8 -0.03	3.5 0.14	73.0 2.87	80.0 3.15	3.3 0.13	103.0 4.06	96.0 3.78	2.20 0.08	1.40 0.05	70.3	25.8	0.1112	0.85 1.87
25.400 1.0000	19.050 0.7500	-0.8 -0.03	3.5 0.14	73.0 2.87	80.0 3.15	0.8 0.03	103.0 4.06	98.0 3.86	2.20 0.08	1.40 0.05	70.3	25.8	0.1112	0.86 1.90
21.996 0.8660	22.000 0.8661	-0.8 -0.03	0.8 0.03	73.0 2.87	73.0 2.87	0.8 0.03	106.0 4.18	101.0 3.98	1.80 0.07	2.00 0.08	56	21.4	0.0984	0.81 1.77
21.996 0.8660	18.825 0.7411	-0.8 -0.03	0.8 0.03	73.0 2.87	73.0 2.87	1.3 0.05	105.0 4.13	101.0 3.98	1.80 0.07	2.00 0.08	56	21.4	0.0984	0.78 1.73
21.996 0.8660	22.000 0.8661	-0.8 -0.03	3.5 0.14	73.0 2.87	79.0 3.11	0.8 0.03	106.0 4.18	101.0 3.98	1.70 0.07	2.30 0.09	56	21.4	0.0984	0.80 1.77
21.996 0.8660	18.825 0.7411	-0.8 -0.03	3.5 0.14	73.0 2.87	79.0 3.11	1.3 0.05	105.0 4.13	101.0 3.98	1.70 0.07	2.30 0.09	56	21.4	0.0984	0.78 1.72
21.996 0.8660	18.825 0.7411	-0.8 -0.03	3.5 0.14	73.0 2.87	79.0 3.11	3.3 0.13	104.5 4.11	99.0 3.90	1.70 0.07	2.30 0.09	56	21.4	0.0984	0.77 1.69
25.400 1.0000	19.050 0.7500	-0.8 -0.03	3.5 0.14	73.0 2.87	80.0 3.15	1.3 0.05	104.0 4.09	99.0 3.90	2.20 0.08	1.40 0.05	70.3	25.8	0.1112	0.91 2.01
30.048 1.1830	23.812 0.9375	-4.6 -0.18	3.5 0.14	74.0 2.91	80.0 3.15	3.3 0.13	105.0 4.13	99.0 3.90	2.40 0.09	0.90 0.04	75.2	21.3	0.1092	1.06 2.33
30.048 1.1830	23.812 0.9375	-4.6 -0.18	5.5 0.22	74.0 2.91	84.0 3.31	3.3 0.13	105.0 4.13	99.0 3.90	2.20 0.09	1.10 0.04	75.2	21.3	0.1092	1.06 2.33
21.996 0.8660	15.875 0.6250	-0.8 -0.03	0.8 0.03	73.0 2.87	73.0 2.87	3.3 0.13	105.0 4.13	100.0 3.94	1.80 0.07	2.00 0.08	56	21.4	0.0984	0.81 1.79
21.996 0.8660	23.812 0.9375	-0.8 -0.03	0.8 0.03	73.0 2.87	73.0 2.87	3.3 0.13	106.0 4.17	99.0 3.90	1.80 0.07	2.00 0.08	56	21.4	0.0984	0.97 2.13
21.996 0.8660	23.812 0.9375	-0.8 -0.03	3.5 0.14	73.0 2.87	79.0 3.11	3.3 0.13	106.0 4.17	99.0 3.90	1.70 0.07	2.30 0.09	56	21.4	0.0984	0.96 2.12
29.223 1.1505	23.812 0.9375	-3.8 -0.15	5.5 0.22	75.0 2.95	86.0 3.39	3.3 0.13	106.0 4.17	99.0 3.90	1.40 0.05	1.10 0.04	75.2	21.3	0.1092	1.13 2.50
30.048 1.1830	23.812 0.9375	-4.6 -0.18	3.5 0.14	74.0 2.91	80.0 3.15	3.3 0.13	106.0 4.17	99.0 3.90	2.40 0.09	0.90 0.04	75.2	21.3	0.1092	1.15 2.53
30.048 1.1830	23.812 0.9375	-4.6 -0.18	3.5 0.14	74.0 2.91	80.0 3.15	0.8 0.03	106.0 4.17	101.0 3.98	2.40 0.09	0.90 0.04	75.2	21.3	0.1092	1.16 2.56
30.048 1.1830	23.812 0.9375	-4.6 -0.18	5.5 0.22	74.0 2.91	84.0 3.31	3.3 0.13	106.0 4.17	99.0 3.90	2.20 0.09	1.10 0.04	75.2	21.3	0.1092	1.15 2.53
30.048 1.1830	23.812 0.9375	-4.6 -0.18	5.5 0.22	74.0 2.91	84.0 3.31	0.8 0.03	106.0 4.17	101.0 3.98	2.20 0.09	1.10 0.04	75.2	21.3	0.1092	1.16 2.56
30.162 1.1875	23.812 0.9375	-6.6 -0.26	1.5 0.06	75.0 2.95	78.0 3.07	3.3 0.13	107.0 4.21	101.0 3.98	1.60 0.06	2.60 0.10	84.3	23.7	0.1074	1.16 2.57
30.162 1.1875	23.812 0.9375	-6.6 -0.26	3.5 0.14	75.0 2.95	82.0 3.23	3.3 0.13	107.0 4.21	101.0 3.98	1.60 0.06	2.60 0.10	84.3	23.7	0.1074	1.16 2.57
30.162 1.1875	23.812 0.9375	-6.6 -0.26	3.5 0.14	75.0 2.95	82.0 3.23	0.8 0.03	107.0 4.21	103.0 4.06	1.60 0.06	2.60 0.10	84.3	23.7	0.1074	1.17 2.57
30.162 1.1875	23.812 0.9375	-6.6 -0.26	5.5 0.22	74.0 2.91	84.0 3.31	3.3 0.13	107.0 4.21	101.0 3.98	1.60 0.06	2.60 0.10	84.3	23.7	0.1074	1.14 2.51
30.048 1.1830	26.988 1.0625	-4.6 -0.18	3.5 0.14	74.0 2.91	80.0 3.15	3.3 0.13	106.0 4.17	98.0 3.86	2.40 0.09	0.90 0.04	75.2	21.3	0.1092	1.23 2.72
30.048 1.1830	26.988 1.0625	-4.6 -0.18	5.5 0.22	74.0 2.91	84.0 3.31	3.3 0.13	106.0 4.17	98.0 3.86	2.20 0.09	1.10 0.04	75.2	21.3	0.1092	1.24 2.72
30.162 1.1875	23.812 0.9375	-2.8 -0.11	5.5 0.22	75.0 2.95	85.0 3.35	3.3 0.13	112.0 4.41	104.0 4.09	2.30 0.09	1.10 0.04	84.2	25.9	0.1162	1.32 2.90

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

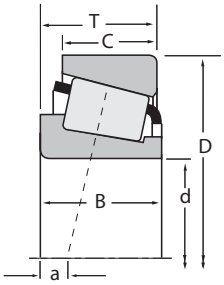
[7] Compound radius on inner race. Details on drawing for bearing.

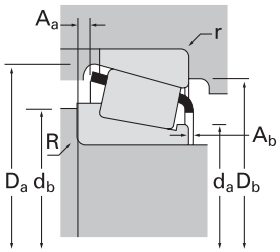
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
66.675 2.6250	117.475 4.6250	30.162 1.1875	128000 28800	0.44	1.38	33200 7470	24800 5570	1.34	197000 44300	33262	33461
66.675 2.6250	117.475 4.6250	30.162 1.1875	128000 28800	0.44	1.38	33200 7470	24800 5570	1.34	197000 44300	33262	33462
66.675 2.6250	120.000 4.7244	29.002 1.1418	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	479	472A
66.675 2.6250	120.000 4.7244	29.794 1.1730	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	479	472
66.675 2.6250	120.000 4.7244	29.794 1.1730	128000 28800	0.44	1.38	33200 7470	24800 5570	1.34	197000 44300	33262	33472
66.675 2.6250	122.238 4.8125	38.100 1.5000	209000 46900	0.34	1.78	54100 12200	31300 7030	1.73	279000 62700	HM212049	HM212010
66.675 2.6250	122.238 4.8125	38.100 1.5000	209000 46900	0.34	1.78	54100 12200	31300 7030	1.73	279000 62700	HM212049	HM212011
66.675 2.6250	122.238 4.8125	38.100 1.5000	209000 46900	0.34	1.78	54100 12200	31300 7030	1.73	279000 62700	HM212049X	HM212010
66.675 2.6250	123.825 4.8750	30.162 1.1875	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	479	472X
66.675 2.6250	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	560	552
66.675 2.6250	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	560	552A
66.675 2.6250	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813844	HM813810
66.675 2.6250	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813844	HM813811
66.675 2.6250	129.944 5.1159	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	560	553-SA
66.675 2.6250	130.175 5.1250	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	641	633
66.675 2.6250	135.755 5.3447	53.975 2.1250	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	6386	6320
66.675 2.6250	135.755 5.3447	53.975 2.1250	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	6389	6320
66.675 2.6250	135.755 5.3447	53.975 2.1250	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	6386A	6320
66.675 2.6250	136.525 5.3750	30.162 1.1875	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	495AA	493
66.675 2.6250	136.525 5.3750	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	641	632
66.675 2.6250	136.525 5.3750	41.275 1.6250	252000 56700	0.36	1.67	65400 14700	40300 9060	1.62	335000 75400	H414242	H414210
66.675 2.6250	136.525 5.3750	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715341A	H715311
66.675 2.6250	136.525 5.3750	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715341	H715311
66.675 2.6250	136.525 5.3750	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715341	H715311A
66.675 2.6250	139.700 5.5000	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715341	H715310
66.675 2.6250	152.400 6.0000	53.975 2.1250	313000 70500	0.49	1.23	81300 18300	67800 15200	1.20	423000 95000	HH814547	HH814510
66.675 2.6250	177.800 7.0000	57.150 2.2500	352000 79200	0.80	0.75	91300 20500	125000 28000	0.73	413000 92900	HH914449	HH914412
68.262 2.6875	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	399A	394A

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
30.162 1.1875	23.812 0.9375	-2.8 -0.11	3.5 0.14	75.0 2.95	81.0 3.19	0.8 0.03	112.0 4.41	106.0 4.17	2.30 0.09	1.10 0.04	84.2	25.9	0.1162	1.35 2.97
30.162 1.1875	23.812 0.9375	-2.8 -0.11	3.5 0.14	75.0 2.95	81.0 3.19	3.3 0.13	112.0 4.41	104.0 4.09	2.30 0.09	1.10 0.04	84.2	25.9	0.1162	1.33 2.94
29.007 1.1420	23.444 0.9230	-4.1 -0.16	2.3 0.09	74.0 2.91	78.0 3.07	3.3 0.13	114.0 4.49	106.0 4.17	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.36 3.00
29.007 1.1420	24.237 0.9542	-4.1 -0.16	2.3 0.09	74.0 2.91	78.0 3.07	2.0 0.08	114.0 4.49	107.0 4.21	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.39 3.07
30.162 1.1875	23.444 0.9230	-2.8 -0.11	3.5 0.14	75.0 2.95	81.0 3.19	0.8 0.03	113.0 4.45	107.0 4.21	2.30 0.09	1.10 0.04	84.2	25.9	0.1162	1.42 3.14
38.354 1.5100	29.718 1.1700	-10.9 -0.43	3.5 0.14	75.5 2.97	82.0 3.23	1.5 0.06	116.0 4.57	110.0 4.33	2.20 0.09	3.00 0.12	92.2	18.1	0.0759	1.85 4.07
38.354 1.5100	29.718 1.1700	-10.9 -0.43	3.5 0.14	75.5 2.97	82.0 3.23	3.3 0.13	116.0 4.57	108.0 4.25	2.20 0.09	3.00 0.12	92.2	18.1	0.0759	1.85 4.07
38.354 1.5100	29.718 1.1700	-10.9 -0.43	7.0 0.28	75.5 2.97	89.0 3.50	1.5 0.06	116.0 4.57	110.0 4.33	2.20 0.09	3.00 0.12	92.2	18.1	0.0759	1.83 4.04
29.007 1.1420	24.605 0.9687	-4.1 -0.16	2.3 0.09	74.0 2.91	78.0 3.07	3.3 0.13	115.0 4.53	109.0 4.29	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.53 3.37
36.678 1.4440	33.338 1.3125	-9.4 -0.37	3.5 0.14	75.0 2.95	81.0 3.19	3.3 0.13	116.0 4.57	109.0 4.29	2.30 0.09	1.20 0.05	91	21.1	0.1108	1.93 4.25
36.678 1.4440	30.162 1.1875	-9.4 -0.37	3.5 0.14	75.0 2.95	81.0 3.19	3.3 0.13	116.0 4.57	109.0 4.29	2.30 0.09	1.20 0.05	91	21.1	0.1108	1.88 4.15
36.512 1.4375	26.988 1.0625	-3.8 -0.15	3.5 0.14	82.0 3.23	88.0 3.46	3.3 0.13	121.0 4.76	111.0 4.37	4.00 0.16	1.30 0.05	91.7	24.3	0.1252	2.00 4.40
36.512 1.4375	26.988 1.0625	-3.8 -0.15	3.5 0.14	82.0 3.23	88.0 3.46	1.5 0.06	121.0 4.76	113.0 4.45	4.00 0.16	1.30 0.05	91.7	24.3	0.1252	2.00 4.41
36.678 1.4440	30.162 1.1875	-9.4 -0.37	3.5 0.14	75.0 2.95	81.0 3.19	3.3 0.13	116.0 4.57	111.0 4.37	2.30 0.09	1.20 0.05	91	21.1	0.1108	2.17 4.78
41.275 1.6250	31.750 1.2500	-11.2 -0.44	3.5 0.14	77.0 3.03	83.0 3.27	3.3 0.13	124.0 4.88	116.0 4.57	4.20 0.16	1.90 0.08	106	21	0.0814	2.39 5.26
56.007 2.2050	44.450 1.7500	-19.3 -0.76	4.3 0.17	77.0 3.04	87.0 3.43	3.3 0.13	126.0 4.96	117.0 4.61	4.00 0.16	0.50 0.02	124	22.4	0.0827	3.54 7.81
56.007 2.2050	44.450 1.7500	-19.3 -0.76	6.4 0.25	77.0 3.04	91.0 3.58	3.3 0.13	126.0 4.96	117.0 4.61	4.00 0.16	0.50 0.02	124	22.4	0.0827	3.52 7.77
56.007 2.2050	44.450 1.7500	-19.3 -0.76	8.7 0.34	77.0 3.04	96.0 3.78	3.3 0.13	126.0 4.96	117.0 4.61	4.00 0.16	0.50 0.02	124	22.4	0.0827	3.49 7.69
29.769 1.1720	22.225 0.8750	-0.8 -0.03	3.5 0.14	78.0 3.07	85.0 3.35	3.3 0.13	130.0 5.12	122.0 4.80	2.50 0.10	2.10 0.08	105	29.3	0.1252	2.05 4.51
41.275 1.6250	31.750 1.2500	-11.2 -0.44	3.5 0.14	77.0 3.03	83.0 3.27	3.3 0.13	125.0 4.92	118.0 4.65	4.20 0.16	1.90 0.08	106	21	0.0814	2.73 6.02
41.275 1.6250	31.750 1.2500	-10.9 -0.43	3.5 0.14	81.0 3.19	85.0 3.35	3.3 0.13	129.0 5.08	121.0 4.76	3.70 0.15	3.00 0.12	113	22.8	0.0827	2.73 6.02
46.038 1.8125	36.512 1.4375	-8.6 -0.34	7.0 0.28	85.0 3.35	98.0 3.86	3.3 0.13	132.0 5.20	118.0 4.65	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.28 7.23
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	85.0 3.35	91.0 3.58	3.3 0.13	132.0 5.20	118.0 4.65	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.30 7.27
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	85.0 3.35	91.0 3.58	0.8 0.03	132.0 5.20	121.0 4.76	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.30 7.27
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	85.0 3.35	91.0 3.58	3.3 0.13	133.0 5.24	120.0 4.72	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.48 7.67
57.150 2.2500	41.275 1.6250	-12.2 -0.48	3.5 0.14	85.0 3.35	93.0 3.66	3.3 0.13	143.0 5.63	130.0 5.12	5.30 0.21	0.20 0.01	130	23.5	0.0957	4.87 10.73
53.975 2.1250	37.308 1.4688	-0.3 -0.01	3.5 0.14	85.5 3.36	106.0 4.17	3.3 0.13	165.0 6.50	146.0 5.75	9.90 0.39	4.70 0.18	111	17.7	0.1044	6.65 14.66
21.996 0.8660	18.825 0.7411	-0.8 -0.03	2.3 0.09	74.0 2.91	78.0 3.07	1.3 0.05	105.0 4.13	101.0 3.98	1.80 0.07	2.00 0.08	56	21.4	0.0984	0.75 1.65

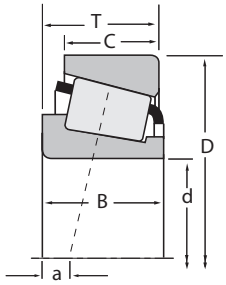
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

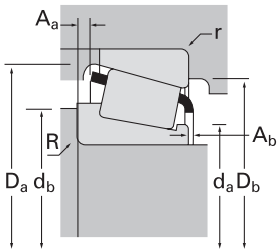
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
68.262 2.6875	110.000 4.3307	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	399AS	394A
68.262 2.6875	111.125 4.3750	22.000 0.8661	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	399A	393AS
68.262 2.6875	112.712 4.4375	26.967 1.0617	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	399A	3920
68.262 2.6875	112.712 4.4375	26.967 1.0617	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	399AS	3920
68.262 2.6875	120.000 4.7244	29.002 1.1418	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	480	472A
68.262 2.6875	120.000 4.7244	29.794 1.1730	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	480	472
68.262 2.6875	120.000 4.7244	29.794 1.1730	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	480	473
68.262 2.6875	120.000 4.7244	29.794 1.1730	128000 28800	0.44	1.38	33200 7470	24800 5570	1.34	197000 44300	33269	33472
68.262 2.6875	123.825 4.8750	34.912 1.3745	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	560-S	552-S
68.262 2.6875	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	560-S	552
68.262 2.6875	123.825 4.8750	38.100 1.5000	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	560-S	552A
68.262 2.6875	127.000 5.0000	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	570	563
68.262 2.6875	130.048 5.1200	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	570	562
68.262 2.6875	130.175 5.1250	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	642	633
68.262 2.6875	136.525 5.3750	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	642	632
68.262 2.6875	136.525 5.3750	41.275 1.6250	252000 56700	0.36	1.67	65400 14700	40300 9060	1.62	335000 75400	H414245X	H414210
68.262 2.6875	136.525 5.3750	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715343	H715311
68.262 2.6875	139.700 5.5000	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715343	H715310
68.262 2.6875	152.400 6.0000	47.625 1.8750	264000 59400	0.66	0.91	68500 15400	76900 17300	0.89	306000 68700	9185	9121
68.262 2.6875	152.400 6.0000	47.625 1.8750	256000 57600	0.90	0.67	66400 14900	102000 23000	0.65	401000 90100	H914841	H914811
68.262 2.6875	158.750 6.2500	50.800 2.0000	264000 59400	0.66	0.91	68500 15400	76900 17300	0.89	306000 68700	9185	9120
68.262 2.6875	161.925 6.3750	49.212 1.9375	275000 61900	0.71	0.85	71400 16100	86700 19500	0.82	330000 74200	9278	9220
69.850 2.7500	98.425 3.8750	13.495 0.5313	37400 8400	0.44	1.37	9690 2180	7260 1630	1.33	58100 13100	LL713049	LL713010
69.850 2.7500	99.217 3.9062	17.000 0.6693	45200 10200	0.46	1.29	11700 2630	9330 2100	1.26	75000 16900	LL713149	LL713110
69.850 2.7500	101.600 4.0000	19.050 0.7500	61900 13900	0.46	1.30	16000 3610	12700 2850	1.27	111000 25000	L713049	L713010
69.850 2.7500	112.712 4.4375	22.225 0.8750	93400 21000	0.42	1.44	24200 5450	17300 3880	1.40	130000 29300	LM613449	LM613410
69.850 2.7500	112.712 4.4375	25.400 1.0000	102000 23000	0.49	1.23	26500 5960	22100 4980	1.20	166000 37200	29675	29620
69.850 2.7500	114.300 4.5000	27.780 1.0937	102000 23000	0.49	1.23	26500 5960	22100 4980	1.20	166000 37200	29675	29624

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
21.996 0.8660	18.825 0.7411	-0.8 -0.03	5.0 0.20	74.0 2.91	83.0 3.27	1.3 0.05	105.0 4.13	101.0 3.98	1.70 0.07	2.30 0.09	56	21.4	0.0984	0.73 1.61
21.996 0.8660	18.825 0.7411	-0.8 -0.03	2.3 0.09	74.0 2.91	78.0 3.07	1.3 0.05	105.0 4.13	101.0 3.98	1.80 0.07	2.00 0.08	56	21.4	0.0984	0.78 1.71
21.996 0.8660	23.812 0.9375	-0.8 -0.03	2.3 0.09	74.0 2.91	78.0 3.07	3.3 0.13	106.0 4.17	99.0 3.90	1.80 0.07	2.00 0.08	56	21.4	0.0984	0.93 2.05
21.996 0.8660	23.812 0.9375	-0.8 -0.03	5.0 0.20	74.0 2.91	83.0 3.27	3.3 0.13	106.0 4.17	99.0 3.90	1.70 0.07	2.30 0.09	56	21.4	0.0984	0.91 2.01
29.007 1.1420	23.444 0.9230	-4.1 -0.16	3.5 0.14	75.0 2.95	82.0 3.23	3.3 0.13	114.0 4.49	106.0 4.17	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.32 2.90
29.007 1.1420	24.237 0.9542	-4.1 -0.16	3.5 0.14	75.0 2.95	82.0 3.23	2.0 0.08	114.0 4.49	107.0 4.21	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.35 2.97
29.007 1.1420	29.000 1.1417	-4.1 -0.16	3.5 0.14	75.0 2.95	82.0 3.23	2.0 0.08	114.0 4.49	107.0 4.21	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.40 3.08
30.162 1.1875	23.444 0.9230	-2.8 -0.11	3.5 0.14	76.0 2.99	82.0 3.23	0.8 0.03	113.0 4.45	107.0 4.21	2.30 0.09	1.10 0.04	84.2	25.9	0.1162	1.38 3.05
36.678 1.4440	26.975 1.0620	-9.4 -0.37	3.5 0.14	76.0 2.99	83.0 3.27	4.8 0.19	115.0 4.53	107.0 4.21	2.30 0.09	1.20 0.05	91	21.1	0.1108	1.71 3.77
36.678 1.4440	33.338 1.3125	-9.4 -0.37	3.5 0.14	76.0 2.99	83.0 3.27	3.3 0.13	116.0 4.57	109.0 4.29	2.30 0.09	1.20 0.05	91	21.1	0.1108	1.88 4.15
36.678 1.4440	30.162 1.1875	-9.4 -0.37	3.5 0.14	76.0 2.99	83.0 3.27	3.3 0.13	116.0 4.57	109.0 4.29	2.30 0.09	1.20 0.05	91	21.1	0.1108	1.83 4.04
36.170 1.4240	28.575 1.1250	-8.1 -0.32	3.5 0.14	77.0 3.03	83.0 3.27	3.3 0.13	120.0 4.72	112.0 4.41	3.20 0.13	1.80 0.07	101	24	0.1167	1.94 4.29
36.170 1.4240	28.575 1.1250	-8.1 -0.32	3.5 0.14	77.0 3.03	83.0 3.27	0.8 0.03	121.0 4.76	116.0 4.57	3.20 0.13	1.80 0.07	101	24	0.1167	2.10 4.62
41.275 1.6250	31.750 1.2500	-11.2 -0.44	3.5 0.14	78.0 3.07	85.0 3.35	3.3 0.13	124.0 4.88	116.0 4.57	4.20 0.16	1.90 0.08	106	21	0.0814	2.33 5.14
41.275 1.6250	31.750 1.2500	-11.2 -0.44	3.5 0.14	78.0 3.07	85.0 3.35	3.3 0.13	125.0 4.92	118.0 4.65	4.20 0.16	1.90 0.08	106	21	0.0814	2.67 5.90
41.275 1.6250	31.750 1.2500	-10.9 -0.43	9.7 0.38	82.0 3.23	98.0 3.86	3.3 0.13	129.0 5.08	121.0 4.76	3.70 0.15	3.00 0.12	113	22.8	0.0827	2.60 5.74
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	86.0 3.39	92.0 3.62	3.3 0.13	132.0 5.20	118.0 4.65	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.23 7.13
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	86.0 3.39	92.0 3.62	3.3 0.13	133.0 5.24	120.0 4.72	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.42 7.53
46.038 1.8125	31.750 1.2500	-3.8 -0.15	3.5 0.14	81.5 3.20	94.0 3.70	3.3 0.13	145.0 5.71	130.0 5.12	8.10 0.32	4.00 0.16	87.6	13.7	0.0912	3.75 8.26
46.038 1.8125	35.100 1.3819	7.9 0.31	3.5 0.14	87.0 3.43	108.0 4.25	3.3 0.13	148.0 5.83	123.0 4.84	5.80 0.23	3.20 0.13	135	30.3	0.1165	4.41 9.73
46.038 1.8125	34.925 1.3750	-3.8 -0.15	3.5 0.14	81.5 3.20	94.0 3.70	3.3 0.13	146.0 5.75	131.0 5.16	8.10 0.32	4.00 0.16	87.6	13.7	0.0912	4.37 9.63
46.038 1.8125	31.750 1.2500	0.0 0.00	3.5 0.14	90.5 3.56	97.0 3.82	3.3 0.13	153.0 6.03	138.0 5.43	9.10 0.36	4.00 0.16	102	18.4	0.0984	4.50 9.92
13.495 0.5313	9.525 0.3750	4.6 0.18	1.5 0.06	74.0 2.91	77.0 3.03	1.5 0.06	94.0 3.70	92.0 3.62	1.00 0.04	1.40 0.06	39.9	55	0.0893	0.30 0.65
16.000 0.6299	13.000 0.5118	4.6 0.18	1.5 0.06	75.0 2.95	77.0 3.03	1.5 0.06	95.0 3.74	91.0 3.58	0.70 0.03	0.60 0.02	47.9	56.5	0.0972	0.38 0.84
19.050 0.7500	15.083 0.5938	2.5 0.10	1.5 0.06	75.0 2.95	78.0 3.07	1.5 0.06	98.0 3.86	93.0 3.66	0.80 0.03	1.40 0.05	64.3	52.5	0.1075	0.50 1.10
21.996 0.8660	15.875 0.6250	0.0 0.00	1.5 0.06	76.0 2.99	78.0 3.07	0.8 0.03	107.0 4.21	104.0 4.09	1.70 0.07	2.30 0.09	60.3	23.1	0.1019	0.78 1.72
25.400 1.0000	19.050 0.7500	1.0 0.04	1.5 0.06	77.0 3.03	80.0 3.15	3.3 0.13	109.0 4.29	101.0 3.98	2.30 0.09	1.50 0.06	77.7	43.3	0.1170	0.97 2.13
25.400 1.0000	22.225 0.8750	1.0 0.04	1.5 0.06	77.0 3.03	80.0 3.15	3.3 0.13	109.0 4.29	103.0 4.06	2.30 0.09	1.50 0.06	77.7	43.3	0.1170	1.06 2.33

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

[7] Compound radius on inner race. Details on drawing for bearing.

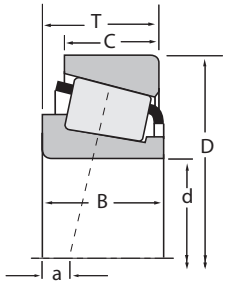
[8] Pin-type cage. Please consult The Timken Company.

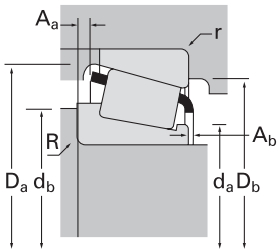
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
69.850 2.7500	117.475 4.6250	30.162 1.1875	128000 28800	0.44	1.38	33200 7470	24800 5570	1.34	197000 44300	33275	33462
69.850 2.7500	120.000 4.7244	29.002 1.1418	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	482	472A
69.850 2.7500	120.000 4.7244	29.002 1.1418	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	482A	472A
69.850 2.7500	120.000 4.7244	29.794 1.1730	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	482	472
69.850 2.7500	120.000 4.7244	29.794 1.1730	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	482	473
69.850 2.7500	120.000 4.7244	29.794 1.1730	128000 28800	0.44	1.38	33200 7470	24800 5570	1.34	197000 44300	33275	33472
69.850 2.7500	120.000 4.7244	29.794 1.1730	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	482A	472
69.850 2.7500	120.000 4.7244	32.545 1.2813	166000 37200	0.36	1.67	42900 9650	26500 5950	1.62	249000 56000	47487	47420
69.850 2.7500	120.000 4.7244	32.545 1.2813	166000 37200	0.36	1.67	42900 9650	26500 5950	1.62	249000 56000	47487	47420A
69.850 2.7500	120.000 4.7244	46.751 1.8406	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	482E	472
69.850 2.7500	120.650 4.7500	25.400 1.0000	102000 23000	0.49	1.23	26500 5960	22100 4980	1.20	166000 37200	29675	29630
69.850 2.7500	123.825 4.8750	30.162 1.1875	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	482	472X
69.850 2.7500	127.000 5.0000	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	566	563
69.850 2.7500	127.000 5.0000	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	566-S	563
69.850 2.7500	127.000 5.0000	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	566X	563
69.850 2.7500	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813846	HM813810
69.850 2.7500	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813846	HM813811
69.850 2.7500	130.175 5.1250	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	643	633
69.850 2.7500	136.525 5.3750	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	643	632
69.850 2.7500	139.700 5.5000	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715344	H715310
69.850 2.7500	146.050 5.7500	36.512 1.4375	161000 36200	0.94	0.64	41700 9380	66900 15000	0.62	202000 45400	HM914545	HM914510
69.850 2.7500	146.050 5.7500	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	655	653
69.850 2.7500	146.050 5.7500	41.275 1.6250	213000 47900	0.78	0.77	55200 12400	74000 16600	0.75	256000 57500	H913849	H913810
69.850 2.7500	149.225 5.8750	53.975 2.1250	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6454	6420
69.850 2.7500	149.225 5.8750	53.975 2.1250	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6484	6420
69.850 2.7500	150.089 5.9090	44.450 1.7500	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	744A	742
69.850 2.7500	150.089 5.9090	44.450 1.7500	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	745A	742
69.850 2.7500	152.400 6.0000	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	655	652

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

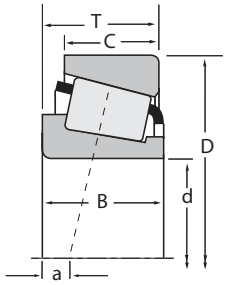
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
30.162 1.1875	23.812 0.9375	-2.8 -0.11	3.5 0.14	77.0 3.03	84.0 3.31	3.3 0.13	112.0 4.41	104.0 4.09	2.30 0.09	1.10 0.04	84.2	25.9	0.1162	1.25 2.76
29.007 1.1420	23.444 0.9230	-4.1 -0.16	3.5 0.14	77.0 3.03	83.0 3.27	3.3 0.13	114.0 4.49	106.0 4.17	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.28 2.81
29.007 1.1420	23.444 0.9230	-4.1 -0.16	4.8 0.19	77.0 3.03	86.0 3.39	3.3 0.13	114.0 4.49	106.0 4.17	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.27 2.79
29.007 1.1420	24.237 0.9542	-4.1 -0.16	3.5 0.14	77.0 3.03	83.0 3.27	2.0 0.08	114.0 4.49	107.0 4.21	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.31 2.88
29.007 1.1420	29.000 1.1417	-4.1 -0.16	3.5 0.14	77.0 3.03	83.0 3.27	2.0 0.08	114.0 4.49	107.0 4.21	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.36 2.99
30.162 1.1875	23.444 0.9230	-2.8 -0.11	3.5 0.14	77.0 3.03	84.0 3.31	0.8 0.03	113.0 4.45	107.0 4.21	2.30 0.09	1.10 0.04	84.2	25.9	0.1162	1.34 2.96
29.007 1.1420	24.237 0.9542	-4.1 -0.16	4.8 0.19	77.0 3.03	86.0 3.39	2.0 0.08	114.0 4.49	107.0 4.21	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.30 2.86
32.545 1.2813	26.195 1.0313	-6.4 -0.25	3.5 0.14	78.0 3.07	84.0 3.31	3.3 0.13	114.0 4.49	107.0 4.21	2.20 0.09	1.90 0.08	98.4	26.3	0.1153	1.45 3.20
32.545 1.2813	26.195 1.0313	-6.4 -0.25	3.5 0.14	78.0 3.07	84.0 3.31	0.5 0.02	114.0 4.49	109.0 4.29	2.20 0.09	1.90 0.08	98.4	26.3	0.1153	1.47 3.24
45.963 1.8096	24.237 0.9542	-21.1 -0.83	1.0 0.04	77.0 3.03	87.0 3.43	2.0 0.08	114.0 4.49	107.0 4.21	18.50 0.73	2.20 0.08	77.2	23	0.1083	1.69 3.73
25.400 1.0000	19.050 0.7500	1.0 0.04	1.5 0.06	77.0 3.03	80.0 3.15	3.3 0.13	113.0 4.45	104.0 4.09	2.30 0.09	1.50 0.06	77.7	43.3	0.1170	1.17 2.59
29.007 1.1420	24.605 0.9687	-4.1 -0.16	3.5 0.14	77.0 3.03	83.0 3.27	3.3 0.13	115.0 4.53	109.0 4.29	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.45 3.19
36.170 1.4240	28.575 1.1250	-8.1 -0.32	3.5 0.14	78.0 3.07	85.0 3.35	3.3 0.13	120.0 4.72	112.0 4.41	3.20 0.13	1.80 0.07	101	24	0.1167	1.89 4.18
36.170 1.4240	28.575 1.1250	-8.1 -0.32	0.8 0.03	78.0 3.07	79.0 3.11	3.3 0.13	120.0 4.72	112.0 4.41	3.20 0.13	1.80 0.07	101	24	0.1167	1.91 4.20
36.170 1.4240	28.575 1.1250	-8.1 -0.32	6.8 0.27	78.0 3.07	91.0 3.58	3.3 0.13	120.0 4.72	112.0 4.41	3.20 0.13	1.80 0.07	101	24	0.1167	1.87 4.11
36.512 1.4375	26.988 1.0625	-3.8 -0.15	3.5 0.14	82.0 3.23	89.0 3.50	3.3 0.13	121.0 4.76	111.0 4.37	4.00 0.16	1.30 0.05	91.7	24.3	0.1252	1.90 4.19
36.512 1.4375	26.988 1.0625	-3.8 -0.15	3.5 0.14	82.0 3.23	89.0 3.50	1.5 0.06	121.0 4.76	113.0 4.45	4.00 0.16	1.30 0.05	91.7	24.3	0.1252	1.90 4.19
41.275 1.6250	31.750 1.2500	-11.2 -0.44	3.5 0.14	80.0 3.15	86.0 3.39	3.3 0.13	124.0 4.88	116.0 4.57	4.20 0.16	1.90 0.08	106	21	0.0814	2.28 5.02
41.275 1.6250	31.750 1.2500	-11.2 -0.44	3.5 0.14	80.0 3.15	86.0 3.39	3.3 0.13	125.0 4.92	118.0 4.65	4.20 0.16	1.90 0.08	106	21	0.0814	2.62 5.77
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	87.0 3.43	93.0 3.66	3.3 0.13	133.0 5.24	120.0 4.72	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.36 7.40
33.338 1.3125	23.812 0.9375	12.4 0.49	4.0 0.16	86.0 3.38	95.0 3.74	3.3 0.13	139.0 5.47	122.0 4.80	7.20 0.28	4.50 0.18	71.5	21.8	0.0943	2.57 5.66
41.275 1.6250	31.750 1.2500	-7.9 -0.31	3.5 0.14	82.0 3.23	88.0 3.46	3.3 0.13	139.0 5.47	131.0 5.16	4.50 0.18	2.00 0.08	137	27.3	0.0919	3.23 7.11
39.688 1.5625	25.400 1.0000	4.3 0.17	3.5 0.14	82.5 3.24	95.0 3.74	3.3 0.13	138.0 5.43	124.0 4.88	8.20 0.32	3.60 0.14	78.5	17.3	0.0927	2.86 6.30
54.229 2.1350	44.450 1.7500	-15.0 -0.59	5.0 0.20	85.0 3.35	94.0 3.70	3.3 0.13	140.0 5.51	129.0 5.08	2.70 0.11	0.70 0.03	158	29.1	0.0931	4.53 9.98
54.229 2.1350	44.450 1.7500	-15.0 -0.59	6.4 0.25	85.0 3.35	97.0 3.82	3.3 0.13	140.0 5.51	129.0 5.08	2.70 0.11	0.70 0.03	158	29.1	0.0931	4.51 9.95
46.672 1.8375	36.512 1.4375	-11.9 -0.47	5.0 0.20	82.0 3.23	91.0 3.58	3.3 0.13	142.0 5.59	134.0 5.28	1.90 0.07	1.20 0.05	160	26.3	0.0898	3.90 8.60
46.672 1.8375	36.512 1.4375	-11.9 -0.47	3.5 0.14	82.0 3.23	88.0 3.46	3.3 0.13	142.0 5.59	134.0 5.28	1.90 0.07	1.20 0.05	160	26.3	0.0898	3.91 8.62
41.275 1.6250	31.750 1.2500	-7.9 -0.31	3.5 0.14	82.0 3.23	88.0 3.46	3.3 0.13	141.0 5.55	134.0 5.28	4.50 0.18	2.00 0.08	137	27.3	0.0919	3.59 7.92

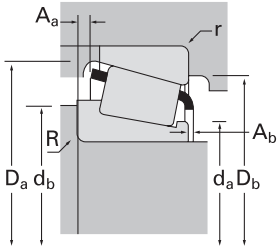
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
69.850 2.7500	168.275 6.6250	53.975 2.1250	379000 85100	0.30	2.00	98200 22100	50300 11300	1.95	522000 117000	835	832
69.914 2.7525	171.450 6.7500	49.212 1.9375	284000 63700	0.76	0.79	73500 16500	96200 21600	0.76	351000 78800	9382	9321
69.952 2.7540	121.442 4.7812	24.608 0.9688	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34274	34478
69.987 2.7554	136.525 5.3750	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715347	H715311
69.987 2.7554	176.212 6.9375	54.770 2.1563	339000 76100	0.70	0.86	87800 19700	105000 23600	0.84	431000 96900	H916642	H916610
70.000 2.7559	110.000 4.3307	21.000 0.8268	84800 19100	0.46	1.30	22000 4940	17400 3900	1.27	112000 25200	JP7049	JP7010
70.000 2.7559	110.000 4.3307	26.000 1.0236	106000 23800	0.49	1.23	27500 6180	22900 5160	1.20	168000 37800	JLM813049	JLM813010
70.000 2.7559	115.000 4.5276	29.000 1.1417	139000 31200	0.43	1.39	36000 8100	26500 5960	1.36	198000 44500	JM612949	JM612910
70.000 2.7559	120.000 4.7244	29.002 1.1418	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	484	472A
70.000 2.7559	121.442 4.7812	24.608 0.9688	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34275	34478
70.000 2.7559	123.825 4.8750	30.162 1.1875	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	484	472X
70.000 2.7559	125.095 4.9250	24.000 0.9449	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34275	34492
70.000 2.7559	130.000 5.1181	36.937 1.4542	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	570X	562X
70.000 2.7559	130.000 5.1181	43.000 1.6929	254000 57200	0.33	1.80	65900 14800	37600 8450	1.75	360000 80800	JF7049A	JF7010
70.000 2.7559	130.000 5.1181	43.000 1.6929	254000 57200	0.33	1.80	65900 14800	37600 8450	1.75	360000 80800	JF7049	JF7010
70.000 2.7559	140.000 5.5118	39.000 1.5354	189000 42400	0.87	0.69	48900 11000	72500 16300	0.67	257000 57800	JW7049	JW7010
70.000 2.7559	149.225 5.8750	53.975 2.1250	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6459	6420
70.000 2.7559	150.000 5.9055	54.000 2.1260	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6459	6424
70.637 2.7810	112.712 4.4375	25.400 1.0000	102000 23000	0.49	1.23	26500 5960	22100 4980	1.20	166000 37200	29680	29620
70.637 2.7810	112.712 4.4375	25.400 1.0000	102000 23000	0.49	1.23	26500 5960	22100 4980	1.20	166000 37200	29681	29620
71.438 2.8125	117.475 4.6250	30.162 1.1875	128000 28800	0.44	1.38	33200 7470	24800 5570	1.34	197000 44300	33281	33461
71.438 2.8125	117.475 4.6250	30.162 1.1875	128000 28800	0.44	1.38	33200 7470	24800 5570	1.34	197000 44300	33281	33462
71.438 2.8125	120.000 4.7244	29.794 1.1730	128000 28800	0.44	1.38	33200 7470	24800 5570	1.34	197000 44300	33281	33472
71.438 2.8125	120.000 4.7244	32.545 1.2813	166000 37200	0.36	1.67	42900 9650	26500 5950	1.62	249000 56000	47490	47420
71.438 2.8125	120.650 4.7500	32.545 1.2813	166000 37200	0.36	1.67	42900 9650	26500 5950	1.62	249000 56000	47490	47423
71.438 2.8125	127.000 5.0000	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	567A	563
71.438 2.8125	127.000 5.0000	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	567-S	563
71.438 2.8125	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813849	HM813810

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

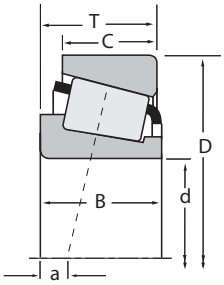
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
56.363 2.2190	41.275 1.6250	-18.5 -0.73	3.5 0.14	84.0 3.31	91.0 3.58	3.3 0.13	155.0 6.10	149.0 5.87	5.20 0.20	1.60 0.06	198	34.8	0.0937	6.09 13.43
46.038 1.8125	31.750 1.2500	4.3 0.17	3.5 0.14	95.0 3.74	101.0 3.98	3.3 0.13	164.0 6.46	147.0 5.79	9.00 0.35	3.90 0.15	118	18.6	0.1053	5.37 11.83
23.012 0.9060	17.462 0.6875	1.5 0.06	2.0 0.08	78.0 3.07	81.0 3.19	2.0 0.08	116.0 4.57	110.0 4.33	2.60 0.10	2.10 0.08	69.3	27	0.1093	1.08 2.38
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	87.0 3.43	93.0 3.66	3.3 0.13	132.0 5.20	118.0 4.65	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.17 6.98
53.183 2.0938	36.512 1.4375	-2.0 -0.08	3.3 0.13	95.0 3.74	103.0 4.06	3.3 0.13	164.0 6.46	147.0 5.79	8.60 0.34	3.40 0.13	133	18.7	0.1071	6.32 13.93
20.000 0.7874	15.500 0.6102	2.5 0.10	2.0 0.08	76.0 2.99	80.0 3.15	2.0 0.08	105.5 4.15	101.0 3.98	1.50 0.06	2.80 0.11	51.1	30.9	0.0995	0.68 1.50
25.000 0.9843	20.500 0.8071	0.3 0.01	1.0 0.04	77.0 3.03	78.0 3.07	2.5 0.10	105.0 4.13	98.0 3.86	1.70 0.07	2.70 0.11	73.5	26.3	0.1151	0.88 1.93
29.000 1.1417	23.000 0.9055	-2.5 -0.10	3.0 0.12	77.0 3.03	83.0 3.27	2.5 0.10	110.0 4.33	103.0 4.06	1.00 0.04	2.30 0.09	76.7	25.7	0.1122	1.13 2.49
29.007 1.1420	23.444 0.9230	-4.1 -0.16	2.0 0.08	77.0 3.03	80.0 3.15	3.3 0.13	114.0 4.49	106.0 4.17	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.28 2.82
23.012 0.9060	17.462 0.6875	1.5 0.06	2.0 0.08	78.0 3.07	82.0 3.23	2.0 0.08	116.0 4.57	110.0 4.33	2.60 0.10	2.10 0.08	69.3	27	0.1093	1.08 2.38
29.007 1.1420	24.605 0.9687	-4.1 -0.16	2.0 0.08	77.0 3.03	80.0 3.15	3.3 0.13	115.0 4.53	109.0 4.29	1.50 0.06	2.20 0.08	77.2	23	0.1083	1.45 3.20
23.012 0.9060	16.670 0.6563	1.5 0.06	2.0 0.08	78.0 3.07	82.0 3.23	2.0 0.08	118.0 4.65	112.0 4.41	2.60 0.10	2.10 0.08	69.3	27	0.1093	1.16 2.55
36.170 1.4240	29.000 1.1417	-8.1 -0.32	3.0 0.12	78.0 3.07	84.0 3.31	3.0 0.12	121.0 4.76	114.0 4.49	3.20 0.13	1.80 0.07	101	24	0.1167	2.05 4.51
42.000 1.6535	35.000 1.3780	-12.4 -0.49	7.0 0.28	80.5 3.17	94.0 3.70	2.5 0.10	124.0 4.88	116.0 4.57	2.10 0.08	4.00 0.16	121	24.5	0.0828	2.45 5.40
42.000 1.6535	35.000 1.3780	-12.4 -0.49	3.0 0.12	80.5 3.17	86.0 3.39	2.5 0.10	124.0 4.88	116.0 4.57	2.10 0.08	4.00 0.16	121	24.5	0.0828	2.49 5.49
35.500 1.3976	27.000 1.0630	8.6 0.34	3.0 0.12	82.0 3.23	95.0 3.74	3.0 0.12	133.5 5.25	117.0 4.61	5.80 0.23	4.40 0.18	85.2	23.3	0.0984	2.63 5.79
54.229 2.1350	44.450 1.7500	-15.0 -0.59	3.0 0.12	85.0 3.35	90.0 3.54	3.3 0.13	140.0 5.51	129.0 5.08	2.70 0.11	0.70 0.03	158	29.1	0.0931	4.54 10.00
54.229 2.1350	45.000 1.7717	-15.0 -0.59	3.0 0.12	85.0 3.35	90.0 3.54	3.0 0.12	140.0 5.51	129.0 5.08	2.70 0.11	0.70 0.03	158	29.1	0.0931	4.61 10.17
25.400 1.0000	19.050 0.7500	1.0 0.04	1.3 0.05	78.0 3.07	80.0 3.15	3.3 0.13	109.0 4.29	101.0 3.98	2.30 0.09	1.50 0.06	77.7	43.3	0.1170	0.95 2.08
25.400 1.0000	19.050 0.7500	1.0 0.04	3.5 0.14	78.0 3.07	85.0 3.35	3.3 0.13	109.0 4.29	101.0 3.98	2.30 0.09	1.50 0.06	77.7	43.3	0.1170	0.94 2.07
30.162 1.1875	23.812 0.9375	-2.8 -0.11	3.5 0.14	79.0 3.11	85.0 3.35	0.8 0.03	112.0 4.41	106.0 4.17	2.30 0.09	1.10 0.04	84.2	24.4	0.1162	1.22 2.70
30.162 1.1875	23.812 0.9375	-2.8 -0.11	3.5 0.14	79.0 3.11	85.0 3.35	3.3 0.13	112.0 4.41	104.0 4.09	2.30 0.09	1.10 0.04	84.2	24.4	0.1162	1.21 2.67
30.162 1.1875	23.444 0.9230	-2.8 -0.11	3.5 0.14	79.0 3.11	85.0 3.35	0.8 0.03	113.0 4.45	107.0 4.21	2.30 0.09	1.10 0.04	84.2	24.4	0.1162	1.30 2.87
32.545 1.2813	26.195 1.0313	-6.4 -0.25	3.5 0.14	79.0 3.11	86.0 3.39	3.3 0.13	114.0 4.49	107.0 4.21	2.20 0.09	1.90 0.08	98.4	26.3	0.1153	1.41 3.11
32.545 1.2813	26.195 1.0313	-6.4 -0.25	3.5 0.14	79.0 3.11	86.0 3.39	0.8 0.03	115.0 4.53	109.0 4.29	2.20 0.09	1.90 0.08	98.4	26.3	0.1153	1.45 3.19
36.170 1.4240	28.575 1.1250	-8.1 -0.32	3.5 0.14	80.0 3.15	86.0 3.39	3.3 0.13	120.0 4.72	112.0 4.41	3.20 0.13	1.80 0.07	101	24	0.1167	1.85 4.07
36.170 1.4240	28.575 1.1250	-8.1 -0.32	6.4 0.25	80.0 3.15	92.0 3.62	3.3 0.13	120.0 4.72	112.0 4.41	3.20 0.13	1.80 0.07	101	24	0.1167	1.82 4.01
36.512 1.4375	26.988 1.0625	-3.8 -0.15	3.5 0.14	82.0 3.23	91.0 3.58	3.3 0.13	121.0 4.76	111.0 4.37	4.00 0.16	1.30 0.05	91.7	24.3	0.1252	1.85 4.08

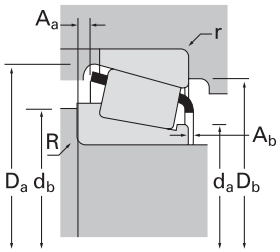
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
71.438 2.8125	127.000 5.0000	36.512 1.4375	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813849	HM813811
71.438 2.8125	130.175 5.1250	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	644	633
71.438 2.8125	130.175 5.1250	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	645	633
71.438 2.8125	133.350 5.2500	33.338 1.3125	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47675	47620
71.438 2.8125	136.525 5.3750	30.162 1.1875	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	495-S	493
71.438 2.8125	136.525 5.3750	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	644	632
71.438 2.8125	136.525 5.3750	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	645	632
71.438 2.8125	136.525 5.3750	41.275 1.6250	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	645X	632
71.438 2.8125	136.525 5.3750	41.275 1.6250	252000 56700	0.36	1.67	65400 14700	40300 9060	1.62	335000 75400	H414249	H414210
71.438 2.8125	136.525 5.3750	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715345	H715311
71.438 2.8125	139.700 5.5000	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715345	H715310
73.025 2.8750	112.712 4.4375	25.400 1.0000	102000 23000	0.49	1.23	26500 5960	22100 4980	1.20	166000 37200	29685	29620
73.025 2.8750	117.475 4.6250	25.400 1.0000	109000 24500	0.51	1.18	28300 6360	24700 5550	1.15	183000 41200	LM814845	LM814810
73.025 2.8750	117.475 4.6250	30.162 1.1875	128000 28800	0.44	1.38	33200 7470	24800 5570	1.34	197000 44300	33287	33462
73.025 2.8750	120.000 4.7244	29.794 1.1730	128000 28800	0.44	1.38	33200 7470	24800 5570	1.34	197000 44300	33287	33472
73.025 2.8750	120.000 4.7244	29.794 1.1730	128000 28800	0.44	1.38	33200 7470	24800 5570	1.34	197000 44300	33287A	33472
73.025 2.8750	125.412 4.9375	25.400 1.0000	109000 24400	0.42	1.44	28100 6320	20000 4500	1.40	178000 39900	27680	27620
73.025 2.8750	127.000 5.0000	30.162 1.1875	149000 33500	0.42	1.43	38700 8690	27700 6230	1.39	222000 49800	42683	42620
73.025 2.8750	127.000 5.0000	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	567	563
73.025 2.8750	127.000 5.0000	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	567	563X
73.025 2.8750	127.000 5.0000	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	567X	563
73.025 2.8750	127.000 5.0000	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	567X	563X
73.025 2.8750	127.000 5.0000	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	567XA	563
73.025 2.8750	130.000 5.1181	36.937 1.4542	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	567X	562X
73.025 2.8750	130.048 5.1200	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	567	562
73.025 2.8750	139.992 5.5115	36.512 1.4375	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	576	572
73.025 2.8750	146.050 5.7500	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	657	653
73.025 2.8750	149.225 5.8750	53.975 2.1250	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6460	6420

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
36.512 1.4375	26.988 1.0625	-3.8 -0.15	3.5 0.14	82.0 3.23	91.0 3.58	1.5 0.06	121.0 4.76	113.0 4.45	4.00 0.16	1.30 0.05	91.7	24.3	0.1252	1.85 4.08
41.275 1.6250	31.750 1.2500	-11.2 -0.44	3.5 0.14	81.0 3.19	87.0 3.43	3.3 0.13	124.0 4.88	116.0 4.57	4.20 0.16	1.90 0.08	106	21	0.0814	2.23 4.91
41.275 1.6250	31.750 1.2500	-11.2 -0.44	6.4 0.25	81.0 3.19	93.0 3.66	3.3 0.13	124.0 4.88	116.0 4.57	4.20 0.16	1.90 0.08	106	21	0.0814	2.19 4.83
33.338 1.3125	26.195 1.0313	-4.3 -0.17	3.5 0.14	82.0 3.23	88.0 3.46	3.3 0.13	128.0 5.04	119.0 4.69	2.30 0.09	2.40 0.09	119	29.2	0.1273	2.04 4.50
29.769 1.1720	22.225 0.8750	-0.8 -0.03	3.5 0.14	82.0 3.23	88.0 3.46	3.3 0.13	130.0 5.12	122.0 4.80	2.50 0.10	2.10 0.08	105	29.3	0.1252	1.93 4.25
41.275 1.6250	31.750 1.2500	-11.2 -0.44	3.5 0.14	81.0 3.19	87.0 3.43	3.3 0.13	125.0 4.92	118.0 4.65	4.20 0.16	1.90 0.08	106	21	0.0814	2.57 5.67
41.275 1.6250	31.750 1.2500	-11.2 -0.44	6.4 0.25	81.0 3.19	93.0 3.66	3.3 0.13	125.0 4.92	118.0 4.65	4.20 0.16	1.90 0.08	106	21	0.0814	2.54 5.59
41.275 1.6250	31.750 1.2500	-11.2 -0.44	6.4 0.25	82.5 3.25	93.0 3.66	3.3 0.13	125.0 4.92	118.0 4.65	4.20 0.16	1.90 0.08	106	21	0.0814	2.53 5.59
41.275 1.6250	31.750 1.2500	-10.9 -0.43	3.5 0.14	83.0 3.27	89.0 3.50	3.3 0.13	129.0 5.08	121.0 4.76	3.70 0.15	3.00 0.12	113	22.8	0.0827	2.56 5.65
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	88.0 3.46	94.0 3.70	3.3 0.13	132.0 5.20	118.0 4.65	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.11 6.86
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	88.0 3.46	94.0 3.70	3.3 0.13	133.0 5.24	120.0 4.72	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.29 7.26
25.400 1.0000	19.050 0.7500	1.0 0.04	3.5 0.14	80.0 3.15	86.0 3.39	3.3 0.13	109.0 4.29	101.0 3.98	2.30 0.09	1.50 0.06	77.7	43.3	0.1170	0.89 1.97
25.400 1.0000	19.050 0.7500	2.3 0.09	3.5 0.14	81.0 3.19	87.0 3.43	3.3 0.13	113.0 4.45	105.0 4.13	2.50 0.10	1.40 0.06	88.6	36.6	0.1239	1.02 2.25
30.162 1.1875	23.812 0.9375	-2.8 -0.11	3.5 0.14	80.0 3.15	87.0 3.43	3.3 0.13	112.0 4.41	104.0 4.09	2.30 0.09	1.10 0.04	84.2	24.4	0.1162	1.17 2.57
30.162 1.1875	23.444 0.9230	-2.8 -0.11	3.5 0.14	80.0 3.15	87.0 3.43	0.8 0.03	113.0 4.45	107.0 4.21	2.30 0.09	1.10 0.04	84.2	24.4	0.1162	1.26 2.77
30.162 1.1875	23.444 0.9230	-2.8 -0.11	0.3 0.01	81.0 3.19	81.0 3.19	0.8 0.03	113.0 4.45	107.0 4.21	2.30 0.09	1.10 0.04	84.2	25.9	0.1162	1.27 2.80
25.400 1.0000	19.845 0.7813	0.5 0.02	3.5 0.14	82.0 3.23	88.0 3.46	1.5 0.06	120.0 4.72	115.0 4.53	1.50 0.06	1.70 0.07	98.2	41.8	0.1198	1.29 2.84
31.000 1.2205	22.225 0.8750	-2.8 -0.11	3.5 0.14	81.0 3.19	88.0 3.46	3.3 0.13	121.0 4.76	114.0 4.49	3.40 0.13	0.90 0.03	96.2	28.6	0.1197	1.52 3.34
36.170 1.4240	28.575 1.1250	-8.1 -0.32	3.5 0.14	81.0 3.19	88.0 3.46	3.3 0.13	120.0 4.72	112.0 4.41	3.20 0.13	1.80 0.07	101	24	0.1167	1.79 3.95
36.170 1.4240	28.575 1.1250	-8.1 -0.32	3.5 0.14	81.0 3.19	88.0 3.46	0.8 0.03	120.0 4.72	114.0 4.49	3.20 0.13	1.80 0.07	101	24	0.1167	1.81 3.99
36.170 1.4240	28.575 1.1250	-8.1 -0.32	4.8 0.19	81.0 3.19	90.0 3.54	3.3 0.13	120.0 4.72	112.0 4.41	3.20 0.13	1.80 0.07	101	24	0.1167	1.80 3.96
36.170 1.4240	28.575 1.1250	-8.1 -0.32	4.8 0.19	81.0 3.19	90.0 3.54	0.8 0.03	120.0 4.72	114.0 4.49	3.20 0.13	1.80 0.07	101	24	0.1167	1.81 4.00
36.170 1.4240	28.575 1.1250	-8.1 -0.32	6.4 0.25	81.0 3.19	93.0 3.66	3.3 0.13	120.0 4.72	112.0 4.41	3.20 0.13	1.80 0.07	101	24	0.1167	1.79 3.94
36.170 1.4240	29.000 1.1417	-8.1 -0.32	4.8 0.19	81.0 3.19	90.0 3.54	3.0 0.12	121.0 4.76	114.0 4.49	3.20 0.13	1.80 0.07	101	24	0.1167	1.95 4.30
36.170 1.4240	28.575 1.1250	-8.1 -0.32	3.5 0.14	81.0 3.19	88.0 3.46	0.8 0.03	121.0 4.76	116.0 4.57	3.20 0.13	1.80 0.07	101	24	0.1167	1.95 4.29
36.098 1.4212	28.575 1.1250	-5.3 -0.21	3.5 0.14	83.0 3.27	90.0 3.54	3.3 0.13	133.0 5.24	125.0 4.92	3.40 0.14	1.90 0.07	126	32	0.1295	2.46 5.43
41.275 1.6250	31.750 1.2500	-7.9 -0.31	3.5 0.14	85.0 3.35	91.0 3.58	3.3 0.13	139.0 5.47	131.0 5.16	4.50 0.18	2.00 0.08	137	27.3	0.0919	3.11 6.86
54.229 2.1350	44.450 1.7500	-15.0 -0.59	3.5 0.14	87.0 3.43	93.0 3.66	3.3 0.13	140.0 5.51	129.0 5.08	2.70 0.11	0.70 0.03	158	29.1	0.0931	4.39 9.67

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

[7] Compound radius on inner race. Details on drawing for bearing.

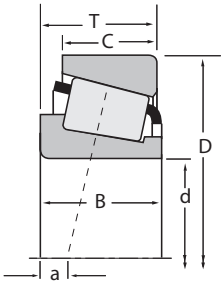
[8] Pin-type cage. Please consult The Timken Company.

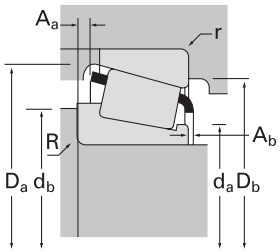
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
73.025 2.8750	149.225 5.8750	53.975 2.1250	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6460	6420A
73.025 2.8750	150.089 5.9090	44.450 1.7500	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	744	742
73.025 2.8750	152.400 6.0000	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	657	652
73.817 2.9062	112.712 4.4375	25.400 1.0000	102000 23000	0.49	1.23	26500 5960	22100 4980	1.20	166000 37200	29688	29620
73.817 2.9062	127.000 5.0000	36.512 1.4375	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	568	563
74.612 2.9375	139.992 5.5115	36.512 1.4375	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	577	572
74.612 2.9375	152.400 6.0000	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	658	652
74.976 2.9518	127.000 5.0000	26.988 1.0625	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34294	34500
74.987 2.9523	129.974 5.1171	33.249 1.3090	149000 33500	0.42	1.43	38700 8690	27700 6230	1.39	222000 49800	42686	42624
75.000 2.9528	115.000 4.5276	25.000 0.9843	110000 24700	0.46	1.31	28400 6390	22300 5020	1.27	167000 37500	JLM714149	JLM714110
75.000 2.9528	120.000 4.7244	31.000 1.2205	148000 33200	0.44	1.35	38300 8600	29100 6540	1.31	229000 51500	JM714249A	JM714210
75.000 2.9528	120.000 4.7244	31.000 1.2205	148000 33200	0.44	1.35	38300 8600	29100 6540	1.31	229000 51500	JM714249	JM714210
75.000 2.9528	145.000 5.7087	51.000 2.0079	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	JH415647	JH415610
75.987 2.9916	131.976 5.1959	39.000 1.5354	222000 49900	0.33	1.80	57600 12900	32800 7370	1.76	324000 72800	HM215249	HM215210
76.000 2.9921	120.000 4.7244	23.000 0.9055	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34299X	34472X
76.200 3.0000	105.570 4.1563	13.495 0.5313	37900 8530	0.47	1.27	9830 2210	7960 1790	1.24	61000 13700	LL714649	LL714610
76.200 3.0000	109.538 4.3125	19.050 0.7500	64100 14400	0.50	1.20	16600 3730	14300 3210	1.16	120000 27000	L814749	L814710
76.200 3.0000	121.442 4.7812	24.608 0.9688	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34300	34478
76.200 3.0000	121.442 4.7812	24.608 0.9688	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34301	34478
76.200 3.0000	125.412 4.9375	25.400 1.0000	109000 24400	0.42	1.44	28100 6320	20000 4500	1.40	178000 39900	27684	27620
76.200 3.0000	125.412 4.9375	25.400 1.0000	109000 24400	0.42	1.44	28100 6320	20000 4500	1.40	178000 39900	27684A	27620
76.200 3.0000	127.000 5.0000	26.988 1.0625	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34300	34500
76.200 3.0000	127.000 5.0000	26.988 1.0625	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34301	34500
76.200 3.0000	127.000 5.0000	30.162 1.1875	149000 33500	0.42	1.43	38700 8690	27700 6230	1.39	222000 49800	42687	42620
76.200 3.0000	127.000 5.0000	30.162 1.1875	149000 33500	0.42	1.43	38700 8690	27700 6230	1.39	222000 49800	42688	42620
76.200 3.0000	133.350 5.2500	30.162 1.1875	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	495A	492A
76.200 3.0000	133.350 5.2500	33.338 1.3125	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47678	47620
76.200 3.0000	133.350 5.2500	33.338 1.3125	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47679	47620

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
54.229 2.1350	44.450 1.7500	-15.0 -0.59	3.5 0.14	87.0 3.43	93.0 3.66	0.8 0.03	140.0 5.51	131.0 5.16	2.70 0.11	0.70 0.03	158	29.1	0.0931	4.41 9.71
46.672 1.8375	36.512 1.4375	-11.9 -0.47	3.5 0.14	85.0 3.35	91.0 3.58	3.3 0.13	142.0 5.59	134.0 5.28	1.90 0.07	1.20 0.05	160	26.3	0.0898	3.78 8.34
41.275 1.6250	31.750 1.2500	-7.9 -0.31	3.5 0.14	85.0 3.35	91.0 3.58	3.3 0.13	141.0 5.55	134.0 5.28	4.50 0.18	2.00 0.08	137	27.3	0.0919	3.48 7.67
25.400 1.0000	19.050 0.7500	1.0 0.04	1.5 0.06	80.0 3.15	83.0 3.27	3.3 0.13	109.0 4.29	101.0 3.98	2.30 0.09	1.50 0.06	77.7	43.3	0.1170	0.87 1.93
36.170 1.4240	28.575 1.1250	-8.1 -0.32	0.8 0.03	82.0 3.23	83.0 3.27	3.3 0.13	120.0 4.72	112.0 4.41	3.20 0.13	1.80 0.07	101	24	0.1167	1.78 3.92
36.098 1.4212	28.575 1.1250	-5.3 -0.21	3.5 0.14	85.0 3.35	91.0 3.58	3.3 0.13	133.0 5.24	125.0 4.92	3.40 0.14	1.90 0.07	126	32	0.1295	2.41 5.32
41.275 1.6250	31.750 1.2500	-7.9 -0.31	3.5 0.14	86.0 3.39	92.0 3.62	3.3 0.13	141.0 5.55	134.0 5.28	4.50 0.18	2.00 0.08	137	27.3	0.0919	3.42 7.54
23.012 0.9060	19.842 0.7812	1.5 0.06	2.0 0.08	82.0 3.23	85.0 3.35	3.3 0.13	118.0 4.65	112.0 4.41	2.60 0.10	2.10 0.08	69.3	27	0.1093	1.20 2.64
31.000 1.2205	27.000 1.0630	-2.8 -0.11	6.4 0.25	83.0 3.27	94.0 3.70	2.3 0.09	123.0 4.84	115.0 4.53	3.40 0.13	0.90 0.03	96.2	28.6	0.1197	1.68 3.70
25.000 0.9843	19.000 0.7480	0.5 0.02	3.0 0.12	81.0 3.19	87.0 3.43	2.5 0.10	110.0 4.33	104.0 4.09	2.00 0.08	2.10 0.08	76.3	30.5	0.1140	0.87 1.92
29.500 1.1614	25.000 0.9843	-2.0 -0.08	6.0 0.24	83.0 3.27	94.0 3.70	2.5 0.10	115.0 4.53	108.0 4.25	2.10 0.08	2.70 0.11	95	32.8	0.1218	1.27 2.80
29.500 1.1614	25.000 0.9843	-2.0 -0.08	3.0 0.12	83.0 3.26	88.0 3.46	2.5 0.10	115.0 4.53	108.0 4.25	2.10 0.08	2.70 0.11	95	32.1	0.1218	1.30 2.86
51.000 2.0079	42.000 1.6535	-14.2 -0.56	3.0 0.12	89.0 3.50	94.0 3.70	2.5 0.10	139.0 5.47	129.0 5.08	2.00 0.08	3.20 0.12	158	26.4	0.0931	3.80 8.39
39.000 1.5354	32.000 1.2598	-9.7 -0.38	7.0 0.28	85.0 3.35	98.0 3.86	3.5 0.14	126.0 4.96	118.0 4.65	1.20 0.05	2.80 0.11	126	30.2	0.0837	2.11 4.65
23.012 0.9060	16.000 0.6299	1.5 0.06	2.3 0.09	83.0 3.27	86.0 3.39	2.3 0.09	115.0 4.53	110.0 4.33	2.60 0.10	2.10 0.08	69.3	27	0.1093	0.88 1.94
13.495 0.5313	9.525 0.3750	6.6 0.26	1.5 0.06	81.0 3.19	83.0 3.27	1.5 0.06	102.0 4.02	99.0 3.90	0.90 0.04	1.20 0.05	45.7	64.3	0.0956	0.32 0.71
19.050 0.7500	15.083 0.5938	5.1 0.20	1.5 0.06	82.0 3.23	84.0 3.31	1.5 0.06	105.0 4.13	100.0 3.94	0.90 0.04	1.20 0.05	76	59.6	0.1164	0.58 1.28
23.012 0.9060	17.462 0.6875	1.5 0.06	2.0 0.08	83.0 3.27	86.0 3.39	2.0 0.08	116.0 4.57	110.0 4.33	2.60 0.10	2.10 0.08	69.3	27	0.1093	0.96 2.11
23.012 0.9060	17.462 0.6875	1.5 0.06	3.5 0.14	83.0 3.27	89.0 3.50	2.0 0.08	116.0 4.57	110.0 4.33	2.60 0.10	2.10 0.08	69.3	27	0.1093	0.94 2.08
25.400 1.0000	19.845 0.7813	0.5 0.02	3.5 0.14	84.0 3.31	91.0 3.58	1.5 0.06	120.0 4.72	115.0 4.53	1.50 0.06	1.70 0.07	98.2	41.8	0.1198	1.21 2.67
25.400 1.0000	19.845 0.7813	0.5 0.02	0.8 0.03	84.0 3.31	85.0 3.35	1.5 0.06	120.0 4.72	115.0 4.53	1.50 0.06	1.70 0.07	98.2	41.8	0.1198	1.22 2.70
23.012 0.9060	19.842 0.7812	1.5 0.06	2.0 0.08	83.0 3.27	86.0 3.39	3.3 0.13	118.0 4.65	112.0 4.41	2.60 0.10	2.10 0.08	69.3	27	0.1093	1.17 2.59
23.012 0.9060	19.842 0.7812	1.5 0.06	3.5 0.14	83.0 3.27	89.0 3.50	3.3 0.13	118.0 4.65	112.0 4.41	2.60 0.10	2.10 0.08	69.3	27	0.1093	1.16 2.56
31.000 1.2205	22.225 0.8750	-2.8 -0.11	3.5 0.14	84.0 3.31	90.0 3.54	3.3 0.13	121.0 4.76	114.0 4.49	3.40 0.13	0.90 0.03	96.2	28.6	0.1197	1.43 3.16
31.000 1.2205	22.225 0.8750	-2.8 -0.11	6.4 0.25	84.0 3.31	96.0 3.78	3.3 0.13	121.0 4.76	114.0 4.49	3.40 0.13	0.90 0.03	96.2	28.6	0.1197	1.40 3.08
29.769 1.1720	22.225 0.8750	-0.8 -0.03	3.5 0.14	86.0 3.39	92.0 3.62	3.3 0.13	128.0 5.04	120.0 4.72	2.50 0.10	2.10 0.08	105	29.3	0.1252	1.68 3.70
33.338 1.3125	26.195 1.0313	-4.3 -0.17	6.4 0.25	85.0 3.35	97.0 3.82	3.3 0.13	128.0 5.04	119.0 4.69	2.30 0.09	2.40 0.09	119	29.2	0.1273	1.87 4.12
33.338 1.3125	26.195 1.0313	-4.3 -0.17	3.5 0.14	85.0 3.35	91.0 3.58	3.3 0.13	128.0 5.04	119.0 4.69	2.30 0.09	2.40 0.09	119	29.2	0.1273	1.90 4.18

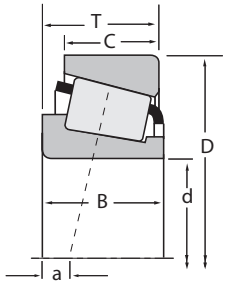
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

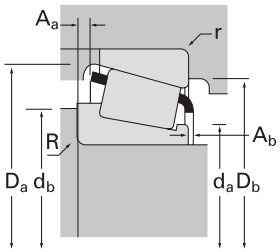
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
76.200 3.0000	133.350 5.2500	33.338 1.3125	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47680	47620
76.200 3.0000	133.350 5.2500	33.338 1.3125	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47679	47620A
76.200 3.0000	133.350 5.2500	39.688 1.5625	202000 45400	0.40	1.49	52400 11800	36100 8110	1.45	353000 79300	HM516442	HM516410
76.200 3.0000	135.733 5.3438	44.450 1.7500	237000 53200	0.41	1.48	61300 13800	42700 9600	1.44	380000 85400	5760	5735
76.200 3.0000	136.525 5.3750	30.162 1.1875	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	495A	493
76.200 3.0000	136.525 5.3750	30.162 1.1875	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	495AX	493
76.200 3.0000	136.525 5.3750	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715346	H715311
76.200 3.0000	139.700 5.5000	36.512 1.4375	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	575	572X
76.200 3.0000	139.700 5.5000	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715346	H715310
76.200 3.0000	139.992 5.5115	36.512 1.4375	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	575	572
76.200 3.0000	139.992 5.5115	36.512 1.4375	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47679	47621
76.200 3.0000	139.992 5.5115	36.512 1.4375	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47680	47621
76.200 3.0000	139.992 5.5115	36.512 1.4375	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	575-S	572
76.200 3.0000	142.138 5.5960	44.450 1.7500	223000 50200	0.39	1.55	57900 13000	38200 8600	1.51	318000 71400	HM515745	HM515716
76.200 3.0000	146.050 5.7500	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	659	653
76.200 3.0000	149.225 5.8750	53.975 2.1250	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6461	6420
76.200 3.0000	149.225 5.8750	53.975 2.1250	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6466	6420
76.200 3.0000	149.225 5.8750	53.975 2.1250	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6461A	6420
76.200 3.0000	150.000 5.9055	35.966 1.4160	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	590A	JM719113
76.200 3.0000	150.089 5.9090	44.450 1.7500	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	748-S	742
76.200 3.0000	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	590A	592A
76.200 3.0000	152.400 6.0000	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	659	652
76.200 3.0000	160.000 6.2992	53.975 2.1250	343000 77200	0.40	1.50	89000 20000	61000 13700	1.46	523000 118000	6576	6525X
76.200 3.0000	161.925 6.3750	47.625 1.8750	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	755	752
76.200 3.0000	161.925 6.3750	49.212 1.9375	275000 61900	0.71	0.85	71400 16100	86700 19500	0.82	330000 74200	9285	9220
76.200 3.0000	161.925 6.3750	53.975 2.1250	343000 77200	0.40	1.50	89000 20000	61000 13700	1.46	523000 118000	6575	6535
76.200 3.0000	161.925 6.3750	53.975 2.1250	343000 77200	0.40	1.50	89000 20000	61000 13700	1.46	523000 118000	6576	6535
76.200 3.0000	161.925 6.3750	53.975 2.1250	343000 77200	0.40	1.50	89000 20000	61000 13700	1.46	523000 118000	6576	6536

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)														Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	$a^{(3)}$	$R^{(4)}$	d_a	d_b	$r^{(4)}$	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
33.338 1.3125	26.195 1.0313	-4.3 -0.17	0.8 0.03	85.0 3.35	86.0 3.39	3.3 0.13	128.0 5.04	119.0 4.69	2.30 0.09	2.40 0.09	119	29.2	0.1273	1.91 4.21
33.338 1.3125	26.195 1.0313	-4.3 -0.17	3.5 0.14	85.0 3.35	91.0 3.58	0.8 0.03	128.0 5.04	121.0 4.76	2.30 0.09	2.40 0.09	119	29.2	0.1273	1.91 4.22
39.688 1.5625	32.545 1.2813	-7.4 -0.29	3.5 0.14	87.0 3.43	93.0 3.66	3.3 0.13	128.0 5.04	118.0 4.65	1.70 0.07	2.50 0.10	154	43	0.0955	2.40 5.30
46.100 1.8150	34.925 1.3750	-11.7 -0.46	3.5 0.14	88.0 3.46	94.0 3.70	3.3 0.13	130.0 5.12	119.0 4.69	5.40 0.21	1.40 0.06	145	31.6	0.0940	2.69 5.94
29.769 1.1720	22.225 0.8750	-0.8 -0.03	3.5 0.14	86.0 3.39	92.0 3.62	3.3 0.13	130.0 5.12	122.0 4.80	2.50 0.10	2.10 0.08	105	29.3	0.1252	1.80 3.96
29.769 1.1720	22.225 0.8750	-0.8 -0.03	6.4 0.25	86.0 3.39	98.0 3.86	3.3 0.13	130.0 5.12	122.0 4.80	2.50 0.10	2.10 0.08	105	29.3	0.1252	1.77 3.90
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	88.0 3.46	98.0 3.86	3.3 0.13	132.0 5.20	118.0 4.65	4.20 0.16	2.00 0.08	147	32.8	0.0993	2.91 6.42
36.098 1.4212	28.575 1.1250	-5.3 -0.21	3.5 0.14	86.0 3.39	92.0 3.62	3.3 0.13	133.0 5.24	125.0 4.92	3.40 0.14	1.90 0.07	126	32	0.1295	2.33 5.14
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	88.0 3.46	98.0 3.86	3.3 0.13	133.0 5.24	120.0 4.72	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.10 6.82
36.098 1.4212	28.575 1.1250	-5.3 -0.21	3.5 0.14	86.0 3.39	92.0 3.62	3.3 0.13	133.0 5.24	125.0 4.92	3.40 0.14	1.90 0.07	126	32	0.1295	2.36 5.20
33.338 1.3125	29.370 1.1563	-4.3 -0.17	3.5 0.14	85.0 3.35	91.0 3.58	3.3 0.13	130.0 5.12	122.0 4.80	2.30 0.09	2.40 0.09	119	29.2	0.1273	2.33 5.13
33.338 1.3125	29.370 1.1563	-4.3 -0.17	0.8 0.03	85.0 3.35	86.0 3.39	3.3 0.13	130.0 5.12	122.0 4.80	2.30 0.09	2.40 0.09	119	29.2	0.1273	2.34 5.15
36.098 1.4212	28.575 1.1250	-5.3 -0.21	6.8 0.27	86.0 3.39	99.0 3.90	3.3 0.13	133.0 5.24	125.0 4.92	3.40 0.14	1.90 0.07	126	32	0.1295	2.32 5.12
46.100 1.8150	33.338 1.3125	-10.9 -0.43	3.5 0.14	87.0 3.43	92.0 3.62	3.3 0.13	133.0 5.24	124.0 4.88	6.00 0.24	-1.30 -0.05	122	26.3	0.0869	2.91 6.41
41.275 1.6250	31.750 1.2500	-7.9 -0.31	3.5 0.14	87.0 3.43	93.0 3.66	3.3 0.13	139.0 5.47	131.0 5.16	4.50 0.18	2.00 0.08	137	27.3	0.0919	2.99 6.59
54.229 2.1350	44.450 1.7500	-15.0 -0.59	3.5 0.14	89.5 3.52	96.0 3.78	3.3 0.13	140.0 5.51	129.0 5.08	2.70 0.11	0.70 0.03	158	29.1	0.0931	4.23 9.32
54.229 2.1350	44.450 1.7500	-15.0 -0.59	6.4 0.25	89.5 3.52	102.0 4.02	3.3 0.13	140.0 5.51	129.0 5.08	2.70 0.11	0.70 0.03	158	29.1	0.0931	4.20 9.26
54.229 2.1350	44.450 1.7500	-15.0 -0.59	9.7 0.38	89.5 3.52	108.0 4.25	3.3 0.13	140.0 5.51	129.0 5.08	2.70 0.11	0.70 0.03	158	29.1	0.0931	4.15 9.15
36.322 1.4300	27.000 1.0630	-2.5 -0.10	3.5 0.14	89.0 3.50	95.0 3.74	2.5 0.10	143.0 5.63	135.0 5.31	4.10 0.16	1.70 0.07	151	38.3	0.1416	2.94 6.48
46.672 1.8375	36.512 1.4375	-11.9 -0.47	3.5 0.14	87.0 3.43	93.0 3.66	3.3 0.13	142.0 5.59	134.0 5.28	1.90 0.07	1.20 0.05	160	26.3	0.0898	3.65 8.04
36.322 1.4300	30.162 1.1875	-2.5 -0.10	3.5 0.14	89.0 3.50	95.0 3.74	3.3 0.13	144.0 5.67	135.0 5.31	4.10 0.16	1.70 0.07	151	38.3	0.1416	3.22 7.09
41.275 1.6250	31.750 1.2500	-7.9 -0.31	3.5 0.14	87.0 3.43	93.0 3.66	3.3 0.13	141.0 5.55	134.0 5.28	4.50 0.18	2.00 0.08	137	27.3	0.0919	3.36 7.40
55.100 2.1693	44.450 1.7500	-13.2 -0.52	3.5 0.14	92.0 3.62	99.0 3.90	3.0 0.12	153.5 6.04	141.0 5.55	4.10 0.16	0.90 0.03	199	33.5	0.1037	5.24 11.54
48.260 1.9000	38.100 1.5000	-11.9 -0.47	3.5 0.14	88.0 3.46	95.0 3.74	3.3 0.13	150.0 5.91	144.0 5.67	3.30 0.13	0.90 0.04	177	29.4	0.0945	4.69 10.34
46.038 1.8125	31.750 1.2500	0.0 0.00	3.5 0.14	90.5 3.56	103.0 4.06	3.3 0.13	153.0 6.03	138.0 5.43	9.10 0.36	4.00 0.16	102	18.4	0.0984	4.18 9.20
55.100 2.1693	42.862 1.6875	-13.2 -0.52	6.4 0.25	92.0 3.62	104.0 4.09	3.3 0.13	154.0 6.06	141.0 5.55	4.10 0.16	0.90 0.03	199	33.5	0.1037	5.34 11.78
55.100 2.1693	42.862 1.6875	-13.2 -0.52	3.5 0.14	92.0 3.62	99.0 3.90	3.3 0.13	154.0 6.06	141.0 5.55	4.10 0.16	0.90 0.03	199	33.5	0.1037	5.37 11.84
55.100 2.1693	42.862 1.6875	-13.2 -0.52	3.5 0.14	92.0 3.62	99.0 3.90	0.8 0.03	154.0 6.06	144.0 5.67	4.10 0.16	0.90 0.03	199	33.5	0.1037	5.39 11.89

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

[7] Compound radius on inner race. Details on drawing for bearing.

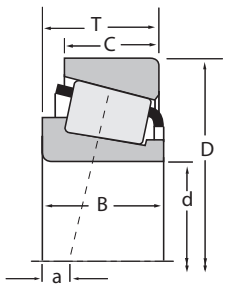
[8] Pin-type cage. Please consult The Timken Company.

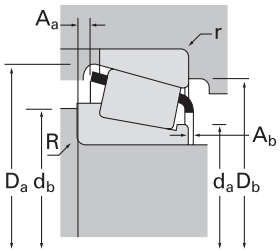
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)		Factors (5)	Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
76.200 3.0000	161.925 6.3750	53.975 2.1250	343000 77200	0.40	1.50	89000 20000	61000 13700	1.46	523000 118000	6576C	6535
76.200 3.0000	168.275 6.6250	47.625 1.8750	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	755	753
76.200 3.0000	168.275 6.6250	53.975 2.1250	379000 85100	0.30	2.00	98200 22100	50300 11300	1.95	522000 117000	837	832
76.200 3.0000	168.275 6.6250	53.975 2.1250	379000 85100	0.30	2.00	98200 22100	50300 11300	1.95	522000 117000	843	832
76.200 3.0000	171.450 6.7500	49.212 1.9375	284000 63700	0.76	0.79	73500 16500	96200 21600	0.76	351000 78800	9380	9321
76.200 3.0000	171.450 6.7500	51.473 2.0265	284000 63700	0.76	0.79	73500 16500	96200 21600	0.76	351000 78800	9378	9321
76.200 3.0000	177.800 7.0000	52.388 2.0625	284000 63700	0.76	0.79	73500 16500	96200 21600	0.76	351000 78800	9380	9320
76.200 3.0000	177.800 7.0000	55.562 2.1875	284000 63700	0.76	0.79	73500 16500	96200 21600	0.76	351000 78800	9378	9320
76.200 3.0000	180.975 7.1250	53.975 2.1250	350000 78700	0.73	0.82	90800 20400	114000 25600	0.80	458000 103000	H917840	H917810
76.200 3.0000	190.500 7.5000	57.150 2.2500	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	HH221430	HH221410
77.788 3.0625	117.475 4.6250	25.400 1.0000	109000 24500	0.51	1.18	28300 6360	24700 5550	1.15	183000 41200	LM814849	LM814810
77.788 3.0625	120.000 4.7244	23.000 0.9055	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34306	34472X
77.788 3.0625	120.650 4.7500	27.783 1.0938	109000 24500	0.51	1.18	28300 6360	24700 5550	1.15	183000 41200	LM814849	LM814814
77.788 3.0625	121.442 4.7812	24.608 0.9688	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34306	34478
77.788 3.0625	121.442 4.7812	24.608 0.9688	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34307	34478
77.788 3.0625	127.000 5.0000	30.162 1.1875	149000 33500	0.42	1.43	38700 8690	27700 6230	1.39	222000 49800	42690	42620
77.788 3.0625	133.350 5.2500	30.162 1.1875	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	495AS	492A
77.788 3.0625	135.733 5.3438	44.450 1.7500	237000 53200	0.41	1.48	61300 13800	42700 9600	1.44	380000 85400	5795	5735
77.788 3.0625	136.525 5.3750	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715348	H715311
77.788 3.0625	139.700 5.5000	46.038 1.8125	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715348	H715310
77.788 3.0625	164.976 6.4951	49.500 1.9488	325000 73200	0.51	1.17	84400 19000	73800 16600	1.14	400000 90000	H816249	H816210
79.375 3.1250	140.000 5.5118	44.450 1.7500	223000 50200	0.39	1.55	57900 13000	38200 8600	1.51	318000 71400	HM515749	HM515714
79.375 3.1250	142.138 5.5960	44.450 1.7500	223000 50200	0.39	1.55	57900 13000	38200 8600	1.51	318000 71400	HM515749	HM515716
79.375 3.1250	146.050 5.7500	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	661	653
79.375 3.1250	147.638 5.8125	35.717 1.4062	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	595A	592XE
79.375 3.1250	150.000 5.9055	35.992 1.4170	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	595A	593X
79.375 3.1250	150.089 5.9090	44.450 1.7500	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	750	742
79.375 3.1250	152.400 6.0000	35.717 1.4062	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	595A	592AS

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

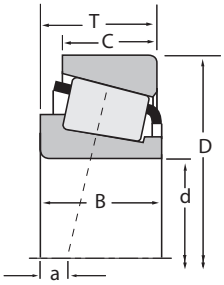
Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a(3)	R(4)	d_a	d_b	r(4)	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
55.100 2.1693	42.862 1.6875	-13.2 -0.52	3.5 0.14	94.0 3.70	101.0 3.98	3.3 0.13	154.0 6.06	141.0 5.55	4.10 0.16	0.90 0.03	199	33.5	0.1037	5.37 11.85
48.260 1.9000	38.100 1.5000	-11.9 -0.47	3.5 0.14	88.0 3.46	95.0 3.74	3.3 0.13	150.0 5.91	147.0 5.79	3.30 0.13	0.90 0.04	177	29.4	0.0945	5.16 11.38
56.363 2.2190	41.275 1.6250	-18.5 -0.73	0.8 0.03	89.0 3.50	90.0 3.54	3.3 0.13	155.0 6.10	149.0 5.87	5.20 0.20	1.60 0.06	198	34.8	0.0937	5.78 12.75
56.363 2.2190	41.275 1.6250	-18.5 -0.73	6.4 0.25	89.0 3.50	101.0 3.98	3.3 0.13	155.0 6.10	149.0 5.87	5.20 0.20	1.60 0.06	198	34.8	0.0937	5.76 12.71
46.038 1.8125	31.750 1.2500	4.3 0.17	3.5 0.14	98.5 3.87	105.0 4.13	3.3 0.13	164.0 6.46	147.0 5.79	9.00 0.35	3.90 0.15	118	18.6	0.1053	5.11 11.26
50.800 2.0000	31.750 1.2500	1.3 0.05	3.5 0.14	98.5 3.87	105.0 4.13	3.3 0.13	164.0 6.46	147.0 5.79	12.20 0.48	2.30 0.09	118	18.6	0.1053	5.35 11.80
46.038 1.8125	34.925 1.3750	4.3 0.17	3.5 0.14	98.5 3.87	105.0 4.13	3.3 0.13	164.0 6.46	148.0 5.83	9.00 0.35	3.90 0.15	118	18.6	0.1053	5.81 12.80
50.800 2.0000	34.925 1.3750	1.3 0.05	3.5 0.14	98.5 3.87	105.0 4.13	3.3 0.13	164.0 6.46	148.0 5.83	12.20 0.48	2.30 0.09	118	18.6	0.1053	6.05 13.34
53.183 2.0938	35.720 1.4063	0.5 0.02	3.5 0.14	100.0 3.94	110.0 4.33	3.3 0.13	170.0 6.69	152.0 5.98	9.50 0.38	2.80 0.11	147	20.7	0.1123	6.55 14.45
57.531 2.2650	46.038 1.8125	-15.0 -0.59	3.5 0.14	95.0 3.74	101.0 3.98	3.3 0.13	179.0 7.05	171.0 6.73	2.50 0.10	3.20 0.13	266	28.4	0.1072	8.87 19.55
25.400 1.0000	19.050 0.7500	2.3 0.09	3.5 0.14	85.0 3.35	91.0 3.58	3.3 0.13	113.0 4.45	105.0 4.13	2.50 0.10	1.40 0.06	88.6	36.6	0.1239	0.91 2.00
23.012 0.9060	16.000 0.6299	1.5 0.06	3.5 0.14	84.0 3.31	90.0 3.54	2.3 0.09	115.0 4.53	110.0 4.33	2.60 0.10	2.10 0.08	69.3	27	0.1093	0.83 1.84
25.400 1.0000	26.195 1.0313	2.3 0.09	3.5 0.14	85.0 3.35	91.0 3.58	3.3 0.13	116.0 4.56	107.0 4.21	2.50 0.10	1.40 0.06	88.6	36.6	0.1239	1.11 2.45
23.012 0.9060	17.462 0.6875	1.5 0.06	3.5 0.14	84.0 3.31	90.0 3.54	2.0 0.08	116.0 4.57	110.0 4.33	2.60 0.10	2.10 0.08	69.3	27	0.1093	0.91 2.00
23.012 0.9060	17.462 0.6875	1.5 0.06	6.4 0.25	84.0 3.31	96.0 3.78	2.0 0.08	116.0 4.57	110.0 4.33	2.60 0.10	2.10 0.08	69.3	27	0.1093	0.88 1.94
31.000 1.2205	22.225 0.8750	-2.8 -0.11	3.5 0.14	85.0 3.35	91.0 3.58	3.3 0.13	121.0 4.76	114.0 4.49	3.40 0.13	0.90 0.03	96.2	28.6	0.1197	1.38 3.04
29.769 1.1720	22.225 0.8750	-0.8 -0.03	3.5 0.14	87.0 3.43	93.0 3.66	3.3 0.13	128.0 5.04	120.0 4.72	2.50 0.10	2.10 0.08	105	29.3	0.1252	1.64 3.61
46.100 1.8150	34.925 1.3750	-11.7 -0.46	3.5 0.14	89.0 3.50	96.0 3.78	3.3 0.13	130.0 5.12	119.0 4.69	5.40 0.21	1.40 0.06	145	31.6	0.0940	2.62 5.78
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	88.0 3.46	99.0 3.90	3.3 0.13	132.0 5.20	118.0 4.65	4.20 0.16	2.00 0.08	147	32.8	0.0993	2.84 6.26
46.038 1.8125	36.512 1.4375	-8.6 -0.34	3.5 0.14	88.0 3.46	99.0 3.90	3.3 0.13	133.0 5.24	120.0 4.72	4.20 0.16	2.00 0.08	147	32.8	0.0993	3.02 6.67
46.248 1.8208	36.251 1.4272	-6.4 -0.25	3.5 0.14	92.5 3.64	102.0 4.02	3.3 0.13	154.5 6.08	144.0 5.67	4.60 0.18	5.90 0.23	127	23.2	0.0959	4.84 10.66
46.100 1.8150	33.338 1.3125	-10.9 -0.43	3.5 0.14	89.5 3.52	95.0 3.74	3.3 0.13	133.0 5.24	123.0 4.84	6.00 0.24	-1.30 -0.05	122	26.3	0.0869	2.64 5.83
46.100 1.8150	33.338 1.3125	-10.9 -0.43	3.5 0.14	89.5 3.52	95.0 3.74	3.3 0.13	133.0 5.24	124.0 4.88	6.00 0.24	-1.30 -0.05	122	26.3	0.0869	2.77 6.10
41.275 1.6250	31.750 1.2500	-7.9 -0.31	3.5 0.14	90.0 3.54	96.0 3.78	3.3 0.13	139.0 5.47	131.0 5.16	4.50 0.18	2.00 0.08	137	27.3	0.0919	2.86 6.31
36.322 1.4300	26.192 1.0312	-2.5 -0.10	3.5 0.14	91.0 3.58	98.0 3.86	0.8 0.03	142.0 5.59	135.0 5.31	4.10 0.16	1.70 0.07	151	38.3	0.1416	2.71 5.97
36.322 1.4300	27.000 1.0630	-2.5 -0.10	3.5 0.14	91.0 3.58	98.0 3.86	3.0 0.12	142.0 5.59	134.0 5.28	4.10 0.16	1.70 0.07	151	38.3	0.1416	2.82 6.22
46.672 1.8375	36.512 1.4375	-11.9 -0.47	3.5 0.14	90.0 3.54	96.0 3.78	3.3 0.13	142.0 5.59	134.0 5.28	1.90 0.07	1.20 0.05	160	26.3	0.0898	3.50 7.72
36.322 1.4300	26.192 1.0312	-2.5 -0.10	3.5 0.14	91.0 3.58	98.0 3.86	0.8 0.03	144.0 5.67	137.0 5.39	4.10 0.16	1.70 0.07	151	38.3	0.1416	2.94 6.48

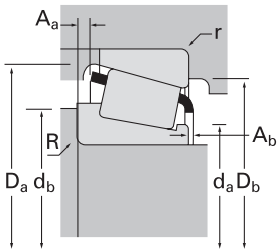
(6) For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
(7) Compound radius on inner race. Details on drawing for bearing.
(8) Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
79.375 3.1250	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	595A	592A
79.375 3.1250	152.400 6.0000	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	661	652
79.375 3.1250	161.925 6.3750	47.625 1.8750	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	756A	752
79.375 3.1250	190.500 7.5000	57.150 2.2500	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	HH221431	HH221410
79.975 3.1486	146.975 5.7864	40.000 1.5748	254000 57000	0.33	1.80	65800 14800	37400 8420	1.76	388000 87300	HM218238	HM218210
79.975 3.1486	152.400 6.0000	40.000 1.5748	254000 57000	0.33	1.80	65800 14800	37400 8420	1.76	388000 87300	HM218238	HM218215
79.985 3.1490	139.992 5.5115	36.512 1.4375	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	578	572
79.985 3.1490	139.992 5.5115	36.512 1.4375	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	578X	572
79.985 3.1490	147.638 5.8125	35.717 1.4062	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	590	592XE
79.985 3.1490	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	590	592A
80.000 3.1496	125.000 4.9213	24.000 0.9449	105000 23600	0.45	1.33	27200 6110	21000 4730	1.29	141000 31800	JP8049	JP8010
80.000 3.1496	130.000 5.1181	35.000 1.3780	184000 41300	0.39	1.54	47700 10700	31700 7130	1.50	283000 63500	JM515649	JM515610
80.000 3.1496	141.000 5.5512	30.250 1.1909	151000 34000	0.42	1.43	39300 8830	28200 6350	1.39	187000 42000	XUB-30216	YFA30216
80.000 3.1496	150.000 5.9055	44.455 1.7502	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	748	743
80.000 3.1496	150.089 5.9090	44.450 1.7500	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	748	742
80.000 3.1496	160.000 6.2992	45.000 1.7717	244000 54900	0.87	0.69	63300 14200	93900 21100	0.67	339000 76100	JW8049	JW8010
80.000 3.1496	200.000 7.8740	52.761 2.0772	376000 84600	0.63	0.95	97500 21900	106000 23700	0.92	519000 117000	98316	98788
80.962 3.1875	133.350 5.2500	30.162 1.1875	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	496	492A
80.962 3.1875	133.350 5.2500	33.338 1.3125	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47681	47620
80.962 3.1875	133.350 5.2500	39.688 1.5625	202000 45400	0.40	1.49	52400 11800	36100 8110	1.45	353000 79300	HM516447	HM516410
80.962 3.1875	133.350 5.2500	39.688 1.5625	202000 45400	0.40	1.49	52400 11800	36100 8110	1.45	353000 79300	HM516447	HM516410A
80.962 3.1875	136.525 5.3750	30.162 1.1875	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	496	493
80.962 3.1875	139.992 5.5115	36.512 1.4375	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	581	572
80.962 3.1875	146.050 5.7500	38.100 1.5000	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	662	653
80.962 3.1875	150.089 5.9090	44.450 1.7500	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	740	742
80.962 3.1875	168.275 6.6250	53.975 2.1250	379000 85100	0.30	2.00	98200 22100	50300 11300	1.95	522000 117000	838	832
82.550 3.2500	114.300 4.5000	15.083 0.5938	55400 12400	0.31	1.94	14400 3230	7610 1710	1.89	87000 19600	LL116249	LL116210
82.550 3.2500	115.888 4.5625	20.638 0.8125	83500 18800	0.31	1.95	21700 4870	11400 2570	1.90	147000 33100	L116149	L116110

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

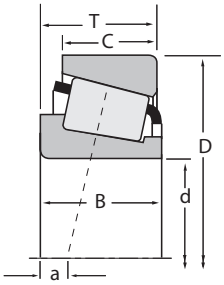
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
36.322 1.4300	30.162 1.1875	-2.5 -0.10	3.5 0.14	91.0 3.58	98.0 3.86	3.3 0.13	144.0 5.67	135.0 5.31	4.10 0.16	1.70 0.07	151	38.3	0.1416	3.11 6.85
41.275 1.6250	31.750 1.2500	-7.9 -0.31	3.5 0.14	90.0 3.54	96.0 3.78	3.3 0.13	141.0 5.55	134.0 5.28	4.50 0.18	2.00 0.08	137	27.3	0.0919	3.23 7.13
48.260 1.9000	38.100 1.5000	-11.9 -0.47	8.0 0.31	91.0 3.58	106.0 4.17	3.3 0.13	150.0 5.91	144.0 5.67	3.30 0.13	0.90 0.04	177	29.4	0.0945	4.49 9.90
57.531 2.2650	46.038 1.8125	-15.0 -0.59	3.5 0.14	97.0 3.82	103.0 4.06	3.3 0.13	179.0 7.05	171.0 6.73	2.50 0.10	3.20 0.13	266	28.4	0.1072	8.69 19.16
40.000 1.5748	32.500 1.2795	-8.6 -0.34	7.0 0.28	91.0 3.58	104.0 4.09	3.5 0.14	141.0 5.55	133.0 5.24	1.40 0.06	2.90 0.12	168	34.7	0.0921	2.95 6.51
40.000 1.5748	32.500 1.2795	-8.6 -0.34	7.0 0.28	91.0 3.58	104.0 4.09	3.3 0.13	143.0 5.63	135.0 5.31	1.40 0.06	2.90 0.12	168	34.7	0.0921	3.28 7.23
36.098 1.4212	28.575 1.1250	-5.3 -0.21	3.5 0.14	89.0 3.50	95.0 3.74	3.3 0.13	133.0 5.24	125.0 4.92	3.40 0.14	1.90 0.07	126	32	0.1295	2.23 4.91
36.098 1.4212	28.575 1.1250	-5.3 -0.21	8.0 0.31	89.0 3.50	104.0 4.09	3.3 0.13	133.0 5.24	125.0 4.92	3.40 0.14	1.90 0.07	126	32	0.1295	2.17 4.79
36.322 1.4300	26.192 1.0312	-2.5 -0.10	3.5 0.14	91.0 3.58	98.0 3.86	0.8 0.03	142.0 5.59	135.0 5.31	4.10 0.16	1.70 0.07	151	38.3	0.1416	2.68 5.92
36.322 1.4300	30.162 1.1875	-2.5 -0.10	3.5 0.14	91.0 3.58	98.0 3.86	3.3 0.13	144.0 5.67	135.0 5.31	4.10 0.16	1.70 0.07	151	38.3	0.1416	3.08 6.80
22.500 0.8858	17.500 0.6890	2.3 0.09	2.0 0.08	86.0 3.39	89.0 3.50	2.0 0.08	120.0 4.72	115.0 4.53	1.90 0.08	3.40 0.14	69.7	37.4	0.1095	0.95 2.10
34.000 1.3386	28.500 1.1220	-5.1 -0.20	3.0 0.12	88.0 3.46	94.0 3.70	2.5 0.10	125.0 4.92	117.0 4.61	1.60 0.06	2.70 0.11	118	31.1	0.0863	1.71 3.77
28.000 1.1024	22.000 0.8661	-2.0 -0.08	0.5 0.02	90.0 3.54	90.0 3.54	2.0 0.08	133.0 5.24	128.0 5.04	3.80 0.15	3.50 0.14	80.7	25.6	0.0771	1.80 3.98
46.672 1.8375	35.000 1.3780	-11.9 -0.47	3.0 0.12	90.0 3.54	96.0 3.78	3.3 0.13	142.0 5.59	134.0 5.28	1.90 0.07	1.20 0.05	160	26.3	0.0898	3.43 7.57
46.672 1.8375	36.512 1.4375	-11.9 -0.47	3.0 0.12	90.0 3.54	96.0 3.78	3.3 0.13	142.0 5.59	134.0 5.28	1.90 0.07	1.20 0.05	160	26.3	0.0898	3.48 7.67
41.000 1.6142	31.000 1.2205	9.7 0.38	3.0 0.12	93.0 3.67	108.0 4.25	3.0 0.12	152.0 5.98	134.0 5.28	7.10 0.28	4.80 0.19	117	27.2	0.1094	4.04 8.90
49.212 1.9375	34.925 1.3750	1.3 0.05	3.5 0.14	105.0 4.13	111.0 4.37	3.3 0.13	188.0 7.40	174.0 6.85	8.60 0.34	5.40 0.21	203	37.4	0.1197	7.95 17.52
29.769 1.1720	22.225 0.8750	-0.8 -0.03	3.5 0.14	89.0 3.50	95.0 3.74	3.3 0.13	128.0 5.04	120.0 4.72	2.50 0.10	2.10 0.08	105	29.3	0.1252	1.54 3.40
33.338 1.3125	26.195 1.0313	-4.3 -0.17	3.5 0.14	89.0 3.50	95.0 3.74	3.3 0.13	128.0 5.04	119.0 4.69	2.30 0.09	2.40 0.09	119	29.2	0.1273	1.74 3.84
39.688 1.5625	32.545 1.2813	-7.4 -0.29	3.5 0.14	91.0 3.58	98.0 3.86	3.3 0.13	128.0 5.04	118.0 4.65	1.70 0.07	2.50 0.10	154	43	0.0955	2.22 4.90
39.688 1.5625	32.545 1.2813	-7.4 -0.29	3.5 0.14	91.0 3.58	98.0 3.86	0.8 0.03	128.0 5.04	120.0 4.72	1.70 0.07	2.50 0.10	154	43	0.0955	2.24 4.93
29.769 1.1720	22.225 0.8750	-0.8 -0.03	3.5 0.14	89.0 3.50	95.0 3.74	3.3 0.13	130.0 5.12	122.0 4.80	2.50 0.10	2.10 0.08	105	29.3	0.1252	1.66 3.66
36.098 1.4212	28.575 1.1250	-5.3 -0.21	3.5 0.14	90.0 3.54	96.0 3.78	3.3 0.13	133.0 5.24	125.0 4.92	3.40 0.14	1.90 0.07	126	32	0.1295	2.19 4.83
38.100 1.5000	31.750 1.2500	-4.8 -0.19	3.5 0.14	91.0 3.58	98.0 3.86	3.3 0.13	139.0 5.47	131.0 5.16	1.40 0.05	2.00 0.08	137	27.3	0.0919	2.67 5.90
46.672 1.8375	36.512 1.4375	-11.9 -0.47	5.0 0.20	91.0 3.58	101.0 3.98	3.3 0.13	142.0 5.59	134.0 5.28	1.90 0.07	1.20 0.05	160	26.3	0.0898	3.42 7.53
56.363 2.2190	41.275 1.6250	-18.5 -0.73	0.8 0.03	93.0 3.66	94.0 3.70	3.3 0.13	155.0 6.10	149.0 5.87	5.20 0.20	1.60 0.06	198	34.8	0.0937	5.52 12.18
15.082 0.5938	11.112 0.4375	1.5 0.06	1.5 0.06	87.0 3.43	90.0 3.54	1.5 0.06	110.0 4.33	108.0 4.25	0.30 0.01	2.10 0.08	66.2	68.2	0.0944	0.44 0.96
21.433 0.8438	16.670 0.6563	-1.3 -0.05	1.5 0.06	88.0 3.46	90.0 3.54	1.5 0.06	111.0 4.37	108.0 4.25	0.60 0.02	1.30 0.05	97.2	64.3	0.1079	0.66 1.46

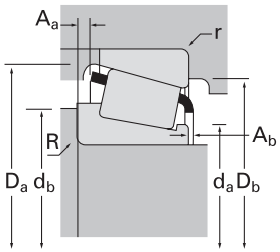
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
82.550 3.2500	125.412 4.9375	25.400 1.0000	109000 24400	0.42	1.44	28100 6320	20000 4500	1.40	178000 39900	27687	27620
82.550 3.2500	133.350 5.2500	30.162 1.1875	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	495	492A
82.550 3.2500	133.350 5.2500	33.338 1.3125	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47685	47620
82.550 3.2500	133.350 5.2500	33.338 1.3125	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47686	47620
82.550 3.2500	133.350 5.2500	33.338 1.3125	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47687	47620
82.550 3.2500	133.350 5.2500	39.688 1.5625	202000 45400	0.40	1.49	52400 11800	36100 8110	1.45	353000 79300	HM516448	HM516410
82.550 3.2500	133.350 5.2500	39.688 1.5625	202000 45400	0.40	1.49	52400 11800	36100 8110	1.45	353000 79300	HM516449A	HM516410
82.550 3.2500	133.350 5.2500	39.688 1.5625	202000 45400	0.40	1.49	52400 11800	36100 8110	1.45	353000 79300	HM516449C	HM516410
82.550 3.2500	136.525 5.3750	30.162 1.1875	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	495	493
82.550 3.2500	139.700 5.5000	36.512 1.4375	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	580	572X
82.550 3.2500	139.700 5.5000	36.512 1.4375	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	582	572X
82.550 3.2500	139.992 5.5115	36.512 1.4375	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	580	572
82.550 3.2500	139.992 5.5115	36.512 1.4375	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	580	574
82.550 3.2500	139.992 5.5115	36.512 1.4375	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	582	572
82.550 3.2500	139.992 5.5115	36.512 1.4375	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47685	47621
82.550 3.2500	139.992 5.5115	36.512 1.4375	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47686	47621
82.550 3.2500	139.992 5.5115	36.512 1.4375	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	580X	572
82.550 3.2500	142.138 5.5960	42.862 1.6875	242000 54300	0.43	1.39	62700 14100	46300 10400	1.35	399000 89700	HM617045	HM617010
82.550 3.2500	146.050 5.7500	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	663	653
82.550 3.2500	146.050 5.7500	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	663A	653
82.550 3.2500	147.638 5.8125	35.717 1.4062	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	595	592XE
82.550 3.2500	147.638 5.8125	35.717 1.4062	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	595	592XS
82.550 3.2500	150.000 5.9055	35.992 1.4170	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	595	593X
82.550 3.2500	150.089 5.9090	44.450 1.7500	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	749A	742
82.550 3.2500	150.089 5.9090	44.450 1.7500	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	750A	742
82.550 3.2500	152.400 6.0000	35.717 1.4062	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	595	592AS
82.550 3.2500	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	595	592A
82.550 3.2500	152.400 6.0000	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	663	652

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight
Bearing			Shaft			Housing			Cage					kg (lbs.)
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
25.400 1.0000	19.845 0.7813	0.5 0.02	3.5 0.14	89.0 3.50	96.0 3.78	1.5 0.06	120.0 4.72	115.0 4.53	1.50 0.06	1.70 0.07	98.2	41.8	0.1198	1.05 2.33
29.769 1.1720	22.225 0.8750	-0.8 -0.03	3.5 0.14	90.0 3.54	97.0 3.82	3.3 0.13	128.0 5.04	120.0 4.72	2.50 0.10	2.10 0.08	105	29.3	0.1252	1.50 3.30
33.338 1.3125	26.195 1.0313	-4.3 -0.17	0.8 0.03	90.0 3.54	91.0 3.58	3.3 0.13	128.0 5.04	119.0 4.69	2.30 0.09	2.40 0.09	119	29.2	0.1273	1.70 3.75
33.338 1.3125	26.195 1.0313	-4.3 -0.17	3.5 0.14	90.0 3.54	97.0 3.82	3.3 0.13	128.0 5.04	119.0 4.69	2.30 0.09	2.40 0.09	119	29.2	0.1273	1.69 3.72
33.338 1.3125	26.195 1.0313	-4.3 -0.17	6.8 0.27	90.0 3.54	103.0 4.06	3.3 0.13	128.0 5.04	119.0 4.69	2.30 0.09	2.40 0.09	119	29.2	0.1273	1.65 3.65
39.688 1.5625	32.545 1.2813	-7.4 -0.29	6.8 0.27	92.0 3.62	106.0 4.17	3.3 0.13	128.0 5.04	118.0 4.65	1.70 0.07	2.50 0.10	154	43	0.0955	2.14 4.72
39.688 1.5625	32.545 1.2813	-7.4 -0.29	6.0 0.24	92.0 3.62	105.0 4.13	3.3 0.13	128.0 5.04	118.0 4.65	1.70 0.07	2.50 0.10	154	43	0.0955	2.10 4.62
39.688 1.5625	32.545 1.2813	-7.4 -0.29	3.5 0.14	92.0 3.62	99.0 3.90	3.3 0.13	128.0 5.04	118.0 4.65	1.70 0.07	2.50 0.10	154	43	0.0955	2.15 4.74
29.769 1.1720	22.225 0.8750	-0.8 -0.03	3.5 0.14	90.0 3.54	97.0 3.82	3.3 0.13	130.0 5.12	122.0 4.80	2.50 0.10	2.10 0.08	105	29.3	0.1252	1.61 3.55
36.098 1.4212	28.575 1.1250	-5.3 -0.21	3.5 0.14	91.0 3.58	98.0 3.86	3.3 0.13	133.0 5.24	125.0 4.92	3.40 0.14	1.90 0.07	126	32	0.1295	2.11 4.65
36.098 1.4212	28.575 1.1250	-5.3 -0.21	6.8 0.27	91.0 3.58	104.0 4.09	3.3 0.13	133.0 5.24	125.0 4.92	3.40 0.14	1.90 0.07	126	32	0.1295	2.07 4.56
36.098 1.4212	28.575 1.1250	-5.3 -0.21	3.5 0.14	91.0 3.58	98.0 3.86	3.3 0.13	133.0 5.24	125.0 4.92	3.40 0.14	1.90 0.07	126	32	0.1295	2.14 4.71
36.098 1.4212	28.575 1.1250	-5.3 -0.21	3.5 0.14	91.0 3.58	98.0 3.86	0.5 0.02	133.0 5.24	128.0 5.04	3.40 0.14	1.90 0.07	126	32	0.1295	2.14 4.72
36.098 1.4212	28.575 1.1250	-5.3 -0.21	6.8 0.27	91.0 3.58	104.0 4.09	3.3 0.13	133.0 5.24	125.0 4.92	3.40 0.14	1.90 0.07	126	32	0.1295	2.10 4.62
33.338 1.3125	29.370 1.1563	-4.3 -0.17	0.8 0.03	90.0 3.54	91.0 3.58	3.3 0.13	130.0 5.12	122.0 4.80	2.30 0.09	2.40 0.09	119	29.2	0.1273	2.13 4.70
33.338 1.3125	29.370 1.1563	-4.3 -0.17	3.5 0.14	90.0 3.54	97.0 3.82	3.3 0.13	130.0 5.12	122.0 4.80	2.30 0.09	2.40 0.09	119	29.2	0.1273	2.12 4.67
36.098 1.4212	28.575 1.1250	-5.3 -0.21	4.8 0.19	92.0 3.62	100.0 3.94	3.3 0.13	133.0 5.24	125.0 4.92	3.40 0.14	1.90 0.07	126	32	0.1295	2.12 4.68
42.862 1.6875	34.133 1.3438	-7.4 -0.29	3.5 0.14	95.0 3.74	101.0 3.98	3.3 0.13	137.0 5.39	125.0 4.92	3.30 0.13	2.40 0.09	163	38.9	0.0996	2.77 6.11
41.275 1.6250	31.750 1.2500	-7.9 -0.31	3.5 0.14	92.0 3.62	99.0 3.90	3.3 0.13	139.0 5.47	131.0 5.16	4.50 0.18	2.00 0.08	137	27.3	0.0919	2.73 6.02
41.275 1.6250	31.750 1.2500	-7.9 -0.31	6.8 0.27	92.0 3.62	105.0 4.13	3.3 0.13	139.0 5.47	131.0 5.16	4.50 0.18	2.00 0.08	137	27.3	0.0919	2.70 5.94
36.322 1.4300	26.192 1.0312	-2.5 -0.10	3.5 0.14	93.0 3.66	100.0 3.94	0.8 0.03	142.0 5.59	135.0 5.31	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.59 5.71
36.322 1.4300	26.192 1.0312	-2.5 -0.10	3.5 0.14	93.0 3.66	100.0 3.94	3.3 0.13	142.0 5.59	133.0 5.24	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.57 5.67
36.322 1.4300	27.000 1.0630	-2.5 -0.10	3.5 0.14	93.0 3.66	100.0 3.94	3.0 0.12	142.0 5.59	134.0 5.28	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.71 5.97
46.672 1.8375	36.512 1.4375	-11.9 -0.47	3.5 0.14	93.0 3.66	99.0 3.90	3.3 0.13	142.0 5.59	134.0 5.28	1.90 0.07	1.20 0.05	160	26.3	0.0898	3.35 7.40
46.672 1.8375	36.512 1.4375	-11.9 -0.47	6.5 0.26	93.0 3.66	106.0 4.17	3.3 0.13	142.0 5.59	134.0 5.28	1.90 0.07	1.20 0.05	160	26.3	0.0898	3.32 7.32
36.322 1.4300	26.192 1.0312	-2.5 -0.10	3.5 0.14	93.0 3.66	100.0 3.94	0.8 0.03	144.0 5.67	137.0 5.39	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.82 6.23
36.322 1.4300	30.162 1.1875	-2.5 -0.10	3.5 0.14	93.0 3.66	100.0 3.94	3.3 0.13	144.0 5.67	135.0 5.31	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.99 6.59
41.275 1.6250	31.750 1.2500	-7.9 -0.31	3.5 0.14	92.0 3.62	99.0 3.90	3.3 0.13	141.0 5.55	134.0 5.28	4.50 0.18	2.00 0.08	137	27.3	0.0919	3.10 6.84

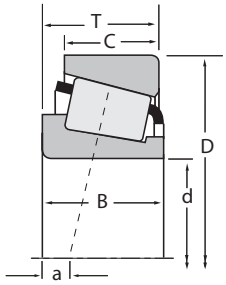
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

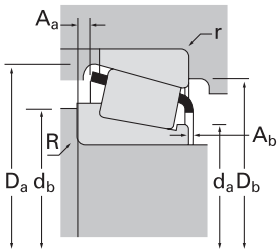
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
82.550 3.2500	159.995 6.2990	47.625 1.8750	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	757	752A
82.550 3.2500	161.925 6.3750	47.625 1.8750	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	757	752
82.550 3.2500	161.925 6.3750	53.975 2.1250	343000 77200	0.40	1.50	89000 20000	61000 13700	1.46	523000 118000	6559C	6535
82.550 3.2500	168.275 6.6250	47.625 1.8750	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	757	753
82.550 3.2500	168.275 6.6250	53.975 2.1250	379000 85100	0.30	2.00	98200 22100	50300 11300	1.95	522000 117000	839	832
82.550 3.2500	168.275 6.6250	53.975 2.1250	379000 85100	0.30	2.00	98200 22100	50300 11300	1.95	522000 117000	842	832
82.550 3.2500	180.975 7.1250	53.975 2.1250	350000 78700	0.73	0.82	90800 20400	114000 25600	0.80	458000 103000	H917849	H917810
83.345 3.2813	125.412 4.9375	25.400 1.0000	109000 24400	0.42	1.44	28100 6320	20000 4500	1.40	178000 39900	27689	27620
83.345 3.2813	125.412 4.9375	25.400 1.0000	109000 24400	0.42	1.44	28100 6320	20000 4500	1.40	178000 39900	27690	27620
83.345 3.2813	125.412 4.9375	25.400 1.0000	109000 24400	0.42	1.44	28100 6320	20000 4500	1.40	178000 39900	27691	27620
83.345 3.2813	133.350 5.2500	33.338 1.3125	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47688	47620
84.000 3.3071	140.000 5.5118	32.000 1.2598	170000 38200	0.42	1.42	44000 9890	31900 7160	1.38	264000 59400	XUA32018X	Y32018X
84.138 3.3125	133.350 5.2500	30.162 1.1875	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	498	492A
84.138 3.3125	136.525 5.3750	30.162 1.1875	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	498	493
84.138 3.3125	152.400 6.0000	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	664	652
84.138 3.3125	171.450 6.7500	49.212 1.9375	284000 63700	0.76	0.79	73500 16500	96200 21600	0.76	351000 78800	9386H	9321
84.138 3.3125	177.800 7.0000	52.388 2.0625	284000 63700	0.76	0.79	73500 16500	96200 21600	0.76	351000 78800	9386H	9320
84.975 3.3455	125.412 4.9375	25.400 1.0000	109000 24400	0.42	1.44	28100 6320	20000 4500	1.40	178000 39900	27695	27620
85.000 3.3465	130.000 5.1181	29.000 1.1417	151000 33800	0.44	1.36	39000 8770	29500 6640	1.32	235000 52900	XAA32017X	Y32017X
85.000 3.3465	130.000 5.1181	30.000 1.1811	149000 33600	0.44	1.35	38700 8700	29400 6620	1.31	245000 55100	JM716648	JM716610
85.000 3.3465	130.000 5.1181	30.000 1.1811	149000 33600	0.44	1.35	38700 8700	29400 6620	1.31	245000 55100	JM716649	JM716610
85.000 3.3465	140.000 5.5118	39.000 1.5354	220000 49500	0.41	1.47	57000 12800	39800 8940	1.43	339000 76300	JHM516849	JHM516810
85.000 3.3465	146.050 5.7500	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	665X	653
85.000 3.3465	150.000 5.9055	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	665X	653X
85.000 3.3465	150.000 5.9055	46.000 1.8110	307000 69100	0.33	1.80	79700 17900	45400 10200	1.76	446000 100000	JH217249	JH217210
85.000 3.3465	188.912 7.4375	53.297 2.0983	299000 67300	0.87	0.69	77600 17400	115000 25900	0.67	392000 88100	90334	90744
85.000 3.3465	200.000 7.8740	52.761 2.0772	376000 84600	0.63	0.95	97500 21900	106000 23700	0.92	519000 117000	98335	98788
85.026 3.3475	150.000 5.9055	44.455 1.7502	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	749	743

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

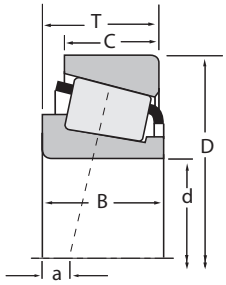
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
48.260 1.9000	38.100 1.5000	-11.9 -0.47	3.5 0.14	94.0 3.70	100.0 3.94	0.8 0.03	150.0 5.91	146.0 5.75	3.30 0.13	0.90 0.04	177	29.4	0.0945	4.26 9.40
48.260 1.9000	38.100 1.5000	-11.9 -0.47	3.5 0.14	94.0 3.70	100.0 3.94	3.3 0.13	150.0 5.91	144.0 5.67	3.30 0.13	0.90 0.04	177	29.4	0.0945	4.39 9.68
55.100 2.1693	42.862 1.6875	-13.2 -0.52	3.5 0.14	98.0 3.86	104.0 4.09	3.3 0.13	154.0 6.06	141.0 5.55	4.10 0.16	0.90 0.03	199	33.5	0.1037	5.03 11.09
48.260 1.9000	38.100 1.5000	-11.9 -0.47	3.5 0.14	94.0 3.70	100.0 3.94	3.3 0.13	150.0 5.91	147.0 5.79	3.30 0.13	0.90 0.04	177	29.4	0.0945	4.86 10.72
56.363 2.2190	41.275 1.6250	-18.5 -0.73	0.8 0.03	94.0 3.70	95.0 3.74	3.3 0.13	155.0 6.10	149.0 5.87	5.20 0.20	1.60 0.06	198	34.8	0.0937	5.43 11.98
56.363 2.2190	41.275 1.6250	-18.5 -0.73	3.5 0.14	94.0 3.70	101.0 3.98	3.3 0.13	155.0 6.10	149.0 5.87	5.20 0.20	1.60 0.06	198	34.8	0.0937	5.42 11.95
53.183 2.0938	35.720 1.4063	0.5 0.02	3.3 0.13	100.0 3.94	114.0 4.49	3.3 0.13	170.0 6.69	152.0 5.98	9.50 0.38	2.80 0.11	147	20.7	0.1123	6.22 13.72
25.400 1.0000	19.845 0.7813	0.5 0.02	0.8 0.03	90.0 3.54	90.0 3.54	1.5 0.06	120.0 4.72	115.0 4.53	1.50 0.06	1.70 0.07	98.2	41.8	0.1198	1.05 2.31
25.400 1.0000	19.845 0.7813	0.5 0.02	3.5 0.14	90.0 3.54	96.0 3.78	1.5 0.06	120.0 4.72	115.0 4.53	1.60 0.06	1.70 0.07	98.2	41.8	0.1198	1.03 2.28
25.400 1.0000	19.845 0.7813	0.5 0.02	6.4 0.25	90.0 3.54	102.0 4.02	1.5 0.06	120.0 4.72	115.0 4.53	1.50 0.06	1.70 0.07	98.2	41.8	0.1198	1.00 2.21
33.338 1.3125	26.195 1.0313	-4.3 -0.17	3.5 0.14	91.0 3.58	97.0 3.82	3.3 0.13	128.0 5.04	119.0 4.69	2.30 0.09	2.40 0.09	119	29.2	0.1273	1.66 3.66
32.000 1.2598	24.000 0.9449	-2.0 -0.08	0.5 0.02	94.0 3.70	94.0 3.70	1.5 0.06	134.0 5.28	128.0 5.04	3.20 0.13	2.20 0.09	128	42.8	0.1317	1.96 4.32
29.769 1.1720	22.225 0.8750	-0.8 -0.03	3.5 0.14	91.0 3.58	98.0 3.86	3.3 0.13	128.0 5.04	120.0 4.72	2.50 0.10	2.10 0.08	105	29.3	0.1252	1.45 3.19
29.769 1.1720	22.225 0.8750	-0.8 -0.03	3.5 0.14	91.0 3.58	98.0 3.86	3.3 0.13	130.0 5.12	122.0 4.80	2.50 0.10	2.10 0.08	105	29.3	0.1252	1.56 3.45
41.275 1.6250	31.750 1.2500	-7.9 -0.31	3.5 0.14	94.0 3.70	100.0 3.94	3.3 0.13	141.0 5.55	134.0 5.28	4.50 0.18	2.00 0.08	137	27.3	0.0919	3.03 6.69
46.038 1.8125	31.750 1.2500	4.3 0.17	3.5 0.14	98.5 3.87	111.0 4.37	3.3 0.13	164.0 6.46	147.0 5.79	9.00 0.35	3.90 0.15	118	18.6	0.1053	4.70 10.36
46.038 1.8125	34.925 1.3750	4.3 0.17	3.5 0.14	98.5 3.87	111.0 4.37	3.3 0.13	164.0 6.46	148.0 5.83	9.00 0.35	3.90 0.15	118	18.6	0.1053	5.40 11.91
25.400 1.0000	19.845 0.7813	0.5 0.02	5.0 0.20	91.0 3.58	100.0 3.94	1.5 0.06	120.0 4.72	115.0 4.53	1.50 0.06	1.70 0.07	98.2	41.8	0.1198	0.98 2.15
29.000 1.1417	22.000 0.8661	-0.5 -0.02	6.5 0.26	92.0 3.62	106.0 4.17	1.5 0.06	125.0 4.92	119.0 4.69	2.10 0.08	2.70 0.11	109	36.3	0.1270	1.31 2.89
29.000 1.1417	24.000 0.9449	-0.3 -0.01	6.0 0.24	92.0 3.62	104.0 4.09	2.5 0.10	125.0 4.92	117.0 4.61	2.10 0.08	2.50 0.10	117	36.6	0.1303	1.32 2.92
29.000 1.1417	24.000 0.9449	-0.3 -0.01	3.0 0.12	92.0 3.62	98.0 3.86	2.5 0.10	125.0 4.92	117.0 4.61	2.10 0.08	2.50 0.10	117	36.6	0.1303	1.36 3.00
38.000 1.4961	31.500 1.2402	-5.8 -0.23	3.0 0.12	94.0 3.70	100.0 3.94	2.5 0.10	134.0 5.28	125.0 4.92	1.50 0.06	3.60 0.14	141	35.1	0.0929	2.27 4.99
41.275 1.6250	31.750 1.2500	-7.9 -0.31	3.5 0.14	95.0 3.74	101.0 3.98	3.3 0.13	139.0 5.47	131.0 5.16	4.50 0.18	2.00 0.08	137	27.3	0.0919	2.63 5.79
41.275 1.6250	31.750 1.2500	-7.9 -0.31	3.5 0.14	95.0 3.74	101.0 3.98	3.0 0.12	141.0 5.55	133.0 5.24	4.50 0.18	2.00 0.08	137	27.3	0.0919	2.86 6.30
46.000 1.8110	38.000 1.4961	-11.9 -0.47	3.0 0.12	95.0 3.74	101.0 3.98	2.5 0.10	142.0 5.59	134.0 5.28	1.10 0.04	3.40 0.14	169	33.3	0.0924	3.34 7.37
52.761 2.0772	31.750 1.2500	10.4 0.41	3.5 0.14	112.0 4.41	116.0 4.57	3.3 0.13	179.5 7.06	161.0 6.34	13.50 0.53	-0.60 -0.02	150	23.8	0.1180	6.57 14.48
49.212 1.9375	34.925 1.3750	1.3 0.05	3.5 0.14	109.0 4.29	115.0 4.53	3.3 0.13	188.0 7.40	174.0 6.85	8.60 0.34	5.40 0.21	203	37.4	0.1197	7.70 16.96
46.672 1.8375	35.000 1.3780	-11.9 -0.47	3.5 0.14	95.0 3.74	101.0 3.98	3.3 0.13	142.0 5.59	134.0 5.28	1.90 0.07	1.20 0.05	160	26.3	0.0898	3.20 7.06

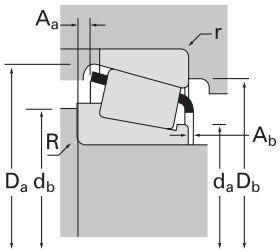
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
85.026 3.3475	150.089 5.9090	44.450 1.7500	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	749	742
85.026 3.3475	150.089 5.9090	44.450 1.7500	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	749-S	742
85.725 3.3750	133.350 5.2500	30.162 1.1875	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	497	492A
85.725 3.3750	136.525 5.3750	30.162 1.1875	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	497	493
85.725 3.3750	136.525 5.3750	30.162 1.1875	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	497A	493
85.725 3.3750	142.138 5.5960	42.862 1.6875	242000 54300	0.43	1.39	62700 14100	46300 10400	1.35	399000 89700	HM617048	HM617010
85.725 3.3750	142.138 5.5960	42.862 1.6875	242000 54300	0.43	1.39	62700 14100	46300 10400	1.35	399000 89700	HM617049	HM617010
85.725 3.3750	146.050 5.7500	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	665	653
85.725 3.3750	146.050 5.7500	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	665A	653
85.725 3.3750	147.828 5.8200	35.717 1.4062	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	596	592AX
85.725 3.3750	150.000 5.9055	35.966 1.4160	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	596	JM719113
85.725 3.3750	150.000 5.9055	35.992 1.4170	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	596	593X
85.725 3.3750	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	596	592A
85.725 3.3750	152.400 6.0000	41.275 1.6250	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	665	652
85.725 3.3750	161.925 6.3750	47.625 1.8750	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	758	752
85.725 3.3750	168.275 6.6250	41.275 1.6250	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	677	672
85.725 3.3750	168.275 6.6250	53.975 2.1250	379000 85100	0.30	2.00	98200 22100	50300 11300	1.95	522000 117000	841	832
87.312 3.4375	123.825 4.8750	20.638 0.8125	85800 19300	0.33	1.82	22200 5000	12600 2820	1.77	156000 35200	L217847	L217810
87.312 3.4375	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	596-S	592A
87.312 3.4375	190.500 7.5000	57.150 2.2500	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	HH221432	HH221410
87.960 3.4630	148.430 5.8437	28.575 1.1250	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42346	42584
87.960 3.4630	149.225 5.8750	31.750 1.2500	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42346	42587
88.900 3.5000	121.442 4.7812	15.083 0.5938	55100 12400	0.33	1.81	14300 3210	8080 1820	1.77	88700 20000	LL217849	LL217810
88.900 3.5000	123.825 4.8750	20.638 0.8125	85800 19300	0.33	1.82	22200 5000	12600 2820	1.77	156000 35200	L217849	L217810
88.900 3.5000	127.000 5.0000	20.638 0.8125	85800 19300	0.33	1.82	22200 5000	12600 2820	1.77	156000 35200	L217849	L217813
88.900 3.5000	148.430 5.8437	28.575 1.1250	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42350	42584
88.900 3.5000	149.225 5.8750	31.750 1.2500	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42350	42587
88.900 3.5000	150.000 5.9055	35.966 1.4160	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	593A	JM719113

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

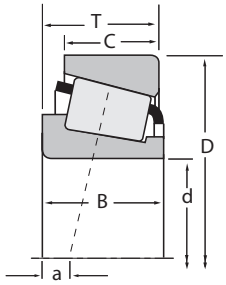
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
46.672 1.8375	**36.512** 1.4375	**-11.9** -0.47	**3.5** 0.14	**95.0** 3.74	**101.0** 3.98	**3.3** 0.13	**142.0** 5.59	**134.0** 5.28	**1.90** 0.07	**1.20** 0.05	**160**	**26.3**	**0.0898**	**3.25** 7.16
46.672 1.8375	**36.512** 1.4375	**-11.9** -0.47	**5.0** 0.20	**95.0** 3.74	**104.0** 4.09	**3.3** 0.13	**142.0** 5.59	**134.0** 5.28	**1.90** 0.07	**1.20** 0.05	**160**	**26.3**	**0.0898**	**3.22** 7.10
29.769 1.1720	**22.225** 0.8750	**-0.8** -0.03	**3.5** 0.14	**93.0** 3.66	**99.0** 3.90	**3.3** 0.13	**128.0** 5.04	**120.0** 4.72	**2.50** 0.10	**2.10** 0.08	**105**	**29.3**	**0.1252**	**1.40** 3.08
29.769 1.1720	**22.225** 0.8750	**-0.8** -0.03	**3.5** 0.14	**93.0** 3.66	**99.0** 3.90	**3.3** 0.13	**130.0** 5.12	**122.0** 4.80	**2.50** 0.10	**2.10** 0.08	**105**	**29.3**	**0.1252**	**1.51** 3.34
29.769 1.1720	**22.225** 0.8750	**-0.8** -0.03	**6.4** 0.25	**93.0** 3.66	**105.0** 4.13	**3.3** 0.13	**130.0** 5.12	**122.0** 4.80	**2.50** 0.10	**2.10** 0.08	**105**	**29.3**	**0.1252**	**1.48** 3.27
42.862 1.6875	**34.133** 1.3438	**-7.4** -0.29	**1.5** 0.06	**95.0** 3.75	**99.0** 3.90	**3.3** 0.13	**137.0** 5.39	**125.0** 4.92	**3.30** 0.13	**2.40** 0.09	**163**	**38.9**	**0.0996**	**2.64** 5.82
42.862 1.6875	**34.133** 1.3438	**-7.4** -0.29	**4.8** 0.19	**95.0** 3.75	**106.0** 4.17	**3.3** 0.13	**137.0** 5.39	**125.0** 4.92	**3.30** 0.13	**2.40** 0.09	**163**	**38.9**	**0.0996**	**2.62** 5.77
41.275 1.6250	**31.750** 1.2500	**-7.9** -0.31	**3.5** 0.14	**95.0** 3.74	**102.0** 4.02	**3.3** 0.13	**139.0** 5.47	**131.0** 5.16	**4.50** 0.18	**2.00** 0.08	**137**	**27.3**	**0.0919**	**2.60** 5.72
41.275 1.6250	**31.750** 1.2500	**-7.9** -0.31	**6.4** 0.25	**95.0** 3.74	**107.0** 4.21	**3.3** 0.13	**139.0** 5.47	**131.0** 5.16	**4.50** 0.18	**2.00** 0.08	**137**	**27.3**	**0.0919**	**2.57** 5.66
36.322 1.4300	**26.192** 1.0312	**-2.5** -0.10	**3.5** 0.14	**96.0** 3.78	**102.0** 4.02	**3.3** 0.13	**142.0** 5.59	**133.0** 5.24	**4.10** 0.16	**1.70** 0.07	**151**	**36.8**	**0.1416**	**2.49** 5.48
36.322 1.4300	**27.000** 1.0630	**-2.5** -0.10	**3.5** 0.14	**96.0** 3.78	**102.0** 4.02	**2.5** 0.10	**143.0** 5.63	**135.0** 5.31	**4.10** 0.16	**1.70** 0.07	**151**	**36.8**	**0.1416**	**2.59** 5.72
36.322 1.4300	**27.000** 1.0630	**-2.5** -0.10	**3.5** 0.14	**96.0** 3.78	**102.0** 4.02	**3.0** 0.12	**142.0** 5.59	**134.0** 5.28	**4.10** 0.16	**1.70** 0.07	**151**	**36.8**	**0.1416**	**2.59** 5.70
36.322 1.4300	**30.162** 1.1875	**-2.5** -0.10	**3.5** 0.14	**96.0** 3.78	**102.0** 4.02	**3.3** 0.13	**144.0** 5.67	**135.0** 5.31	**4.10** 0.16	**1.70** 0.07	**151**	**36.8**	**0.1416**	**2.87** 6.33
41.275 1.6250	**31.750** 1.2500	**-7.9** -0.31	**3.5** 0.14	**95.0** 3.74	**102.0** 4.02	**3.3** 0.13	**141.0** 5.55	**134.0** 5.28	**4.50** 0.18	**2.00** 0.08	**137**	**27.3**	**0.0919**	**2.97** 6.54
48.260 1.9000	**38.100** 1.5000	**-11.9** -0.47	**3.5** 0.14	**97.0** 3.82	**103.0** 4.06	**3.3** 0.13	**150.0** 5.91	**144.0** 5.67	**3.30** 0.13	**0.90** 0.04	**177**	**29.4**	**0.0945**	**4.23** 9.33
41.275 1.6250	**30.162** 1.1875	**-2.8** -0.11	**3.5** 0.14	**99.0** 3.90	**105.0** 4.13	**3.3** 0.13	**160.0** 6.30	**149.0** 5.87	**5.00** 0.20	**2.00** 0.08	**182**	**37.2**	**0.1056**	**4.12** 9.08
56.363 2.2190	**41.275** 1.6250	**-18.5** -0.73	**3.5** 0.14	**97.0** 3.82	**104.0** 4.09	**3.3** 0.13	**155.0** 6.10	**149.0** 5.87	**5.20** 0.20	**1.60** 0.06	**198**	**34.8**	**0.0937**	**5.24** 11.54
20.638 0.8125	**16.670** 0.6563	**0.0** 0.00	**1.5** 0.06	**93.0** 3.66	**96.0** 3.78	**1.5** 0.06	**119.0** 4.69	**116.0** 4.57	**0.50** 0.02	**2.10** 0.08	**111**	**74.7**	**0.1152**	**0.77** 1.70
36.322 1.4300	**30.162** 1.1875	**-2.5** -0.10	**3.5** 0.14	**97.0** 3.82	**103.0** 4.06	**3.3** 0.13	**144.0** 5.67	**135.0** 5.31	**4.10** 0.16	**1.70** 0.07	**151**	**38.3**	**0.1416**	**2.81** 6.19
57.531 2.2650	**46.038** 1.8125	**-15.0** -0.59	**8.0** 0.31	**103.0** 4.06	**118.0** 4.65	**3.3** 0.13	**179.0** 7.05	**171.0** 6.73	**2.50** 0.10	**3.20** 0.13	**266**	**28.4**	**0.1072**	**8.17** 18.00
28.971 1.1406	**21.433** 0.8438	**3.0** 0.12	**3.0** 0.12	**98.0** 3.86	**103.0** 4.06	**3.0** 0.12	**142.0** 5.59	**134.0** 5.28	**2.80** 0.11	**3.00** 0.12	**130**	**37.2**	**0.1386**	**1.96** 4.32
28.971 1.1406	**24.608** 0.9688	**3.0** 0.12	**3.0** 0.12	**98.0** 3.86	**103.0** 4.06	**3.3** 0.13	**143.0** 5.63	**134.0** 5.28	**2.80** 0.11	**3.00** 0.12	**130**	**37.2**	**0.1386**	**2.10** 4.63
15.083 0.5938	**11.112** 0.4375	**3.0** 0.12	**1.5** 0.06	**94.0** 3.70	**97.0** 3.82	**1.5** 0.06	**117.0** 4.61	**115.0** 4.53	**0.50** 0.02	**2.00** 0.08	**73.4**	**74.1**	**0.0996**	**0.47** 1.04
20.638 0.8125	**16.670** 0.6563	**0.0** 0.00	**1.5** 0.06	**94.0** 3.70	**97.0** 3.82	**1.5** 0.06	**119.0** 4.69	**116.0** 4.57	**0.50** 0.02	**2.10** 0.08	**111**	**74.7**	**0.1152**	**0.74** 1.63
20.638 0.8125	**19.050** 0.7500	**0.0** 0.00	**1.5** 0.06	**94.0** 3.70	**97.0** 3.82	**1.5** 0.06	**121.0** 4.76	**117.0** 4.61	**0.50** 0.02	**2.10** 0.08	**111**	**74.7**	**0.1152**	**0.85** 1.87
28.971 1.1406	**21.433** 0.8438	**3.0** 0.12	**3.0** 0.12	**98.0** 3.86	**104.0** 4.09	**3.0** 0.12	**142.0** 5.59	**134.0** 5.28	**2.80** 0.11	**3.00** 0.12	**130**	**37.2**	**0.1386**	**1.93** 4.26
28.971 1.1406	**24.608** 0.9688	**3.0** 0.12	**3.0** 0.12	**98.0** 3.86	**104.0** 4.09	**3.3** 0.13	**143.0** 5.63	**134.0** 5.28	**2.80** 0.11	**3.00** 0.12	**130**	**37.2**	**0.1386**	**2.07** 4.57
36.322 1.4300	**27.000** 1.0630	**-2.5** -0.10	**6.4** 0.25	**98.0** 3.86	**110.0** 4.33	**2.5** 0.10	**143.0** 5.63	**135.0** 5.31	**4.10** 0.16	**1.70** 0.07	**151**	**36.8**	**0.1416**	**2.44** 5.37

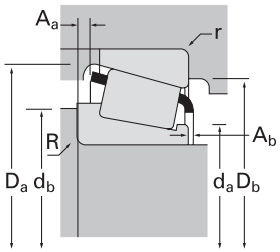
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
88.900 3.5000	150.000 5.9055	35.966 1.4160	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	593	JM719113
88.900 3.5000	150.000 5.9055	35.992 1.4170	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	593	593X
88.900 3.5000	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	593	592A
88.900 3.5000	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	593A	592A
88.900 3.5000	152.400 6.0000	39.688 1.5625	275000 61800	0.40	1.49	71200 16000	49000 11000	1.45	404000 90800	HM518445	HM518410
88.900 3.5000	159.995 6.2990	47.625 1.8750	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	759	752A
88.900 3.5000	160.000 6.2992	53.975 2.1250	343000 77200	0.40	1.50	89000 20000	61000 13700	1.46	523000 118000	6580	6525X
88.900 3.5000	160.096 6.3030	30.124 1.1860	167000 37600	0.42	1.42	43400 9750	31400 7060	1.38	230000 51700	69350X	69630
88.900 3.5000	161.925 6.3750	47.625 1.8750	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	759	752
88.900 3.5000	161.925 6.3750	47.625 1.8750	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	766	752
88.900 3.5000	161.925 6.3750	53.975 2.1250	343000 77200	0.40	1.50	89000 20000	61000 13700	1.46	523000 118000	6580	6535
88.900 3.5000	161.925 6.3750	53.975 2.1250	343000 77200	0.40	1.50	89000 20000	61000 13700	1.46	523000 118000	6580	6536
88.900 3.5000	168.275 6.6250	41.275 1.6250	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	679	672
88.900 3.5000	168.275 6.6250	47.625 1.8750	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	759	753
88.900 3.5000	168.275 6.6250	47.625 1.8750	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	766	753
88.900 3.5000	168.275 6.6250	53.975 2.1250	379000 85100	0.30	2.00	98200 22100	50300 11300	1.95	522000 117000	850	832
88.900 3.5000	171.450 6.7500	47.625 1.8750	315000 70700	0.37	1.63	81500 18300	51200 11500	1.59	474000 107000	77350	77675
88.900 3.5000	180.975 7.1250	47.625 1.8750	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	775	772
88.900 3.5000	190.500 7.5000	57.150 2.2500	424000 95300	0.33	1.79	110000 24700	63000 14200	1.74	630000 142000	855	854
88.900 3.5000	190.500 7.5000	57.150 2.2500	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	HH221434	HH221410
88.900 3.5000	200.000 7.8740	52.761 2.0772	376000 84600	0.63	0.95	97500 21900	106000 23700	0.92	519000 117000	98350	98788
89.090 3.5075	147.638 5.8125	35.717 1.4062	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	593-S	592XE
89.090 3.5075	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	593-S	592A
89.891 3.5390	168.275 6.6250	53.975 2.1250	379000 85100	0.30	2.00	98200 22100	50300 11300	1.95	522000 117000	850A	832
89.975 3.5423	146.975 5.7864	40.000 1.5748	254000 57000	0.33	1.80	65800 14800	37400 8420	1.76	388000 87300	HM218248	HM218210
89.992 3.5430	160.096 6.3030	30.124 1.1860	167000 37600	0.42	1.42	43400 9750	31400 7060	1.38	230000 51700	69354	69630
90.000 3.5433	135.000 5.3150	24.000 0.9449	110000 24600	0.49	1.21	28400 6390	24000 5410	1.18	155000 34900	JP9049	JP9010
90.000 3.5433	140.000 5.5118	32.000 1.2598	170000 38200	0.42	1.42	44000 9890	31900 7160	1.38	264000 59400	XAA32018X	Y32018X

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
36.322 1.4300	27.000 1.0630	-2.5 -0.10	3.5 0.14	98.0 3.86	104.0 4.09	2.5 0.10	143.0 5.63	135.0 5.31	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.47 5.44
36.322 1.4300	27.000 1.0630	-2.5 -0.10	3.5 0.14	98.0 3.86	104.0 4.09	3.0 0.12	142.0 5.59	134.0 5.28	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.46 5.43
36.322 1.4300	30.162 1.1875	-2.5 -0.10	3.5 0.14	98.0 3.86	104.0 4.09	3.3 0.13	144.0 5.67	135.0 5.31	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.75 6.05
36.322 1.4300	30.162 1.1875	-2.5 -0.10	6.4 0.25	98.0 3.86	110.0 4.33	3.3 0.13	144.0 5.67	135.0 5.31	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.71 5.98
39.688 1.5625	30.162 1.1875	-6.4 -0.25	6.4 0.25	100.0 3.94	112.0 4.41	3.3 0.13	147.0 5.79	137.0 5.39	3.20 0.13	3.50 0.14	162	33.7	0.0966	2.79 6.14
48.260 1.9000	38.100 1.5000	-11.9 -0.47	3.5 0.14	99.0 3.90	106.0 4.17	0.8 0.03	150.0 5.91	146.0 5.75	3.30 0.13	0.90 0.04	177	29.4	0.0945	3.94 8.69
55.100 2.1693	44.450 1.7500	-13.2 -0.52	3.5 0.14	102.0 4.01	109.0 4.29	3.0 0.12	153.5 6.04	141.0 5.55	4.10 0.16	0.90 0.03	199	33.5	0.1037	4.52 9.97
30.162 1.1875	22.301 0.8780	-0.5 -0.02	2.3 0.09	98.0 3.86	102.0 4.02	3.3 0.13	149.0 5.87	143.0 5.63	3.80 0.15	2.50 0.10	117	39.6	0.0874	2.40 5.28
48.260 1.9000	38.100 1.5000	-11.9 -0.47	3.5 0.14	99.0 3.90	106.0 4.17	3.3 0.13	150.0 5.91	144.0 5.67	3.30 0.13	0.90 0.04	177	29.4	0.0945	4.07 8.97
48.260 1.9000	38.100 1.5000	-11.9 -0.47	7.0 0.28	99.0 3.90	113.0 4.45	3.3 0.13	150.0 5.91	144.0 5.67	3.30 0.13	0.90 0.04	177	29.4	0.0945	4.02 8.87
55.100 2.1693	42.862 1.6875	-13.2 -0.52	3.5 0.14	102.0 4.01	109.0 4.29	3.3 0.13	154.0 6.06	141.0 5.55	4.10 0.16	0.90 0.03	199	33.5	0.1037	4.66 10.28
55.100 2.1693	42.862 1.6875	-13.2 -0.52	3.5 0.14	102.0 4.01	109.0 4.29	0.8 0.03	154.0 6.06	144.0 5.67	4.10 0.16	0.90 0.03	199	33.5	0.1037	4.68 10.32
41.275 1.6250	30.162 1.1875	-2.8 -0.11	3.5 0.14	101.0 3.98	107.0 4.21	3.3 0.13	160.0 6.30	149.0 5.87	5.00 0.20	2.00 0.08	182	37.2	0.1056	3.98 8.77
48.260 1.9000	38.100 1.5000	-11.9 -0.47	3.5 0.14	99.0 3.90	106.0 4.17	3.3 0.13	150.0 5.91	147.0 5.79	3.30 0.13	0.90 0.04	177	29.4	0.0945	4.54 10.01
48.260 1.9000	38.100 1.5000	-11.9 -0.47	7.0 0.28	99.0 3.90	113.0 4.45	3.3 0.13	150.0 5.91	147.0 5.79	3.30 0.13	0.90 0.04	177	29.4	0.0945	4.49 9.91
56.363 2.2190	41.275 1.6250	-18.5 -0.73	3.5 0.14	100.0 3.94	106.0 4.17	3.3 0.13	155.0 6.10	149.0 5.87	5.20 0.20	1.60 0.06	198	34.8	0.0937	5.04 11.12
48.260 1.9000	38.100 1.5000	-9.7 -0.38	5.0 0.20	101.0 3.98	110.0 4.33	3.3 0.13	161.0 6.34	153.0 6.02	3.50 0.14	1.00 0.04	206	37.7	0.1017	4.87 10.74
48.006 1.8900	38.100 1.5000	-8.1 -0.32	4.8 0.19	103.0 4.06	112.0 4.41	3.3 0.13	168.0 6.61	161.0 6.34	3.60 0.14	1.30 0.05	227	41.3	0.1067	5.73 12.64
57.531 2.2650	44.450 1.7500	-15.2 -0.60	8.0 0.31	103.0 4.06	118.0 4.65	3.3 0.13	174.0 6.85	170.0 6.69	5.60 0.22	0.60 0.02	264	44.9	0.1072	7.65 16.87
57.531 2.2650	46.038 1.8125	-15.0 -0.59	8.0 0.31	105.0 4.13	120.0 4.72	3.3 0.13	179.0 7.05	171.0 6.73	2.50 0.10	3.20 0.13	266	28.4	0.1072	8.07 17.78
49.212 1.9375	34.925 1.3750	1.3 0.05	3.5 0.14	112.0 4.41	118.0 4.65	3.3 0.13	188.0 7.40	174.0 6.85	8.60 0.34	5.40 0.21	203	37.4	0.1197	7.49 16.51
36.322 1.4300	26.192 1.0312	-2.5 -0.10	3.5 0.14	98.0 3.86	105.0 4.13	0.8 0.03	142.0 5.59	135.0 5.31	4.10 0.16	1.70 0.07	151	38.3	0.1416	2.34 5.16
36.322 1.4300	30.162 1.1875	-2.5 -0.10	3.5 0.14	98.0 3.86	105.0 4.13	3.3 0.13	144.0 5.67	135.0 5.31	4.10 0.16	1.70 0.07	151	38.3	0.1416	2.74 6.04
56.363 2.2190	41.275 1.6250	-18.5 -0.73	3.5 0.14	101.0 3.98	107.0 4.21	3.3 0.13	155.0 6.10	149.0 5.87	5.20 0.20	1.60 0.06	198	34.8	0.0937	4.98 10.98
40.000 1.5748	32.500 1.2795	-8.6 -0.34	7.0 0.28	99.0 3.90	112.0 4.41	3.5 0.14	141.0 5.55	133.0 5.24	1.40 0.06	2.90 0.12	168	34.7	0.0921	2.53 5.58
30.162 1.1875	22.301 0.8780	-0.5 -0.02	2.3 0.09	99.0 3.90	103.0 4.06	3.3 0.13	149.0 5.87	143.0 5.63	3.80 0.15	2.50 0.10	117	39.6	0.0874	2.36 5.20
22.500 0.8858	17.500 0.6890	5.6 0.22	2.0 0.08	97.0 3.82	100.0 3.94	2.0 0.08	130.0 5.12	125.0 4.92	1.90 0.07	3.30 0.13	83.8	46	0.1196	1.09 2.41
32.000 1.2598	24.000 0.9449	-2.0 -0.08	6.0 0.24	98.0 3.86	111.0 4.37	1.5 0.06	134.0 5.28	128.0 5.04	3.20 0.13	2.20 0.09	128	41.1	0.1317	1.70 3.75

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

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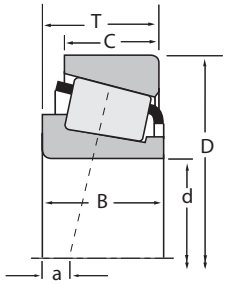
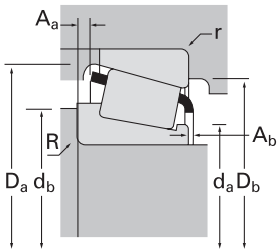
B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
90.000 3.5433	145.000 5.7087	35.000 1.3780	206000 46300	0.44	1.35	53400 12000	40600 9130	1.31	313000 70500	JM718149A	JM718110
90.000 3.5433	145.000 5.7087	35.000 1.3780	206000 46300	0.44	1.35	53400 12000	40600 9130	1.31	313000 70500	JM718149	JM718110
90.000 3.5433	149.225 5.8750	31.750 1.2500	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42354X	42587
90.000 3.5433	150.000 5.9055	35.992 1.4170	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	597X	593X
90.000 3.5433	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	597X	592A
90.000 3.5433	155.000 6.1024	44.000 1.7323	306000 68900	0.34	1.76	79400 17900	46400 10400	1.71	447000 101000	JHM318448	JHM318410
90.000 3.5433	160.000 6.2992	53.975 2.1250	343000 77200	0.40	1.50	89000 20000	61000 13700	1.46	523000 118000	6581X	6525X
90.000 3.5433	161.925 6.3750	53.975 2.1250	343000 77200	0.40	1.50	89000 20000	61000 13700	1.46	523000 118000	6581X	6535
90.000 3.5433	190.000 7.4803	50.800 2.0000	299000 67300	0.87	0.69	77600 17400	115000 25900	0.67	392000 88100	J90354	J90748
90.000 3.5433	190.000 7.4803	57.150 2.2500	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	JHH221436	JHH221413
90.488 3.5625	161.925 6.3750	47.625 1.8750	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	760	752
90.488 3.5625	168.275 6.6250	47.625 1.8750	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	760	753
91.975 3.6210	142.875 5.6250	30.000 1.1811	152000 34100	0.48	1.25	39300 8830	32200 7230	1.22	240000 53900	LM718947	LM718910
92.075 3.6250	130.175 5.1250	20.638 0.8125	88300 19900	0.35	1.72	22900 5150	13700 3080	1.67	166000 37400	L319245	L319210
92.075 3.6250	146.050 5.7500	33.338 1.3125	182000 41000	0.45	1.34	47300 10600	36300 8160	1.30	307000 69000	47890	47820
92.075 3.6250	147.638 5.8125	35.717 1.4062	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	598	592XE
92.075 3.6250	147.638 5.8125	35.717 1.4062	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	598	592XS
92.075 3.6250	148.430 5.8437	28.575 1.1250	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42362	42584
92.075 3.6250	149.225 5.8750	31.750 1.2500	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42362	42587
92.075 3.6250	150.000 5.9055	35.966 1.4160	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	598	JM719113
92.075 3.6250	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	598	592A
92.075 3.6250	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	598	592-S
92.075 3.6250	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	598A	592A
92.075 3.6250	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	598X	592A
92.075 3.6250	168.275 6.6250	41.275 1.6250	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	681	672
92.075 3.6250	168.275 6.6250	41.275 1.6250	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	681A	672
92.075 3.6250	171.450 6.7500	47.625 1.8750	315000 70700	0.37	1.63	81500 18300	51200 11500	1.59	474000 107000	77362	77675
92.075 3.6250	171.450 6.7500	47.625 1.8750	315000 70700	0.37	1.63	81500 18300	51200 11500	1.59	474000 107000	77364	77675

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
34.000 1.3386	27.000 1.0630	-2.0 -0.08	6.0 0.24	99.0 3.90	112.0 4.41	2.5 0.10	138.5 5.46	131.0 5.16	2.10 0.08	3.80 0.15	138	35.1	0.0946	2.13 4.69
34.000 1.3386	27.000 1.0630	-2.0 -0.08	3.0 0.12	99.0 3.90	106.0 4.17	2.5 0.10	138.5 5.46	131.0 5.16	2.10 0.08	3.80 0.15	138	35.1	0.0946	2.14 4.72
28.971 1.1406	24.608 0.9688	3.0 0.12	3.0 0.12	99.0 3.90	104.0 4.09	3.3 0.13	143.0 5.63	134.0 5.28	2.80 0.11	3.00 0.12	130	37.2	0.1386	2.04 4.49
36.322 1.4300	27.000 1.0630	-2.5 -0.10	3.0 0.12	99.0 3.90	104.0 4.09	3.0 0.12	142.0 5.59	134.0 5.28	4.10 0.16	1.70 0.07	151	38.3	0.1416	2.42 5.34
36.322 1.4300	30.162 1.1875	-2.5 -0.10	3.0 0.12	99.0 3.90	104.0 4.09	3.3 0.13	144.0 5.67	135.0 5.31	4.10 0.16	1.70 0.07	151	38.3	0.1416	2.71 5.97
44.000 1.7323	35.500 1.3976	-9.9 -0.39	3.0 0.12	100.0 3.94	106.0 4.17	2.5 0.10	148.0 5.83	140.0 5.51	1.30 0.05	3.30 0.13	179	32.4	0.0948	3.32 7.31
55.100 2.1693	44.450 1.7500	-13.2 -0.52	3.0 0.12	102.0 4.02	109.0 4.29	3.0 0.12	153.5 6.04	141.0 5.55	4.10 0.16	0.90 0.03	199	33.5	0.1037	4.47 9.86
55.100 2.1693	42.862 1.6875	-13.2 -0.52	3.0 0.12	102.0 4.02	109.0 4.29	3.3 0.13	154.0 6.06	141.0 5.55	4.10 0.16	0.90 0.03	199	33.5	0.1037	4.61 10.16
46.038 1.8125	31.750 1.2500	12.7 0.50	3.5 0.14	112.0 4.40	120.0 4.72	3.3 0.13	179.5 7.06	162.0 6.38	11.00 0.43	3.60 0.14	150	23.8	0.1180	6.04 13.31
57.531 2.2650	46.038 1.8125	-15.0 -0.59	8.0 0.31	106.0 4.17	121.0 4.76	3.3 0.13	179.0 7.05	171.0 6.73	2.50 0.10	3.20 0.13	266	28.4	0.1072	7.94 17.51
48.260 1.9000	38.100 1.5000	-11.9 -0.47	3.5 0.14	101.0 3.98	107.0 4.21	3.3 0.13	150.0 5.91	144.0 5.67	3.30 0.13	0.90 0.04	177	29.4	0.0945	3.98 8.78
48.260 1.9000	38.100 1.5000	-11.9 -0.47	3.5 0.14	101.0 3.98	107.0 4.21	3.3 0.13	150.0 5.91	147.0 5.79	3.30 0.13	0.90 0.04	177	29.4	0.0945	4.45 9.82
30.000 1.1811	22.000 0.8661	1.8 0.07	3.5 0.14	100.0 3.94	106.0 4.17	3.3 0.13	138.0 5.43	129.0 5.08	2.70 0.11	1.90 0.08	124	37.6	0.1355	1.63 3.60
21.433 0.8438	16.670 0.6563	1.3 0.05	3.5 0.14	99.0 3.90	105.0 4.13	1.5 0.06	125.0 4.92	122.0 4.80	0.70 0.03	1.40 0.05	125	90.7	0.1220	0.86 1.89
34.925 1.3750	26.195 1.0313	-1.0 -0.04	3.5 0.14	101.0 3.98	107.0 4.21	3.3 0.13	140.0 5.51	131.0 5.16	2.60 0.10	0.30 0.01	153	38.1	0.1428	2.05 4.53
36.322 1.4300	26.192 1.0312	-2.5 -0.10	3.5 0.14	101.0 3.98	107.0 4.21	0.8 0.03	142.0 5.59	135.0 5.31	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.22 4.89
36.322 1.4300	26.192 1.0312	-2.5 -0.10	3.5 0.14	101.0 3.98	107.0 4.21	3.3 0.13	142.0 5.59	133.0 5.24	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.20 4.85
28.971 1.1406	21.433 0.8438	3.0 0.12	3.5 0.14	101.0 3.98	107.0 4.21	3.0 0.12	142.0 5.59	134.0 5.28	2.80 0.11	3.00 0.12	130	37.2	0.1386	1.82 4.02
28.971 1.1406	24.608 0.9688	3.0 0.12	3.5 0.14	101.0 3.98	107.0 4.21	3.3 0.13	143.0 5.63	134.0 5.28	2.80 0.11	3.00 0.12	130	37.2	0.1386	1.96 4.33
36.322 1.4300	27.000 1.0630	-2.5 -0.10	3.5 0.14	101.0 3.98	107.0 4.21	2.5 0.10	143.0 5.63	135.0 5.31	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.34 5.16
36.322 1.4300	30.162 1.1875	-2.5 -0.10	3.5 0.14	101.0 3.98	107.0 4.21	3.3 0.13	144.0 5.67	135.0 5.31	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.62 5.77
36.322 1.4300	39.688 1.5625	-2.5 -0.10	3.5 0.14	101.0 3.98	107.0 4.21	3.3 0.13	147.0 5.79	135.0 5.31	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.76 6.09
36.322 1.4300	30.162 1.1875	-2.5 -0.10	6.4 0.25	101.0 3.98	113.0 4.45	3.3 0.13	144.0 5.67	135.0 5.31	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.59 5.70
36.322 1.4300	30.162 1.1875	-2.5 -0.10	3.5 0.14	104.0 4.09	107.0 4.21	3.3 0.13	144.0 5.67	135.0 5.31	4.10 0.16	1.70 0.07	151	38.3	0.1416	2.61 5.76
41.275 1.6250	30.162 1.1875	-2.8 -0.11	3.5 0.14	104.0 4.09	110.0 4.33	3.3 0.13	160.0 6.30	149.0 5.87	5.00 0.20	2.00 0.08	182	37.2	0.1056	3.83 8.45
41.275 1.6250	30.162 1.1875	-2.8 -0.11	6.4 0.25	104.0 4.09	116.0 4.57	3.3 0.13	160.0 6.30	149.0 5.87	5.00 0.20	2.00 0.08	182	37.2	0.1056	3.80 8.38
48.260 1.9000	38.100 1.5000	-9.7 -0.38	3.5 0.14	103.0 4.06	109.0 4.29	3.3 0.13	161.0 6.34	153.0 6.02	3.50 0.14	1.00 0.04	206	37.7	0.1017	4.72 10.40
48.260 1.9000	38.100 1.5000	-9.7 -0.38	6.4 0.25	103.0 4.06	115.0 4.53	3.3 0.13	161.0 6.34	153.0 6.02	3.50 0.14	1.00 0.04	206	37.7	0.1017	4.68 10.33

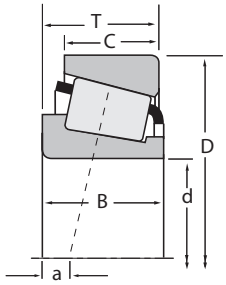
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

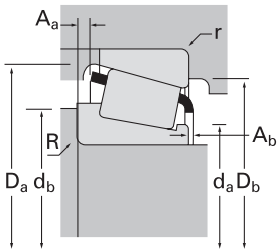
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
92.075 3.6250	180.975 7.1250	47.625 1.8750	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	778	772
92.075 3.6250	190.500 7.5000	57.150 2.2500	424000 95300	0.33	1.79	110000 24700	63000 14200	1.74	630000 142000	857	854
92.075 3.6250	190.500 7.5000	57.150 2.2500	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	HH221438	HH221410
92.075 3.6250	214.312 8.4375	73.025 2.8750	596000 134000	0.46	1.31	155000 34800	121000 27300	1.27	786000 177000	EE213362	213843
93.662 3.6875	148.430 5.8437	28.575 1.1250	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42368	42584
93.662 3.6875	149.225 5.8750	31.750 1.2500	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42368	42587
93.662 3.6875	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	597	592A
94.975 3.7392	149.974 5.9045	31.750 1.2500	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42373	42590
94.975 3.7392	168.275 6.6250	41.275 1.6250	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	682	672
95.000 3.7402	135.000 5.3150	20.000 0.7874	76900 17300	0.58	1.03	19900 4480	19900 4470	1.00	133000 29900	JL819349	JL819310
95.000 3.7402	145.000 5.7087	24.000 0.9449	116000 26100	0.47	1.27	30100 6770	24400 5480	1.24	172000 38700	JP10044	JP10010
95.000 3.7402	145.000 5.7087	39.000 1.5354	228000 51300	0.28	2.16	59100 13300	28100 6320	2.10	378000 85100	XAA33019	Y33019
95.000 3.7402	150.000 5.9055	35.000 1.3780	199000 44700	0.44	1.36	51500 11600	39000 8770	1.32	316000 71100	JM719149	JM719113
95.000 3.7402	152.400 6.0000	39.690 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	J594X	592A
95.000 3.7402	160.000 6.2992	46.000 1.8110	328000 73800	0.34	1.77	85100 19100	49300 11100	1.73	506000 114000	JF9549	JF9510
95.000 3.7402	190.000 7.4803	57.000 2.2441	424000 95300	0.33	1.79	110000 24700	63000 14200	1.74	630000 142000	862	853
95.250 3.7500	130.175 5.1250	20.638 0.8125	88300 19900	0.35	1.72	22900 5150	13700 3080	1.67	166000 37400	L319249	L319210
95.250 3.7500	136.525 5.3750	30.162 1.1875	129000 29100	0.28	2.11	33500 7530	16300 3660	2.06	227000 51100	LM119348	LM119311
95.250 3.7500	146.050 5.7500	33.338 1.3125	182000 41000	0.45	1.34	47300 10600	36300 8160	1.30	307000 69000	47896	47820
95.250 3.7500	146.050 5.7500	33.338 1.3125	182000 41000	0.45	1.34	47300 10600	36300 8160	1.30	307000 69000	47898	47820
95.250 3.7500	147.638 5.8125	35.717 1.4062	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	594	592XS
95.250 3.7500	147.828 5.8200	35.717 1.4062	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	594	592AX
95.250 3.7500	148.430 5.8437	28.575 1.1250	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42375	42584
95.250 3.7500	148.430 5.8437	28.575 1.1250	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42376	42584
95.250 3.7500	148.430 5.8437	28.575 1.1250	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42375A	42584
95.250 3.7500	149.225 5.8750	31.750 1.2500	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42375	42587
95.250 3.7500	149.225 5.8750	31.750 1.2500	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42376	42587
95.250 3.7500	150.000 5.9055	35.966 1.4160	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	594AA	JM719113

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

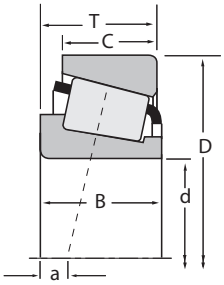
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
48.006 1.8900	38.100 1.5000	-8.1 -0.32	3.5 0.14	105.0 4.13	111.0 4.37	3.3 0.13	168.0 6.61	161.0 6.34	3.60 0.14	1.30 0.05	227	41.3	0.1067	5.57 12.29
57.531 2.2650	44.450 1.7500	-15.2 -0.60	8.0 0.31	106.0 4.17	121.0 4.76	3.3 0.13	174.0 6.85	170.0 6.69	5.60 0.22	0.60 0.02	264	44.9	0.1072	7.45 16.42
57.531 2.2650	46.038 1.8125	-15.0 -0.59	8.0 0.31	107.0 4.21	122.0 4.80	3.3 0.13	179.0 7.05	171.0 6.73	2.50 0.10	3.20 0.13	266	28.4	0.1072	7.86 17.33
73.025 2.8750	53.975 2.1250	-18.3 -0.72	9.7 0.38	117.0 4.61	135.0 5.31	6.4 0.25	196.0 7.71	182.0 7.17	* *	* *	262	38.1	0.1180	12.33 27.19
28.971 1.1406	21.433 0.8438	3.0 0.12	3.0 0.12	102.0 4.02	107.0 4.21	3.0 0.12	142.0 5.59	134.0 5.28	2.80 0.11	3.00 0.12	130	37.2	0.1386	1.78 3.91
28.971 1.1406	24.608 0.9688	3.0 0.12	3.0 0.12	102.0 4.02	107.0 4.21	3.3 0.13	143.0 5.63	134.0 5.28	2.80 0.11	3.00 0.12	130	37.2	0.1386	1.92 4.22
36.322 1.4300	30.162 1.1875	-2.5 -0.10	3.5 0.14	102.0 4.02	109.0 4.29	3.3 0.13	144.0 5.67	135.0 5.31	4.10 0.16	1.70 0.07	151	38.3	0.1416	2.55 5.63
28.971 1.1406	24.608 0.9688	3.0 0.12	3.0 0.12	103.0 4.06	108.0 4.25	3.3 0.13	143.0 5.63	135.0 5.31	2.80 0.11	3.00 0.12	130	37.2	0.1386	1.91 4.22
41.275 1.6250	30.162 1.1875	-2.8 -0.11	3.5 0.14	106.0 4.17	113.0 4.45	3.3 0.13	160.0 6.30	149.0 5.87	5.00 0.20	2.00 0.08	182	37.2	0.1056	3.69 8.15
20.000 0.7874	14.000 0.5512	10.9 0.43	5.0 0.20	102.0 4.02	111.0 4.37	2.5 0.10	129.0 5.08	123.0 4.84	2.50 0.10	1.40 0.05	93.3	70.5	0.1298	0.85 1.88
22.500 0.8858	17.500 0.6890	6.1 0.24	3.0 0.12	102.0 4.02	108.0 4.25	3.0 0.12	140.0 5.51	134.0 5.28	1.90 0.08	3.30 0.13	104	40.9	0.1264	1.27 2.79
39.000 1.5354	32.500 1.2795	-10.2 -0.40	6.0 0.24	102.0 4.02	114.0 4.49	1.5 0.06	139.0 5.47	133.0 5.24	1.90 0.07	2.30 0.09	192	48.4	0.0907	2.23 4.93
34.000 1.3386	27.000 1.0630	-1.5 -0.06	3.0 0.12	104.0 4.09	109.0 4.29	2.5 0.10	143.0 5.63	135.0 5.31	3.10 0.12	3.00 0.12	150	36.1	0.1413	2.17 4.78
36.322 1.4300	30.162 1.1875	2.5 0.10	8.0 0.31	103.0 4.06	119.0 4.69	3.3 0.13	144.0 5.67	135.0 5.31	4.10 0.16	1.70 0.07	151	38.3	0.1416	2.43 5.37
46.000 1.8110	38.000 1.4961	-10.7 -0.42	3.0 0.12	105.5 4.15	111.0 4.37	3.0 0.12	154.0 6.06	145.0 5.71	1.40 0.06	3.00 0.12	210	39.7	0.0998	3.73 8.22
57.531 2.2650	48.000 1.8898	-15.2 -0.60	6.4 0.25	108.0 4.25	120.0 4.72	3.0 0.12	174.0 6.86	170.0 6.69	5.60 0.22	0.60 0.02	264	44.9	0.1072	7.36 16.22
21.433 0.8438	16.670 0.6563	1.3 0.05	1.5 0.06	101.0 3.98	103.0 4.06	1.5 0.06	125.0 4.92	122.0 4.80	0.70 0.03	1.40 0.05	125	90.7	0.1220	0.79 1.75
30.162 1.1875	24.608 0.9688	-4.6 -0.18	2.3 0.09	102.0 4.02	105.0 4.13	2.3 0.09	131.0 5.16	126.0 4.96	1.30 0.05	-0.20 -0.01	149	69	0.1213	1.35 2.97
34.925 1.3750	26.195 1.0313	-1.0 -0.04	3.5 0.14	103.0 4.06	110.0 4.33	3.3 0.13	140.0 5.51	131.0 5.16	2.60 0.10	0.30 0.01	153	38.1	0.1428	1.93 4.25
34.925 1.3750	26.195 1.0313	-1.0 -0.04	7.0 0.28	103.0 4.06	117.0 4.61	3.3 0.13	140.0 5.51	131.0 5.16	2.60 0.10	0.30 0.01	153	38.1	0.1428	1.87 4.12
36.322 1.4300	26.192 1.0312	-2.5 -0.10	3.5 0.14	104.0 4.09	110.0 4.33	3.3 0.13	142.0 5.59	133.0 5.24	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.07 4.56
36.322 1.4300	26.192 1.0312	-2.5 -0.10	3.5 0.14	104.0 4.09	110.0 4.33	3.3 0.13	142.0 5.59	133.0 5.24	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.10 4.63
28.971 1.1406	21.433 0.8438	3.0 0.12	3.0 0.12	103.0 4.06	108.0 4.25	3.0 0.12	142.0 5.59	134.0 5.28	2.80 0.11	3.00 0.12	130	37.2	0.1386	1.73 3.82
28.971 1.1406	21.433 0.8438	3.0 0.12	3.5 0.14	103.0 4.06	109.0 4.29	3.0 0.12	142.0 5.59	134.0 5.28	2.80 0.11	3.00 0.12	130	37.2	0.1386	1.72 3.79
28.971 1.1406	21.433 0.8438	3.0 0.12	0.8 0.03	103.0 4.06	104.0 4.09	3.0 0.12	142.0 5.59	134.0 5.28	2.80 0.11	3.00 0.12	130	37.2	0.1386	1.73 3.82
28.971 1.1406	24.608 0.9688	3.0 0.12	3.0 0.12	103.0 4.06	108.0 4.25	3.3 0.13	143.0 5.63	134.0 5.28	2.80 0.11	3.00 0.12	130	37.2	0.1386	1.87 4.13
28.971 1.1406	24.608 0.9688	3.0 0.12	3.5 0.14	103.0 4.06	109.0 4.29	3.3 0.13	143.0 5.63	134.0 5.28	2.80 0.11	3.00 0.12	130	37.2	0.1386	1.86 4.10
36.322 1.4300	27.000 1.0630	-2.5 -0.10	0.8 0.03	104.0 4.09	107.0 4.21	2.5 0.10	143.0 5.63	135.0 5.31	4.10 0.16	1.70 0.07	151	36.8	0.1416	2.22 4.90

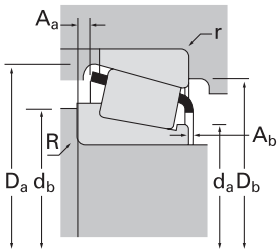
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
95.250 3.7500	150.000 5.9055	35.966 1.4160	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	594	JM719113
95.250 3.7500	150.000 5.9055	35.992 1.4170	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	594	593X
95.250 3.7500	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	594	592A
95.250 3.7500	152.400 6.0000	39.688 1.5625	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	594A	592A
95.250 3.7500	157.162 6.1875	36.512 1.4375	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52375	52618
95.250 3.7500	161.925 6.3750	36.512 1.4375	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52375	52637
95.250 3.7500	161.925 6.3750	39.690 1.5626	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52375	52638
95.250 3.7500	168.275 6.6250	41.275 1.6250	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	683	672
95.250 3.7500	168.275 6.6250	41.275 1.6250	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	683XA	672
95.250 3.7500	171.450 6.7500	47.625 1.8750	315000 70700	0.37	1.63	81500 18300	51200 11500	1.59	474000 107000	77375	77675
95.250 3.7500	171.450 6.7500	47.625 1.8750	315000 70700	0.37	1.63	81500 18300	51200 11500	1.59	474000 107000	77376	77675
95.250 3.7500	171.450 6.7500	50.800 2.0000	315000 70700	0.37	1.63	81500 18300	51200 11500	1.59	474000 107000	77375	77676X
95.250 3.7500	180.975 7.1250	47.625 1.8750	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	776	772
95.250 3.7500	190.500 7.5000	57.150 2.2500	424000 95300	0.33	1.79	110000 24700	63000 14200	1.74	630000 142000	864	854
95.250 3.7500	190.500 7.5000	57.150 2.2500	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	HH221440	HH221410
95.250 3.7500	200.025 7.8750	61.912 2.4375	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	HH221440	HH221416
95.250 3.7500	200.025 7.8750	73.025 2.8750	662000 149000	0.32	1.88	172000 38600	93700 21100	1.83	906000 204000	EH220749	EH220710
96.838 3.8125	148.430 5.8437	28.575 1.1250	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42381	42584
96.838 3.8125	149.225 5.8750	31.750 1.2500	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42381	42587
96.838 3.8125	188.912 7.4375	50.800 2.0000	299000 67300	0.87	0.69	77600 17400	115000 25900	0.67	392000 88100	90381	90744
98.425 3.8750	157.162 6.1875	36.512 1.4375	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52387	52618
98.425 3.8750	161.925 6.3750	36.512 1.4375	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52387	52637
98.425 3.8750	168.275 6.6250	41.275 1.6250	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	685	672
98.425 3.8750	180.975 7.1250	47.625 1.8750	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	779	772
98.425 3.8750	184.150 7.2500	63.500 2.5000	491000 110000	0.37	1.60	127000 28600	81500 18300	1.56	772000 174000	HH421246C	HH421210
98.425 3.8750	190.500 7.5000	57.150 2.2500	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	HH221442	HH221410
98.425 3.8750	212.725 8.3750	66.675 2.6250	630000 142000	0.33	1.84	163000 36700	91000 20500	1.79	906000 204000	HH224332	HH224310
99.975 3.9360	156.975 6.1801	42.000 1.6535	278000 62500	0.33	1.80	72100 16200	41000 9230	1.76	438000 98500	HM220149	HM220110

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

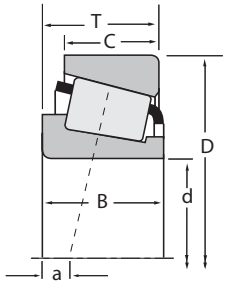
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
36.322 1.4300	**27.000** 1.0630	**-2.5** -0.10	**3.5** 0.14	**104.0** 4.09	**110.0** 4.33	**2.5** 0.10	**143.0** 5.63	**135.0** 5.31	**4.10** 0.16	**1.70** 0.07	**151**	**36.8**	**0.1416**	**2.21** 4.87
36.322 1.4300	**27.000** 1.0630	**-2.5** -0.10	**3.5** 0.14	**104.0** 4.09	**110.0** 4.33	**3.0** 0.12	**142.0** 5.59	**134.0** 5.28	**4.10** 0.16	**1.70** 0.07	**151**	**36.8**	**0.1416**	**2.20** 4.85
36.322 1.4300	**30.162** 1.1875	**-2.5** -0.10	**3.5** 0.14	**104.0** 4.09	**110.0** 4.33	**3.3** 0.13	**144.0** 5.67	**135.0** 5.31	**4.10** 0.16	**1.70** 0.07	**151**	**36.8**	**0.1416**	**2.48** 5.48
36.322 1.4300	**30.162** 1.1875	**-2.5** -0.10	**5.0** 0.20	**104.0** 4.09	**113.0** 4.45	**3.3** 0.13	**144.0** 5.67	**135.0** 5.31	**4.10** 0.16	**1.70** 0.07	**151**	**36.8**	**0.1416**	**2.47** 5.44
36.116 1.4219	**26.195** 1.0313	**-0.5** -0.02	**3.5** 0.14	**105.0** 4.13	**112.0** 4.41	**3.3** 0.13	**152.0** 5.98	**142.0** 5.59	**4.40** 0.17	**2.50** 0.10	**175**	**41.7**	**0.1519**	**2.66** 5.86
36.116 1.4219	**26.195** 1.0313	**-0.5** -0.02	**3.5** 0.14	**105.0** 4.13	**112.0** 4.41	**3.3** 0.13	**154.0** 6.06	**144.0** 5.67	**4.40** 0.17	**2.50** 0.10	**175**	**41.7**	**0.1519**	**2.90** 6.39
36.116 1.4219	**29.370** 1.1563	**-0.5** -0.02	**3.5** 0.14	**105.0** 4.13	**112.0** 4.41	**3.3** 0.13	**154.0** 6.06	**143.0** 5.63	**4.40** 0.17	**2.50** 0.10	**175**	**41.7**	**0.1519**	**3.07** 6.76
41.275 1.6250	**30.162** 1.1875	**-2.8** -0.11	**3.5** 0.14	**106.0** 4.17	**113.0** 4.45	**3.3** 0.13	**160.0** 6.30	**149.0** 5.87	**5.00** 0.20	**2.00** 0.08	**182**	**37.2**	**0.1056**	**3.68** 8.12
41.275 1.6250	**30.162** 1.1875	**-2.8** -0.11	**5.0** 0.20	**106.0** 4.17	**116.0** 4.57	**3.3** 0.13	**160.0** 6.30	**149.0** 5.87	**5.00** 0.20	**2.00** 0.08	**182**	**37.2**	**0.1056**	**3.67** 8.08
48.260 1.9000	**38.100** 1.5000	**-9.7** -0.38	**3.5** 0.14	**106.0** 4.17	**113.0** 4.45	**3.3** 0.13	**161.0** 6.34	**153.0** 6.02	**3.50** 0.14	**1.00** 0.04	**206**	**37.7**	**0.1017**	**4.54** 10.01
48.260 1.9000	**38.100** 1.5000	**-9.7** -0.38	**6.4** 0.25	**106.0** 4.17	**118.0** 4.65	**3.3** 0.13	**161.0** 6.34	**153.0** 6.02	**3.50** 0.14	**1.00** 0.04	**206**	**37.7**	**0.1017**	**4.51** 9.93
48.260 1.9000	**41.275** 1.6250	**-9.7** -0.38	**3.5** 0.14	**106.0** 4.17	**113.0** 4.45	**3.3** 0.13	**161.0** 6.34	**152.0** 5.98	**3.50** 0.14	**1.00** 0.04	**206**	**37.7**	**0.1017**	**4.74** 10.44
48.006 1.8900	**38.100** 1.5000	**-8.1** -0.32	**3.5** 0.14	**107.0** 4.21	**114.0** 4.49	**3.3** 0.13	**168.0** 6.61	**161.0** 6.34	**3.60** 0.14	**1.30** 0.05	**227**	**41.3**	**0.1067**	**5.40** 11.90
57.531 2.2650	**44.450** 1.7500	**-15.2** -0.60	**8.0** 0.31	**108.0** 4.25	**123.0** 4.84	**3.3** 0.13	**174.0** 6.85	**170.0** 6.69	**5.60** 0.22	**0.60** 0.02	**264**	**44.9**	**0.1072**	**7.24** 15.95
57.531 2.2650	**46.038** 1.8125	**-15.0** -0.59	**8.0** 0.31	**110.0** 4.33	**125.0** 4.92	**3.3** 0.13	**179.0** 7.05	**171.0** 6.73	**2.50** 0.10	**3.20** 0.13	**266**	**28.4**	**0.1072**	**7.65** 16.86
57.531 2.2650	**50.800** 2.0000	**-15.0** -0.59	**8.0** 0.31	**110.0** 4.33	**125.0** 4.92	**3.3** 0.13	**179.0** 7.05	**174.0** 6.85	**2.50** 0.10	**3.20** 0.13	**266**	**28.4**	**0.1072**	**9.15** 20.17
73.025 2.8750	**58.738** 2.3125	**-24.6** -0.97	**3.3** 0.13	**115.5** 4.55	**120.0** 4.72	**3.3** 0.13	**187.0** 7.36	**177.0** 6.97	**5.80** 0.23	**2.40** 0.09	**306**	**26.2**	**0.1106**	**10.64** 23.46
28.971 1.1406	**21.433** 0.8438	**3.0** 0.12	**3.5** 0.14	**104.0** 4.09	**110.0** 4.33	**3.0** 0.12	**142.0** 5.59	**134.0** 5.28	**2.80** 0.11	**3.00** 0.12	**130**	**37.2**	**0.1386**	**1.66** 3.67
28.971 1.1406	**24.608** 0.9688	**3.0** 0.12	**3.5** 0.14	**104.0** 4.09	**110.0** 4.33	**3.3** 0.13	**143.0** 5.63	**134.0** 5.28	**2.80** 0.11	**3.00** 0.12	**130**	**37.2**	**0.1386**	**1.80** 3.98
46.038 1.8125	**31.750** 1.2500	**12.7** 0.50	**3.5** 0.14	**113.0** 4.44	**125.0** 4.92	**3.3** 0.13	**179.5** 7.06	**161.0** 6.34	**11.00** 0.43	**3.60** 0.14	**150**	**22.1**	**0.1180**	**5.59** 12.33
36.116 1.4219	**26.195** 1.0313	**-0.5** -0.02	**3.5** 0.14	**108.0** 4.25	**114.0** 4.49	**3.3** 0.13	**152.0** 5.98	**142.0** 5.59	**4.40** 0.17	**2.50** 0.10	**175**	**41.7**	**0.1519**	**2.52** 5.55
36.116 1.4219	**26.195** 1.0313	**-0.5** -0.02	**3.5** 0.14	**108.0** 4.25	**114.0** 4.49	**3.3** 0.13	**154.0** 6.06	**144.0** 5.67	**4.40** 0.17	**2.50** 0.10	**175**	**41.7**	**0.1519**	**2.76** 6.08
41.275 1.6250	**30.162** 1.1875	**-2.8** -0.11	**3.5** 0.14	**109.0** 4.29	**116.0** 4.57	**3.3** 0.13	**160.0** 6.30	**149.0** 5.87	**5.00** 0.20	**2.00** 0.08	**182**	**37.2**	**0.1056**	**3.53** 7.77
48.006 1.8900	**38.100** 1.5000	**-8.1** -0.32	**3.5** 0.14	**110.0** 4.33	**116.0** 4.57	**3.3** 0.13	**168.0** 6.61	**161.0** 6.34	**3.60** 0.14	**1.30** 0.05	**227**	**41.3**	**0.1067**	**5.22** 11.50
63.500 2.5000	**52.388** 2.0625	**-16.8** -0.66	**6.4** 0.25	**115.0** 4.53	**127.0** 5.00	**3.3** 0.13	**176.0** 6.93	**163.0** 6.42	**3.10** 0.12	**3.10** 0.12	**298**	**40.9**	**0.1162**	**7.31** 16.11
57.531 2.2650	**46.038** 1.8125	**-15.0** -0.59	**3.5** 0.14	**113.0** 4.45	**119.0** 4.69	**3.3** 0.13	**179.0** 7.05	**171.0** 6.73	**2.50** 0.10	**3.20** 0.13	**266**	**28.4**	**0.1072**	**7.49** 16.52
66.675 2.6250	**53.975** 2.1250	**-18.8** -0.74	**3.5** 0.14	**119.0** 4.69	**123.0** 4.84	**3.3** 0.13	**201.5** 7.94	**192.0** 7.56	**4.90** 0.19	**2.80** 0.11	**367**	**47.8**	**0.1182**	**11.31** 24.94
42.000 1.6535	**34.000** 1.3386	**-8.6** -0.34	**8.0** 0.31	**108.0** 4.25	**123.0** 4.84	**3.5** 0.14	**151.0** 5.94	**142.0** 5.59	**2.10** 0.08	**2.40** 0.09	**204**	**45.9**	**0.0981**	**2.80** 6.17

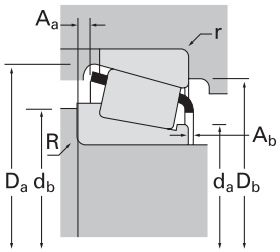
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
99.975 3.9360	214.975 8.4636	64.798 2.5511	630000 142000	0.33	1.84	163000 36700	91000 20500	1.79	906000 204000	HH224334	HH224314
100.000 3.9370	145.000 5.7087	24.000 0.9449	116000 26100	0.47	1.27	30100 6770	24400 5480	1.24	172000 38700	JP10049A	JP10010
100.000 3.9370	145.000 5.7087	24.000 0.9449	116000 26100	0.47	1.27	30100 6770	24400 5480	1.24	172000 38700	JP10049	JP10010
100.000 3.9370	145.000 5.7087	24.000 0.9449	116000 26100	0.47	1.27	30100 6770	24400 5480	1.24	172000 38700	JP10049	JP10010A
100.000 3.9370	150.000 5.9055	32.000 1.2598	150000 33800	0.50	1.20	39000 8770	33500 7530	1.16	242000 54400	JLM820048	JLM820012
100.000 3.9370	155.000 6.1024	36.000 1.4173	214000 48200	0.47	1.27	55600 12500	45000 10100	1.24	355000 79900	JM720249	JM720210
100.000 3.9370	160.000 6.2992	36.512 1.4375	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52394X	52630X
100.000 3.9370	160.000 6.2992	41.000 1.6142	259000 58100	0.47	1.28	67000 15100	54000 12100	1.24	416000 93500	JHM720249	JHM720210
100.000 3.9370	180.000 7.0866	48.000 1.8898	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	783	773
100.000 3.9370	180.975 7.1250	47.625 1.8750	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	783	772
100.000 3.9370	200.000 7.8740	52.761 2.0772	376000 84600	0.63	0.95	97500 21900	106000 23700	0.92	519000 117000	98394X	98788
100.000 3.9370	215.000 8.4646	66.680 2.6250	630000 142000	0.33	1.84	163000 36700	91000 20500	1.79	906000 204000	JHH224333	JHH224315
100.012 3.9375	157.162 6.1875	36.512 1.4375	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52393	52618
100.012 3.9375	161.925 6.3750	36.512 1.4375	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52393	52637
100.012 3.9375	161.925 6.3750	39.688 1.5625	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52393	52638
101.600 4.0000	134.938 5.3125	15.875 0.6250	60100 13500	0.37	1.62	15600 3500	9890 2220	1.58	104000 23400	LL420549	LL420510
101.600 4.0000	136.525 5.3750	21.433 0.8438	90500 20400	0.37	1.63	23500 5280	14800 3330	1.59	175000 39400	L420449	L420410
101.600 4.0000	146.050 5.7500	21.433 0.8438	88900 20000	0.39	1.53	23100 5180	15500 3480	1.49	175000 39400	L521945	L521910
101.600 4.0000	146.050 5.7500	25.400 1.0000	122000 27400	0.46	1.31	31600 7100	24800 5580	1.27	202000 45400	LM720648	LM720610
101.600 4.0000	152.400 6.0000	21.433 0.8438	88900 20000	0.39	1.53	23100 5180	15500 3480	1.49	175000 39400	L521945	L521914
101.600 4.0000	157.162 6.1875	36.512 1.4375	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52400	52618
101.600 4.0000	157.162 6.1875	36.512 1.4375	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52401	52618
101.600 4.0000	160.000 6.2992	36.512 1.4375	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52400	52630X
101.600 4.0000	161.925 6.3750	36.512 1.4375	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52400	52637
101.600 4.0000	161.925 6.3750	39.688 1.5625	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52400	52638
101.600 4.0000	168.275 6.6250	41.275 1.6250	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	687	672
101.600 4.0000	168.275 6.6250	41.275 1.6250	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	687	672A
101.600 4.0000	171.450 6.7500	41.275 1.6250	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	687	674

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
66.675 2.6250	50.800 2.0000	-18.8 -0.74	3.5 0.14	120.0 4.72	124.0 4.88	3.3 0.13	201.0 7.92	192.0 7.56	4.80 0.19	2.80 0.11	367	43.4	0.1182	11.30 24.91
22.500 0.8858	17.500 0.6890	6.1 0.24	5.0 0.20	106.0 4.17	116.0 4.57	3.0 0.12	140.0 5.51	134.0 5.28	1.90 0.08	3.30 0.13	104	40.9	0.1264	1.13 2.49
22.500 0.8858	17.500 0.6890	6.1 0.24	3.0 0.12	106.0 4.17	112.0 4.41	3.0 0.12	140.0 5.51	134.0 5.28	1.90 0.08	3.30 0.13	104	40.9	0.1264	1.13 2.49
22.500 0.8858	17.500 0.6890	6.1 0.24	3.0 0.12	106.0 4.17	112.0 4.41	0.8 0.03	140.0 5.51	136.0 5.35	1.90 0.08	3.30 0.13	104	40.9	0.1264	1.15 2.54
30.000 1.1811	26.000 1.0236	4.6 0.18	2.3 0.09	107.0 4.21	111.0 4.37	2.3 0.09	144.0 5.67	135.0 5.31	2.40 0.09	0.90 0.04	133	38.3	0.1405	1.81 3.99
35.000 1.3780	28.000 1.1024	0.3 0.01	3.0 0.12	109.0 4.29	115.0 4.53	2.5 0.10	149.0 5.87	140.0 5.51	3.00 0.12	3.00 0.12	175	48.5	0.1043	2.36 5.20
36.116 1.4219	26.195 1.0313	-0.5 -0.02	3.5 0.14	109.0 4.29	116.0 4.57	3.0 0.12	153.0 6.02	144.0 5.67	4.40 0.17	2.50 0.10	175	41.7	0.1519	2.59 5.72
40.000 1.5748	32.000 1.2598	-2.5 -0.10	3.0 0.12	109.0 4.30	117.0 4.61	2.5 0.10	154.0 6.06	143.0 5.63	3.40 0.13	3.60 0.14	188	45.5	0.1068	2.99 6.60
48.006 1.8900	40.000 1.5748	-8.1 -0.32	3.5 0.14	111.0 4.37	118.0 4.65	3.0 0.12	168.0 6.61	160.0 6.30	3.60 0.14	1.30 0.05	227	41.3	0.1067	5.09 11.23
48.006 1.8900	38.100 1.5000	-8.1 -0.32	3.5 0.14	111.0 4.37	118.0 4.65	3.3 0.13	168.0 6.61	161.0 6.34	3.60 0.14	1.30 0.05	227	41.3	0.1067	5.12 11.30
49.212 1.9375	34.925 1.3750	1.3 0.05	3.5 0.14	120.5 4.75	126.0 4.96	3.3 0.13	188.0 7.40	174.0 6.85	8.60 0.34	5.40 0.21	203	37.4	0.1197	6.85 15.11
66.675 2.6250	53.975 2.1250	-18.8 -0.74	7.0 0.28	120.0 4.72	131.0 5.16	3.3 0.13	201.5 7.94	193.0 7.60	4.90 0.19	2.80 0.11	367	47.8	0.1182	11.46 25.27
36.116 1.4219	26.195 1.0313	-0.5 -0.02	3.5 0.14	109.0 4.29	116.0 4.57	3.3 0.13	152.0 5.98	142.0 5.59	4.40 0.17	2.50 0.10	175	41.7	0.1519	2.45 5.39
36.116 1.4219	26.195 1.0313	-0.5 -0.02	3.5 0.14	109.0 4.29	116.0 4.57	3.3 0.13	154.0 6.06	144.0 5.67	4.40 0.17	2.50 0.10	175	41.7	0.1519	2.69 5.93
36.116 1.4219	29.370 1.1563	-0.5 -0.02	3.5 0.14	109.0 4.29	116.0 4.57	3.3 0.13	154.0 6.06	143.0 5.63	4.40 0.17	2.50 0.10	175	41.7	0.1519	2.86 6.29
15.083 0.5938	11.908 0.4688	5.6 0.22	1.5 0.06	107.0 4.21	109.0 4.29	1.5 0.06	130.0 5.12	128.0 5.04	1.10 0.04	2.10 0.08	95.5	89.7	0.1126	0.56 1.24
21.433 0.8438	16.670 0.6563	2.8 0.11	1.5 0.06	107.0 4.21	109.0 4.29	1.5 0.06	132.0 5.20	128.0 5.04	0.70 0.03	1.60 0.06	140	102	0.1286	0.84 1.86
21.433 0.8438	16.670 0.6563	4.8 0.19	1.5 0.06	109.0 4.29	112.0 4.41	1.5 0.06	141.0 5.55	136.0 5.35	0.80 0.03	1.50 0.06	152	108	0.1346	1.16 2.56
25.400 1.0000	19.050 0.7500	4.8 0.19	1.5 0.06	109.0 4.29	110.0 4.33	1.5 0.06	141.0 5.55	136.0 5.35	2.50 0.10	1.10 0.04	128	58.4	0.1342	1.29 2.84
21.433 0.8438	16.670 0.6563	4.8 0.19	1.5 0.06	109.0 4.29	112.0 4.41	1.5 0.06	144.0 5.67	139.0 5.47	0.80 0.03	1.50 0.06	152	108	0.1346	1.35 2.99
36.116 1.4219	26.195 1.0313	-5.1 -0.20	3.5 0.14	111.0 4.37	117.0 4.61	3.3 0.13	152.0 5.98	142.0 5.59	4.40 0.17	2.50 0.10	175	41.7	0.1519	2.39 5.27
36.116 1.4219	26.195 1.0313	-0.5 -0.02	8.0 0.31	111.0 4.37	126.0 4.96	3.3 0.13	152.0 5.98	142.0 5.59	4.40 0.17	2.50 0.10	175	41.7	0.1519	2.39 5.27
36.116 1.4219	26.195 1.0313	-5.1 -0.20	3.5 0.14	111.0 4.37	117.0 4.61	3.0 0.12	153.0 6.02	144.0 5.67	4.40 0.17	2.50 0.10	175	41.7	0.1519	2.54 5.59
36.116 1.4219	26.195 1.0313	-5.1 -0.20	3.5 0.14	111.0 4.37	117.0 4.61	3.3 0.13	154.0 6.06	144.0 5.67	4.40 0.17	2.50 0.10	175	41.7	0.1519	2.63 5.81
36.116 1.4219	29.370 1.1563	-5.1 -0.20	3.5 0.14	111.0 4.37	117.0 4.61	3.3 0.13	154.0 6.06	143.0 5.63	4.40 0.17	2.50 0.10	175	41.7	0.1519	2.80 6.17
41.275 1.6250	30.162 1.1875	-2.8 -0.11	3.5 0.14	112.0 4.41	118.0 4.65	3.3 0.13	160.0 6.30	149.0 5.87	5.00 0.20	2.00 0.08	182	37.2	0.1056	3.36 7.42
41.275 1.6250	34.925 1.3750	-2.8 -0.11	3.5 0.14	112.0 4.41	118.0 4.65	3.3 0.13	160.0 6.30	149.0 5.87	5.00 0.20	2.00 0.08	182	37.2	0.1056	3.46 7.64
41.275 1.6250	30.162 1.1875	-2.8 -0.11	3.5 0.14	112.0 4.41	118.0 4.65	3.3 0.13	160.0 6.30	150.0 5.91	5.00 0.20	2.00 0.08	182	37.2	0.1056	3.54 7.81

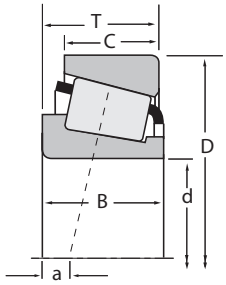
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

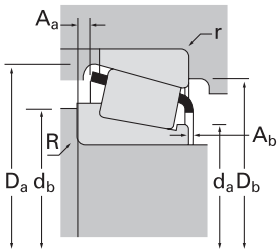
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
101.600 4.0000	177.800 7.0000	34.925 1.3750	158000 35500	1.17	0.51	40900 9200	82100 18400	0.50	219000 49200	LM921845	LM921810
101.600 4.0000	180.000 7.0866	48.000 1.8898	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	780	773
101.600 4.0000	180.975 7.1250	47.625 1.8750	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	780	772
101.600 4.0000	190.500 7.5000	57.150 2.2500	424000 95300	0.33	1.79	110000 24700	63000 14200	1.74	630000 142000	861	854
101.600 4.0000	190.500 7.5000	57.150 2.2500	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	HH221449A	HH221410
101.600 4.0000	190.500 7.5000	57.150 2.2500	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	HH221449	HH221410
101.600 4.0000	200.000 7.8740	52.761 2.0772	376000 84600	0.63	0.95	97500 21900	106000 23700	0.92	519000 117000	98400	98788
101.600 4.0000	212.725 8.3750	66.675 2.6250	530000 119000	0.33	1.84	137000 30900	76600 17200	1.79	786000 177000	941	932
101.600 4.0000	212.725 8.3750	66.675 2.6250	630000 142000	0.33	1.84	163000 36700	91000 20500	1.79	906000 204000	HH224335	HH224310
101.600 4.0000	214.312 8.4375	55.562 2.1875	435000 97800	0.67	0.89	113000 25400	130000 29300	0.87	610000 137000	H924033	H924010
101.600 4.0000	214.975 8.4636	64.798 2.5511	630000 142000	0.33	1.84	163000 36700	91000 20500	1.79	906000 204000	HH224335	HH224314
101.600 4.0000	250.825 9.8750	76.200 3.0000	647000 145000	0.70	0.86	168000 37700	201000 45100	0.84	827000 186000	HH923649	HH923611
103.188 4.0625	171.450 6.7500	41.275 1.6250	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	689	674
104.775 4.1250	142.083 5.5938	15.875 0.6250	60200 13500	0.39	1.53	15600 3510	10500 2350	1.49	107000 24000	LL521845	LL521810
104.775 4.1250	180.975 7.1250	47.625 1.8750	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	782	772
104.775 4.1250	180.975 7.1250	47.625 1.8750	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	786	772
104.775 4.1250	180.975 7.1250	47.625 1.8750	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	787	772
104.775 4.1250	190.500 7.5000	47.625 1.8750	337000 75700	0.42	1.44	87300 19600	62200 14000	1.40	543000 122000	71412	71750
106.000 4.1732	160.000 6.2992	35.000 1.3780	210000 47300	0.44	1.35	54500 12300	41500 9320	1.31	339000 76200	XGA32021X	Y32021X
106.362 4.1875	165.100 6.5000	36.512 1.4375	210000 47100	0.50	1.21	54400 12200	46300 10400	1.18	355000 79700	56418	56650
106.975 4.2116	146.975 5.7864	28.500 1.1220	158000 35600	0.27	2.23	41000 9220	18900 4250	2.17	285000 64100	LM121349	LM121310
107.950 4.2500	142.083 5.5938	15.875 0.6250	60200 13500	0.39	1.53	15600 3510	10500 2350	1.49	107000 24000	LL521849C	LL521810
107.950 4.2500	146.050 5.7500	21.433 0.8438	88900 20000	0.39	1.53	23100 5180	15500 3480	1.49	175000 39400	L521949	L521910
107.950 4.2500	152.400 6.0000	21.433 0.8438	88900 20000	0.39	1.53	23100 5180	15500 3480	1.49	175000 39400	L521949	L521914
107.950 4.2500	158.750 6.2500	23.020 0.9063	107000 24000	0.61	0.99	27600 6220	28700 6450	0.96	179000 40100	37425	37625
107.950 4.2500	159.987 6.2987	34.925 1.3750	181000 40700	0.40	1.49	47000 10600	32300 7270	1.45	357000 80300	LM522546	LM522510
107.950 4.2500	161.925 6.3750	34.925 1.3750	178000 40000	0.51	1.19	46100 10400	39900 8970	1.16	308000 69200	48190	48120
107.950 4.2500	165.100 6.5000	36.512 1.4375	210000 47100	0.50	1.21	54400 12200	46300 10400	1.18	355000 79700	56425	56650

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
31.750 1.2500	19.050 0.7500	34.5 1.36	3.3 0.13	119.0 4.69	128.0 5.04	3.3 0.13	172.0 6.77	154.0 6.06	8.90 0.35	3.30 0.13	114	37.4	0.1153	3.10 6.83
48.006 1.8900	40.000 1.5748	-8.1 -0.32	3.5 0.14	113.0 4.45	119.0 4.69	3.0 0.12	168.0 6.61	160.0 6.30	3.60 0.14	1.30 0.05	227	38.2	0.1067	5.00 11.02
48.006 1.8900	38.100 1.5000	-8.1 -0.32	3.5 0.14	113.0 4.45	119.0 4.69	3.3 0.13	168.0 6.61	161.0 6.34	3.60 0.14	1.30 0.05	227	38.2	0.1067	5.03 11.08
57.531 2.2650	44.450 1.7500	-15.2 -0.60	8.0 0.31	114.0 4.49	129.0 5.08	3.3 0.13	174.0 6.85	170.0 6.69	5.60 0.22	0.60 0.02	264	44.9	0.1072	6.79 14.97
57.531 2.2650	46.038 1.8125	-15.0 -0.59	3.5 0.14	116.0 4.56	122.0 4.80	3.3 0.13	179.0 7.05	171.0 6.73	2.50 0.10	3.20 0.13	266	28.4	0.1072	7.27 16.02
57.531 2.2650	46.038 1.8125	-15.0 -0.59	8.0 0.31	116.0 4.56	131.0 5.16	3.3 0.13	179.0 7.05	171.0 6.73	2.50 0.10	3.20 0.13	266	28.4	0.1072	7.20 15.88
49.212 1.9375	34.925 1.3750	1.3 0.05	3.5 0.14	120.5 4.75	128.0 5.04	3.3 0.13	188.0 7.40	174.0 6.85	8.60 0.34	5.40 0.21	203	37.4	0.1197	6.76 14.89
66.675 2.6250	53.975 2.1250	-19.8 -0.78	7.0 0.28	117.0 4.61	130.0 5.12	3.3 0.13	193.0 7.60	187.0 7.36	6.70 0.26	1.20 0.05	339	39.7	0.1153	10.95 24.13
66.675 2.6250	53.975 2.1250	-18.8 -0.74	7.0 0.28	121.0 4.76	132.0 5.20	3.3 0.13	201.5 7.94	192.0 7.56	4.80 0.19	2.80 0.11	367	43.4	0.1182	11.00 24.26
52.388 2.0625	39.688 1.5625	6.9 0.27	3.5 0.14	128.0 5.04	132.0 5.20	3.3 0.13	205.0 8.07	186.0 7.32	6.60 0.26	3.40 0.13	246	32.2	0.1299	8.95 19.72
66.675 2.6250	50.800 2.0000	-18.8 -0.74	7.0 0.28	121.0 4.76	132.0 5.20	3.3 0.13	201.0 7.92	192.0 7.56	4.80 0.19	2.80 0.11	367	43.4	0.1182	11.12 24.51
73.025 2.8750	50.800 2.0000	-3.3 -0.13	6.4 0.25	131.0 5.15	149.0 5.87	3.3 0.13	229.0 9.01	210.0 8.27	15.10 0.60	4.60 0.18	282	35.2	0.1370	17.07 37.64
41.275 1.6250	30.162 1.1875	-2.8 -0.11	3.5 0.14	113.5 4.46	123.0 4.84	3.3 0.13	160.0 6.30	150.0 5.91	5.00 0.20	2.00 0.08	182	37.2	0.1056	3.46 7.62
15.083 0.5938	11.908 0.4688	7.4 0.29	1.5 0.06	111.0 4.37	113.0 4.45	1.5 0.06	137.0 5.39	135.0 5.31	0.80 0.03	2.20 0.09	105	110	0.1179	0.68 1.50
48.006 1.8900	38.100 1.5000	-8.1 -0.32	3.5 0.14	116.0 4.57	122.0 4.80	3.3 0.13	168.0 6.61	161.0 6.34	3.60 0.14	1.30 0.05	227	38.2	0.1067	4.83 10.66
48.006 1.8900	38.100 1.5000	-8.1 -0.32	6.4 0.25	116.0 4.57	128.0 5.04	3.3 0.13	168.0 6.61	161.0 6.34	3.60 0.14	1.30 0.05	227	38.2	0.1067	4.80 10.58
48.006 1.8900	38.100 1.5000	-8.1 -0.32	7.0 0.28	116.0 4.57	129.0 5.08	3.3 0.13	168.0 6.61	161.0 6.34	3.60 0.14	1.30 0.05	227	41.3	0.1067	4.78 10.54
49.212 1.9375	34.925 1.3750	-6.6 -0.26	3.5 0.14	118.0 4.65	124.0 4.88	3.3 0.13	181.0 7.13	171.0 6.73	5.40 0.21	1.50 0.06	269	45.7	0.1156	5.78 12.74
35.000 1.3780	26.000 1.0236	-0.3 -0.01	6.0 0.24	115.0 4.53	128.0 5.04	2.0 0.08	154.0 6.06	147.0 5.79	3.20 0.13	2.60 0.10	176	50.7	0.1024	2.36 5.19
36.512 1.4375	26.988 1.0625	2.0 0.08	3.5 0.14	116.0 4.57	122.0 4.80	3.3 0.13	159.0 6.26	149.0 5.87	4.00 0.16	1.50 0.06	191	47.7	0.1584	2.68 5.91
28.000 1.1024	24.000 0.9449	-3.8 -0.15	2.3 0.09	112.0 4.41	116.0 4.57	2.3 0.09	142.0 5.59	138.0 5.43	0.60 0.02	2.30 0.09	195	75.6	0.1302	1.31 2.90
15.083 0.5938	11.908 0.4688	7.4 0.29	1.5 0.06	113.0 4.45	115.0 4.53	1.5 0.06	137.0 5.39	135.0 5.31	0.80 0.03	2.20 0.09	105	110	0.1179	0.62 1.37
21.433 0.8438	16.670 0.6563	4.8 0.19	1.5 0.06	114.0 4.49	116.0 4.57	1.5 0.06	141.0 5.55	136.0 5.35	0.80 0.03	1.50 0.06	152	108	0.1346	0.99 2.17
21.433 0.8438	16.670 0.6563	4.8 0.19	1.5 0.06	114.0 4.49	116.0 4.57	1.5 0.06	144.0 5.67	139.0 5.47	0.80 0.03	1.50 0.06	152	108	0.1346	1.18 2.60
21.438 0.8440	15.875 0.6250	13.7 0.54	3.5 0.14	115.0 4.53	122.0 4.80	3.3 0.13	152.0 5.98	143.0 5.63	2.60 0.10	3.00 0.12	124	57	0.1443	1.35 2.98
34.925 1.3750	26.987 1.0625	-1.5 -0.06	3.5 0.14	116.0 4.57	122.0 4.80	3.3 0.13	154.0 6.06	146.0 5.75	2.50 0.10	1.30 0.05	232	63.3	0.1576	2.34 5.17
34.925 1.3750	26.988 1.0625	3.8 0.15	3.5 0.14	116.0 4.57	122.0 4.80	3.3 0.13	156.0 6.14	146.0 5.75	2.90 0.11	0.70 0.03	180	44.7	0.1558	2.35 5.17
36.512 1.4375	26.988 1.0625	2.0 0.08	3.5 0.14	117.0 4.61	123.0 4.84	3.3 0.13	159.0 6.26	149.0 5.87	4.00 0.16	1.50 0.06	191	47.7	0.1584	2.60 5.74

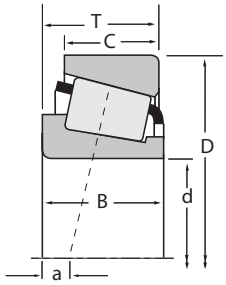
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

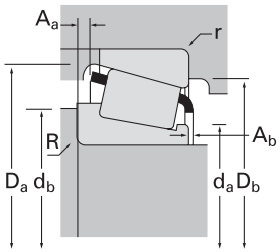
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
107.950 4.2500	165.100 6.5000	36.512 1.4375	210000 47100	0.50	1.21	54400 12200	46300 10400	1.18	355000 79700	56426	56650
107.950 4.2500	168.275 6.6250	36.512 1.4375	210000 47100	0.50	1.21	54400 12200	46300 10400	1.18	355000 79700	56425	56662
107.950 4.2500	171.450 6.7500	34.000 1.3386	182000 41000	0.47	1.27	47300 10600	38300 8600	1.24	268000 60300	67425	67675
107.950 4.2500	190.500 7.5000	47.625 1.8750	337000 75700	0.42	1.44	87300 19600	62200 14000	1.40	543000 122000	71425	71750
107.950 4.2500	212.725 8.3750	66.675 2.6250	530000 119000	0.33	1.84	137000 30900	76600 17200	1.79	786000 177000	936	932
107.950 4.2500	212.725 8.3750	66.675 2.6250	630000 142000	0.33	1.84	163000 36700	91000 20500	1.79	906000 204000	HH224340	HH224310
109.538 4.3125	158.750 6.2500	23.020 0.9063	107000 24000	0.61	0.99	27600 6220	28700 6450	0.96	179000 40100	37431	37625
109.538 4.3125	158.750 6.2500	23.020 0.9063	107000 24000	0.61	0.99	27600 6220	28700 6450	0.96	179000 40100	37431A	37625
109.952 4.3288	190.500 7.5000	47.625 1.8750	337000 75700	0.42	1.44	87300 19600	62200 14000	1.40	543000 122000	71432	71750
109.975 4.3297	179.974 7.0856	41.275 1.6250	254000 57200	0.52	1.16	65900 14800	58300 13100	1.13	419000 94200	64432	64708
110.000 4.3301	214.312 8.4375	55.562 2.1875	435000 97800	0.67	0.89	113000 25400	130000 29300	0.87	610000 137000	H924043	H924010
109.987 4.3302	159.987 6.2987	34.925 1.3750	181000 40700	0.40	1.49	47000 10600	32300 7270	1.45	357000 80300	LM522548	LM522510
109.987 4.3302	159.987 6.2987	34.925 1.3750	181000 40700	0.40	1.49	47000 10600	32300 7270	1.45	357000 80300	LM522549	LM522510
109.992 4.3304	177.800 7.0000	41.275 1.6250	254000 57200	0.52	1.16	65900 14800	58300 13100	1.13	419000 94200	64433	64700
110.000 4.3307	165.000 6.4961	35.000 1.3780	210000 47300	0.50	1.21	54500 12300	46400 10400	1.18	356000 80100	JM822049	JM822010
110.000 4.3307	180.000 7.0866	47.000 1.8504	344000 77300	0.41	1.48	89100 20000	61900 13900	1.44	554000 125000	JHM522649A	JHM522610
110.000 4.3307	212.725 8.3750	66.675 2.6250	530000 119000	0.33	1.84	137000 30900	76600 17200	1.79	786000 177000	942	932
110.000 4.3307	215.000 8.4646	61.500 2.4213	502000 113000	0.44	1.38	130000 29300	97000 21800	1.34	753000 169000	XFA32224	Y32224
110.332 4.3438	171.450 6.7500	34.000 1.3386	182000 41000	0.47	1.27	47300 10600	38300 8600	1.24	268000 60300	67434	67675
111.125 4.3750	171.450 6.7500	34.000 1.3386	182000 41000	0.47	1.27	47300 10600	38300 8600	1.24	268000 60300	67437	67675
111.125 4.3750	190.500 7.5000	47.625 1.8750	337000 75700	0.42	1.44	87300 19600	62200 14000	1.40	543000 122000	71437	71750
111.125 4.3750	214.312 8.4375	55.562 2.1875	435000 97800	0.67	0.89	113000 25400	130000 29300	0.87	610000 137000	H924045	H924010
114.300 4.5000	152.400 6.0000	21.433 0.8438	92400 20800	0.41	1.45	23900 5380	16900 3810	1.41	188000 42300	L623149	L623110
114.300 4.5000	177.800 7.0000	41.275 1.6250	254000 57200	0.52	1.16	65900 14800	58300 13100	1.13	419000 94200	64450	64700
114.300 4.5000	178.000 7.0079	41.275 1.6250	254000 57200	0.52	1.16	65900 14800	58300 13100	1.13	419000 94200	64450	64701X
114.300 4.5000	179.974 7.0856	41.275 1.6250	254000 57200	0.52	1.16	65900 14800	58300 13100	1.13	419000 94200	64450	64708
114.300 4.5000	180.975 7.1250	41.275 1.6250	254000 57200	0.52	1.16	65900 14800	58300 13100	1.13	419000 94200	64450	64713
114.300 4.5000	190.500 7.5000	47.625 1.8750	337000 75700	0.42	1.44	87300 19600	62200 14000	1.40	543000 122000	71450	71750

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
36.512 1.4375	26.988 1.0625	2.0 0.08	8.0 0.31	117.0 4.61	132.0 5.20	3.3 0.13	159.0 6.26	149.0 5.87	4.00 0.16	1.50 0.06	191	47.7	0.1584	2.54 5.59
36.512 1.4375	26.988 1.0625	2.0 0.08	3.5 0.14	117.0 4.61	123.0 4.84	3.3 0.13	161.0 6.34	151.0 5.94	4.00 0.16	1.50 0.06	191	47.7	0.1584	2.78 6.13
30.162 1.1875	25.268 0.9948	4.6 0.18	3.5 0.14	116.0 4.57	123.0 4.84	3.3 0.13	164.0 6.46	156.0 6.14	3.40 0.13	2.10 0.08	152	50.5	0.0987	2.51 5.53
49.212 1.9375	34.925 1.3750	-6.6 -0.26	3.5 0.14	120.0 4.72	126.0 4.96	3.3 0.13	181.0 7.13	171.0 6.73	5.40 0.21	1.50 0.06	269	45.7	0.1156	5.57 12.29
66.675 2.6250	53.975 2.1250	-19.8 -0.78	8.0 0.31	122.0 4.80	137.0 5.39	3.3 0.13	193.0 7.60	187.0 7.36	6.70 0.26	1.20 0.05	339	39.7	0.1153	10.38 22.89
66.675 2.6250	53.975 2.1250	-18.8 -0.74	8.0 0.31	126.0 4.96	139.0 5.47	3.3 0.13	201.5 7.94	192.0 7.56	4.90 0.19	2.80 0.11	367	47.8	0.1182	10.44 23.01
21.438 0.8440	15.875 0.6250	13.7 0.54	3.5 0.14	116.0 4.57	123.0 4.84	3.3 0.13	152.0 5.98	143.0 5.63	2.60 0.10	3.00 0.12	124	48.7	0.1443	1.31 2.88
21.438 0.8440	15.875 0.6250	13.7 0.54	5.0 0.20	117.0 4.61	126.0 4.96	3.3 0.13	152.0 5.98	143.0 5.63	2.60 0.10	3.00 0.12	124	57	0.1443	1.30 2.87
49.212 1.9375	34.925 1.3750	-6.6 -0.26	3.5 0.14	122.0 4.80	128.0 5.04	3.3 0.13	181.0 7.13	171.0 6.73	5.40 0.21	1.50 0.06	269	45.7	0.1156	5.44 12.00
41.275 1.6250	30.162 1.1875	1.3 0.05	3.5 0.14	121.0 4.76	128.0 5.04	3.3 0.13	173.0 6.81	161.0 6.34	5.30 0.21	2.00 0.08	219	45.3	0.1153	3.86 8.50
52.388 2.0625	39.688 1.5625	6.9 0.27	3.5 0.14	131.0 5.16	139.0 5.47	3.3 0.13	205.0 8.07	186.0 7.32	6.60 0.26	3.40 0.13	246	32.2	0.1299	8.37 18.46
34.925 1.3750	26.987 1.0625	-1.5 -0.06	8.0 0.31	118.0 4.65	133.0 5.24	3.3 0.13	154.0 6.06	146.0 5.75	2.50 0.10	1.30 0.05	232	63.3	0.1576	2.18 4.80
34.925 1.3750	26.987 1.0625	-1.5 -0.06	3.5 0.14	118.0 4.65	124.0 4.88	3.3 0.13	154.0 6.06	146.0 5.75	2.50 0.10	1.30 0.05	232	63.3	0.1576	2.25 4.96
41.275 1.6250	30.162 1.1875	1.3 0.05	3.5 0.14	121.0 4.76	128.0 5.04	3.3 0.13	172.0 6.77	160.0 6.30	5.30 0.21	2.00 0.08	219	45.3	0.1153	3.71 8.18
35.000 1.3780	26.500 1.0433	3.0 0.12	3.0 0.12	119.0 4.69	125.0 4.92	2.5 0.10	159.0 6.26	149.0 5.87	3.00 0.12	2.00 0.08	192	45.8	0.1585	2.44 5.38
46.000 1.8110	38.000 1.4961	-5.8 -0.23	7.0 0.28	122.0 4.80	138.0 5.43	2.5 0.10	172.0 6.77	162.0 6.38	2.70 0.10	3.90 0.15	259	52.1	0.1134	4.59 10.13
66.675 2.6250	53.975 2.1250	-19.8 -0.78	6.4 0.25	124.0 4.88	136.0 5.35	3.3 0.13	193.0 7.60	187.0 7.36	6.60 0.26	1.20 0.05	339	39.7	0.1153	10.25 22.59
58.000 2.2835	50.000 1.9685	-9.4 -0.37	3.0 0.12	133.0 5.24	137.0 5.39	2.5 0.10	204.0 8.03	192.0 7.56	7.80 0.31	3.00 0.12	329	52.3	0.1253	9.85 21.72
30.162 1.1875	25.268 0.9948	4.6 0.18	3.5 0.14	118.0 4.65	124.0 4.88	3.3 0.13	164.0 6.46	156.0 6.14	3.40 0.13	2.10 0.08	152	50.5	0.0987	2.41 5.32
30.162 1.1875	25.268 0.9948	4.6 0.18	3.5 0.14	119.0 4.69	125.0 4.92	3.3 0.13	164.0 6.46	156.0 6.14	3.40 0.13	2.10 0.08	152	50.5	0.0987	2.38 5.25
49.212 1.9375	34.925 1.3750	-6.6 -0.26	3.5 0.14	123.0 4.84	129.0 5.08	3.3 0.13	181.0 7.13	171.0 6.73	5.40 0.21	1.50 0.06	269	45.7	0.1156	5.36 11.82
52.388 2.0625	39.688 1.5625	6.9 0.27	3.5 0.14	131.0 5.16	139.0 5.47	3.3 0.13	205.0 8.07	186.0 7.32	6.60 0.26	3.40 0.13	246	32.2	0.1299	8.29 18.28
21.432 0.8438	16.670 0.6563	6.4 0.25	1.5 0.06	120.0 4.72	123.0 4.84	1.5 0.06	147.0 5.79	143.0 5.63	1.10 0.04	1.60 0.06	171	102	0.1422	1.05 2.31
41.275 1.6250	30.162 1.1875	1.3 0.05	3.5 0.14	125.0 4.92	131.0 5.16	3.3 0.13	172.0 6.77	160.0 6.30	5.30 0.21	2.00 0.08	219	45.3	0.1153	3.47 7.64
41.275 1.6250	30.162 1.1875	1.3 0.05	3.5 0.14	125.0 4.92	131.0 5.16	3.0 0.12	172.0 6.77	160.0 6.30	5.30 0.21	2.00 0.08	219	45.3	0.1153	3.48 7.68
41.275 1.6250	30.162 1.1875	1.3 0.05	3.5 0.14	125.0 4.92	131.0 5.16	3.3 0.13	173.0 6.81	161.0 6.34	5.30 0.21	2.00 0.08	219	45.3	0.1153	3.61 7.96
41.275 1.6250	30.162 1.1875	1.3 0.05	3.5 0.14	125.0 4.92	131.0 5.16	3.3 0.13	173.0 6.81	161.0 6.34	5.30 0.21	2.00 0.08	219	45.3	0.1153	3.68 8.11
49.212 1.9375	34.925 1.3750	-6.6 -0.26	3.5 0.14	125.0 4.92	132.0 5.20	3.3 0.13	181.0 7.13	171.0 6.73	5.40 0.21	1.50 0.06	269	45.7	0.1156	5.15 11.34

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

[7] Compound radius on inner race. Details on drawing for bearing.

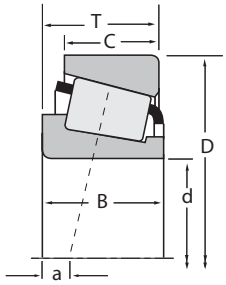
[8] Pin-type cage. Please consult The Timken Company.

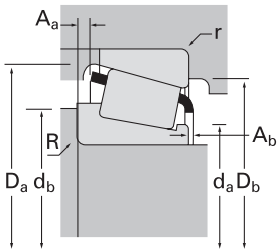
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
114.300 4.5000	206.375 8.1250	66.675 2.6250	530000 119000	0.33	1.84	137000 30900	76600 17200	1.79	786000 177000	938	930
114.300 4.5000	212.725 8.3750	66.675 2.6250	530000 119000	0.33	1.84	137000 30900	76600 17200	1.79	786000 177000	938	932
114.300 4.5000	212.725 8.3750	66.675 2.6250	630000 142000	0.33	1.84	163000 36700	91000 20500	1.79	906000 204000	HH224346	HH224310
114.300 4.5000	214.975 8.4636	64.798 2.5511	630000 142000	0.33	1.84	163000 36700	91000 20500	1.79	906000 204000	HH224346	HH224314
114.300 4.5000	228.600 9.0000	53.975 2.1250	458000 103000	0.74	0.81	119000 26700	150000 33700	0.79	673000 151000	HM926740	HM926710
114.300 4.5000	273.050 10.7500	82.550 3.2500	832000 187000	0.63	0.95	216000 48500	234000 52500	0.92	1080000 243000	HH926744	HH926710
114.300 4.5000	279.400 11.0000	82.550 3.2500	832000 187000	0.63	0.95	216000 48500	234000 52500	0.92	1080000 243000	HH926744	HH926716
114.975 4.5266	177.800 7.0000	41.275 1.6250	254000 57200	0.52	1.16	65900 14800	58300 13100	1.13	419000 94200	64452A	64700
114.975 4.5266	179.974 7.0856	41.275 1.6250	254000 57200	0.52	1.16	65900 14800	58300 13100	1.13	419000 94200	64452	64708
114.975 4.5266	180.975 7.1250	41.275 1.6250	254000 57200	0.52	1.16	65900 14800	58300 13100	1.13	419000 94200	64452A	64713
114.975 4.5266	212.725 8.3750	66.675 2.6250	630000 142000	0.33	1.84	163000 36700	91000 20500	1.79	906000 204000	HH224349	HH224310
115.000 4.5276	165.000 6.4961	28.000 1.1024	148000 33200	0.46	1.31	38300 8620	30100 6770	1.27	245000 55100	JLM722948	JLM722912
115.000 4.5276	178.000 7.0079	40.000 1.5748	254000 57200	0.52	1.16	65900 14800	58300 13100	1.13	419000 94200	64452X	64701X
115.087 4.5310	190.500 7.5000	47.625 1.8750	337000 75700	0.42	1.44	87300 19600	62200 14000	1.40	543000 122000	71453	71750
115.087 4.5310	190.500 7.5000	47.625 1.8750	337000 75700	0.42	1.44	87300 19600	62200 14000	1.40	543000 122000	71455	71750
117.475 4.6250	179.974 7.0856	34.925 1.3750	181000 40700	0.50	1.21	46900 10600	39900 8980	1.18	271000 61000	68462	68709
117.475 4.6250	180.975 7.1250	34.925 1.3750	181000 40700	0.50	1.21	46900 10600	39900 8980	1.18	271000 61000	68462	68712
117.475 4.6250	180.975 7.1250	34.925 1.3750	181000 40700	0.50	1.21	46900 10600	39900 8980	1.18	271000 61000	68463	68712
119.964 4.7230	215.900 8.5000	47.625 1.8750	354000 79500	0.49	1.23	91700 20600	76500 17200	1.20	614000 138000	74472	74850
119.975 4.7234	174.625 6.8750	35.720 1.4063	226000 50900	0.33	1.80	58700 13200	33400 7510	1.76	422000 94900	M224748	M224710
120.000 4.7244	170.000 6.6929	25.400 1.0000	134000 30200	0.46	1.31	34800 7820	27300 6140	1.27	231000 52000	JL724348	JL724314
120.000 4.7244	170.000 6.6929	27.000 1.0630	153000 34400	0.47	1.27	39700 8920	32100 7220	1.24	238000 53500	JP12049A	JP12010
120.000 4.7244	170.000 6.6929	27.000 1.0630	153000 34400	0.47	1.27	39700 8920	32100 7220	1.24	238000 53500	JP12049	JP12010
120.000 4.7244	180.000 7.0866	36.000 1.4173	229000 51400	0.41	1.45	59300 13300	41900 9430	1.41	377000 84700	JM624649	JM624610
120.000 4.7244	180.000 7.0866	38.000 1.4961	271000 60900	0.46	1.31	70200 15800	55100 12400	1.27	466000 105000	XAA32024X	Y32024X
120.000 4.7244	215.900 8.5000	47.625 1.8750	354000 79500	0.49	1.23	91700 20600	76500 17200	1.20	614000 138000	74473X	74850
120.000 4.7244	230.000 9.0551	53.975 2.1250	348000 78300	0.74	0.81	90200 20300	114000 25600	0.79	486000 109000	97472X	97905X
120.650 4.7500	161.925 6.3750	21.433 0.8438	97500 21900	0.43	1.38	25300 5680	18800 4230	1.34	206000 46400	L624549	L624514

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
66.675 2.6250	53.975 2.1250	-19.8 -0.78	7.0 0.28	128.0 5.04	141.0 5.55	3.3 0.13	193.0 7.60	184.0 7.24	6.70 0.26	1.20 0.05	339	39.7	0.1153	8.92 19.66
66.675 2.6250	53.975 2.1250	-19.8 -0.78	7.0 0.28	128.0 5.04	141.0 5.55	3.3 0.13	193.0 7.60	187.0 7.36	6.70 0.26	1.20 0.05	339	39.7	0.1153	9.82 21.64
66.675 2.6250	53.975 2.1250	-18.8 -0.74	7.0 0.28	131.0 5.16	143.0 5.63	3.3 0.13	201.5 7.94	192.0 7.56	4.90 0.19	2.80 0.11	367	47.8	0.1182	9.88 21.77
66.675 2.6250	50.800 2.0000	-18.8 -0.74	7.0 0.28	131.0 5.16	143.0 5.63	3.3 0.13	201.0 7.92	192.0 7.56	4.90 0.19	2.80 0.11	367	47.8	0.1182	9.99 22.02
49.428 1.9460	38.100 1.5000	13.5 0.53	3.5 0.14	142.0 5.59	146.0 5.75	3.3 0.13	219.0 8.63	200.0 7.87	9.00 0.36	6.40 0.25	295	39	0.1416	9.54 21.04
82.550 3.2500	53.975 2.1250	-6.6 -0.26	6.4 0.25	147.5 5.80	164.0 6.46	6.4 0.25	253.0 9.97	230.0 9.06	15.10 0.60	4.10 0.16	384	37.8	0.1472	21.92 48.32
82.550 3.2500	53.975 2.1250	-6.6 -0.26	6.4 0.25	147.5 5.80	164.0 6.46	6.4 0.25	253.0 9.97	233.0 9.17	15.10 0.60	4.10 0.16	384	37.8	0.1472	23.08 50.88
41.275 1.6250	30.162 1.1875	1.3 0.05	9.0 0.35	126.0 4.96	143.0 5.63	3.3 0.13	172.0 6.77	160.0 6.30	5.30 0.21	2.00 0.08	219	45.3	0.1153	3.33 7.34
41.275 1.6250	30.162 1.1875	1.3 0.05	3.5 0.14	126.0 4.96	132.0 5.20	3.3 0.13	173.0 6.81	161.0 6.34	5.30 0.21	2.00 0.08	219	45.3	0.1153	3.57 7.87
41.275 1.6250	30.162 1.1875	1.3 0.05	9.0 0.35	126.0 4.96	143.0 5.63	3.3 0.13	173.0 6.81	161.0 6.34	5.30 0.21	2.00 0.08	219	45.3	0.1153	3.54 7.80
66.675 2.6250	53.975 2.1250	-18.8 -0.74	7.0 0.28	131.0 5.16	144.0 5.67	3.3 0.13	201.5 7.94	192.0 7.56	4.90 0.19	2.80 0.11	367	47.8	0.1182	9.81 21.63
27.000 1.0630	21.000 0.8268	5.6 0.22	3.3 0.13	121.0 4.76	127.0 5.00	3.0 0.12	158.0 6.22	151.0 5.94	2.20 0.09	2.40 0.09	161	57.2	0.1449	1.76 3.87
40.000 1.5748	30.162 1.1875	1.3 0.05	3.5 0.14	125.5 4.95	132.0 5.20	3.0 0.12	172.0 6.77	160.0 6.30	4.00 0.16	2.00 0.08	219	45.3	0.1153	3.37 7.44
49.212 1.9375	34.925 1.3750	-6.6 -0.26	3.5 0.14	126.0 4.96	133.0 5.24	3.3 0.13	181.0 7.13	171.0 6.73	5.40 0.21	1.50 0.06	269	45.7	0.1156	5.09 11.22
49.212 1.9375	34.925 1.3750	-6.6 -0.26	8.0 0.31	126.0 4.96	141.0 5.55	3.3 0.13	181.0 7.13	171.0 6.73	5.40 0.21	1.50 0.06	269	45.7	0.1156	5.02 11.06
31.750 1.2500	25.400 1.0000	5.3 0.21	3.5 0.14	125.0 4.92	132.0 5.20	0.8 0.03	172.0 6.77	165.0 6.50	5.10 0.20	2.30 0.09	163	51.7	0.1026	2.71 5.96
31.750 1.2500	25.400 1.0000	5.3 0.21	3.5 0.14	125.0 4.92	132.0 5.20	3.3 0.13	172.0 6.77	163.0 6.42	5.10 0.20	2.30 0.09	163	51.7	0.1026	2.74 6.04
31.750 1.2500	25.400 1.0000	5.3 0.21	8.0 0.31	125.0 4.92	140.0 5.51	3.3 0.13	172.0 6.77	163.0 6.42	5.10 0.20	2.30 0.09	163	51.7	0.1026	2.66 5.87
47.625 1.8750	34.925 1.3750	2.3 0.09	3.5 0.14	136.0 5.35	142.0 5.59	3.3 0.13	208.0 8.19	196.0 7.72	4.80 0.19	2.00 0.08	363	68.5	0.1338	7.52 16.57
36.512 1.4375	27.783 1.0938	-3.6 -0.14	3.5 0.14	129.0 5.08	134.0 5.28	1.5 0.06	168.0 6.61	162.0 6.38	3.80 0.15	0.50 0.02	279	86.6	0.1575	2.70 5.96
25.400 1.0000	19.050 0.7500	7.9 0.31	3.3 0.13	127.0 5.00	132.0 5.20	3.3 0.13	163.0 6.42	156.0 6.14	2.70 0.11	1.20 0.05	170	70.6	0.1472	1.62 3.56
25.000 0.9843	19.500 0.7677	7.9 0.31	6.0 0.24	127.0 5.00	139.0 5.47	3.0 0.12	164.0 6.46	158.0 6.22	2.80 0.11	3.70 0.14	158	76.7	0.1451	1.60 3.53
25.000 0.9843	19.500 0.7677	7.9 0.31	3.0 0.12	127.0 5.00	133.0 5.24	3.0 0.12	164.0 6.46	158.0 6.22	2.80 0.11	3.70 0.14	158	76.7	0.1451	1.62 3.58
36.000 1.4173	26.000 1.0236	0.0 0.00	3.5 0.14	128.0 5.04	135.0 5.31	1.5 0.06	173.0 6.81	166.0 6.54	3.60 0.14	2.70 0.10	227	61.6	0.1084	2.93 6.46
38.000 1.4961	29.000 1.1417	1.5 0.06	5.0 0.20	130.0 5.12	141.0 5.55	2.0 0.08	174.0 6.85	165.0 6.50	3.50 0.14	3.00 0.12	255	58.3	0.1169	3.26 7.19
47.625 1.8750	34.925 1.3750	2.3 0.09	4.0 0.16	137.0 5.39	144.0 5.67	3.3 0.13	208.0 8.19	196.0 7.72	4.80 0.19	2.00 0.08	363	68.5	0.1338	7.51 16.55
49.428 1.9460	38.100 1.5000	13.2 0.52	3.5 0.14	140.0 5.51	145.0 5.71	3.3 0.13	213.0 8.38	198.0 7.80	8.20 0.32	4.80 0.19	237	44.6	0.1311	8.92 19.66
21.433 0.8438	16.670 0.6563	8.4 0.33	1.5 0.06	127.0 5.00	129.0 5.08	1.5 0.06	156.0 6.14	151.0 5.94	1.20 0.05	1.60 0.06	195	139	0.1509	1.21 2.66

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

[7] Compound radius on inner race. Details on drawing for bearing.

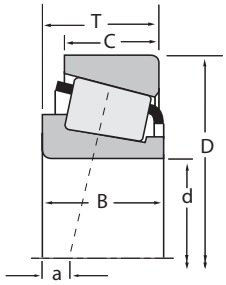
[8] Pin-type cage. Please consult The Timken Company.

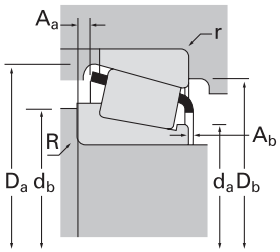
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
120.650 4.7500	166.688 6.5625	25.400 1.0000	134000 30200	0.46	1.31	34800 7820	27300 6140	1.27	231000 52000	L724349	L724310
120.650 4.7500	169.862 6.6875	25.400 1.0000	132000 29700	0.33	1.80	34300 7710	19500 4390	1.76	273000 61400	L225842	L225810
120.650 4.7500	172.242 6.7812	35.720 1.4063	226000 50900	0.33	1.80	58700 13200	33400 7510	1.76	422000 94900	M224749	M224711
120.650 4.7500	174.625 6.8750	35.720 1.4063	226000 50900	0.33	1.80	58700 13200	33400 7510	1.76	422000 94900	M224749	M224710
120.650 4.7500	174.625 6.8750	35.720 1.4063	226000 50900	0.33	1.80	58700 13200	33400 7510	1.76	422000 94900	M224749	M224712
120.650 4.7500	180.975 7.1250	25.400 1.0000	132000 29700	0.33	1.80	34300 7710	19500 4390	1.76	273000 61400	L225842	L225818
120.650 4.7500	182.562 7.1875	39.688 1.5625	248000 55800	0.31	1.97	64300 14500	33600 7550	1.91	493000 111000	48282	48220
120.650 4.7500	190.500 7.5000	46.038 1.8125	335000 75300	0.43	1.41	86800 19500	63400 14300	1.37	543000 122000	HM624749	HM624710
120.650 4.7500	199.974 7.8730	46.038 1.8125	335000 75300	0.43	1.41	86800 19500	63400 14300	1.37	543000 122000	HM624749	HM624716
120.650 4.7500	206.375 8.1250	47.625 1.8750	350000 78700	0.46	1.31	90800 20400	71300 16000	1.27	593000 133000	795	792
120.650 4.7500	234.950 9.2500	63.500 2.5000	582000 131000	0.37	1.62	151000 33900	95500 21500	1.58	931000 209000	95475	95925
120.650 4.7500	254.000 10.0000	77.788 3.0625	843000 189000	0.32	1.87	218000 49100	120000 27000	1.82	1240000 279000	HH228340	HH228310
120.650 4.7500	259.974 10.2352	77.788 3.0625	843000 189000	0.32	1.87	218000 49100	120000 27000	1.82	1240000 279000	HH228340	HH228318
120.650 4.7500	273.050 10.7500	82.550 3.2500	832000 187000	0.63	0.95	216000 48500	234000 52500	0.92	1080000 243000	HH926749	HH926710
123.825 4.8750	182.562 7.1875	39.688 1.5625	248000 55800	0.31	1.97	64300 14500	33600 7550	1.91	493000 111000	48286	48220
124.943 4.9190	234.950 9.2500	63.500 2.5000	582000 131000	0.37	1.62	151000 33900	95500 21500	1.58	931000 209000	95491	95925
125.000 4.9213	175.000 6.8898	25.400 1.0000	139000 31200	0.48	1.26	36000 8100	29400 6600	1.23	246000 55300	JL725346	JL725316
125.298 4.9330	228.600 9.0000	53.975 2.1250	458000 103000	0.74	0.81	119000 26700	150000 33700	0.79	673000 151000	HM926745	HM926710
127.000 5.0000	165.895 6.5313	18.258 0.7188	83500 18800	0.33	1.80	21600 4870	12300 2770	1.76	153000 34400	LL225749	LL225710
127.000 5.0000	169.862 6.6875	25.400 1.0000	132000 29700	0.33	1.80	34300 7710	19500 4390	1.76	273000 61400	L225849	L225810
127.000 5.0000	171.450 6.7500	25.400 1.0000	139000 31200	0.48	1.26	36000 8100	29400 6600	1.23	246000 55300	L725349	L725311
127.000 5.0000	174.625 6.8750	36.512 1.4375	204000 45800	0.31	1.95	52900 11900	27800 6250	1.90	413000 92900	LM125748	LM125711
127.000 5.0000	180.975 7.1250	25.400 1.0000	132000 29700	0.33	1.80	34300 7710	19500 4390	1.76	273000 61400	L225849	L225818
127.000 5.0000	182.562 7.1875	39.688 1.5625	248000 55800	0.31	1.97	64300 14500	33600 7550	1.91	493000 111000	48290	48220
127.000 5.0000	196.850 7.7500	46.038 1.8125	340000 76500	0.34	1.74	88200 19800	52000 11700	1.70	625000 141000	67388	67322
127.000 5.0000	203.200 8.0000	46.038 1.8125	340000 76500	0.34	1.74	88200 19800	52000 11700	1.70	625000 141000	67388	67320
127.000 5.0000	215.900 8.5000	47.625 1.8750	354000 79500	0.49	1.23	91700 20600	76500 17200	1.20	614000 138000	74500	74850
127.000 5.0000	228.600 9.0000	53.975 2.1250	348000 78300	0.74	0.81	90200 20300	114000 25600	0.79	486000 109000	97500	97900

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
25.400 1.0000	19.050 0.7500	7.9 0.31	3.3 0.13	128.0 5.04	133.0 5.24	3.3 0.13	161.0 6.34	154.0 6.06	2.70 0.11	1.20 0.05	170	70.6	0.1472	1.48 3.27
26.195 1.0313	20.638 0.8125	2.5 0.10	1.5 0.06	129.0 5.08	131.0 5.16	1.5 0.06	164.0 6.46	160.0 6.30	0.70 0.03	1.60 0.06	253	134	0.1511	1.86 4.11
36.512 1.4375	27.783 1.0938	-3.6 -0.14	3.5 0.14	129.0 5.08	135.0 5.31	1.5 0.06	167.0 6.57	162.0 6.38	3.80 0.15	0.50 0.02	279	86.6	0.1575	2.52 5.57
36.512 1.4375	27.783 1.0938	-3.6 -0.14	3.5 0.14	129.0 5.08	135.0 5.31	1.5 0.06	168.0 6.61	162.0 6.38	3.80 0.15	0.50 0.02	279	86.6	0.1575	2.67 5.88
36.512 1.4375	27.783 1.0938	-3.6 -0.14	3.5 0.14	129.0 5.08	135.0 5.31	3.3 0.13	168.0 6.61	161.0 6.34	3.80 0.15	0.50 0.02	279	86.6	0.1575	2.67 5.88
26.195 1.0313	20.638 0.8125	2.5 0.10	1.5 0.06	129.0 5.08	131.0 5.16	1.5 0.06	166.0 6.54	164.0 6.46	0.70 0.03	1.60 0.06	253	134	0.1511	2.35 5.18
38.100 1.5000	33.338 1.3125	-5.6 -0.22	3.5 0.14	131.0 5.16	137.0 5.39	3.3 0.13	176.0 6.93	168.0 6.61	1.90 0.07	3.20 0.13	353	91.3	0.1138	3.64 8.03
46.038 1.8125	34.925 1.3750	-3.8 -0.15	3.5 0.14	132.0 5.20	138.0 5.43	1.5 0.06	184.0 7.24	174.0 6.85	3.70 0.15	2.60 0.10	279	51.5	0.1178	4.60 10.15
46.038 1.8125	34.925 1.3750	-3.8 -0.15	3.5 0.14	132.0 5.20	138.0 5.43	1.5 0.06	185.0 7.28	178.0 7.01	3.70 0.15	2.60 0.10	279	51.5	0.1178	5.40 11.90
47.625 1.8750	34.925 1.3750	-1.8 -0.07	3.3 0.13	134.0 5.28	139.0 5.47	3.3 0.13	198.0 7.80	186.0 7.32	5.30 0.21	2.80 0.11	326	56.2	0.1269	6.32 13.94
63.500 2.5000	49.212 1.9375	-14.0 -0.55	6.4 0.25	137.0 5.39	149.0 5.87	3.3 0.13	217.0 8.54	209.0 8.23	6.40 0.25	3.80 0.15	454	59.3	0.1323	12.35 27.22
82.550 3.2500	61.912 2.4375	-23.4 -0.92	9.7 0.38	142.0 5.59	158.0 6.22	6.4 0.25	233.5 9.20	223.0 8.78	7.10 0.28	0.00 0.00	530	44.8	0.1329	18.50 40.79
82.550 3.2500	61.912 2.4375	-23.4 -0.92	9.7 0.38	142.0 5.59	158.0 6.22	4.0 0.16	233.5 9.20	228.0 8.98	7.10 0.28	0.00 0.00	530	44.8	0.1329	19.74 43.52
82.550 3.2500	53.975 2.1250	-6.6 -0.26	6.4 0.25	147.5 5.80	168.0 6.61	6.4 0.25	253.0 9.97	230.0 9.06	15.10 0.60	4.10 0.16	384	37.8	0.1472	21.16 46.65
38.100 1.5000	33.338 1.3125	-5.6 -0.22	3.5 0.14	133.0 5.24	139.0 5.47	3.3 0.13	176.0 6.93	168.0 6.61	1.90 0.07	3.20 0.13	353	91.3	0.1138	3.46 7.63
63.500 2.5000	49.212 1.9375	-14.0 -0.55	6.4 0.25	140.0 5.51	152.0 5.98	3.3 0.13	217.0 8.54	209.0 8.23	6.40 0.25	3.80 0.15	454	59.3	0.1323	11.93 26.31
25.400 1.0000	18.288 0.7200	9.1 0.36	3.3 0.13	133.0 5.24	138.0 5.43	3.3 0.13	168.0 6.61	161.0 6.34	3.00 0.12	1.50 0.06	187	77.6	0.1535	1.69 3.72
49.428 1.9460	38.100 1.5000	13.5 0.53	3.5 0.14	143.0 5.63	154.0 6.06	3.3 0.13	219.0 8.63	200.0 7.87	9.00 0.36	6.40 0.25	295	39	0.1416	8.74 19.27
17.462 0.6875	13.495 0.5313	6.1 0.24	1.5 0.06	133.0 5.24	135.0 5.31	1.5 0.06	160.0 6.30	158.0 6.22	1.30 0.05	2.10 0.08	164	141	0.1297	0.92 2.02
26.195 1.0313	20.638 0.8125	2.5 0.10	1.5 0.06	134.0 5.28	136.0 5.35	1.5 0.06	164.0 6.46	160.0 6.30	0.70 0.03	1.60 0.06	253	106	0.1511	1.61 3.55
25.400 1.0000	18.288 0.7200	9.1 0.36	3.3 0.13	134.0 5.28	139.0 5.47	3.3 0.13	167.0 6.57	160.0 6.30	3.00 0.12	1.50 0.06	187	77.6	0.1535	1.50 3.30
36.512 1.4375	31.750 1.2500	-4.3 -0.17	3.3 0.13	135.0 5.31	140.0 5.51	3.3 0.13	168.0 6.61	161.0 6.34	2.20 0.09	0.60 0.02	315	134	0.1594	2.54 5.60
26.195 1.0313	20.638 0.8125	2.5 0.10	1.5 0.06	134.0 5.28	136.0 5.35	1.5 0.06	166.0 6.54	164.0 6.46	0.70 0.03	1.60 0.06	253	106	0.1511	2.10 4.63
38.100 1.5000	33.338 1.3125	-5.6 -0.22	3.5 0.14	135.0 5.31	141.0 5.55	3.3 0.13	176.0 6.93	168.0 6.61	1.90 0.07	3.20 0.13	353	91.3	0.1138	3.27 7.22
46.038 1.8125	38.100 1.5000	-6.4 -0.25	3.5 0.14	138.0 5.43	144.0 5.67	3.3 0.13	189.0 7.44	180.0 7.09	4.20 0.17	1.30 0.05	384	70.1	0.1220	5.01 11.05
46.038 1.8125	38.100 1.5000	-6.4 -0.25	3.5 0.14	138.0 5.43	144.0 5.67	3.3 0.13	191.0 7.52	183.0 7.20	4.20 0.17	1.30 0.05	384	70.1	0.1220	5.61 12.37
47.625 1.8750	34.925 1.3750	2.3 0.09	3.5 0.14	141.0 5.55	148.0 5.83	3.3 0.13	208.0 8.19	196.0 7.72	4.80 0.19	2.00 0.08	363	68.5	0.1338	7.01 15.45
49.428 1.9460	38.100 1.5000	13.2 0.52	3.5 0.14	143.5 5.65	151.0 5.94	3.3 0.13	213.0 8.38	197.0 7.76	8.20 0.32	4.80 0.19	237	44.6	0.1311	8.24 18.17

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

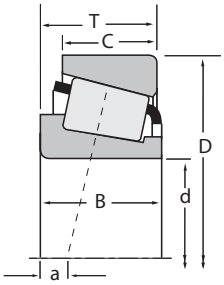
[7] Compound radius on inner race. Details on drawing for bearing.

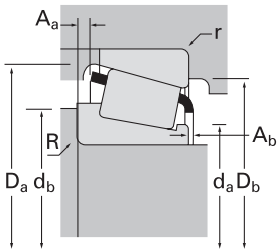
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
127.000 5.0000	228.600 9.0000	53.975 2.1250	458000 103000	0.74	0.81	119000 26700	150000 33700	0.79	673000 151000	HM926747	HM926710
127.000 5.0000	234.950 9.2500	63.500 2.5000	582000 131000	0.37	1.62	151000 33900	95500 21500	1.58	931000 209000	95500	95925
127.000 5.0000	244.475 9.6250	63.500 2.5000	582000 131000	0.37	1.62	151000 33900	95500 21500	1.58	931000 209000	95500	95962
127.000 5.0000	250.825 9.8750	63.500 2.5000	590000 133000	0.37	1.63	153000 34400	96200 21600	1.59	867000 195000	EE116050	116098
127.000 5.0000	254.000 10.0000	66.675 2.6250	611000 137000	0.41	1.47	158000 35600	110000 24800	1.43	1030000 231000	99500	99100
127.000 5.0000	254.000 10.0000	77.788 3.0625	843000 189000	0.32	1.87	218000 49100	120000 27000	1.82	1240000 279000	HH228349	HH228310
127.000 5.0000	288.925 11.3750	82.550 3.2500	977000 220000	0.32	1.88	253000 56900	138000 31100	1.83	1340000 302000	HH231637	HH231610
127.000 5.0000	295.275 11.6250	82.550 3.2500	977000 220000	0.32	1.88	253000 56900	138000 31100	1.83	1340000 302000	HH231637	HH231615
127.000 5.0000	304.800 12.0000	88.900 3.5000	904000 203000	0.73	0.82	234000 52700	292000 65700	0.80	1250000 282000	HH932132	HH932110
127.000 5.0000	311.150 12.2500	88.900 3.5000	904000 203000	0.73	0.82	234000 52700	292000 65700	0.80	1250000 282000	HH932132	HH932115
127.792 5.0312	228.600 9.0000	53.975 2.1250	458000 103000	0.74	0.81	119000 26700	150000 33700	0.79	673000 151000	HM926749	HM926710
128.588 5.0625	190.500 7.5000	34.925 1.3750	164000 36900	0.65	0.92	42500 9560	47500 10700	0.89	300000 67400	48506	48750
128.588 5.0625	206.375 8.1250	47.625 1.8750	350000 78700	0.46	1.31	90800 20400	71300 16000	1.27	593000 133000	799	792
129.975 5.1171	234.975 9.2510	64.798 2.5511	582000 131000	0.37	1.62	151000 33900	95500 21500	1.58	931000 209000	95512	95929
130.000 5.1181	185.000 7.2835	29.000 1.1417	181000 40800	0.47	1.27	47000 10600	38100 8560	1.24	283000 63600	JP13049A	JP13010
130.000 5.1181	185.000 7.2835	29.000 1.1417	181000 40800	0.47	1.27	47000 10600	38100 8560	1.24	283000 63600	JP13049	JP13010
130.000 5.1181	206.375 8.1250	47.625 1.8750	350000 78700	0.46	1.31	90800 20400	71300 16000	1.27	593000 133000	797	792
130.000 5.1181	230.000 9.0551	63.500 2.5000	582000 131000	0.37	1.62	151000 33900	95500 21500	1.58	931000 209000	95512X	95905
130.000 5.1181	234.950 9.2500	63.500 2.5000	582000 131000	0.37	1.62	151000 33900	95500 21500	1.58	931000 209000	95512X	95925
130.000 5.1181	234.975 9.2510	63.500 2.5000	582000 131000	0.37	1.62	151000 33900	95500 21500	1.58	931000 209000	95512X	95928
130.175 5.1250	196.850 7.7500	46.038 1.8125	340000 76500	0.34	1.74	88200 19800	52000 11700	1.70	625000 141000	67389	67322
130.175 5.1250	203.200 8.0000	46.038 1.8125	340000 76500	0.34	1.74	88200 19800	52000 11700	1.70	625000 141000	67389	67320
130.175 5.1250	206.375 8.1250	47.625 1.8750	350000 78700	0.46	1.31	90800 20400	71300 16000	1.27	593000 133000	799A	792
133.350 5.2500	173.038 6.8125	19.050 0.7500	89300 20100	0.35	1.72	23100 5200	13800 3100	1.68	170000 38300	LL327049	LL327010
133.350 5.2500	177.008 6.9688	25.400 1.0000	136000 30600	0.35	1.72	35300 7940	21000 4730	1.68	289000 65000	L327249	L327210
133.350 5.2500	190.500 7.5000	39.688 1.5625	262000 58900	0.32	1.87	67900 15300	37300 8390	1.82	542000 122000	48385	48320
133.350 5.2500	196.850 7.7500	46.038 1.8125	340000 76500	0.34	1.74	88200 19800	52000 11700	1.70	625000 141000	67390	67322
133.350 5.2500	196.850 7.7500	46.038 1.8125	340000 76500	0.34	1.74	88200 19800	52000 11700	1.70	625000 141000	67391	67322

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
49.428 1.9460	38.100 1.5000	13.5 0.53	3.5 0.14	143.0 5.63	156.0 6.14	3.3 0.13	219.0 8.63	200.0 7.87	9.00 0.36	6.40 0.25	295	39	0.1416	8.61 18.98
63.500 2.5000	49.212 1.9375	-14.0 -0.55	6.4 0.25	142.0 5.59	154.0 6.06	3.3 0.13	217.0 8.54	209.0 8.23	6.40 0.25	3.80 0.15	454	53.8	0.1323	11.73 25.86
63.500 2.5000	49.212 1.9375	-14.0 -0.55	6.4 0.25	142.0 5.59	154.0 6.06	3.3 0.13	217.0 8.54	213.0 8.39	6.40 0.25	3.80 0.15	454	53.8	0.1323	13.08 28.83
63.500 2.5000	47.625 1.8750	-13.5 -0.53	3.3 0.13	144.0 5.67	148.0 5.83	4.8 0.19	224.0 8.82	220.0 8.66	8.50 0.34	1.60 0.06	417	57.3	0.1279	13.61 30.00
66.675 2.6250	47.625 1.8750	-12.2 -0.48	6.4 0.25	149.0 5.87	159.0 6.26	3.3 0.13	238.0 9.37	227.0 8.94	9.70 0.38	3.50 0.14	556	73.5	0.1459	15.44 34.03
82.550 3.2500	61.912 2.4375	-23.4 -0.92	9.7 0.38	148.0 5.83	164.0 6.46	6.4 0.25	233.5 9.20	223.0 8.78	7.10 0.28	0.00 0.00	530	44.8	0.1329	17.70 39.02
87.312 3.4375	57.150 2.2500	-26.7 -1.05	13.5 0.53	150.0 5.91	174.0 6.85	6.4 0.25	263.5 10.38	255.0 10.04	12.70 0.50	1.10 0.04	601	57.7	0.1083	25.21 55.57
87.312 3.4375	57.150 2.2500	-26.7 -1.05	13.5 0.53	150.0 5.91	174.0 6.85	6.4 0.25	263.5 10.38	258.0 10.16	12.70 0.50	1.10 0.04	601	57.7	0.1083	27.02 59.58
82.550 3.2500	57.150 2.2500	1.8 0.07	6.4 0.25	172.0 6.77	182.0 7.17	6.4 0.25	288.0 11.34	260.0 10.24	21.50 0.85	8.90 0.35	514	55.6	0.1333	29.48 65.00
82.550 3.2500	57.150 2.2500	1.8 0.07	6.4 0.25	172.0 6.77	182.0 7.17	6.4 0.25	288.0 11.34	262.0 10.31	21.50 0.85	8.90 0.35	514	55.6	0.1333	30.73 67.75
49.428 1.9460	38.100 1.5000	13.5 0.53	3.5 0.14	143.0 5.63	156.0 6.14	3.3 0.13	219.0 8.63	200.0 7.87	9.00 0.36	6.40 0.25	295	39	0.1416	8.55 18.84
31.750 1.2500	25.400 1.0000	16.5 0.65	3.5 0.14	138.0 5.43	144.0 5.67	3.3 0.13	183.0 7.20	170.0 6.69	4.40 0.18	0.80 0.03	218	71.4	0.1783	3.07 6.76
47.625 1.8750	34.925 1.3750	-1.8 -0.07	3.3 0.13	140.0 5.51	146.0 5.75	3.3 0.13	198.0 7.80	186.0 7.32	5.30 0.21	2.80 0.11	326	61.9	0.1269	5.74 12.66
63.500 2.5000	49.950 1.9665	-14.0 -0.55	6.4 0.25	145.0 5.71	157.0 6.18	3.3 0.13	217.0 8.54	208.0 8.19	6.40 0.25	3.80 0.15	454	59.3	0.1323	11.52 25.41
27.000 1.0630	21.000 0.8268	8.9 0.35	6.0 0.24	137.0 5.39	149.0 5.87	3.0 0.12	179.0 7.05	172.0 6.77	2.40 0.09	4.10 0.16	192	60.3	0.1064	2.15 4.73
27.000 1.0630	21.000 0.8268	8.9 0.35	3.0 0.12	137.0 5.39	143.0 5.63	3.0 0.12	179.0 7.05	172.0 6.77	2.40 0.09	4.10 0.16	192	60.3	0.1064	2.16 4.76
47.625 1.8750	34.925 1.3750	-1.8 -0.07	3.5 0.14	141.0 5.55	148.0 5.83	3.3 0.13	198.0 7.80	186.0 7.32	5.30 0.21	2.80 0.11	326	61.9	0.1269	5.63 12.42
63.500 2.5000	49.212 1.9375	-14.0 -0.55	6.0 0.24	145.0 5.71	156.0 6.14	3.3 0.13	217.0 8.54	207.0 8.15	6.40 0.25	3.80 0.15	454	59.3	0.1323	10.71 23.60
63.500 2.5000	49.212 1.9375	-14.0 -0.55	6.0 0.24	145.0 5.71	156.0 6.14	3.3 0.13	217.0 8.54	209.0 8.23	6.40 0.25	3.80 0.15	454	59.3	0.1323	11.43 25.21
63.500 2.5000	49.212 1.9375	-14.0 -0.55	6.0 0.24	145.0 5.71	156.0 6.14	3.3 0.13	217.0 8.54	209.0 8.23	6.40 0.25	3.80 0.15	454	59.3	0.1323	11.41 25.14
46.038 1.8125	38.100 1.5000	-6.4 -0.25	3.5 0.14	141.0 5.55	146.0 5.75	3.3 0.13	189.0 7.44	180.0 7.09	4.20 0.17	1.30 0.05	384	70.1	0.1220	4.78 10.54
46.038 1.8125	38.100 1.5000	-6.4 -0.25	3.5 0.14	141.0 5.55	146.0 5.75	3.3 0.13	191.0 7.52	183.0 7.20	4.20 0.17	1.30 0.05	384	70.1	0.1220	5.38 11.86
47.625 1.8750	34.925 1.3750	-1.8 -0.07	3.5 0.14	142.0 5.59	148.0 5.83	3.3 0.13	198.0 7.80	186.0 7.32	5.30 0.21	2.80 0.11	326	61.9	0.1269	5.62 12.39
17.462 0.6875	14.288 0.5625	7.6 0.30	1.5 0.06	139.0 5.47	141.0 5.55	1.5 0.06	167.0 6.57	164.0 6.46	1.40 0.06	1.90 0.08	188	146	0.1377	1.00 2.21
26.195 1.0313	20.638 0.8125	4.1 0.16	1.5 0.06	140.0 5.51	142.0 5.59	1.5 0.06	171.0 6.73	167.0 6.57	0.80 0.03	1.70 0.07	280	156	0.1585	1.71 3.78
39.688 1.5625	33.338 1.3125	-4.1 -0.16	3.5 0.14	142.0 5.59	148.0 5.83	3.3 0.13	184.0 7.24	177.0 6.97	2.80 0.11	1.20 0.05	404	95.6	0.1209	3.56 7.85
46.038 1.8125	38.100 1.5000	-6.4 -0.25	3.5 0.14	143.0 5.63	149.0 5.87	3.3 0.13	189.0 7.44	180.0 7.09	4.20 0.17	1.30 0.05	384	70.1	0.1220	4.55 10.02
46.038 1.8125	38.100 1.5000	-6.4 -0.25	8.0 0.31	143.0 5.63	157.0 6.18	3.3 0.13	189.0 7.44	180.0 7.09	4.20 0.17	1.30 0.05	384	70.1	0.1220	4.53 10.00

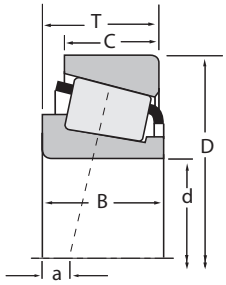
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

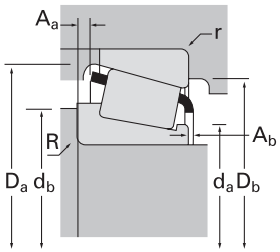
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
133.350 5.2500	203.200 8.0000	46.038 1.8125	340000 76500	0.34	1.74	88200 19800	52000 11700	1.70	625000 141000	67390	67320
133.350 5.2500	203.200 8.0000	46.038 1.8125	340000 76500	0.34	1.74	88200 19800	52000 11700	1.70	625000 141000	67391	67320
133.350 5.2500	214.975 8.4636	47.625 1.8750	354000 79500	0.49	1.23	91700 20600	76500 17200	1.20	614000 138000	74525	74845
133.350 5.2500	215.900 8.5000	47.625 1.8750	354000 79500	0.49	1.23	91700 20600	76500 17200	1.20	614000 138000	74525	74850
133.350 5.2500	215.900 8.5000	53.975 2.1250	354000 79500	0.49	1.23	91700 20600	76500 17200	1.20	614000 138000	74525	74853
133.350 5.2500	234.950 9.2500	63.500 2.5000	582000 131000	0.37	1.62	151000 33900	95500 21500	1.58	931000 209000	95525	95925
133.350 5.2500	234.950 9.2500	63.500 2.5000	582000 131000	0.37	1.62	151000 33900	95500 21500	1.58	931000 209000	95528	95925
136.525 5.3750	190.500 7.5000	39.688 1.5625	262000 58900	0.32	1.87	67900 15300	37300 8390	1.82	542000 122000	48393	48320
136.525 5.3750	203.200 8.0000	39.688 1.5625	262000 58900	0.32	1.87	67900 15300	37300 8390	1.82	542000 122000	48393	48328
136.525 5.3750	215.900 8.5000	47.625 1.8750	354000 79500	0.49	1.23	91700 20600	76500 17200	1.20	614000 138000	74537	74850
136.525 5.3750	217.488 8.5625	47.625 1.8750	354000 79500	0.49	1.23	91700 20600	76500 17200	1.20	614000 138000	74537	74856
136.525 5.3750	228.600 9.0000	57.150 2.2500	482000 108000	0.42	1.43	125000 28100	90000 20200	1.39	809000 182000	896	892
139.700 5.5000	187.325 7.3750	28.575 1.1250	177000 39800	0.36	1.69	45900 10300	27900 6270	1.65	375000 84300	LM328448	LM328410
139.700 5.5000	214.975 8.4636	47.625 1.8750	354000 79500	0.49	1.23	91700 20600	76500 17200	1.20	614000 138000	74550	74845
139.700 5.5000	215.900 8.5000	47.625 1.8750	354000 79500	0.49	1.23	91700 20600	76500 17200	1.20	614000 138000	74550	74850
139.700 5.5000	215.900 8.5000	47.625 1.8750	354000 79500	0.49	1.23	91700 20600	76500 17200	1.20	614000 138000	74550A	74850
139.700 5.5000	222.250 8.7500	34.925 1.3750	229000 51400	0.44	1.37	59300 13300	44400 9970	1.34	342000 77000	73551	73875
139.700 5.5000	228.600 9.0000	57.150 2.2500	482000 108000	0.42	1.43	125000 28100	90000 20200	1.39	809000 182000	898	892
139.700 5.5000	228.600 9.0000	57.150 2.2500	482000 108000	0.42	1.43	125000 28100	90000 20200	1.39	809000 182000	898A	892
139.700 5.5000	236.538 9.3125	57.150 2.2500	553000 124000	0.32	1.88	143000 32200	78200 17600	1.83	932000 210000	HM231132	HM231110
139.700 5.5000	241.300 9.5000	57.150 2.2500	553000 124000	0.32	1.88	143000 32200	78200 17600	1.83	932000 210000	HM231132	HM231115
139.700 5.5000	254.000 10.0000	66.675 2.6250	611000 137000	0.41	1.47	158000 35600	110000 24800	1.43	1030000 231000	99550	99100
139.700 5.5000	288.925 11.3750	82.550 3.2500	977000 220000	0.32	1.88	253000 56900	138000 31100	1.83	1340000 302000	HH231649	HH231610
139.700 5.5000	295.275 11.6250	82.550 3.2500	977000 220000	0.32	1.88	253000 56900	138000 31100	1.83	1340000 302000	HH231649	HH231615
139.700 5.5000	307.975 12.1250	88.900 3.5000	1130000 254000	0.33	1.84	293000 65900	164000 36800	1.79	1580000 354000	HH234031	HH234010
139.700 5.5000	307.975 12.1250	88.900 3.5000	1130000 254000	0.33	1.84	293000 65900	164000 36800	1.79	1580000 354000	HH234032	HH234010
140.000 5.5118	195.000 7.6772	29.000 1.1417	188000 42300	0.50	1.19	48800 11000	42000 9440	1.16	304000 68400	JP14049	JP14010
142.875 5.6250	193.675 7.6250	28.575 1.1250	182000 40900	0.37	1.63	47100 10600	29700 6690	1.59	394000 88600	36686	36620

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)														Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
46.038 1.8125	**38.100** 1.5000	**-6.4** -0.25	**3.5** 0.14	**143.0** 5.63	**149.0** 5.87	**3.3** 0.13	**191.0** 7.52	**183.0** 7.20	**4.20** 0.17	**1.30** 0.05	**384**	**70.1**	**0.1220**	**5.14** 11.34
46.038 1.8125	**38.100** 1.5000	**-6.4** -0.25	**8.0** 0.31	**143.0** 5.63	**157.0** 6.18	**3.3** 0.13	**191.0** 7.52	**183.0** 7.20	**4.20** 0.17	**1.30** 0.05	**384**	**70.1**	**0.1220**	**5.13** 11.31
47.625 1.8750	**34.925** 1.3750	**2.3** 0.09	**3.5** 0.14	**146.0** 5.75	**152.0** 5.98	**3.3** 0.13	**208.0** 8.19	**196.0** 7.72	**4.80** 0.19	**2.00** 0.08	**363**	**63.3**	**0.1338**	**6.41** 14.14
47.625 1.8750	**34.925** 1.3750	**2.3** 0.09	**3.5** 0.14	**146.0** 5.75	**152.0** 5.98	**3.3** 0.13	**208.0** 8.19	**196.0** 7.72	**4.80** 0.19	**2.00** 0.08	**363**	**63.3**	**0.1338**	**6.52** 14.38
47.625 1.8750	**47.625** 1.8750	**2.3** 0.09	**3.5** 0.14	**146.0** 5.75	**152.0** 5.98	**3.3** 0.13	**209.0** 8.23	**196.0** 7.72	**4.80** 0.19	**2.00** 0.08	**363**	**63.3**	**0.1338**	**7.20** 15.86
63.500 2.5000	**49.212** 1.9375	**-14.0** -0.55	**9.7** 0.38	**148.0** 5.83	**166.0** 6.54	**3.3** 0.13	**217.0** 8.54	**209.0** 8.23	**6.40** 0.25	**3.80** 0.15	**454**	**53.8**	**0.1323**	**10.99** 24.23
63.500 2.5000	**49.212** 1.9375	**-14.0** -0.55	**4.8** 0.19	**148.0** 5.83	**157.0** 6.18	**3.3** 0.13	**217.0** 8.54	**209.0** 8.23	**6.40** 0.25	**3.80** 0.15	**454**	**59.3**	**0.1323**	**11.11** 24.50
39.688 1.5625	**33.338** 1.3125	**-4.1** -0.16	**3.5** 0.14	**144.0** 5.67	**151.0** 5.94	**3.3** 0.13	**184.0** 7.24	**177.0** 6.97	**2.80** 0.11	**1.20** 0.05	**404**	**95.6**	**0.1209**	**3.35** 7.38
39.688 1.5625	**33.338** 1.3125	**-4.1** -0.16	**3.5** 0.14	**144.0** 5.67	**151.0** 5.94	**3.3** 0.13	**186.0** 7.32	**182.0** 7.17	**2.80** 0.11	**1.20** 0.05	**404**	**95.6**	**0.1209**	**4.37** 9.64
47.625 1.8750	**34.925** 1.3750	**2.3** 0.09	**3.5** 0.14	**148.0** 5.83	**155.0** 6.10	**3.3** 0.13	**208.0** 8.19	**196.0** 7.72	**4.80** 0.19	**2.00** 0.08	**363**	**68.5**	**0.1338**	**6.27** 13.82
47.625 1.8750	**34.925** 1.3750	**2.3** 0.09	**3.5** 0.14	**148.0** 5.83	**155.0** 6.10	**3.3** 0.13	**209.0** 8.23	**197.0** 7.76	**4.80** 0.19	**2.00** 0.08	**363**	**68.5**	**0.1338**	**6.40** 14.10
57.150 2.2500	**44.450** 1.7500	**-6.1** -0.24	**3.5** 0.14	**150.0** 5.91	**156.0** 6.14	**3.3** 0.13	**216.0** 8.50	**205.0** 8.07	**6.40** 0.25	**1.40** 0.05	**430**	**78.2**	**0.1355**	**8.95** 19.72
29.370 1.1563	**23.020** 0.9063	**3.6** 0.14	**1.5** 0.06	**147.0** 5.79	**149.0** 5.87	**1.5** 0.06	**182.0** 7.17	**176.0** 6.93	**1.20** 0.05	**1.90** 0.08	**336**	**179**	**0.1700**	**2.20** 4.85
47.625 1.8750	**34.925** 1.3750	**2.3** 0.09	**3.5** 0.14	**151.0** 5.94	**158.0** 6.22	**3.3** 0.13	**208.0** 8.19	**196.0** 7.72	**4.80** 0.19	**2.00** 0.08	**363**	**63.3**	**0.1338**	**5.91** 13.02
47.625 1.8750	**34.925** 1.3750	**2.3** 0.09	**3.5** 0.14	**151.0** 5.94	**158.0** 6.22	**3.3** 0.13	**208.0** 8.19	**196.0** 7.72	**4.80** 0.19	**2.00** 0.08	**363**	**63.3**	**0.1338**	**6.01** 13.26
47.625 1.8750	**34.925** 1.3750	**2.3** 0.09	**6.4** 0.25	**154.0** 6.06	**166.0** 6.54	**3.3** 0.13	**208.0** 8.19	**196.0** 7.72	**4.80** 0.19	**2.00** 0.08	**363**	**63.3**	**0.1338**	**6.00** 13.23
31.623 1.2450	**23.812** 0.9375	**6.4** 0.25	**3.5** 0.14	**150.0** 5.91	**156.0** 6.14	**3.3** 0.13	**207.0** 8.15	**204.0** 8.03	**5.70** 0.23	**3.90** 0.15	**244**	**82**	**0.1122**	**4.26** 9.40
57.150 2.2500	**44.450** 1.7500	**-6.1** -0.24	**3.5** 0.14	**153.0** 6.02	**160.0** 6.30	**3.3** 0.13	**216.0** 8.50	**205.0** 8.07	**6.40** 0.25	**1.40** 0.05	**430**	**78.2**	**0.1355**	**8.64** 19.04
57.150 2.2500	**44.450** 1.7500	**-6.1** -0.24	**6.4** 0.25	**153.0** 6.02	**165.0** 6.50	**3.3** 0.13	**216.0** 8.50	**205.0** 8.07	**6.40** 0.25	**1.40** 0.05	**430**	**78.2**	**0.1355**	**8.59** 18.93
56.642 2.2300	**44.450** 1.7500	**-11.4** -0.45	**3.5** 0.14	**156.0** 6.14	**160.0** 6.30	**3.3** 0.13	**224.0** 8.82	**217.0** 8.54	**4.30** 0.17	**3.70** 0.14	**533**	**85.9**	**0.1327**	**9.90** 21.82
56.642 2.2300	**44.450** 1.7500	**-11.4** -0.45	**3.5** 0.14	**156.0** 6.14	**160.0** 6.30	**3.3** 0.13	**224.0** 8.82	**219.0** 8.62	**4.30** 0.17	**3.70** 0.14	**533**	**85.9**	**0.1327**	**10.52** 23.19
66.675 2.6250	**47.625** 1.8750	**-12.2** -0.48	**7.0** 0.28	**156.0** 6.14	**170.0** 6.69	**3.3** 0.13	**238.0** 9.37	**227.0** 8.94	**9.70** 0.38	**3.50** 0.14	**556**	**73.5**	**0.1459**	**14.00** 30.87
87.312 3.4375	**57.150** 2.2500	**-26.7** -1.05	**9.7** 0.38	**161.0** 6.34	**177.0** 6.97	**6.4** 0.25	**263.5** 10.38	**255.0** 10.04	**12.70** 0.50	**1.10** 0.04	**601**	**57.7**	**0.1083**	**23.53** 51.87
87.312 3.4375	**57.150** 2.2500	**-26.7** -1.05	**9.7** 0.38	**161.0** 6.34	**177.0** 6.97	**6.4** 0.25	**263.5** 10.38	**258.0** 10.16	**12.70** 0.50	**1.10** 0.04	**601**	**57.7**	**0.1083**	**25.34** 55.87
93.662 3.6875	**66.675** 2.6250	**-26.4** -1.04	**9.7** 0.38	**168.0** 6.61	**180.0** 7.09	**6.8** 0.27	**285.5** 11.24	**276.0** 10.87	**12.50** 0.49	**-0.90** -0.04	**718**	**62.1**	**0.1157**	**30.78** 67.85
93.662 3.6875	**66.675** 2.6250	**-26.4** -1.04	**9.7** 0.38	**168.0** 6.61	**180.0** 7.09	**6.8** 0.27	**285.5** 11.24	**276.0** 10.87	**10.50** 0.42	**1.10** 0.04	**718**	**62.1**	**0.1157**	**29.48** 64.99
27.000 1.0630	**21.000** 0.8268	**11.9** 0.47	**3.0** 0.12	**148.0** 5.83	**153.0** 6.02	**3.0** 0.12	**189.0** 7.44	**182.0** 7.17	**2.60** 0.10	**4.10** 0.16	**220**	**68.1**	**0.1133**	**2.29** 5.06
28.575 1.1250	**23.020** 0.9063	**4.8** 0.19	**1.5** 0.06	**151.0** 5.94	**153.0** 6.02	**1.5** 0.06	**188.0** 7.40	**182.0** 7.17	**1.20** 0.05	**2.70** 0.11	**366**	**152**	**0.1768**	**2.43** 5.35

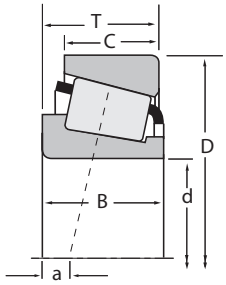
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

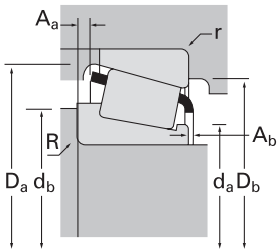
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
142.875 5.6250	200.025 7.8750	41.275 1.6250	265000 59600	0.34	1.78	68800 15500	39600 8900	1.74	560000 126000	48684	48620
142.875 5.6250	200.025 7.8750	41.275 1.6250	265000 59600	0.34	1.78	68800 15500	39600 8900	1.74	560000 126000	48685	48620
142.875 5.6250	222.250 8.7500	34.925 1.3750	229000 51400	0.44	1.37	59300 13300	44400 9970	1.34	342000 77000	73562	73875
142.875 5.6250	236.538 9.3125	57.150 2.2500	477000 107000	0.44	1.36	124000 27800	93600 21000	1.32	810000 182000	82562A	82931
142.875 5.6250	241.300 9.5000	57.150 2.2500	477000 107000	0.44	1.36	124000 27800	93600 21000	1.32	810000 182000	82562A	82950
142.875 5.6250	241.300 9.5000	57.150 2.2500	553000 124000	0.32	1.88	143000 32200	78200 17600	1.83	932000 210000	HM231136	HM231115
146.050 5.7500	188.120 7.4063	22.225 0.8750	105000 23500	0.38	1.57	27200 6100	17700 3990	1.53	214000 48200	LL529749	LL529710
146.050 5.7500	193.675 7.6250	28.575 1.1250	182000 40900	0.37	1.63	47100 10600	29700 6690	1.59	394000 88600	36690	36620
146.050 5.7500	193.675 7.6250	28.575 1.1250	182000 40900	0.37	1.63	47100 10600	29700 6690	1.59	394000 88600	36691	36620
146.050 5.7500	203.200 8.0000	28.575 1.1250	182000 40900	0.37	1.63	47100 10600	29700 6690	1.59	394000 88600	36690	36626
146.050 5.7500	203.200 8.0000	45.100 1.7756	309000 69500	0.33	1.80	80100 18000	45600 10300	1.76	573000 129000	M229349A	M229310
146.050 5.7500	203.200 8.0000	45.100 1.7756	309000 69500	0.33	1.80	80100 18000	45600 10300	1.76	573000 129000	M229349	M229310
146.050 5.7500	236.538 9.3125	57.150 2.2500	477000 107000	0.44	1.36	124000 27800	93600 21000	1.32	810000 182000	82576	82931
146.050 5.7500	241.300 9.5000	57.150 2.2500	477000 107000	0.44	1.36	124000 27800	93600 21000	1.32	810000 182000	82576	82950
146.050 5.7500	241.300 9.5000	57.150 2.2500	553000 124000	0.32	1.88	143000 32200	78200 17600	1.83	932000 210000	HM231140	HM231115
146.050 5.7500	244.475 9.6250	47.625 1.8750	372000 83600	0.35	1.71	96400 21700	58100 13100	1.66	595000 134000	81575	81962
146.050 5.7500	254.000 10.0000	66.675 2.6250	611000 137000	0.41	1.47	158000 35600	110000 24800	1.43	1030000 231000	99575	99100
146.050 5.7500	268.288 10.5625	74.612 2.9375	726000 163000	0.39	1.55	188000 42300	125000 28100	1.51	1170000 263000	EE107057	107105
146.050 5.7500	304.800 12.0000	60.325 2.3750	718000 161000	0.33	1.80	186000 41800	106000 23800	1.76	871000 196000	EE750576	751200
146.050 5.7500	304.800 12.0000	88.900 3.5000	904000 203000	0.73	0.82	234000 52700	292000 65700	0.80	1250000 282000	HH932145	HH932110
146.050 5.7500	307.975 12.1250	88.900 3.5000	975000 219000	0.33	1.84	253000 56800	141000 31700	1.79	1480000 333000	EE450577	451212
146.050 5.7500	307.975 12.1250	88.900 3.5000	1130000 254000	0.33	1.84	293000 65900	164000 36800	1.79	1580000 354000	HH234040	HH234010
146.050 5.7500	311.150 12.2500	88.900 3.5000	904000 203000	0.73	0.82	234000 52700	292000 65700	0.80	1250000 282000	HH932145	HH932115
149.225 5.8750	236.538 9.3125	57.150 2.2500	553000 124000	0.32	1.88	143000 32200	78200 17600	1.83	932000 210000	HM231148	HM231110
149.225 5.8750	236.538 9.3125	57.150 2.2500	553000 124000	0.32	1.88	143000 32200	78200 17600	1.83	932000 210000	HM231149	HM231110
149.225 5.8750	241.300 9.5000	57.150 2.2500	553000 124000	0.32	1.88	143000 32200	78200 17600	1.83	932000 210000	HM231149	HM231115
149.225 5.8750	254.000 10.0000	67.945 2.6750	611000 137000	0.41	1.47	158000 35600	110000 24800	1.43	1030000 231000	99587	99100
150.000 5.9055	203.200 8.0000	28.580 1.1250	179000 40300	0.46	1.31	46500 10500	36500 8210	1.27	339000 76100	JL730646	L730610

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

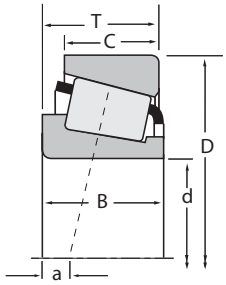
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
39.688 1.5625	34.130 1.3437	-3.0 -0.12	8.0 0.31	151.0 5.94	166.0 6.54	3.3 0.13	193.0 7.60	185.0 7.28	2.80 0.11	2.50 0.10	440	115	0.1261	3.74 8.25
39.688 1.5625	34.130 1.3437	-3.0 -0.12	3.5 0.14	151.0 5.94	158.0 6.22	3.3 0.13	193.0 7.60	185.0 7.28	2.80 0.11	2.50 0.10	440	115	0.1261	3.84 8.46
31.623 1.2450	23.812 0.9375	6.4 0.25	3.5 0.14	152.0 5.98	159.0 6.26	3.3 0.13	207.0 8.15	204.0 8.03	5.70 0.23	3.90 0.15	244	82	0.1122	4.09 9.01
56.642 2.2300	44.450 1.7500	-3.6 -0.14	8.0 0.31	157.0 6.18	172.0 6.77	3.3 0.13	226.0 8.90	213.0 8.39	5.80 0.23	2.10 0.08	460	81.1	0.1405	9.43 20.78
56.642 2.2300	44.450 1.7500	-3.6 -0.14	8.0 0.31	157.0 6.18	172.0 6.77	3.3 0.13	226.0 8.90	215.0 8.46	5.80 0.23	2.10 0.08	460	81.1	0.1405	10.05 22.15
56.642 2.2300	44.450 1.7500	-11.4 -0.45	3.5 0.14	158.0 6.22	162.0 6.38	3.3 0.13	224.0 8.82	219.0 8.62	4.30 0.17	3.70 0.14	533	85.9	0.1327	10.20 22.50
20.638 0.8125	16.670 0.6563	9.4 0.37	1.5 0.06	152.0 5.98	155.0 6.10	1.5 0.06	182.0 7.17	179.0 7.05	0.50 0.02	1.80 0.07	248	186	0.1557	1.42 3.12
28.575 1.1250	23.020 0.9063	4.8 0.19	1.5 0.06	153.0 6.02	155.0 6.10	1.5 0.06	188.0 7.40	182.0 7.17	1.20 0.05	2.70 0.11	366	121	0.1768	2.27 5.00
28.575 1.1250	23.020 0.9063	4.8 0.19	4.8 0.19	153.0 6.02	162.0 6.38	1.5 0.06	188.0 7.40	182.0 7.17	1.20 0.05	2.70 0.11	366	152	0.1768	2.23 4.91
28.575 1.1250	23.020 0.9063	4.8 0.19	1.5 0.06	153.0 6.02	155.0 6.10	1.5 0.06	190.0 7.48	186.0 7.32	1.20 0.05	2.70 0.11	366	121	0.1768	2.80 6.17
40.000 1.5748	38.100 1.5000	-2.5 -0.10	5.0 0.20	154.0 6.06	164.0 6.46	3.5 0.14	197.0 7.76	187.0 7.36	1.50 0.06	2.80 0.11	402	98	0.1220	3.99 8.79
40.000 1.5748	38.100 1.5000	-2.5 -0.10	3.5 0.14	154.0 6.06	160.0 6.30	3.5 0.14	197.0 7.76	187.0 7.36	1.50 0.06	2.80 0.11	402	98	0.1220	4.00 8.81
56.642 2.2300	44.450 1.7500	-3.6 -0.14	3.5 0.14	160.0 6.30	166.0 6.54	3.3 0.13	226.0 8.90	213.0 8.39	5.80 0.23	2.10 0.08	460	81.1	0.1405	9.20 20.28
56.642 2.2300	44.450 1.7500	-3.6 -0.14	3.5 0.14	160.0 6.30	166.0 6.54	3.3 0.13	226.0 8.90	215.0 8.46	5.80 0.23	2.10 0.08	460	81.1	0.1405	9.82 21.65
56.642 2.2300	44.450 1.7500	-11.4 -0.45	3.5 0.14	160.0 6.30	164.0 6.46	3.3 0.13	224.0 8.82	219.0 8.62	4.30 0.17	3.70 0.14	533	85.9	0.1327	9.88 21.79
50.005 1.9687	33.338 1.3125	-5.3 -0.21	3.5 0.14	161.0 6.34	166.0 6.54	3.3 0.13	229.0 9.02	225.0 8.86	8.30 0.33	-0.10 0.00	413	98.4	0.1250	8.19 18.06
66.675 2.6250	47.625 1.8750	-12.2 -0.48	7.0 0.28	162.0 6.38	175.0 6.89	3.3 0.13	238.0 9.37	227.0 8.94	9.70 0.38	3.50 0.14	556	73.5	0.1459	13.25 29.22
74.612 2.9375	57.150 2.2500	-15.0 -0.59	6.4 0.25	166.0 6.54	176.0 6.93	6.4 0.25	249.5 9.82	237.0 9.33	7.70 0.30	3.00 0.12	606	76.3	0.1163	17.37 38.30
61.912 2.4375	41.275 1.6250	-10.7 -0.42	3.3 0.13	172.0 6.77	167.0 6.57	6.4 0.25	272.0 10.71	270.0 10.63	6.70 0.26	3.50 0.14	431	54.4	0.0974	17.64 38.90
82.550 3.2500	57.150 2.2500	1.8 0.07	6.4 0.25	174.5 6.87	195.0 7.68	6.4 0.25	288.0 11.34	260.0 10.24	21.50 0.85	8.90 0.35	514	55.6	0.1333	26.84 59.16
93.662 3.6875	61.912 2.4375	-28.2 -1.11	9.7 0.38	172.0 6.77	185.0 7.28	6.8 0.27	275.0 10.82	269.0 10.59	17.90 0.70	-2.80 -0.11	747	76.3	0.1176	29.59 65.24
93.662 3.6875	66.675 2.6250	-26.4 -1.04	9.7 0.38	173.0 6.81	186.0 7.32	6.8 0.27	285.5 11.24	276.0 10.87	10.50 0.42	0.80 0.03	718	62.1	0.1157	28.43 62.67
82.550 3.2500	57.150 2.2500	1.8 0.07	6.4 0.25	174.5 6.87	195.0 7.68	6.4 0.25	288.0 11.34	262.0 10.31	21.50 0.85	8.90 0.35	514	55.6	0.1333	28.08 61.91
56.642 2.2300	44.450 1.7500	-11.4 -0.45	6.4 0.25	163.0 6.42	172.0 6.77	3.3 0.13	224.0 8.82	217.0 8.54	4.30 0.17	3.70 0.14	533	85.9	0.1327	8.88 19.59
56.642 2.2300	44.450 1.7500	-11.4 -0.45	3.5 0.14	163.0 6.42	167.0 6.57	3.3 0.13	224.0 8.82	217.0 8.54	4.30 0.17	3.70 0.14	533	85.9	0.1327	8.94 19.70
56.642 2.2300	44.450 1.7500	-11.4 -0.45	3.5 0.14	163.0 6.42	167.0 6.57	3.3 0.13	224.0 8.82	219.0 8.62	4.30 0.17	3.70 0.14	533	85.9	0.1327	9.56 21.07
66.675 2.6250	47.625 1.8750	-12.2 -0.48	7.0 0.28	165.0 6.50	178.0 7.01	3.3 0.13	238.0 9.37	227.0 8.94	9.70 0.38	3.50 0.14	556	73.5	0.1459	12.87 28.37
28.575 1.1250	21.438 0.8440	11.4 0.45	3.3 0.13	158.0 6.22	164.0 6.46	3.3 0.13	198.0 7.80	190.0 7.48	2.40 0.10	1.40 0.06	295	103	0.1763	2.49 5.48

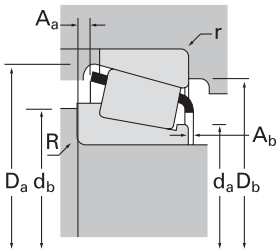
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
150.000 5.9055	205.000 8.0709	28.580 1.1250	179000 40300	0.46	1.31	46500 10500	36500 8210	1.27	339000 76100	JL730646	JL730612
150.000 5.9055	244.475 9.6250	47.625 1.8750	372000 83600	0.35	1.71	96400 21700	58100 13100	1.66	595000 134000	81590	81962
150.000 5.9055	245.000 9.6457	47.625 1.8750	372000 83600	0.35	1.71	96400 21700	58100 13100	1.66	595000 134000	81590	81964
150.812 5.9375	244.475 9.6250	47.625 1.8750	372000 83600	0.35	1.71	96400 21700	58100 13100	1.66	595000 134000	81593	81962
152.400 6.0000	192.088 7.5625	25.000 0.9843	132000 29700	0.42	1.44	34200 7690	24400 5480	1.40	277000 62200	L630349	L630310
152.400 6.0000	203.200 8.0000	28.575 1.1250	179000 40300	0.46	1.31	46500 10500	36500 8210	1.27	339000 76100	L730649	L730610
152.400 6.0000	203.200 8.0000	41.275 1.6250	262000 59000	0.35	1.73	68000 15300	40400 9090	1.68	556000 125000	LM330448	LM330410
152.400 6.0000	244.475 9.6250	47.625 1.8750	372000 83600	0.35	1.71	96400 21700	58100 13100	1.66	595000 134000	81600	81962
152.400 6.0000	249.974 9.8415	66.675 2.6250	611000 137000	0.41	1.47	158000 35600	110000 24800	1.43	1030000 231000	99600	99097
152.400 6.0000	250.000 9.8425	66.675 2.6250	611000 137000	0.41	1.47	158000 35600	110000 24800	1.43	1030000 231000	99600	99098X
152.400 6.0000	254.000 10.0000	66.675 2.6250	611000 137000	0.41	1.47	158000 35600	110000 24800	1.43	1030000 231000	99600	99100
152.400 6.0000	268.288 10.5625	74.612 2.9375	726000 163000	0.39	1.55	188000 42300	125000 28100	1.51	1170000 263000	EE107060	107105
152.400 6.0000	285.750 11.2500	76.200 3.0000	701000 158000	0.40	1.49	182000 40800	125000 28100	1.45	1060000 237000	EE217060	217112
152.400 6.0000	307.975 12.1250	88.900 3.5000	975000 219000	0.33	1.84	253000 56800	141000 31700	1.79	1480000 333000	EE450601	451212
152.400 6.0000	307.975 12.1250	88.900 3.5000	1130000 254000	0.33	1.84	293000 65900	164000 36800	1.79	1580000 354000	HH234048	HH234010
152.400 6.0000	307.975 12.1250	88.900 3.5000	1130000 254000	0.33	1.84	293000 65900	164000 36800	1.79	1580000 354000	HH234049	HH234010
152.400 6.0000	317.500 12.5000	88.900 3.5000	1130000 254000	0.33	1.84	293000 65900	164000 36800	1.79	1580000 354000	HH234049	HH234018
155.575 6.1250	330.200 13.0000	85.725 3.3750	960000 216000	0.81	0.74	249000 56000	345000 77500	0.72	1400000 316000	H936340	H936310
155.575 6.1250	336.550 13.2500	85.725 3.3750	960000 216000	0.81	0.74	249000 56000	345000 77500	0.72	1400000 316000	H936340	H936313
155.575 6.1250	342.900 13.5000	85.725 3.3750	960000 216000	0.81	0.74	249000 56000	345000 77500	0.72	1400000 316000	H936340	H936316
158.750 6.2500	205.583 8.0938	23.812 0.9375	136000 30600	0.37	1.61	35300 7930	22500 5060	1.57	280000 63000	L432348	L432310
158.750 6.2500	225.425 8.8750	41.275 1.6250	281000 63100	0.38	1.57	72800 16400	47800 10700	1.52	635000 143000	46780	46720
158.750 6.2500	285.750 11.2500	76.200 3.0000	701000 158000	0.40	1.49	182000 40800	125000 28100	1.45	1060000 237000	EE217062X	217112
158.750 6.2500	304.800 12.0000	66.675 2.6250	591000 133000	0.36	1.67	153000 34500	94500 21200	1.62	867000 195000	EE280626	281200
159.951 6.2973	244.475 9.6250	47.625 1.8750	372000 83600	0.35	1.71	96400 21700	58100 13100	1.66	595000 134000	81629	81962
159.951 6.2973	244.475 9.6250	47.625 1.8750	372000 83600	0.35	1.71	96400 21700	58100 13100	1.66	595000 134000	81630	81962
160.000 6.2992	240.000 9.4488	46.000 1.8110	393000 88400	0.44	1.37	102000 22900	76300 17200	1.34	759000 171000	JM734445	JM734410
160.325 6.3120	288.925 11.3750	63.500 2.5000	763000 171000	0.32	1.88	198000 44500	108000 24300	1.83	1240000 278000	HM237532	HM237510

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
28.575 1.1250	21.438 0.8440	11.4 0.45	3.3 0.13	158.0 6.22	164.0 6.46	3.3 0.13	198.0 7.80	190.0 7.48	2.40 0.10	1.40 0.06	295	103	0.1763	2.61 5.76
50.005 1.9687	33.338 1.3125	-5.3 -0.21	3.5 0.14	163.0 6.42	169.0 6.65	3.3 0.13	229.0 9.02	225.0 8.86	8.30 0.33	-0.10 0.00	413	98.4	0.1250	7.87 17.36
50.005 1.9687	33.338 1.3125	-5.3 -0.21	3.5 0.14	163.0 6.42	169.0 6.65	3.3 0.13	229.0 9.02	225.0 8.86	8.30 0.33	-0.10 0.00	413	98.4	0.1250	7.92 17.46
50.005 1.9687	33.338 1.3125	-5.3 -0.21	3.5 0.14	164.0 6.46	169.0 6.65	3.3 0.13	229.0 9.02	225.0 8.86	8.30 0.33	-0.10 0.00	413	98.4	0.1250	7.80 17.21
24.000 0.9449	19.000 0.7480	10.2 0.40	2.0 0.08	158.0 6.22	162.0 6.38	2.0 0.08	187.0 7.36	183.0 7.20	1.90 0.08	2.50 0.10	293	164	0.1698	1.56 3.44
28.575 1.1250	21.438 0.8440	11.4 0.45	3.3 0.13	160.0 6.30	165.0 6.50	3.3 0.13	198.0 7.80	190.0 7.48	2.40 0.10	1.40 0.06	295	103	0.1763	2.35 5.18
41.275 1.6250	34.925 1.3750	-1.8 -0.07	3.3 0.13	162.0 6.37	166.0 6.54	3.3 0.13	197.0 7.76	189.0 7.44	2.90 0.11	0.90 0.04	456	135	0.1289	3.51 7.74
50.005 1.9687	33.338 1.3125	-5.3 -0.21	3.5 0.14	165.0 6.50	171.0 6.73	3.3 0.13	229.0 9.02	225.0 8.86	8.30 0.33	-0.10 0.00	413	98.4	0.1250	7.64 16.84
66.675 2.6250	53.400 2.1024	-12.2 -0.48	7.0 0.28	169.5 6.68	181.0 7.13	3.0 0.12	240.0 9.44	226.0 8.90	9.70 0.38	3.50 0.14	556	66.7	0.1459	12.05 26.56
66.675 2.6250	47.625 1.8750	-12.2 -0.48	7.0 0.28	169.5 6.68	181.0 7.13	3.3 0.13	238.0 9.37	226.0 8.90	9.70 0.38	3.50 0.14	556	66.7	0.1459	11.85 26.13
66.675 2.6250	47.625 1.8750	-12.2 -0.48	7.0 0.28	169.5 6.68	181.0 7.13	3.3 0.13	238.0 9.37	227.0 8.94	9.70 0.38	3.50 0.14	556	66.7	0.1459	12.47 27.50
74.612 2.9375	57.150 2.2500	-15.0 -0.59	6.4 0.25	171.0 6.73	181.0 7.13	6.4 0.25	249.5 9.82	237.0 9.33	7.70 0.30	3.00 0.12	606	76.3	0.1163	16.50 36.38
73.025 2.8750	55.562 2.1875	-15.0 -0.59	1.5 0.06	171.0 6.73	171.0 6.73	6.4 0.25	260.5 10.25	251.0 9.88	15.00 0.59	1.70 0.07	556	71.8	0.1140	19.41 42.80
93.662 3.6875	61.912 2.4375	-28.2 -1.11	9.7 0.38	177.0 6.97	189.0 7.44	6.8 0.27	275.0 10.82	269.0 10.59	17.90 0.70	-2.80 -0.11	747	76.3	0.1176	28.50 62.82
93.662 3.6875	66.675 2.6250	-26.4 -1.04	9.7 0.38	179.0 7.05	191.0 7.52	6.8 0.27	285.5 11.24	276.0 10.87	12.50 0.49	-0.90 -0.04	718	62.1	0.1157	28.63 63.11
93.662 3.6875	66.675 2.6250	-26.4 -1.04	9.7 0.38	179.0 7.05	191.0 7.52	6.8 0.27	285.5 11.24	276.0 10.87	10.50 0.42	0.80 0.03	718	62.1	0.1157	27.33 60.25
93.662 3.6875	66.675 2.6250	-26.4 -1.04	9.7 0.38	179.0 7.05	191.0 7.52	6.8 0.27	285.5 11.24	280.0 11.02	10.50 0.42	0.80 0.03	718	62.1	0.1157	29.75 65.59
79.375 3.1250	53.975 2.1250	16.8 0.66	6.4 0.25	192.5 7.58	209.0 8.23	6.4 0.25	311.5 12.26	282.0 11.10	18.40 0.72	9.20 0.36	638	69.1	0.1475	31.49 69.42
79.375 3.1250	53.975 2.1250	16.8 0.66	6.4 0.25	192.5 7.58	209.0 8.23	6.4 0.25	311.0 12.24	285.0 11.22	18.40 0.72	9.20 0.36	638	69.1	0.1475	32.89 72.51
79.375 3.1250	53.975 2.1250	16.8 0.66	6.4 0.25	192.5 7.58	209.0 8.23	6.4 0.25	311.5 12.26	287.0 11.30	18.40 0.72	9.20 0.36	638	69.1	0.1475	34.32 75.66
23.812 0.9375	18.258 0.7188	9.4 0.37	4.8 0.19	166.0 6.54	174.0 6.85	1.5 0.06	199.0 7.83	195.0 7.68	2.00 0.08	1.20 0.05	320	177	0.1683	1.85 4.09
39.688 1.5625	33.338 1.3125	2.5 0.10	3.5 0.14	169.0 6.65	176.0 6.93	3.3 0.13	218.0 8.58	209.0 8.23	4.00 0.16	2.00 0.08	572	133	0.1432	5.15 11.34
73.025 2.8750	55.562 2.1875	-15.0 -0.59	13.5 0.53	176.0 6.93	200.0 7.87	6.4 0.25	260.5 10.25	251.0 9.88	15.00 0.59	1.70 0.07	556	71.8	0.1140	18.84 41.54
69.106 2.7207	42.862 1.6875	-12.2 -0.48	6.4 0.25	180.0 7.09	192.0 7.56	3.3 0.13	282.5 11.12	279.0 10.98	15.20 0.60	0.90 0.04	591	86	0.1115	19.79 43.62
50.005 1.9687	33.338 1.3125	-5.3 -0.21	3.5 0.14	165.0 6.50	176.0 6.93	3.3 0.13	229.0 9.02	225.0 8.86	8.30 0.33	-0.10 0.00	413	98.4	0.1250	7.03 15.49
46.830 1.8437	33.338 1.3125	-5.3 -0.21	3.5 0.14	171.0 6.73	176.0 6.93	3.3 0.13	229.0 9.02	225.0 8.86	8.30 0.33	3.10 0.12	413	98.4	0.1250	6.88 15.18
44.500 1.7520	37.000 1.4567	5.1 0.20	3.0 0.12	173.0 6.81	178.0 7.01	2.5 0.10	232.0 9.13	222.0 8.74	2.70 0.11	4.00 0.16	548	117	0.1164	7.16 15.78
63.500 2.5000	47.625 1.8750	-11.7 -0.46	7.0 0.28	181.0 7.13	192.0 7.56	3.3 0.13	271.5 10.68	266.0 10.47	5.80 0.23	4.10 0.16	751	101	0.1168	17.34 38.23

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

[7] Compound radius on inner race. Details on drawing for bearing.

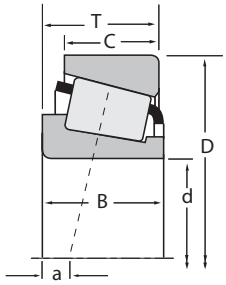
[8] Pin-type cage. Please consult The Timken Company.

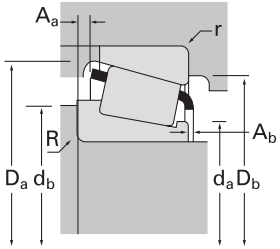
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
165.100 6.5000	215.900 8.5000	26.195 1.0313	165000 37200	0.36	1.65	42900 9640	26800 6010	1.60	335000 75300	L433749	L433710
165.100 6.5000	225.425 8.8750	41.275 1.6250	281000 63100	0.38	1.57	72800 16400	47800 10700	1.52	635000 143000	46790	46720
165.100 6.5000	225.425 8.8750	41.275 1.6250	281000 63100	0.38	1.57	72800 16400	47800 10700	1.52	635000 143000	46790A	46720
165.100 6.5000	247.650 9.7500	47.625 1.8750	375000 84300	0.44	1.36	97200 21900	73200 16500	1.33	779000 175000	67780	67720
165.100 6.5000	254.000 10.0000	46.038 1.8125	389000 87400	0.37	1.62	101000 22700	63800 14300	1.58	644000 145000	86650	86100
165.100 6.5000	288.925 11.3750	63.500 2.5000	611000 137000	0.47	1.28	159000 35600	127000 28600	1.25	1070000 242000	94649	94113
165.100 6.5000	288.925 11.3750	63.500 2.5000	763000 171000	0.32	1.88	198000 44500	108000 24300	1.83	1240000 278000	HM237535	HM237510
165.100 6.5000	288.925 11.3750	63.500 2.5000	763000 171000	0.32	1.88	198000 44500	108000 24300	1.83	1240000 278000	HM237536	HM237510
165.100 6.5000	298.450 11.7500	82.550 3.2500	909000 204000	0.38	1.59	236000 53000	152000 34300	1.55	1520000 341000	EE219065	219117
165.100 6.5000	311.150 12.2500	82.550 3.2500	909000 204000	0.38	1.59	236000 53000	152000 34300	1.55	1520000 341000	EE219065	219122
165.100 6.5000	311.150 12.2500	82.550 3.2500	1040000 233000	0.33	1.81	269000 60400	152000 34200	1.77	1680000 378000	H238140	H238110
165.100 6.5000	336.550 13.2500	92.075 3.6250	1290000 291000	0.37	1.62	336000 75400	213000 47900	1.57	1930000 434000	HH437549	HH437510
165.100 6.5000	361.950 14.2500	106.362 4.1875	1420000 319000	0.33	1.79	367000 82600	211000 47300	1.74	1950000 439000	EE108065	108142
165.100 6.5000	365.049 14.3720	92.075 3.6250	1080000 243000	0.40	1.49	280000 63000	193000 43300	1.45	1820000 409000	EE420651	421437
166.687 6.5625	225.425 8.8750	41.275 1.6250	281000 63100	0.38	1.57	72800 16400	47800 10700	1.52	635000 143000	46792	46720
168.275 6.6250	247.650 9.7500	47.625 1.8750	375000 84300	0.44	1.36	97200 21900	73200 16500	1.33	779000 175000	67782	67720
168.275 6.6250	330.200 13.0000	85.725 3.3750	960000 216000	0.81	0.74	249000 56000	345000 77500	0.72	1400000 316000	H936349	H936310
168.275 6.6250	342.900 13.5000	85.725 3.3750	960000 216000	0.81	0.74	249000 56000	345000 77500	0.72	1400000 316000	H936349	H936316
170.000 6.6929	230.000 9.0551	39.000 1.5354	310000 69700	0.38	1.57	80400 18100	52700 11900	1.52	590000 133000	JHM534149	JHM534110
170.000 6.6929	240.000 9.4488	46.000 1.8110	393000 88400	0.44	1.37	102000 22900	76300 17200	1.34	759000 171000	JM734449	JM734410
170.000 6.6929	254.000 10.0000	46.038 1.8125	389000 87400	0.37	1.62	101000 22700	63800 14300	1.58	644000 145000	86669	86100
170.000 6.6929	254.000 10.0000	46.038 1.8125	438000 98500	0.32	1.88	114000 25500	62000 13900	1.83	740000 166000	M235149	M235113
171.450 6.7500	260.350 10.2500	66.675 2.6250	605000 136000	0.40	1.49	157000 35300	108000 24300	1.45	1180000 265000	HM535349	HM535310
174.625 6.8750	247.650 9.7500	47.625 1.8750	375000 84300	0.44	1.36	97200 21900	73200 16500	1.33	779000 175000	67786	67720
174.625 6.8750	247.650 9.7500	47.625 1.8750	375000 84300	0.44	1.36	97200 21900	73200 16500	1.33	779000 175000	67787	67720
174.625 6.8750	260.350 10.2500	53.975 2.1250	497000 112000	0.33	1.80	129000 29000	73400 16500	1.76	933000 210000	M236845	M236810
174.625 6.8750	288.925 11.3750	63.500 2.5000	611000 137000	0.47	1.28	159000 35600	127000 28600	1.25	1070000 242000	94687	94113
174.625 6.8750	298.450 11.7500	82.550 3.2500	909000 204000	0.38	1.59	236000 53000	152000 34300	1.55	1520000 341000	EE219068	219117

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	$a^{(3)}$	$R^{(4)}$	d_a	d_b	$r^{(4)}$	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
26.195 1.0313	**20.638** 0.8125	**8.6** 0.34	**1.5** 0.06	**172.0** 6.77	**174.0** 6.85	**1.5** 0.06	**209.0** 8.23	**205.0** 8.07	**2.50** 0.10	**1.40** 0.06	**365**	**168**	**0.1748**	**2.35** 5.18
39.688 1.5625	**33.338** 1.3125	**2.5** 0.10	**3.5** 0.14	**174.0** 6.85	**181.0** 7.13	**3.3** 0.13	**218.0** 8.58	**209.0** 8.23	**4.00** 0.16	**2.00** 0.08	**572**	**175**	**0.1432**	**4.64** 10.24
39.687 1.5625	**33.338** 1.3125	**2.5** 0.10	**8.0** 0.31	**174.0** 6.85	**189.0** 7.44	**3.3** 0.13	**218.0** 8.58	**209.0** 8.23	**4.00** 0.16	**2.00** 0.08	**572**	**154**	**0.1432**	**4.54** 10.01
47.625 1.8750	**38.100** 1.5000	**4.8** 0.19	**3.5** 0.14	**179.0** 7.05	**185.0** 7.28	**3.3** 0.13	**240.0** 9.45	**229.0** 9.02	**4.80** 0.19	**1.80** 0.07	**622**	**122**	**0.1214**	**7.95** 17.53
46.038 1.8125	**33.338** 1.3125	**-1.5** -0.06	**4.8** 0.19	**176.0** 6.93	**185.0** 7.28	**3.3** 0.13	**239.0** 9.41	**234.0** 9.21	**6.90** 0.27	**1.90** 0.08	**466**	**112**	**0.1041**	**7.55** 16.65
63.500 2.5000	**47.625** 1.8750	**-0.8** -0.03	**7.0** 0.28	**186.0** 7.32	**197.0** 7.76	**3.3** 0.13	**272.0** 10.71	**259.0** 10.20	**6.80** 0.27	**5.20** 0.21	**692**	**93.8**	**0.1287**	**16.98** 37.44
63.500 2.5000	**47.625** 1.8750	**-11.7** -0.46	**7.0** 0.28	**184.0** 7.24	**195.0** 7.68	**3.3** 0.13	**271.5** 10.68	**266.0** 10.47	**5.80** 0.23	**4.10** 0.16	**751**	**101**	**0.1168**	**16.73** 36.89
63.500 2.5000	**47.625** 1.8750	**-11.7** -0.46	**7.0** 0.28	**187.0** 7.36	**195.0** 7.68	**3.3** 0.13	**271.5** 10.68	**266.0** 10.47	**5.80** 0.23	**4.10** 0.16	**751**	**101**	**0.1168**	**16.72** 36.85
82.550 3.2500	**63.500** 2.5000	**-15.2** -0.60	**6.4** 0.25	**185.0** 7.28	**196.0** 7.72	**6.4** 0.25	**282.0** 11.10	**269.0** 10.59	**10.00** 0.39	**0.20** 0.01	**841**	**94.9**	**0.1286**	**23.74** 52.33
82.550 3.2500	**63.500** 2.5000	**-15.2** -0.60	**6.4** 0.25	**185.0** 7.28	**196.0** 7.72	**6.4** 0.25	**282.0** 11.10	**275.0** 10.83	**10.00** 0.39	**0.20** 0.01	**841**	**94.9**	**0.1286**	**26.75** 58.97
82.550 3.2500	**65.088** 2.5625	**-18.5** -0.73	**6.4** 0.25	**188.0** 7.40	**198.0** 7.80	**6.4** 0.25	**288.5** 11.36	**280.0** 11.02	**8.20** 0.32	**2.10** 0.08	**914**	**92.1**	**0.1265**	**27.13** 59.80
95.250 3.7500	**69.850** 2.7500	**-21.3** -0.84	**3.3** 0.13	**196.0** 7.72	**196.0** 7.72	**6.4** 0.25	**308.0** 12.12	**297.0** 11.69	**11.70** 0.46	**1.00** 0.04	**910**	**75**	**0.1310**	**37.04** 81.66
104.775 4.1250	**76.200** 3.0000	**-32.8** -1.29	**13.5** 0.53	**194.0** 7.64	**215.0** 8.46	**3.3** 0.13	**329.0** 12.95	**323.0** 12.72	**16.90** 0.66	**5.60** 0.22	**942**	**71.4**	**0.1274**	**47.23** 104.13
88.897 3.4999	**63.500** 2.5000	**-15.5** -0.61	**9.7** 0.38	**199.0** 7.83	**215.0** 8.46	**3.3** 0.13	**334.5** 13.16	**329.0** 12.95	**19.10** 0.75	**2.40** 0.10	**1150**	**128**	**0.1450**	**44.52** 98.14
39.687 1.5625	**33.338** 1.3125	**2.5** 0.10	**3.5** 0.14	**175.0** 6.89	**182.0** 7.17	**3.3** 0.13	**218.0** 8.58	**209.0** 8.23	**4.00** 0.16	**2.00** 0.08	**572**	**154**	**0.1432**	**4.51** 9.95
47.625 1.8750	**38.100** 1.5000	**4.8** 0.19	**3.5** 0.14	**181.0** 7.13	**187.0** 7.36	**3.3** 0.13	**240.0** 9.45	**229.0** 9.02	**4.80** 0.19	**1.80** 0.07	**622**	**122**	**0.1214**	**7.64** 16.85
79.375 3.1250	**53.975** 2.1250	**16.8** 0.66	**6.4** 0.25	**192.5** 7.58	**218.0** 8.58	**6.4** 0.25	**311.5** 12.26	**282.0** 11.10	**18.40** 0.72	**9.20** 0.36	**638**	**69.1**	**0.1475**	**29.48** 64.99
79.375 3.1250	**53.975** 2.1250	**16.8** 0.66	**6.4** 0.25	**192.5** 7.58	**218.0** 8.58	**6.4** 0.25	**311.5** 12.26	**287.0** 11.30	**18.40** 0.72	**9.20** 0.36	**638**	**69.1**	**0.1475**	**32.31** 71.22
38.000 1.4961	**31.000** 1.2205	**4.6** 0.18	**3.0** 0.12	**178.0** 7.01	**184.0** 7.24	**2.5** 0.10	**224.0** 8.82	**217.0** 8.54	**1.00** 0.04	**3.40** 0.13	**480**	**89.8**	**0.1350**	**4.29** 9.46
44.500 1.7520	**37.000** 1.4567	**5.1** 0.20	**3.0** 0.12	**180.0** 7.09	**185.0** 7.28	**2.5** 0.10	**232.0** 9.13	**222.0** 8.74	**2.70** 0.11	**4.00** 0.16	**548**	**117**	**0.1164**	**6.25** 13.79
46.038 1.8125	**33.338** 1.3125	**-1.5** -0.06	**4.8** 0.19	**180.0** 7.09	**189.0** 7.44	**3.3** 0.13	**239.0** 9.41	**234.0** 9.21	**6.90** 0.27	**1.90** 0.08	**466**	**112**	**0.1041**	**7.09** 15.63
46.038 1.8125	**33.338** 1.3125	**-4.6** -0.18	**4.8** 0.19	**182.0** 7.17	**189.0** 7.44	**3.3** 0.13	**240.0** 9.45	**235.0** 9.25	**4.90** 0.19	**3.00** 0.12	**531**	**107**	**0.1037**	**7.30** 16.09
66.675 2.6250	**52.388** 2.0625	**-8.6** -0.34	**3.5** 0.14	**188.0** 7.40	**192.0** 7.56	**3.3** 0.13	**250.0** 9.84	**236.0** 9.29	**6.00** 0.24	**2.10** 0.08	**750**	**116**	**0.1263**	**12.16** 26.80
47.625 1.8750	**38.100** 1.5000	**4.8** 0.19	**8.0** 0.31	**185.0** 7.28	**200.0** 7.87	**3.3** 0.13	**240.0** 9.45	**229.0** 9.02	**4.80** 0.19	**1.80** 0.07	**622**	**122**	**0.1214**	**6.89** 15.20
47.625 1.8750	**38.100** 1.5000	**4.8** 0.19	**3.5** 0.14	**185.0** 7.28	**192.0** 7.56	**3.3** 0.13	**240.0** 9.45	**229.0** 9.02	**4.80** 0.19	**1.80** 0.07	**622**	**122**	**0.1214**	**7.00** 15.44
53.975 2.1250	**41.275** 1.6250	**-6.6** -0.26	**3.5** 0.14	**189.0** 7.44	**193.0** 7.60	**3.3** 0.13	**249.0** 9.80	**241.0** 9.49	**4.60** 0.18	**3.20** 0.13	**691**	**100**	**0.1150**	**9.41** 20.75
63.500 2.5000	**47.625** 1.8750	**-0.8** -0.03	**7.0** 0.28	**193.0** 7.60	**204.0** 8.03	**3.3** 0.13	**272.0** 10.71	**259.0** 10.20	**6.80** 0.27	**5.20** 0.21	**692**	**93.8**	**0.1287**	**15.72** 34.65
82.550 3.2500	**63.500** 2.5000	**-15.2** -0.60	**6.4** 0.25	**193.0** 7.60	**204.0** 8.03	**6.4** 0.25	**282.0** 11.10	**269.0** 10.59	**10.00** 0.39	**0.20** 0.01	**841**	**94.9**	**0.1286**	**22.09** 48.70

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

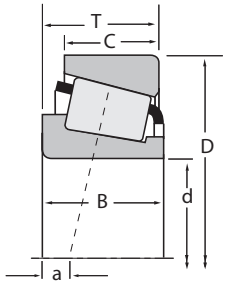
[7] Compound radius on inner race. Details on drawing for bearing.

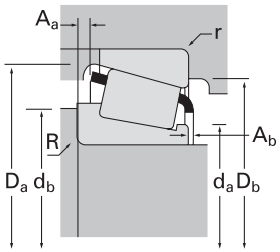
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
174.625 6.8750	311.150 12.2500	82.550 3.2500	909000 204000	0.38	1.59	236000 53000	152000 34300	1.55	1520000 341000	EE219068	219122
174.625 6.8750	311.150 12.2500	82.550 3.2500	1040000 233000	0.33	1.81	269000 60400	152000 34200	1.77	1680000 378000	H238148	H238110
177.800 7.0000	215.900 8.5000	20.638 0.8125	113000 25500	0.45	1.33	29400 6600	22600 5090	1.30	252000 56600	LL735449	LL735410
177.800 7.0000	247.650 9.7500	47.625 1.8750	375000 84300	0.44	1.36	97200 21900	73200 16500	1.33	779000 175000	67790	67720
177.800 7.0000	247.650 9.7500	47.625 1.8750	375000 84300	0.44	1.36	97200 21900	73200 16500	1.33	779000 175000	67791	67720
177.800 7.0000	260.350 10.2500	53.975 2.1250	497000 112000	0.33	1.80	129000 29000	73400 16500	1.76	933000 210000	M236848	M236810
177.800 7.0000	260.350 10.2500	53.975 2.1250	497000 112000	0.33	1.80	129000 29000	73400 16500	1.76	933000 210000	M236849	M236810
177.800 7.0000	269.875 10.6250	55.562 2.1875	508000 114000	0.33	1.80	132000 29600	74900 16800	1.76	999000 225000	M238840	M238810
177.800 7.0000	288.925 11.3750	63.500 2.5000	611000 137000	0.47	1.28	159000 35600	127000 28600	1.25	1070000 242000	94700	94113
177.800 7.0000	288.925 11.3750	63.500 2.5000	763000 171000	0.32	1.88	198000 44500	108000 24300	1.83	1240000 278000	HM237545	HM237510
177.800 7.0000	298.450 11.7500	63.500 2.5000	611000 137000	0.47	1.28	159000 35600	127000 28600	1.25	1070000 242000	94700	94118
177.800 7.0000	319.964 12.5970	88.900 3.5000	1030000 231000	0.32	1.88	267000 59900	145000 32700	1.83	1580000 356000	H239640	H239610
177.800 7.0000	320.675 12.6250	88.900 3.5000	1030000 231000	0.32	1.88	267000 59900	145000 32700	1.83	1580000 356000	H239640	H239612
177.800 7.0000	327.025 12.8750	90.488 3.5625	997000 224000	0.37	1.64	258000 58100	162000 36300	1.60	1580000 354000	EE470078X	470128
177.800 7.0000	330.200 13.0000	90.488 3.5625	997000 224000	0.37	1.64	258000 58100	162000 36300	1.60	1580000 354000	EE470073	470130
177.800 7.0000	330.200 13.0000	90.488 3.5625	997000 224000	0.37	1.64	258000 58100	162000 36300	1.60	1580000 354000	EE470078X	470130
177.800 7.0000	336.550 13.2500	90.488 3.5625	997000 224000	0.37	1.64	258000 58100	162000 36300	1.60	1580000 354000	EE470073	470132
177.800 7.0000	355.600 14.0000	61.912 2.4375	811000 182000	0.40	1.50	210000 47300	144000 32300	1.46	1080000 243000	EE780705	781400
177.800 7.0000	360.000 14.1732	92.075 3.6250	1080000 243000	0.40	1.49	280000 63000	193000 43300	1.45	1820000 409000	EE420701	421417
177.800 7.0000	365.049 14.3720	92.075 3.6250	1080000 243000	0.40	1.49	280000 63000	193000 43300	1.45	1820000 409000	EE420701	421437
177.800 7.0000	368.300 14.5000	92.075 3.6250	1080000 243000	0.40	1.49	280000 63000	193000 43300	1.45	1820000 409000	EE420701	421450
177.800 7.0000	428.625 16.8750	106.362 4.1875	1280000 289000	0.76	0.79	333000 74900	432000 97200	0.77	1700000 382000	EE350701	351687
179.975 7.0856	317.500 12.5000	63.500 2.5000	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93708	93125
180.000 7.0866	250.000 9.8425	47.000 1.8504	401000 90100	0.48	1.25	104000 23400	85500 19200	1.22	786000 177000	JM736149A	JM736110
180.000 7.0866	250.000 9.8425	47.000 1.8504	401000 90100	0.48	1.25	104000 23400	85500 19200	1.22	786000 177000	JM736149	JM736110
184.150 7.2500	234.950 9.2500	34.000 1.3386	263000 59100	0.33	1.79	68100 15300	39100 8780	1.74	550000 124000	LM236749	LM236710
184.150 7.2500	235.229 9.2610	34.000 1.3386	263000 59100	0.33	1.79	68100 15300	39100 8780	1.74	550000 124000	LM236749	LM236710A
184.150 7.2500	236.538 9.3125	26.192 1.0312	161000 36100	0.40	1.49	41700 9360	28700 6440	1.45	337000 75700	LL537649	LL537610

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight
Bearing			Shaft			Housing			Cage					kg (lbs.)
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
82.550 3.2500	63.500 2.5000	-15.2 -0.60	6.4 0.25	193.0 7.60	204.0 8.03	6.4 0.25	282.0 11.10	275.0 10.83	10.00 0.39	0.20 0.01	841	94.9	0.1286	25.10 55.34
82.550 3.2500	65.088 2.5625	-18.5 -0.73	6.4 0.25	195.0 7.68	205.0 8.07	6.4 0.25	288.5 11.36	280.0 11.02	8.20 0.32	2.10 0.08	914	92.1	0.1265	25.48 56.18
20.638 0.8125	15.083 0.5938	17.8 0.70	1.5 0.06	184.0 7.24	186.0 7.32	1.5 0.06	212.0 8.35	207.0 8.15	1.30 0.05	1.60 0.06	346	241	0.1825	1.44 3.18
47.625 1.8750	38.100 1.5000	4.8 0.19	3.5 0.14	188.0 7.40	194.0 7.64	3.3 0.13	240.0 9.45	229.0 9.02	4.80 0.19	1.80 0.07	622	122	0.1214	6.68 14.72
47.625 1.8750	38.100 1.5000	4.8 0.19	10.5 0.41	188.0 7.40	208.0 8.19	3.3 0.13	240.0 9.45	229.0 9.02	4.80 0.19	1.80 0.07	622	122	0.1214	6.46 14.25
53.975 2.1250	41.275 1.6250	-6.6 -0.26	8.0 0.31	191.0 7.52	204.0 8.03	3.3 0.13	249.0 9.80	241.0 9.49	4.60 0.18	3.20 0.13	691	100	0.1150	8.93 19.68
53.975 2.1250	41.275 1.6250	-6.6 -0.26	3.5 0.14	191.0 7.52	195.0 7.68	3.3 0.13	249.0 9.80	241.0 9.49	4.60 0.18	3.20 0.13	691	100	0.1150	9.04 19.93
55.562 2.1875	42.862 1.6875	-6.1 -0.24	3.5 0.14	194.0 7.64	198.0 7.80	3.3 0.13	256.0 10.08	250.0 9.84	5.90 0.23	2.10 0.08	788	118	0.1201	10.95 24.15
63.500 2.5000	47.625 1.8750	-0.8 -0.03	7.0 0.28	195.0 7.68	207.0 8.15	3.3 0.13	272.0 10.71	259.0 10.20	6.80 0.27	5.20 0.21	692	93.8	0.1287	15.28 33.68
63.500 2.5000	47.625 1.8750	-11.7 -0.46	7.0 0.28	194.0 7.64	205.0 8.07	3.3 0.13	271.5 10.68	266.0 10.47	5.80 0.23	4.10 0.16	751	101	0.1168	15.03 33.12
63.500 2.5000	47.625 1.8750	-0.8 -0.03	7.0 0.28	195.0 7.68	207.0 8.15	3.3 0.13	272.0 10.71	263.0 10.35	6.80 0.27	5.20 0.21	692	93.8	0.1287	16.91 37.29
85.725 3.3750	65.088 2.5625	-22.4 -0.88	3.5 0.14	198.0 7.80	202.0 7.95	4.8 0.19	300.5 11.84	293.0 11.54	11.50 0.45	2.80 0.11	906	90.3	0.1242	27.52 60.68
85.725 3.3750	65.088 2.5625	-22.4 -0.88	3.5 0.14	198.0 7.80	202.0 7.95	4.8 0.19	300.5 11.84	293.0 11.54	11.50 0.45	2.80 0.11	906	90.3	0.1242	27.71 61.08
92.075 3.6250	63.500 2.5000	-21.8 -0.86	9.7 0.38	201.0 7.91	217.0 8.54	6.4 0.25	306.5 12.07	294.0 11.57	* *	* *	914	105	0.1304	30.42 67.07
92.075 3.6250	63.500 2.5000	-21.8 -0.86	13.5 0.53	201.0 7.91	225.0 8.86	6.4 0.25	306.5 12.07	295.0 11.61	* *	* *	914	105	0.1304	31.28 68.95
92.075 3.6250	63.500 2.5000	-21.8 -0.86	9.7 0.38	201.0 7.91	217.0 8.54	6.4 0.25	306.5 12.07	295.0 11.61	* *	* *	914	105	0.1304	31.48 69.40
92.075 3.6250	63.500 2.5000	-21.8 -0.86	13.5 0.53	201.0 7.91	225.0 8.86	6.4 0.25	306.5 12.07	298.0 11.73	* *	* *	914	105	0.1304	32.93 72.60
60.325 2.3750	41.275 1.6250	-0.3 -0.01	4.8 0.19	209.0 8.23	207.0 8.15	4.8 0.19	321.0 12.64	320.0 12.60	7.80 0.30	5.50 0.22	646	79.4	0.1185	24.23 53.41
88.897 3.4999	63.500 2.5000	-15.5 -0.61	12.7 0.50	208.0 8.19	231.0 9.09	3.3 0.13	334.5 13.16	327.0 12.87	19.10 0.75	2.40 0.10	1150	128	0.1450	40.54 89.37
88.897 3.4999	63.500 2.5000	-15.5 -0.61	12.7 0.50	208.0 8.19	231.0 9.09	3.3 0.13	334.5 13.16	329.0 12.95	19.10 0.75	2.40 0.10	1150	128	0.1450	41.96 92.51
88.897 3.4999	63.500 2.5000	-15.5 -0.61	12.7 0.50	208.0 8.19	231.0 9.09	3.3 0.13	334.5 13.16	331.0 13.03	19.10 0.75	2.40 0.10	1150	128	0.1450	42.89 94.56
95.250 3.7500	61.912 2.4375	13.0 0.51	6.4 0.25	221.0 8.70	230.0 9.06	6.4 0.25	383.0 15.08	365.0 14.37	21.10 0.83	16.00 0.63	828	77.3	0.1568	62.57 137.95
63.500 2.5000	46.038 1.8125	7.9 0.31	3.5 0.14	204.0 8.03	209.0 8.23	3.3 0.13	300.0 11.81	286.0 11.26	9.20 0.36	4.20 0.17	912	126	0.1460	21.19 46.71
45.000 1.7717	37.000 1.4567	8.9 0.35	9.5 0.37	190.0 7.48	209.0 8.23	2.5 0.10	242.5 9.55	232.0 9.13	3.40 0.13	4.10 0.16	589	128	0.1227	6.60 14.54
45.000 1.7717	37.000 1.4567	8.9 0.35	3.0 0.12	190.5 7.50	196.0 7.72	2.5 0.10	242.5 9.55	232.0 9.13	3.40 0.13	4.10 0.16	589	128	0.1227	6.64 14.64
33.000 1.2992	28.000 1.1024	5.1 0.20	2.0 0.08	191.0 7.52	195.0 7.68	2.0 0.08	229.0 9.02	224.0 8.82	0.40 0.02	3.60 0.14	559	173	0.1353	3.34 7.37
33.000 1.2992	28.000 1.1024	5.1 0.20	2.0 0.08	191.0 7.52	195.0 7.68	2.0 0.08	229.0 9.02	224.0 8.82	0.40 0.02	3.60 0.14	559	173	0.1353	3.37 7.42
25.400 1.0000	19.050 0.7500	13.7 0.54	1.5 0.06	192.0 7.56	194.0 7.64	1.5 0.06	230.0 9.06	225.0 8.86	3.20 0.12	1.40 0.06	418	211	0.1293	2.59 5.71

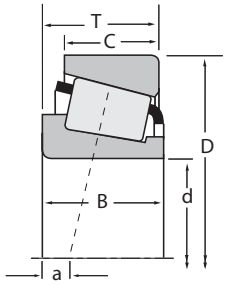
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

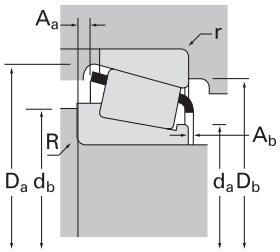
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
184.150 7.2500	266.700 10.5000	47.625 1.8750	386000 86700	0.48	1.26	99900 22500	81700 18400	1.22	835000 188000	67883	67820
187.325 7.3750	266.700 10.5000	47.625 1.8750	386000 86700	0.48	1.26	99900 22500	81700 18400	1.22	835000 188000	67884	67820
187.325 7.3750	269.875 10.6250	55.562 2.1875	508000 114000	0.33	1.80	132000 29600	74900 16800	1.76	999000 225000	M238849	M238810
187.325 7.3750	282.575 11.1250	50.800 2.0000	398000 89400	0.42	1.44	103000 23200	73300 16500	1.41	692000 156000	87737	87111
187.325 7.3750	320.675 12.6250	88.900 3.5000	1030000 231000	0.32	1.88	267000 59900	145000 32700	1.83	1580000 356000	H239649	H239612
190.000 7.4803	260.000 10.2362	46.000 1.8110	399000 89700	0.48	1.26	103000 23300	84500 19000	1.22	807000 181000	JM738249	JM738210
190.000 7.4803	269.875 10.6250	55.560 2.1875	508000 114000	0.33	1.80	132000 29600	74900 16800	1.76	999000 225000	JM238848	M238810
190.078 7.4834	289.992 11.4170	46.000 1.8110	386000 86700	0.48	1.26	99900 22500	81700 18400	1.22	835000 188000	67886	67835
190.500 7.5000	266.700 10.5000	47.625 1.8750	386000 86700	0.48	1.26	99900 22500	81700 18400	1.22	835000 188000	67885	67820
190.500 7.5000	282.575 11.1250	50.800 2.0000	398000 89400	0.42	1.44	103000 23200	73300 16500	1.41	692000 156000	87750	87111
190.500 7.5000	284.162 11.1875	55.562 2.1875	565000 127000	0.36	1.68	147000 33000	89700 20200	1.63	1060000 239000	82788	82722
190.500 7.5000	288.925 11.3750	55.562 2.1875	565000 127000	0.36	1.68	147000 33000	89700 20200	1.63	1060000 239000	82788	82720
190.500 7.5000	317.500 12.5000	63.500 2.5000	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93750	93125
190.500 7.5000	327.025 12.8750	90.488 3.5625	997000 224000	0.37	1.64	258000 58100	162000 36300	1.60	1580000 354000	EE470075	470128
190.500 7.5000	330.200 13.0000	63.500 2.5000	664000 149000	0.38	1.56	172000 38700	113000 25500	1.52	1050000 235000	EE210753	211300
190.500 7.5000	336.550 13.2500	90.488 3.5625	997000 224000	0.37	1.64	258000 58100	162000 36300	1.60	1580000 354000	EE470075	470132
190.500 7.5000	336.550 13.2500	98.425 3.8750	1130000 254000	0.58	1.04	293000 65800	289000 64900	1.01	2050000 460000	HH840249	HH840210
190.500 7.5000	360.000 14.1732	92.075 3.6250	1080000 243000	0.40	1.49	280000 63000	193000 43300	1.45	1820000 409000	EE420751	421417
190.500 7.5000	365.049 14.3720	92.075 3.6250	1080000 243000	0.40	1.49	280000 63000	193000 43300	1.45	1820000 409000	EE420751	421437
190.500 7.5000	368.300 14.5000	92.075 3.6250	1080000 243000	0.40	1.49	280000 63000	193000 43300	1.45	1820000 409000	EE420751	421450
190.500 7.5000	428.625 16.8750	106.362 4.1875	1280000 289000	0.76	0.79	333000 74900	432000 97200	0.77	1700000 382000	EE350750	351687
192.088 7.5625	266.700 10.5000	47.625 1.8750	386000 86700	0.48	1.26	99900 22500	81700 18400	1.22	835000 188000	67887	67820
193.675 7.6250	282.575 11.1250	50.800 2.0000	398000 89400	0.42	1.44	103000 23200	73300 16500	1.41	692000 156000	87762	87111
196.850 7.7500	257.175 10.1250	39.688 1.5625	295000 66300	0.45	1.34	76400 17200	58400 13100	1.31	718000 161000	LM739749	LM739710
196.850 7.7500	266.700 10.5000	39.688 1.5625	295000 66300	0.45	1.34	76400 17200	58400 13100	1.31	718000 161000	LM739749	LM739719
196.850 7.7500	317.500 12.5000	63.500 2.5000	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93775	93125
200.000 7.8740	300.000 11.8110	65.000 2.5591	682000 153000	0.52	1.15	177000 39700	158000 35500	1.12	1280000 287000	JHM840449	JHM840410
200.025 7.8750	292.100 11.5000	57.945 2.2813	588000 132000	0.33	1.80	152000 34300	86800 19500	1.76	1170000 263000	M241543	M241510

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

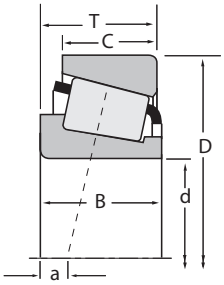
Dimensions, mm (inches)														Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
46.833 1.8438	**38.100** 1.5000	**10.2** 0.40	**3.5** 0.14	**198.0** 7.80	**204.0** 8.03	**3.3** 0.13	**259.0** 10.20	**246.0** 9.69	**5.10** 0.20	**1.80** 0.07	**728**	**147**	**0.1310**	**8.61** 18.98
46.833 1.8438	**38.100** 1.5000	**10.2** 0.40	**3.5** 0.14	**201.0** 7.91	**206.0** 8.11	**3.3** 0.13	**259.0** 10.20	**246.0** 9.69	**5.10** 0.20	**1.80** 0.07	**728**	**147**	**0.1310**	**8.27** 18.23
55.562 2.1875	**42.862** 1.6875	**-6.1** -0.24	**3.5** 0.14	**201.0** 7.91	**205.0** 8.07	**3.3** 0.13	**256.0** 10.08	**250.0** 9.84	**5.90** 0.23	**2.10** 0.08	**788**	**118**	**0.1201**	**9.77** 21.53
47.625 1.8750	**36.512** 1.4375	**3.8** 0.15	**3.5** 0.14	**201.0** 7.91	**207.0** 8.15	**3.3** 0.13	**266.5** 10.50	**261.0** 10.28	**8.80** 0.34	**2.60** 0.10	**575**	**131**	**0.1155**	**9.78** 21.56
85.725 3.3750	**65.088** 2.5625	**-22.4** -0.88	**5.5** 0.22	**205.0** 8.07	**214.0** 8.43	**4.8** 0.19	**300.5** 11.84	**293.0** 11.54	**11.50** 0.45	**2.80** 0.11	**906**	**90.3**	**0.1242**	**25.83** 56.94
44.000 1.7323	**36.500** 1.4370	**10.9** 0.43	**3.0** 0.12	**200.0** 7.87	**206.0** 8.11	**2.5** 0.10	**252.0** 9.92	**242.0** 9.53	**3.20** 0.13	**4.00** 0.16	**653**	**147**	**0.1265**	**6.83** 15.06
55.562 2.1875	**42.862** 1.6875	**-6.1** -0.24	**3.0** 0.12	**203.0** 7.99	**206.0** 8.11	**3.3** 0.13	**256.0** 10.08	**250.0** 9.84	**5.90** 0.23	**2.10** 0.08	**788**	**118**	**0.1201**	**9.48** 20.89
46.000 1.8110	**35.999** 1.4173	**10.7** 0.42	**6.4** 0.25	**203.0** 7.99	**214.0** 8.43	**3.3** 0.13	**259.0** 10.20	**256.0** 10.08	**4.60** 0.18	**2.10** 0.08	**728**	**147**	**0.1310**	**10.57** 23.29
46.833 1.8438	**38.100** 1.5000	**10.2** 0.40	**3.5** 0.14	**203.0** 7.99	**209.0** 8.23	**3.3** 0.13	**259.0** 10.20	**246.0** 9.69	**5.10** 0.20	**1.80** 0.07	**728**	**147**	**0.1310**	**7.92** 17.47
47.625 1.8750	**36.512** 1.4375	**3.8** 0.15	**3.5** 0.14	**203.0** 7.99	**209.0** 8.23	**3.3** 0.13	**266.5** 10.50	**261.0** 10.28	**8.80** 0.34	**2.60** 0.10	**575**	**131**	**0.1155**	**9.43** 20.79
55.562 2.1875	**42.862** 1.6875	**-2.8** -0.11	**3.5** 0.14	**203.0** 7.99	**210.0** 8.27	**3.3** 0.13	**271.0** 10.67	**263.0** 10.35	**5.20** 0.21	**2.30** 0.09	**805**	**111**	**0.1238**	**11.55** 25.46
55.562 2.1875	**42.862** 1.6875	**-2.8** -0.11	**3.5** 0.14	**203.0** 7.99	**210.0** 8.27	**3.3** 0.13	**271.0** 10.67	**265.0** 10.43	**5.20** 0.21	**2.30** 0.09	**805**	**111**	**0.1238**	**12.27** 27.04
63.500 2.5000	**46.038** 1.8125	**7.9** 0.31	**4.3** 0.17	**212.0** 8.35	**218.0** 8.58	**3.3** 0.13	**300.0** 11.81	**286.0** 11.26	**9.20** 0.36	**4.20** 0.17	**912**	**126**	**0.1460**	**19.65** 43.32
92.075 3.6250	**63.500** 2.5000	**-21.8** -0.86	**6.4** 0.25	**210.0** 8.27	**220.0** 8.66	**6.4** 0.25	**306.5** 12.07	**294.0** 11.57	* *	* *	**914**	**105**	**0.1304**	**27.89** 61.49
61.912 2.4375	**42.862** 1.6875	**-4.6** -0.18	**7.0** 0.28	**210.0** 8.27	**221.0** 8.70	**3.3** 0.13	**300.0** 11.81	**299.0** 11.77	**11.60** 0.46	**4.00** 0.16	**737**	**116**	**0.1227**	**19.85** 43.75
92.075 3.6250	**63.500** 2.5000	**-21.8** -0.86	**6.4** 0.25	**210.0** 8.27	**220.0** 8.66	**6.4** 0.25	**306.5** 12.07	**298.0** 11.73	* *	* *	**914**	**105**	**0.1304**	**30.61** 67.48
95.250 3.7500	**73.025** 2.8750	**-5.6** -0.22	**6.4** 0.25	**215.5** 8.49	**234.0** 9.21	**6.4** 0.25	**318.0** 12.52	**290.0** 11.42	**14.50** 0.57	**5.10** 0.20	**1090**	**104**	**0.1605**	**35.46** 78.18
88.897 3.4999	**63.500** 2.5000	**-15.5** -0.61	**6.4** 0.25	**218.0** 8.58	**227.0** 8.94	**3.3** 0.13	**334.5** 13.16	**327.0** 12.87	**19.10** 0.75	**2.40** 0.10	**1150**	**128**	**0.1450**	**38.26** 84.34
88.897 3.4999	**63.500** 2.5000	**-15.5** -0.61	**6.4** 0.25	**218.0** 8.58	**227.0** 8.94	**3.3** 0.13	**334.5** 13.16	**329.0** 12.95	**19.10** 0.75	**2.40** 0.10	**1150**	**128**	**0.1450**	**39.68** 87.48
88.897 3.4999	**63.500** 2.5000	**-15.5** -0.61	**6.4** 0.25	**218.0** 8.58	**227.0** 8.94	**3.3** 0.13	**334.5** 13.16	**331.0** 13.03	**19.10** 0.75	**2.40** 0.10	**1150**	**128**	**0.1450**	**40.61** 89.53
95.250 3.7500	**61.912** 2.4375	**13.0** 0.51	**6.4** 0.25	**237.0** 9.33	**240.0** 9.45	**6.4** 0.25	**383.0** 15.08	**365.0** 14.37	**21.10** 0.83	**16.00** 0.63	**828**	**77.3**	**0.1568**	**59.74** 131.70
46.833 1.8438	**38.100** 1.5000	**10.2** 0.40	**10.5** 0.41	**204.0** 8.03	**223.0** 8.78	**3.3** 0.13	**259.0** 10.20	**246.0** 9.69	**5.10** 0.20	**1.80** 0.07	**728**	**147**	**0.1310**	**7.52** 16.58
47.625 1.8750	**36.512** 1.4375	**3.8** 0.15	**3.5** 0.14	**206.0** 8.11	**211.0** 8.31	**3.3** 0.13	**266.5** 10.50	**261.0** 10.28	**8.80** 0.34	**2.60** 0.10	**575**	**131**	**0.1155**	**9.07** 20.00
39.688 1.5625	**30.162** 1.1875	**11.4** 0.45	**3.5** 0.14	**206.0** 8.11	**213.0** 8.39	**3.3** 0.13	**251.0** 9.88	**239.0** 9.41	**3.40** 0.14	**2.10** 0.08	**762**	**232**	**0.1296**	**5.26** 11.60
39.688 1.5625	**30.162** 1.1875	**11.4** 0.45	**3.5** 0.14	**206.0** 8.11	**213.0** 8.39	**3.3** 0.13	**252.0** 9.92	**243.0** 9.57	**3.40** 0.14	**2.10** 0.08	**762**	**232**	**0.1296**	**6.16** 13.58
63.500 2.5000	**46.038** 1.8125	**7.9** 0.31	**4.3** 0.17	**216.0** 8.50	**223.0** 8.78	**3.3** 0.13	**300.0** 11.81	**286.0** 11.26	**9.20** 0.36	**4.20** 0.17	**912**	**126**	**0.1460**	**18.69** 41.20
62.000 2.4409	**51.000** 2.0079	**8.1** 0.32	**3.5** 0.14	**215.0** 8.46	**223.0** 8.78	**2.5** 0.10	**289.0** 11.37	**273.0** 10.75	**4.80** 0.19	**6.10** 0.24	**854**	**126**	**0.1428**	**15.39** 33.92
57.945 2.2813	**46.038** 1.8125	**-4.8** -0.19	**3.5** 0.14	**215.0** 8.46	**219.0** 8.62	**3.3** 0.13	**279.0** 10.98	**272.0** 10.71	**4.80** 0.19	**2.00** 0.08	**954**	**128**	**0.1279**	**12.50** 27.55

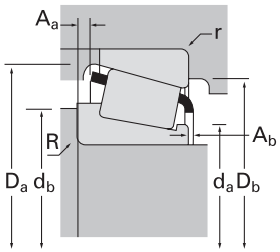
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
200.025 7.8750	317.500 12.5000	63.500 2.5000	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93787	93125
200.025 7.8750	317.500 12.5000	68.262 2.6875	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93787	93126
200.025 7.8750	320.000 12.5984	63.500 2.5000	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93787	J93129A
200.025 7.8750	355.600 14.0000	69.850 2.7500	781000 175000	0.33	1.82	202000 45500	114000 25700	1.77	1400000 314000	EE130787	131400
200.025 7.8750	384.175 15.1250	112.712 4.4375	1640000 369000	0.33	1.80	426000 95700	242000 54500	1.76	3110000 699000	H247535	H247510
200.025 7.8750	393.700 15.5000	111.125 4.3750	1650000 370000	0.30	2.01	427000 96000	218000 49100	1.96	2600000 585000	HH144642	HH144614
201.612 7.9375	365.049 14.3720	92.075 3.6250	1080000 243000	0.40	1.49	280000 63000	193000 43300	1.45	1820000 409000	EE420793	421437
201.612 7.9375	368.300 14.5000	92.075 3.6250	1080000 243000	0.40	1.49	280000 63000	193000 43300	1.45	1820000 409000	EE420793	421450
203.200 8.0000	261.142 10.2812	28.575 1.1250	192000 43200	0.41	1.47	49900 11200	34900 7850	1.43	405000 91100	LL641149	LL641110
203.200 8.0000	276.225 10.8750	42.862 1.6875	406000 91300	0.32	1.88	105000 23700	57500 12900	1.83	811000 182000	LM241149	LM241110
203.200 8.0000	282.575 11.1250	46.038 1.8125	393000 88300	0.51	1.18	102000 22900	88700 19900	1.15	876000 197000	67983	67920
203.200 8.0000	292.100 11.5000	57.945 2.2813	588000 132000	0.33	1.80	152000 34300	86800 19500	1.76	1170000 263000	M241547C	M241510
203.200 8.0000	292.100 11.5000	57.945 2.2813	588000 132000	0.33	1.80	152000 34300	86800 19500	1.76	1170000 263000	M241547	M241510
203.200 8.0000	317.500 12.5000	53.975 2.1250	518000 116000	0.31	1.91	134000 30200	72000 16200	1.86	900000 202000	EE132083	132125
203.200 8.0000	317.500 12.5000	63.500 2.5000	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93800	93125
203.200 8.0000	317.500 12.5000	63.500 2.5000	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93800A	93125
203.200 8.0000	360.000 14.1732	92.075 3.6250	1080000 243000	0.40	1.49	280000 63000	193000 43300	1.45	1820000 409000	EE420801	421417
203.200 8.0000	365.049 14.3720	92.075 3.6250	1080000 243000	0.40	1.49	280000 63000	193000 43300	1.45	1820000 409000	EE420801	421437
203.200 8.0000	368.300 14.5000	92.075 3.6250	1080000 243000	0.40	1.49	280000 63000	193000 43300	1.45	1820000 409000	EE420801	421450
203.200 8.0000	406.400 16.0000	92.075 3.6250	1040000 234000	0.80	0.75	270000 60700	369000 82900	0.73	1460000 328000	EE114080	114160
203.200 8.0000	482.600 19.0000	117.475 4.6250	1410000 317000	0.87	0.69	366000 82200	542000 122000	0.67	2010000 453000	EE380080	380190
204.788 8.0625	292.100 11.5000	57.945 2.2813	588000 132000	0.33	1.80	152000 34300	86800 19500	1.76	1170000 263000	M241549	M241510
204.788 8.0625	317.500 12.5000	63.500 2.5000	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93806A	93125
206.375 8.1250	282.575 11.1250	46.038 1.8125	393000 88300	0.51	1.18	102000 22900	88700 19900	1.15	876000 197000	67985	67920
206.375 8.1250	317.500 12.5000	53.975 2.1250	518000 116000	0.31	1.91	134000 30200	72000 16200	1.86	900000 202000	EE132084	132125
206.375 8.1250	336.550 13.2500	98.425 3.8750	1250000 282000	0.33	1.80	325000 73100	185000 41600	1.76	2320000 522000	H242649	H242610
209.550 8.2500	279.400 11.0000	46.038 1.8125	393000 88300	0.51	1.18	102000 22900	88700 19900	1.15	876000 197000	67989	67919
209.550 8.2500	282.575 11.1250	46.038 1.8125	393000 88300	0.51	1.18	102000 22900	88700 19900	1.15	876000 197000	67989	67920

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
63.500 2.5000	46.038 1.8125	7.9 0.31	4.3 0.17	219.0 8.62	225.0 8.86	3.3 0.13	300.0 11.81	286.0 11.26	9.20 0.36	4.20 0.17	912	126	0.1460	18.20 40.11
63.500 2.5000	50.800 2.0000	7.9 0.31	4.3 0.17	219.0 8.62	225.0 8.86	3.3 0.13	300.0 11.81	285.0 11.22	9.20 0.36	4.20 0.17	912	126	0.1460	19.10 42.10
63.500 2.5000	46.038 1.8125	7.9 0.31	4.3 0.17	219.0 8.62	225.0 8.86	3.3 0.13	298.0 11.73	287.0 11.30	9.20 0.36	4.20 0.17	912	126	0.1460	18.64 41.10
69.850 2.7500	49.212 1.9375	-9.9 -0.39	6.8 0.27	226.0 8.90	236.0 9.29	1.5 0.06	330.5 13.01	329.0 12.95	12.30 0.48	3.30 0.13	1160	168	0.1358	28.09 61.93
112.712 4.4375	90.488 3.5625	-27.9 -1.10	6.4 0.25	231.0 9.09	241.0 9.49	6.4 0.25	362.0 14.26	346.0 13.62	10.20 0.40	2.80 0.11	1960	148	0.1638	60.18 132.67
111.125 4.3750	84.138 3.3125	-33.8 -1.33	6.4 0.25	226.0 8.90	235.0 9.25	6.4 0.25	356.5 14.04	352.0 13.86	15.60 0.62	1.40 0.06	1470	128	0.1429	58.68 129.37
88.897 3.4999	63.500 2.5000	-15.5 -0.61	3.3 0.13	226.0 8.90	229.0 9.02	3.3 0.13	334.5 13.16	329.0 12.95	19.10 0.75	2.40 0.10	1150	128	0.1450	37.37 82.39
88.897 3.4999	63.500 2.5000	-15.5 -0.61	3.3 0.13	226.0 8.90	229.0 9.02	3.3 0.13	334.5 13.16	331.0 13.03	19.10 0.75	2.40 0.10	1150	128	0.1450	38.30 84.44
27.783 1.0938	21.433 0.8438	15.7 0.62	1.5 0.06	212.0 8.35	214.0 8.43	1.5 0.06	254.0 10.00	249.0 9.80	3.10 0.12	1.70 0.07	522	231	0.1398	3.47 7.64
42.862 1.6875	34.133 1.3438	1.8 0.07	3.5 0.14	214.0 8.43	220.0 8.66	3.3 0.13	267.0 10.51	260.0 10.24	2.80 0.11	1.30 0.05	774	182	0.1170	6.96 15.35
46.038 1.8125	36.512 1.4375	16.0 0.63	3.5 0.14	216.0 8.50	222.0 8.74	3.3 0.13	275.0 10.83	260.0 10.24	4.50 0.18	1.70 0.07	820	172	0.1388	8.65 19.06
57.945 2.2813	46.038 1.8125	-4.8 -0.19	3.5 0.14	217.0 8.54	221.0 8.70	3.3 0.13	279.0 10.98	272.0 10.71	4.80 0.19	2.00 0.08	954	128	0.1279	12.04 26.55
57.945 2.2813	46.038 1.8125	-4.8 -0.19	3.5 0.14	217.0 8.54	221.0 8.70	3.3 0.13	279.0 10.98	272.0 10.71	4.80 0.19	2.00 0.08	954	128	0.1279	12.04 26.55
53.975 2.1250	34.925 1.3750	-6.1 -0.24	4.0 0.16	218.0 8.58	225.0 8.86	3.3 0.13	293.0 11.54	294.0 11.57	10.80 0.42	3.20 0.13	798	125	0.1174	13.87 30.57
63.500 2.5000	46.038 1.8125	7.9 0.31	4.3 0.17	222.0 8.74	227.0 8.94	3.3 0.13	300.0 11.81	286.0 11.26	9.20 0.36	4.20 0.17	912	126	0.1460	17.70 39.01
63.500 2.5000	46.038 1.8125	7.9 0.31	8.0 0.31	222.0 8.74	234.0 9.21	3.3 0.13	300.0 11.81	286.0 11.26	9.20 0.36	4.20 0.17	912	126	0.1460	17.58 38.77
88.897 3.4999	63.500 2.5000	-15.5 -0.61	3.3 0.13	227.0 8.94	230.0 9.06	3.3 0.13	334.5 13.16	327.0 12.87	19.10 0.75	2.40 0.10	1150	128	0.1450	35.59 78.47
88.897 3.4999	63.500 2.5000	-15.5 -0.61	3.3 0.13	227.0 8.94	230.0 9.06	3.3 0.13	334.5 13.16	329.0 12.95	19.10 0.75	2.40 0.10	1150	128	0.1450	37.02 81.62
88.897 3.4999	63.500 2.5000	-15.5 -0.61	3.3 0.13	227.0 8.94	230.0 9.06	3.3 0.13	334.5 13.16	331.0 13.03	19.10 0.75	2.40 0.10	1150	128	0.1450	37.95 83.67
85.725 3.3750	57.150 2.2500	24.9 0.98	6.4 0.25	237.0 9.33	246.0 9.69	6.4 0.25	373.5 14.71	349.0 13.74	19.00 0.75	10.60 0.42	795	80.2	0.1571	44.72 98.58
95.250 3.7500	73.025 2.8750	34.3 1.35	6.4 0.25	274.0 10.79	280.0 11.02	6.4 0.25	428.5 16.87	402.0 15.83	22.30 0.88	16.90 0.67	1100	104	0.1792	88.54 195.20
57.945 2.2813	46.038 1.8125	-4.8 -0.19	3.5 0.14	219.0 8.62	223.0 8.78	3.3 0.13	279.0 10.98	272.0 10.71	4.80 0.19	2.00 0.08	954	128	0.1279	11.81 26.04
63.500 2.5000	46.038 1.8125	7.9 0.31	4.3 0.17	223.0 8.78	229.0 9.02	3.3 0.13	300.0 11.81	286.0 11.26	9.20 0.36	4.20 0.17	912	126	0.1460	17.44 38.46
46.038 1.8125	36.512 1.4375	16.0 0.63	3.5 0.14	219.0 8.62	224.0 8.82	3.3 0.13	275.0 10.83	260.0 10.24	4.50 0.18	1.70 0.07	820	172	0.1388	8.28 18.25
53.975 2.1250	34.925 1.3750	-6.1 -0.24	4.0 0.16	220.0 8.66	227.0 8.94	3.3 0.13	293.0 11.54	294.0 11.57	10.80 0.42	3.20 0.13	798	125	0.1174	13.44 29.62
100.012 3.9375	77.788 3.0625	-25.4 -1.00	3.3 0.13	227.0 8.94	231.0 9.09	3.3 0.13	318.0 12.51	306.0 12.05	11.20 0.44	1.80 0.07	1400	135	0.1465	33.01 72.76
46.038 1.8125	36.512 1.4375	16.0 0.63	3.5 0.14	221.0 8.70	227.0 8.94	3.3 0.13	273.0 10.75	259.0 10.20	4.50 0.18	1.70 0.07	820	172	0.1388	7.48 16.49
46.038 1.8125	36.512 1.4375	16.0 0.63	3.5 0.14	221.0 8.70	227.0 8.94	3.3 0.13	275.0 10.83	260.0 10.24	4.50 0.18	1.70 0.07	820	172	0.1388	7.91 17.43

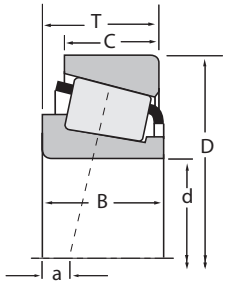
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

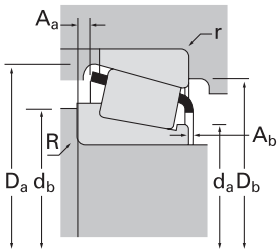
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
209.550 8.2500	317.500 12.5000	63.500 2.5000	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93825	93125
209.550 8.2500	317.500 12.5000	63.500 2.5000	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93825A	93125
209.550 8.2500	317.500 12.5000	68.262 2.6875	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93825	93126
209.550 8.2500	355.600 14.0000	68.262 2.6875	703000 158000	0.59	1.02	182000 41000	184000 41400	0.99	1420000 319000	96825	96140
212.725 8.3750	285.750 11.2500	46.038 1.8125	398000 89500	0.48	1.25	103000 23200	85000 19100	1.21	892000 200000	LM742745	LM742710
215.900 8.5000	285.750 11.2500	46.038 1.8125	398000 89500	0.48	1.25	103000 23200	85000 19100	1.21	892000 200000	LM742749AA	LM742710
215.900 8.5000	285.750 11.2500	46.038 1.8125	398000 89500	0.48	1.25	103000 23200	85000 19100	1.21	892000 200000	LM742749	LM742710
215.900 8.5000	288.925 11.3750	46.038 1.8125	398000 89500	0.48	1.25	103000 23200	85000 19100	1.21	892000 200000	LM742749	LM742714
215.900 8.5000	290.010 11.4177	31.750 1.2500	221000 49800	0.39	1.56	57400 12900	37900 8510	1.52	453000 102000	543085	543114
215.900 8.5000	355.600 14.0000	69.850 2.7500	781000 175000	0.33	1.82	202000 45500	114000 25700	1.77	1400000 314000	EE130851	131400
215.900 8.5000	360.000 14.1732	82.550 3.2500	1080000 243000	0.40	1.49	280000 63000	193000 43300	1.45	1820000 409000	EE420850	421417
215.900 8.5000	365.049 14.3720	82.550 3.2500	1080000 243000	0.40	1.49	280000 63000	193000 43300	1.45	1820000 409000	EE420850	421437
219.969 8.6602	290.010 11.4177	31.750 1.2500	221000 49800	0.39	1.56	57400 12900	37900 8510	1.52	453000 102000	543086	543114
220.662 8.6875	314.325 12.3750	61.912 2.4375	636000 143000	0.33	1.80	165000 37100	93900 21100	1.76	1240000 279000	M244249A	M244210
220.663 8.6875	314.325 12.3750	61.912 2.4375	682000 153000	0.33	1.80	177000 39700	101000 22600	1.76	1370000 308000	M244249	M244210
223.838 8.8125	295.275 11.6250	46.038 1.8125	403000 90700	0.50	1.20	105000 23500	89200 20100	1.17	919000 207000	LM844049	LM844010
225.425 8.8750	355.600 14.0000	69.850 2.7500	781000 175000	0.33	1.82	202000 45500	114000 25700	1.77	1400000 314000	EE130889	131400
225.425 8.8750	400.050 15.7500	88.900 3.5000	1100000 248000	0.44	1.36	286000 64200	215000 48300	1.33	1920000 432000	EE430888	431575
228.397 8.9920	431.800 17.0000	92.075 3.6250	1090000 245000	0.88	0.68	282000 63500	427000 96000	0.66	1600000 361000	EE113089	113170
228.460 8.9945	431.800 17.0000	92.075 3.6250	1090000 245000	0.88	0.68	282000 63500	427000 96000	0.66	1600000 361000	EE113091	113170
228.600 9.0000	320.675 12.6250	50.800 2.0000	431000 97000	0.49	1.23	112000 25100	93200 21000	1.20	821000 185000	88900	88126
228.600 9.0000	327.025 12.8750	52.388 2.0625	431000 97000	0.49	1.23	112000 25100	93200 21000	1.20	821000 185000	88900	88128
228.600 9.0000	355.600 14.0000	68.262 2.6875	703000 158000	0.59	1.02	182000 41000	184000 41400	0.99	1420000 319000	96900	96140
228.600 9.0000	355.600 14.0000	69.850 2.7500	781000 175000	0.33	1.82	202000 45500	114000 25700	1.77	1400000 314000	EE130902	131400
228.600 9.0000	355.600 14.0000	69.850 2.7500	932000 210000	0.47	1.27	242000 54300	196000 44000	1.24	1690000 380000	HM746646	HM746610
228.600 9.0000	358.775 14.1250	71.438 2.8125	896000 202000	0.33	1.80	232000 52200	132000 29700	1.76	1850000 416000	M249732	M249710
228.600 9.0000	400.050 15.7500	88.900 3.5000	1100000 248000	0.44	1.36	286000 64200	215000 48300	1.33	1920000 432000	EE430900	431575
228.600 9.0000	488.950 19.2500	123.825 4.8750	1750000 394000	0.94	0.64	455000 102000	730000 164000	0.62	2510000 564000	HH949549	HH949510

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight
Bearing			Shaft			Housing			Cage					kg (lbs.)
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
63.500 2.5000	46.038 1.8125	7.9 0.31	4.3 0.17	227.0 8.93	233.0 9.17	3.3 0.13	300.0 11.81	286.0 11.26	9.20 0.36	4.20 0.17	912	126	0.1460	16.67 36.76
63.500 2.5000	46.038 1.8125	7.9 0.31	12.7 0.50	227.0 8.93	250.0 9.84	3.3 0.13	300.0 11.81	286.0 11.26	9.20 0.36	4.20 0.17	912	126	0.1460	16.29 35.91
63.500 2.5000	50.800 2.0000	7.9 0.31	4.3 0.17	227.0 8.93	233.0 9.17	3.3 0.13	300.0 11.81	285.0 11.22	9.20 0.36	4.20 0.17	912	126	0.1460	17.57 38.74
66.675 2.6250	47.625 1.8750	17.0 0.67	7.0 0.28	235.0 9.25	246.0 9.69	3.3 0.13	334.0 13.15	318.0 12.52	12.00 0.47	3.80 0.15	1140	160	0.1626	26.64 58.73
46.038 1.8125	34.925 1.3750	14.2 0.56	3.5 0.14	225.0 8.86	230.0 9.06	3.3 0.13	279.0 10.98	266.0 10.47	5.10 0.20	2.00 0.08	867	225	0.1388	7.93 17.47
46.038 1.8125	34.925 1.3750	14.2 0.56	9.0 0.35	227.0 8.94	243.0 9.57	3.3 0.13	279.0 10.98	266.0 10.47	5.10 0.20	2.00 0.08	867	225	0.1388	7.51 16.56
46.038 1.8125	34.925 1.3750	14.2 0.56	3.5 0.14	227.0 8.94	233.0 9.17	3.3 0.13	279.0 10.98	266.0 10.47	5.10 0.20	2.00 0.08	867	225	0.1388	7.54 16.62
46.038 1.8125	34.925 1.3750	14.2 0.56	3.5 0.14	227.0 8.94	233.0 9.17	3.3 0.13	280.0 11.02	267.0 10.51	5.10 0.20	2.00 0.08	867	225	0.1388	7.93 17.48
31.750 1.2500	22.225 0.8750	13.0 0.51	3.5 0.14	226.0 8.90	232.0 9.13	3.3 0.13	276.0 10.87	272.0 10.71	4.10 0.16	2.80 0.11	608	217	0.1135	5.38 11.87
69.850 2.7500	49.212 1.9375	-9.9 -0.39	6.8 0.27	237.0 9.33	248.0 9.76	1.5 0.06	330.5 13.01	329.0 12.95	12.30 0.48	3.30 0.13	1160	168	0.1358	25.25 55.66
79.372 3.1249	63.500 2.5000	-6.1 -0.24	1.5 0.06	236.0 9.29	236.0 9.29	3.3 0.13	334.5 13.16	327.0 12.87	9.60 0.38	2.40 0.10	1150	128	0.1450	30.87 68.06
79.372 3.1249	63.500 2.5000	-6.1 -0.24	1.5 0.06	236.0 9.29	236.0 9.29	3.3 0.13	334.5 13.16	329.0 12.95	9.60 0.38	2.40 0.10	1150	128	0.1450	32.30 71.21
31.750 1.2500	22.225 0.8750	13.0 0.51	3.5 0.14	229.0 9.02	235.0 9.25	3.3 0.13	276.0 10.87	272.0 10.71	4.10 0.16	2.80 0.11	608	217	0.1135	5.04 11.10
66.675 2.6250	49.212 1.9375	-4.6 -0.18	1.5 0.06	235.0 9.25	235.0 9.25	3.3 0.13	300.0 11.81	293.0 11.54	3.30 0.13	0.30 0.01	1070	132	0.1327	14.89 32.83
61.912 2.4375	49.212 1.9375	-4.6 -0.18	6.4 0.25	235.0 9.25	245.0 9.65	3.3 0.13	300.0 11.81	293.0 11.54	5.00 0.20	2.40 0.10	1150	141	0.1360	14.51 31.99
46.038 1.8125	34.925 1.3750	17.0 0.67	3.5 0.14	235.0 9.25	241.0 9.49	3.3 0.13	288.0 11.34	275.0 10.83	2.30 0.21	1.90 0.08	927	269	0.1434	8.02 17.69
69.850 2.7500	49.212 1.9375	-9.9 -0.39	6.8 0.27	244.0 9.61	255.0 10.04	1.5 0.06	330.5 13.01	329.0 12.95	12.30 0.48	3.30 0.13	1160	168	0.1358	23.44 51.67
87.312 3.4375	63.500 2.5000	-4.8 -0.19	1.5 0.06	251.0 9.88	251.0 9.88	3.3 0.13	364.0 14.34	360.0 14.17	14.80 0.58	1.50 0.06	1350	143	0.1572	43.79 96.54
85.725 3.3750	49.212 1.9375	41.4 1.63	6.4 0.25	267.0 10.51	274.0 10.79	6.4 0.25	397.5 15.64	375.0 14.76	19.40 0.77	11.50 0.45	967	98.1	0.1723	48.70 107.36
85.725 3.3750	49.212 1.9375	41.4 1.63	6.4 0.25	267.0 10.51	274.0 10.79	6.4 0.25	397.5 15.64	375.0 14.76	19.40 0.77	11.50 0.45	967	98.1	0.1723	48.70 107.36
49.212 1.9375	33.338 1.3125	14.2 0.56	6.4 0.25	242.0 9.53	253.0 9.96	3.3 0.13	309.0 12.17	299.0 11.77	11.20 0.44	2.70 0.10	800	189	0.1352	10.94 24.12
49.212 1.9375	34.925 1.3750	14.2 0.56	6.4 0.25	242.0 9.53	253.0 9.96	3.3 0.13	309.0 12.17	302.0 11.89	11.20 0.44	2.70 0.10	800	189	0.1352	12.02 26.49
66.675 2.6250	47.625 1.8750	17.0 0.67	7.0 0.28	249.0 9.80	260.0 10.24	3.3 0.13	334.0 13.15	318.0 12.52	12.00 0.47	3.80 0.15	1140	160	0.1626	23.21 51.17
69.850 2.7500	49.212 1.9375	-9.9 -0.39	6.8 0.27	247.0 9.72	257.0 10.12	1.5 0.06	330.5 13.01	329.0 12.95	12.30 0.48	3.30 0.13	1160	168	0.1358	22.82 50.31
69.850 2.7500	50.800 2.0000	6.9 0.27	6.4 0.25	248.0 9.76	258.0 10.16	6.4 0.25	339.0 13.34	324.0 12.76	6.10 0.24	4.40 0.17	1190	149	0.1542	25.23 55.63
71.438 2.8125	53.975 2.1250	-6.9 -0.27	3.5 0.14	251.0 9.88	256.0 10.08	3.3 0.13	343.0 13.50	335.0 13.19	8.00 0.32	3.00 0.12	1630	168	0.1526	26.73 58.94
87.312 3.4375	63.500 2.5000	-4.8 -0.19	10.5 0.41	253.0 9.96	271.0 10.67	3.3 0.13	364.0 14.34	360.0 14.17	14.80 0.58	1.50 0.06	1350	143	0.1572	42.71 94.16
111.125 4.3750	73.025 2.8750	39.9 1.57	6.4 0.25	280.0 11.02	297.0 11.69	6.4 0.25	456.0 17.95	416.0 16.38	21.50 0.85	11.80 0.46	1300	91.5	0.1931	94.73 208.84

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

[7] Compound radius on inner race. Details on drawing for bearing.

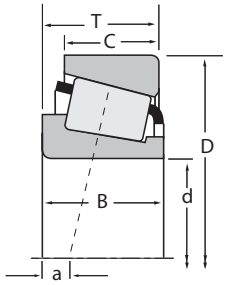
[8] Pin-type cage. Please consult The Timken Company.

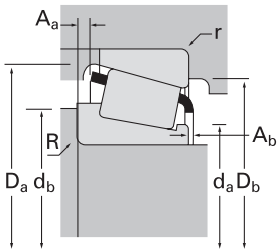
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
228.600 9.0000	508.000 20.0000	117.475 4.6250	1430000 322000	0.94	0.64	371000 83500	596000 134000	0.62	2100000 473000	EE390090	390200
231.775 9.1250	268.288 10.5625	22.500 0.8858	135000 30400	0.33	1.80	35100 7890	20000 4490	1.76	349000 78500	LL244549	LL244510
231.775 9.1250	336.550 13.2500	65.088 2.5625	773000 174000	0.33	1.80	200000 45100	114000 25700	1.76	1570000 352000	M246942	M246910
234.950 9.2500	311.150 12.2500	46.038 1.8125	432000 97200	0.36	1.66	112000 25200	69600 15600	1.61	926000 208000	LM446349	LM446310
234.950 9.2500	314.325 12.3750	49.212 1.9375	509000 114000	0.40	1.51	132000 29700	89700 20200	1.47	1040000 233000	LM545849A	LM545810
234.950 9.2500	314.325 12.3750	49.212 1.9375	479000 108000	0.40	1.51	124000 27900	84400 19000	1.47	949000 213000	LM545849E	LM545810
234.950 9.2500	320.675 12.6250	50.800 2.0000	431000 97000	0.49	1.23	112000 25100	93200 21000	1.20	821000 185000	88925	88126
234.950 9.2500	327.025 12.8750	52.388 2.0625	431000 97000	0.49	1.23	112000 25100	93200 21000	1.20	821000 185000	88925	88128
234.950 9.2500	355.600 14.0000	68.262 2.6875	703000 158000	0.59	1.02	182000 41000	184000 41400	0.99	1420000 319000	96925	96140
234.950 9.2500	381.000 15.0000	74.612 2.9375	982000 221000	0.33	1.80	255000 57200	145000 32600	1.76	2030000 455000	M252330	M252310
234.950 9.2500	384.175 15.1250	112.712 4.4375	1740000 390000	0.33	1.80	450000 101000	256000 57600	1.76	3370000 757000	H247548	H247510
234.950 9.2500	384.175 15.1250	112.712 4.4375	1640000 369000	0.33	1.80	426000 95700	242000 54500	1.76	3110000 699000	H247549	H247510
235.077 9.2550	314.325 12.3750	49.212 1.9375	479000 108000	0.40	1.51	124000 27900	84400 19000	1.47	949000 213000	LM545847	LM545810
236.538 9.3125	320.675 12.6250	44.450 1.7500	431000 97000	0.49	1.23	112000 25100	93200 21000	1.20	821000 185000	88931	88126
237.330 9.3437	336.550 13.2500	65.088 2.5625	722000 162000	0.33	1.80	187000 42100	107000 24000	1.76	1420000 319000	M246948	M246910
237.330 9.3437	336.550 13.2500	65.088 2.5625	773000 174000	0.33	1.80	200000 45100	114000 25700	1.76	1570000 352000	M246949	M246910
237.330 9.3437	358.775 14.1250	71.438 2.8125	896000 202000	0.33	1.80	232000 52200	132000 29700	1.76	1850000 416000	M249736	M249710
241.300 9.5000	349.148 13.7460	57.150 2.2500	647000 146000	0.35	1.70	168000 37700	101000 22800	1.65	1250000 282000	EE127095	127135
241.300 9.5000	355.600 14.0000	50.800 2.0000	549000 123000	0.36	1.65	142000 32000	88500 19900	1.61	1030000 231000	EE170950	171400
241.300 9.5000	355.600 14.0000	57.150 2.2500	647000 146000	0.35	1.70	168000 37700	101000 22800	1.65	1250000 282000	EE127095	127140
241.300 9.5000	365.049 14.3720	50.800 2.0000	549000 123000	0.36	1.65	142000 32000	88500 19900	1.61	1030000 231000	EE170950	171436
241.300 9.5000	368.300 14.5000	50.800 2.0000	549000 123000	0.36	1.65	142000 32000	88500 19900	1.61	1030000 231000	EE170950	171450
241.300 9.5000	368.300 14.5000	68.262 2.6875	828000 186000	0.34	1.75	215000 48200	126000 28400	1.70	1530000 345000	EE125095	125145
241.300 9.5000	393.700 15.5000	73.817 2.9062	865000 195000	0.40	1.49	224000 50400	154000 34700	1.45	1600000 359000	EE275095	275155
241.300 9.5000	406.400 16.0000	69.850 2.7500	865000 195000	0.40	1.49	224000 50400	154000 34700	1.45	1600000 359000	EE275095	275160
241.300 9.5000	444.500 17.5000	101.600 4.0000	1560000 350000	0.34	1.78	403000 90700	233000 52400	1.73	2420000 544000	EE923095	923175
241.300 9.5000	488.950 19.2500	120.650 4.7500	2070000 465000	0.31	1.92	537000 121000	287000 64600	1.87	3310000 744000	EE295950	295193
241.300 9.5000	508.000 20.0000	117.475 4.6250	1430000 322000	0.94	0.64	371000 83500	596000 134000	0.62	2100000 473000	EE390095	390200

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

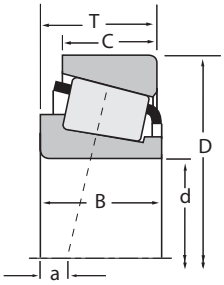
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
95.250 3.7500	73.025 2.8750	49.5 1.95	6.4 0.25	277.0 10.91	287.0 11.30	6.4 0.25	456.0 17.96	423.0 16.65	22.50 0.88	19.20 0.76	1260	106	0.1909	94.81 209.02
21.500 0.8465	18.500 0.7283	15.7 0.62	2.0 0.08	237.0 9.33	241.0 9.49	2.0 0.08	263.0 10.35	259.0 10.20	0.30 0.01	2.40 0.09	694	584	0.1422	1.86 4.09
65.088 2.5625	50.800 2.0000	-4.8 -0.19	6.4 0.25	249.0 9.80	258.0 10.16	3.3 0.13	322.0 12.68	313.0 12.32	5.20 0.20	3.30 0.13	1350	198	0.1436	18.41 40.59
46.038 1.8125	33.338 1.3125	6.6 0.26	3.5 0.14	246.0 9.69	252.0 9.92	3.3 0.13	301.0 11.85	294.0 11.57	5.50 0.22	1.60 0.06	1010	243	0.1328	8.68 19.14
49.212 1.9375	36.512 1.4375	8.4 0.33	6.4 0.25	246.0 9.69	258.0 10.16	3.3 0.13	306.0 12.05	296.0 11.65	4.50 0.18	2.80 0.11	997	163	0.1367	9.86 21.74
53.975 2.1250	36.512 1.4375	8.4 0.33	3.5 0.14	247.0 9.72	252.0 9.92	3.3 0.13	306.0 12.05	296.0 11.65	4.30 0.17	0.00 0.00	938	176	0.1338	10.17 22.42
49.212 1.9375	33.338 1.3125	14.2 0.56	6.4 0.25	246.0 9.69	258.0 10.16	3.3 0.13	309.0 12.17	299.0 11.77	11.20 0.44	2.70 0.10	800	189	0.1352	10.05 22.15
49.212 1.9375	34.925 1.3750	14.2 0.56	6.4 0.25	246.0 9.69	258.0 10.16	3.3 0.13	309.0 12.17	302.0 11.89	11.20 0.44	2.70 0.10	800	189	0.1352	11.12 24.52
66.675 2.6250	47.625 1.8750	17.0 0.67	7.0 0.28	254.0 10.00	265.0 10.43	3.3 0.13	334.0 13.15	318.0 12.52	12.00 0.47	3.80 0.15	1140	160	0.1626	22.00 48.50
74.612 2.9375	57.150 2.2500	-6.6 -0.26	6.4 0.25	261.0 10.28	271.0 10.67	3.3 0.13	363.5 14.32	356.0 14.02	8.30 0.33	3.50 0.14	1840	226	0.1588	33.39 73.60
112.712 4.4375	90.488 3.5625	-27.9 -1.10	6.4 0.25	259.0 10.20	269.0 10.59	6.4 0.25	362.0 14.26	346.0 13.62	8.60 0.34	4.40 0.17	2080	156	0.1671	49.18 108.42
112.712 4.4375	90.488 3.5625	-27.9 -1.10	6.4 0.25	259.0 10.20	269.0 10.59	6.4 0.25	362.0 14.26	346.0 13.62	10.20 0.40	2.80 0.11	1960	148	0.1638	49.65 109.45
53.975 2.1250	36.512 1.4375	8.4 0.33	3.5 0.14	247.0 9.72	252.0 9.92	3.3 0.13	306.0 12.05	296.0 11.65	4.30 0.17	0.00 0.00	938	176	0.1338	10.14 22.34
44.450 1.7500	33.338 1.3125	20.6 0.81	3.5 0.14	247.0 9.72	254.0 10.00	3.3 0.13	309.0 12.17	299.0 11.77	4.80 0.19	1.10 0.04	800	189	0.1352	9.32 20.56
69.850 2.7500	50.800 2.0000	-4.8 -0.19	6.4 0.25	253.0 9.96	263.0 10.35	3.3 0.13	322.0 12.68	313.0 12.32	4.30 0.17	1.20 0.05	1260	174	0.1401	17.78 39.21
65.088 2.5625	50.800 2.0000	-4.8 -0.19	6.4 0.25	253.0 9.96	262.0 10.31	3.3 0.13	322.0 12.68	313.0 12.32	5.20 0.20	3.30 0.13	1350	198	0.1436	17.37 38.29
71.438 2.8125	53.975 2.1250	-6.9 -0.27	6.4 0.25	258.0 10.16	267.0 10.51	3.3 0.13	343.0 13.50	335.0 13.19	8.00 0.32	3.00 0.12	1630	168	0.1526	24.87 54.82
57.150 2.2500	44.450 1.7500	2.5 0.10	6.4 0.25	257.0 10.12	267.0 10.51	3.3 0.13	329.0 12.95	325.0 12.80	6.50 0.25	1.60 0.06	1180	164	0.1392	16.53 36.44
50.800 2.0000	33.338 1.3125	5.8 0.23	6.4 0.25	260.0 10.24	269.0 10.59	3.3 0.13	337.0 13.27	334.0 13.15	8.60 0.34	3.30 0.13	1070	172	0.1354	15.41 33.98
57.150 2.2500	44.450 1.7500	2.5 0.10	6.4 0.25	257.0 10.12	267.0 10.51	3.3 0.13	329.0 12.95	327.0 12.87	6.50 0.25	1.60 0.06	1180	164	0.1392	17.77 39.18
50.800 2.0000	33.338 1.3125	5.8 0.23	6.4 0.25	260.0 10.24	269.0 10.59	3.3 0.13	337.0 13.27	338.0 13.31	8.60 0.34	3.30 0.13	1070	172	0.1354	16.80 37.05
50.800 2.0000	33.338 1.3125	5.8 0.23	6.4 0.25	260.0 10.24	269.0 10.59	3.3 0.13	337.0 13.27	340.0 13.39	8.60 0.34	3.30 0.13	1070	172	0.1354	17.29 38.12
68.262 2.6875	53.975 2.1250	-2.3 -0.09	6.4 0.25	257.0 10.12	269.0 10.59	3.3 0.13	344.0 13.54	341.0 13.43	7.70 0.30	0.10 0.00	1310	221	0.1432	24.20 53.35
69.850 2.7500	50.005 1.9687	2.5 0.10	6.4 0.25	268.0 10.55	278.0 10.94	6.4 0.25	378.0 14.89	366.0 14.41	14.40 0.57	3.30 0.13	1450	201	0.1555	31.84 70.19
69.850 2.7500	46.038 1.8125	2.5 0.10	6.4 0.25	268.0 10.55	278.0 10.94	6.4 0.25	378.0 14.89	373.0 14.69	14.40 0.57	3.30 0.13	1450	201	0.1555	33.95 74.84
100.012 3.9375	76.200 3.0000	-19.3 -0.76	6.4 0.25	268.0 10.55	277.0 10.91	4.8 0.19	407.0 16.02	403.0 15.87	12.30 0.48	2.10 0.08	1630	136	0.1531	62.00 136.69
120.650 4.7500	92.075 3.6250	-31.0 -1.22	6.4 0.25	276.0 10.87	285.0 11.22	6.4 0.25	450.5 17.74	444.0 17.48	18.70 0.73	4.00 0.16	2250	172	0.1664	98.39 216.91
95.250 3.7500	73.025 2.8750	49.5 1.95	6.4 0.25	288.0 11.34	297.0 11.69	6.4 0.25	456.0 17.96	423.0 16.65	22.50 0.88	18.90 0.74	1260	106	0.1909	91.31 201.31

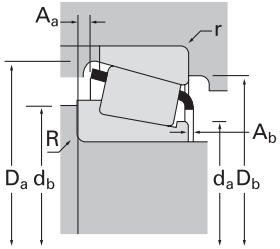
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
244.475 9.6250	381.000 15.0000	79.375 3.1250	889000 200000	0.52	1.16	231000 51800	204000 45800	1.13	1690000 381000	EE126097	126150
247.650 9.7500	304.800 12.0000	22.225 0.8750	146000 32700	0.32	1.85	37800 8490	21000 4720	1.80	373000 83900	28880	28820
247.650 9.7500	346.075 13.6250	63.500 2.5000	787000 177000	0.34	1.75	204000 45900	120000 27000	1.70	1620000 365000	M348449	M348410
247.650 9.7500	355.600 14.0000	50.800 2.0000	549000 123000	0.36	1.65	142000 32000	88500 19900	1.61	1030000 231000	EE170975	171400
247.650 9.7500	365.049 14.3720	50.800 2.0000	549000 123000	0.36	1.65	142000 32000	88500 19900	1.61	1030000 231000	EE170975	171436
247.650 9.7500	368.300 14.5000	50.800 2.0000	549000 123000	0.36	1.65	142000 32000	88500 19900	1.61	1030000 231000	EE170975	171450
247.650 9.7500	381.000 15.0000	74.612 2.9375	982000 221000	0.33	1.80	255000 57200	145000 32600	1.76	2030000 455000	M252337	M252310
247.650 9.7500	406.400 16.0000	115.888 4.5625	1930000 433000	0.33	1.80	499000 112000	284000 63900	1.76	3770000 846000	HH249949	HH249910
249.250 9.8130	381.000 15.0000	79.375 3.1250	889000 200000	0.52	1.16	231000 51800	204000 45800	1.13	1690000 381000	EE126098	126150
254.000 10.0000	323.850 12.7500	22.225 0.8750	148000 33300	0.35	1.73	38400 8630	22800 5120	1.69	391000 87800	29875	29820
254.000 10.0000	358.775 14.1250	71.438 2.8125	896000 202000	0.33	1.80	232000 52200	132000 29700	1.76	1850000 416000	M249749	M249710
254.000 10.0000	358.775 14.1250	71.438 2.8125	896000 202000	0.33	1.80	232000 52200	132000 29700	1.76	1850000 416000	M249749X	M249710
254.000 10.0000	365.125 14.3750	58.738 2.3125	666000 150000	0.37	1.60	173000 38800	111000 24900	1.56	1330000 299000	EE134100	134143
254.000 10.0000	368.300 14.5000	58.738 2.3125	666000 150000	0.37	1.60	173000 38800	111000 24900	1.56	1330000 299000	EE134100	134145
254.000 10.0000	393.700 15.5000	73.817 2.9062	865000 195000	0.40	1.49	224000 50400	154000 34700	1.45	1600000 359000	EE275100	275155
254.000 10.0000	400.050 15.7500	57.150 2.2500	782000 176000	0.33	1.81	203000 45600	115000 25900	1.76	1390000 313000	EE251001	251575
254.000 10.0000	406.400 16.0000	69.850 2.7500	865000 195000	0.40	1.49	224000 50400	154000 34700	1.45	1600000 359000	EE275100	275160
254.000 10.0000	422.275 16.6250	86.121 3.3906	1280000 288000	0.33	1.80	332000 74700	189000 42500	1.76	2020000 455000	HM252343	HM252310
254.000 10.0000	422.275 16.6250	86.121 3.3906	1320000 297000	0.33	1.80	343000 77000	195000 43900	1.76	2110000 475000	HM252344	HM252310
254.000 10.0000	533.400 21.0000	133.350 5.2500	2100000 471000	0.94	0.64	543000 122000	872000 196000	0.62	3090000 694000	HH953749	HH953710
257.175 10.1250	342.900 13.5000	57.150 2.2500	667000 150000	0.35	1.73	173000 38900	103000 23100	1.68	1430000 321000	M349549A	M349510
257.175 10.1250	342.900 13.5000	57.150 2.2500	667000 150000	0.35	1.73	173000 38900	103000 23100	1.68	1430000 321000	M349549	M349510
260.350 10.2500	365.125 14.3750	58.738 2.3125	666000 150000	0.37	1.60	173000 38800	111000 24900	1.56	1330000 299000	EE134102	134143
260.350 10.2500	368.300 14.5000	58.738 2.3125	666000 150000	0.37	1.60	173000 38800	111000 24900	1.56	1330000 299000	EE134102	134145
260.350 10.2500	400.050 15.7500	69.850 2.7500	811000 182000	0.39	1.52	210000 47300	142000 31900	1.48	1450000 326000	EE221026	221575
260.350 10.2500	419.100 16.5000	85.725 3.3750	1100000 248000	0.60	0.99	286000 64200	296000 66500	0.97	2010000 451000	EE435102	435165
260.350 10.2500	422.275 16.6250	86.121 3.3906	1280000 288000	0.33	1.80	332000 74700	189000 42500	1.76	2020000 455000	HM252348	HM252310
260.350 10.2500	422.275 16.6250	86.121 3.3906	1320000 297000	0.33	1.80	343000 77000	195000 43900	1.76	2110000 475000	HM252349	HM252310

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

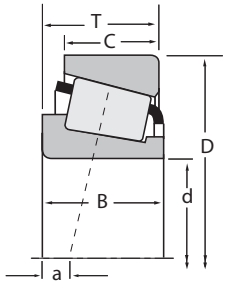
Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
76.200 3.0000	57.150 2.2500	9.7 0.38	6.4 0.25	266.0 10.47	275.0 10.83	4.8 0.19	358.0 14.09	343.0 13.50	13.10 0.52	2.00 0.08	1320	169	0.1640	30.30 66.80
22.225 0.8750	15.875 0.6250	17.3 0.68	1.5 0.06	256.0 10.08	258.0 10.16	1.5 0.06	294.0 11.57	291.0 11.46	1.70 0.06	1.90 0.07	807	572	0.1479	3.18 7.01
63.500 2.5000	50.800 2.0000	-1.3 -0.05	6.4 0.25	263.0 10.35	273.0 10.75	6.4 0.25	332.0 13.07	321.0 12.64	4.00 0.16	3.60 0.14	1450	213	0.1483	17.51 38.60
50.800 2.0000	33.338 1.3125	5.8 0.23	6.4 0.25	264.0 10.39	274.0 10.79	3.3 0.13	337.0 13.27	334.0 13.15	8.60 0.34	3.30 0.13	1070	172	0.1354	14.44 31.83
50.800 2.0000	33.338 1.3125	5.8 0.23	6.4 0.25	264.0 10.39	274.0 10.79	3.3 0.13	337.0 13.27	338.0 13.31	8.60 0.34	3.30 0.13	1070	172	0.1354	15.83 34.90
50.800 2.0000	33.338 1.3125	5.8 0.23	6.4 0.25	264.0 10.39	274.0 10.79	3.3 0.13	337.0 13.27	340.0 13.39	8.60 0.34	3.30 0.13	1070	172	0.1354	16.32 35.98
74.612 2.9375	57.150 2.2500	-6.6 -0.26	6.4 0.25	270.0 10.63	280.0 11.02	3.3 0.13	363.5 14.32	356.0 14.02	8.30 0.33	3.50 0.14	1840	226	0.1588	30.47 67.16
117.475 4.6250	93.662 3.6875	-28.7 -1.13	6.4 0.25	275.0 10.83	284.0 11.18	6.4 0.25	383.0 15.08	366.0 14.41	9.00 0.35	4.10 0.16	2370	173	0.1746	57.93 127.71
76.200 3.0000	57.150 2.2500	9.7 0.38	6.4 0.25	269.0 10.59	279.0 10.98	4.8 0.19	358.0 14.09	343.0 13.50	13.10 0.52	2.00 0.08	1320	169	0.1640	29.19 64.36
22.225 0.8750	15.875 0.6250	21.1 0.83	1.5 0.06	266.0 10.47	267.0 10.51	1.5 0.06	312.0 12.28	310.0 12.20	1.70 0.07	1.90 0.07	907	657	0.1567	4.26 9.39
71.438 2.8125	53.975 2.1250	-6.9 -0.27	3.5 0.14	270.0 10.63	274.0 10.79	3.3 0.13	343.0 13.50	335.0 13.19	8.00 0.32	3.00 0.12	1630	168	0.1526	21.35 47.07
71.438 2.8125	53.975 2.1250	-6.9 -0.27	3.5 0.14	270.0 10.63	274.0 10.79	3.3 0.13	343.0 13.50	335.0 13.19	8.00 0.32	3.00 0.12	1630	168	0.1526	21.35 47.07
58.738 2.3125	42.862 1.6875	5.1 0.20	6.4 0.25	272.0 10.71	281.0 11.06	6.4 0.25	347.0 13.66	339.0 13.35	8.30 0.32	1.70 0.07	1330	187	0.1474	18.11 39.93
58.738 2.3125	42.862 1.6875	5.1 0.20	6.4 0.25	272.0 10.71	281.0 11.06	6.4 0.25	347.0 13.66	340.0 13.39	8.30 0.32	1.70 0.07	1330	187	0.1474	18.72 41.28
69.850 2.7500	50.005 1.9687	2.5 0.10	6.4 0.25	277.0 10.91	287.0 11.30	6.4 0.25	378.0 14.89	366.0 14.41	14.40 0.57	3.30 0.13	1450	201	0.1555	29.13 64.23
55.562 2.1875	41.275 1.6250	3.3 0.13	3.3 0.13	272.0 10.71	278.0 10.94	1.5 0.06	369.0 14.53	371.0 14.61	6.30 0.25	5.30 0.21	1320	218	0.1413	24.88 54.85
69.850 2.7500	46.038 1.8125	2.5 0.10	6.4 0.25	277.0 10.91	287.0 11.30	6.4 0.25	378.0 14.89	373.0 14.69	14.40 0.57	3.30 0.13	1450	201	0.1555	31.24 68.88
79.771 3.1406	66.675 2.6250	-9.4 -0.37	6.8 0.27	281.0 11.06	287.0 11.30	3.3 0.13	399.5 15.73	392.0 15.43	13.00 0.51	4.80 0.19	1500	148	0.1482	41.60 91.71
79.771 3.1406	66.675 2.6250	-9.4 -0.37	6.8 0.27	281.0 11.06	287.0 11.30	3.3 0.13	399.5 15.73	392.0 15.43	10.50 0.41	6.10 0.24	1550	152	0.1498	41.76 92.06
120.650 4.7500	77.788 3.0625	45.5 1.79	6.4 0.25	306.5 12.06	328.0 12.91	6.4 0.25	495.5 19.51	455.0 17.91	21.80 0.86	14.20 0.56	1670	104	0.2101	120.15 264.88
57.150 2.2500	44.450 1.7500	2.5 0.10	10.7 0.42	269.0 10.59	289.0 11.38	3.3 0.13	333.0 13.11	322.0 12.68	4.80 0.19	3.00 0.12	1420	193	0.1475	13.33 29.40
57.150 2.2500	44.450 1.7500	2.5 0.10	6.4 0.25	269.0 10.59	281.0 11.06	3.3 0.13	333.0 13.11	322.0 12.68	4.80 0.19	3.00 0.12	1420	193	0.1475	13.57 29.92
58.738 2.3125	42.862 1.6875	5.1 0.20	6.4 0.25	276.0 10.87	286.0 11.26	6.4 0.25	347.0 13.66	339.0 13.35	8.30 0.32	1.70 0.07	1330	187	0.1474	16.93 37.32
58.738 2.3125	42.862 1.6875	5.1 0.20	6.4 0.25	276.0 10.87	286.0 11.26	6.4 0.25	347.0 13.66	340.0 13.39	8.30 0.32	1.70 0.07	1330	187	0.1474	17.54 38.67
67.470 2.6563	46.038 1.8125	0.8 0.03	9.7 0.38	280.0 11.02	296.0 11.65	6.4 0.25	371.5 14.63	366.0 14.41	14.30 0.56	5.60 0.22	1320	207	0.1497	26.68 58.82
84.138 3.3125	61.912 2.4375	19.8 0.78	6.4 0.25	285.0 11.22	295.0 11.61	3.3 0.13	395.0 15.56	376.0 14.80	14.10 0.55	2.00 0.08	1480	123	0.1787	41.85 92.26
79.771 3.1406	66.675 2.6250	-9.4 -0.37	6.8 0.27	285.0 11.22	292.0 11.50	3.3 0.13	399.5 15.73	392.0 15.43	13.00 0.51	4.80 0.19	1500	148	0.1482	40.16 88.54
79.771 3.1406	66.675 2.6250	-9.4 -0.37	6.8 0.27	285.0 11.22	292.0 11.50	3.3 0.13	399.5 15.73	392.0 15.43	10.50 0.41	6.10 0.24	1550	152	0.1498	40.16 88.53

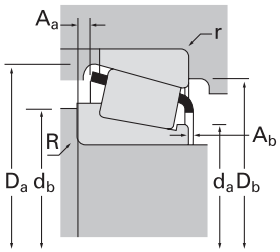
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
260.350 10.2500	488.950 19.2500	120.650 4.7500	2070000 465000	0.31	1.92	537000 121000	287000 64600	1.87	3310000 744000	EE295102	295193
263.525 10.3750	325.438 12.8125	28.575 1.1250	217000 48800	0.37	1.64	56300 12700	35200 7920	1.60	554000 125000	38880	38820
263.525 10.3750	355.600 14.0000	57.150 2.2500	688000 155000	0.36	1.67	178000 40100	110000 24700	1.62	1510000 339000	LM451345	LM451310
266.560 10.4945	325.438 12.8125	29.500 1.1614	210000 47100	0.37	1.64	54400 12200	34000 7650	1.60	527000 118000	38884	38820
266.700 10.5000	323.850 12.7500	22.225 0.8750	148000 33300	0.35	1.73	38400 8630	22800 5120	1.69	391000 87800	29880	29820
266.700 10.5000	325.438 12.8125	28.575 1.1250	217000 48800	0.37	1.64	56300 12700	35200 7920	1.60	554000 125000	38885	38820
266.700 10.5000	355.600 14.0000	57.150 2.2500	688000 155000	0.36	1.67	178000 40100	110000 24700	1.62	1510000 339000	LM451349A	LM451310
266.700 10.5000	355.600 14.0000	57.150 2.2500	688000 155000	0.36	1.67	178000 40100	110000 24700	1.62	1510000 339000	LM451349	LM451310
266.700 10.5000	393.700 15.5000	73.817 2.9062	865000 195000	0.40	1.49	224000 50400	154000 34700	1.45	1600000 359000	EE275105	275155
266.700 10.5000	406.400 16.0000	69.850 2.7500	865000 195000	0.40	1.49	224000 50400	154000 34700	1.45	1600000 359000	EE275105	275160
266.700 10.5000	444.500 17.5000	120.650 4.7500	1790000 402000	0.58	1.04	464000 104000	457000 103000	1.01	3520000 791000	H852849	H852810
269.875 10.6250	381.000 15.0000	74.612 2.9375	982000 221000	0.33	1.80	255000 57200	145000 32600	1.76	2030000 455000	M252349	M252310
273.050 10.7500	393.700 15.5000	73.817 2.9062	865000 195000	0.40	1.49	224000 50400	154000 34700	1.45	1600000 359000	EE275108	275155
273.050 10.7500	406.400 16.0000	69.850 2.7500	865000 195000	0.40	1.49	224000 50400	154000 34700	1.45	1600000 359000	EE275108	275160
276.225 10.8750	352.425 13.8750	36.512 1.4375	326000 73400	0.54	1.11	84600 19000	78000 17500	1.08	750000 169000	L853049	L853010
279.400 11.0000	317.500 12.5000	24.384 0.9600	159000 35800	0.35	1.73	41200 9270	24400 5500	1.69	467000 105000	LL352149	LL352110
279.400 11.0000	469.900 18.5000	95.250 3.7500	1380000 310000	0.38	1.59	357000 80300	231000 52000	1.55	2350000 527000	EE722110	722185
279.400 11.0000	488.950 19.2500	120.650 4.7500	2070000 465000	0.31	1.92	537000 121000	287000 64600	1.87	3310000 744000	EE295110	295193
279.982 11.0229	380.009 14.9610	65.088 2.5625	708000 159000	0.43	1.39	184000 41300	136000 30500	1.35	1720000 387000	LM654642	LM654611
280.000 11.0236	406.400 16.0000	69.850 2.7500	851000 191000	0.39	1.55	221000 49600	146000 32800	1.51	1660000 374000	EE128112	128160
280.192 11.0312	400.050 15.7500	52.388 2.0625	590000 133000	0.41	1.47	153000 34400	107000 24000	1.43	1180000 266000	EE101103	101575
280.192 11.0312	406.400 16.0000	52.388 2.0625	590000 133000	0.41	1.47	153000 34400	107000 24000	1.43	1180000 266000	EE101103	101600
280.192 11.0312	406.400 16.0000	69.850 2.7500	906000 204000	0.39	1.55	235000 52800	155000 34900	1.51	1820000 409000	EE128110	128160
280.192 11.0312	406.400 16.0000	69.850 2.7500	851000 191000	0.39	1.55	221000 49600	146000 32800	1.51	1660000 374000	EE128111	128160
285.750 11.2500	354.012 13.9375	33.338 1.3125	253000 56800	0.49	1.22	65500 14700	55200 12400	1.19	596000 134000	545112	545139
285.750 11.2500	358.775 14.1250	33.338 1.3125	253000 56800	0.49	1.22	65500 14700	55200 12400	1.19	596000 134000	545112	545141
288.925 11.3750	406.400 16.0000	77.788 3.0625	1170000 262000	0.34	1.77	302000 68000	175000 39300	1.73	2520000 567000	M255449	M255410
292.100 11.5000	374.650 14.7500	47.625 1.8750	510000 115000	0.40	1.49	132000 29700	90900 20400	1.45	1150000 258000	L555249	L555210

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
120.650 4.7500	92.075 3.6250	-31.0 -1.22	6.4 0.25	290.0 11.42	299.0 11.77	6.4 0.25	450.5 17.74	444.0 17.48	18.70 0.73	4.00 0.16	2250	172	0.1664	91.30 201.28
28.575 1.1250	25.400 1.0000	20.3 0.80	1.5 0.06	275.0 10.83	275.0 10.83	1.5 0.06	315.0 12.40	312.0 12.28	1.30 0.05	1.30 0.05	1030	496	0.1676	5.15 11.35
57.150 2.2500	44.450 1.7500	5.1 0.20	3.5 0.14	279.0 10.98	283.0 11.14	3.3 0.13	343.0 13.50	335.0 13.19	5.90 0.23	3.40 0.13	1550	212	0.1536	15.43 34.02
33.470 1.3177	25.400 1.0000	19.6 0.77	1.5 0.06	275.0 10.83	277.0 10.91	1.5 0.06	315.0 12.40	312.0 12.28	0.50 0.02	-0.80 -0.03	993	480	0.1656	5.35 11.79
22.225 0.8750	15.875 0.6250	21.1 0.83	1.5 0.06	275.0 10.83	277.0 10.91	1.5 0.06	312.0 12.28	310.0 12.20	1.70 0.07	1.90 0.07	907	657	0.1567	3.36 7.40
28.575 1.1250	25.400 1.0000	20.3 0.80	1.5 0.06	277.0 10.91	277.0 10.91	1.5 0.06	315.0 12.40	312.0 12.28	1.30 0.05	1.30 0.05	1030	496	0.1676	4.85 10.70
57.150 2.2500	44.450 1.7500	5.1 0.20	10.5 0.41	281.0 11.06	299.0 11.77	3.3 0.13	343.0 13.50	335.0 13.19	5.90 0.23	3.40 0.13	1550	212	0.1536	14.52 32.00
57.150 2.2500	44.450 1.7500	5.1 0.20	3.5 0.14	281.0 11.06	285.0 11.22	3.3 0.13	343.0 13.50	335.0 13.19	5.90 0.23	3.40 0.13	1550	212	0.1536	14.84 32.72
69.850 2.7500	50.005 1.9687	2.5 0.10	6.4 0.25	287.0 11.30	296.0 11.65	6.4 0.25	378.0 14.89	366.0 14.41	14.40 0.57	3.30 0.13	1450	201	0.1555	26.29 57.96
69.850 2.7500	46.038 1.8125	2.5 0.10	6.4 0.25	287.0 11.30	296.0 11.65	6.4 0.25	378.0 14.89	373.0 14.69	14.40 0.57	3.30 0.13	1450	201	0.1555	28.40 62.61
117.475 4.6250	88.900 3.5000	-0.5 -0.02	6.4 0.25	297.0 11.69	315.0 12.40	6.4 0.25	422.5 16.63	390.0 15.35	19.20 0.76	4.10 0.16	2250	171	0.2040	72.32 159.43
74.612 2.9375	57.150 2.2500	-6.6 -0.26	6.4 0.25	287.0 11.30	296.0 11.65	3.3 0.13	363.5 14.32	356.0 14.02	8.30 0.33	3.50 0.14	1840	226	0.1588	25.28 55.74
69.850 2.7500	50.005 1.9687	2.5 0.10	6.4 0.25	291.0 11.46	301.0 11.85	6.4 0.25	378.0 14.89	366.0 14.41	14.40 0.57	3.30 0.13	1450	201	0.1555	24.82 54.71
69.850 2.7500	46.038 1.8125	2.5 0.10	6.4 0.25	291.0 11.46	301.0 11.85	6.4 0.25	378.0 14.89	373.0 14.69	14.40 0.57	3.30 0.13	1450	201	0.1555	26.92 59.36
34.925 1.3750	23.812 0.9375	35.1 1.38	3.5 0.14	288.0 11.34	293.0 11.54	3.3 0.13	342.0 13.46	332.0 13.07	6.00 0.24	3.40 0.14	1060	350	0.1517	7.67 16.91
24.384 0.9600	18.288 0.7200	20.3 0.80	1.5 0.06	286.0 11.26	288.0 11.34	1.5 0.06	312.0 12.28	309.0 12.17	1.80 0.07	2.10 0.08	1130	860	0.1688	2.58 5.69
93.662 3.6875	69.850 2.7500	-7.6 -0.30	9.7 0.38	314.0 12.36	321.0 12.64	3.3 0.13	433.0 17.04	430.0 16.93	16.80 0.66	0.40 0.02	1890	143	0.1669	58.94 129.95
120.650 4.7500	92.075 3.6250	-31.0 -1.22	1.3 0.05	304.0 11.97	303.0 11.93	6.4 0.25	450.5 17.74	444.0 17.48	18.70 0.73	4.00 0.16	2250	172	0.1664	83.81 184.76
65.088 2.5625	49.212 1.9375	11.4 0.45	3.5 0.14	298.0 11.73	302.0 11.89	3.3 0.13	368.0 14.49	356.0 14.02	7.90 0.31	0.70 0.03	1920	265	0.1744	20.64 45.51
67.673 2.6643	53.975 2.1250	6.6 0.26	6.4 0.25	307.0 12.09	308.0 12.13	3.3 0.13	384.0 15.12	378.0 14.88	8.20 0.32	0.90 0.04	1620	240	0.1592	27.03 59.58
50.211 1.9768	34.925 1.3750	15.7 0.62	6.8 0.27	307.0 12.09	309.0 12.17	3.3 0.13	376.0 14.80	374.0 14.72	7.70 0.30	5.30 0.21	1380	227	0.1527	18.74 41.31
50.211 1.9768	34.925 1.3750	15.7 0.62	6.8 0.27	307.0 12.09	309.0 12.17	3.3 0.13	376.0 14.80	377.0 14.84	7.70 0.30	5.30 0.21	1380	227	0.1527	19.83 43.72
67.673 2.6643	53.975 2.1250	6.6 0.26	6.8 0.27	307.0 12.09	309.0 12.17	3.3 0.13	384.0 15.12	378.0 14.88	6.90 0.27	1.50 0.06	1730	255	0.1628	26.81 59.09
67.673 2.6643	53.975 2.1250	6.6 0.26	6.8 0.27	307.0 12.09	309.0 12.17	3.3 0.13	384.0 15.12	378.0 14.88	8.20 0.32	0.90 0.04	1620	240	0.1592	26.96 59.43
31.750 1.2500	22.225 0.8750	32.8 1.29	3.5 0.14	298.0 11.73	302.0 11.89	3.3 0.13	345.0 13.58	338.0 13.31	5.70 0.22	2.90 0.11	1020	477	0.1446	6.28 13.84
31.750 1.2500	22.225 0.8750	32.8 1.29	3.5 0.14	298.0 11.73	302.0 11.89	3.3 0.13	345.0 13.58	340.0 13.39	5.70 0.22	2.90 0.11	1020	477	0.1446	6.74 14.86
77.788 3.0625	60.325 2.3750	-4.1 -0.16	6.4 0.25	310.0 12.20	316.0 12.44	3.3 0.13	388.0 15.27	379.0 14.92	5.80 0.23	3.90 0.16	2300	287	0.1722	29.40 64.81
47.625 1.8750	34.925 1.3750	17.5 0.69	3.5 0.14	305.0 12.01	309.0 12.17	3.3 0.13	362.0 14.25	355.0 13.98	5.50 0.22	2.30 0.09	1480	340	0.1553	11.78 25.97

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

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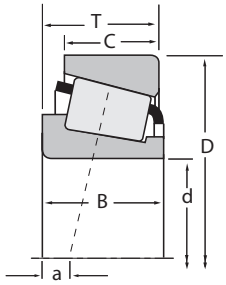
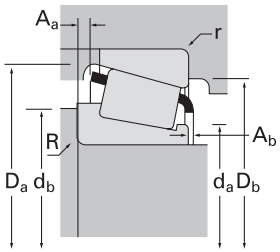
SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
292.100 11.5000	393.700 15.5000	63.500 2.5000	468000 105000	0.61	0.98	121000 27300	127000 28500	0.96	997000 224000	84115	84155
292.100 11.5000	469.900 18.5000	95.250 3.7500	1380000 310000	0.38	1.59	357000 80300	231000 52000	1.55	2350000 527000	EE722115	722185
292.100 11.5000	558.800 22.0000	136.525 5.3750	2640000 594000	0.40	1.52	685000 154000	464000 104000	1.48	4100000 923000	EE790114	790221
298.450 11.7500	444.500 17.5000	63.500 2.5000	758000 170000	0.38	1.59	196000 44200	127000 28600	1.55	1390000 312000	EE291175	291750
299.975 11.8100	495.300 19.5000	141.288 5.5625	2810000 632000	0.33	1.80	729000 164000	415000 93300	1.76	5650000 1270000	HH258248	HH258210
300.038 11.8125	422.275 16.6250	82.550 3.2500	1270000 286000	0.34	1.78	330000 74100	190000 42700	1.73	2770000 622000	HM256849	HM256810
304.800 12.0000	393.700 15.5000	50.800 2.0000	575000 129000	0.36	1.67	149000 33500	91600 20600	1.63	1310000 295000	L357049	L357010
304.800 12.0000	406.400 16.0000	63.500 2.5000	754000 170000	0.44	1.36	196000 44000	148000 33200	1.32	1740000 392000	LM757049AA	LM757010
304.800 12.0000	406.400 16.0000	63.500 2.5000	754000 170000	0.44	1.36	196000 44000	148000 33200	1.32	1740000 392000	LM757049	LM757010
304.800 12.0000	438.048 17.2460	76.200 3.0000	879000 198000	0.42	1.44	228000 51200	162000 36500	1.40	1780000 401000	EE129120X	129172
304.800 12.0000	444.500 17.5000	63.500 2.5000	758000 170000	0.38	1.59	196000 44200	127000 28600	1.55	1390000 312000	EE291201	291749
304.800 12.0000	444.500 17.5000	63.500 2.5000	758000 170000	0.38	1.59	196000 44200	127000 28600	1.55	1390000 312000	EE291201	291750
304.800 12.0000	495.300 19.5000	76.200 3.0000	1320000 298000	0.40	1.49	343000 77200	236000 53100	1.45	2090000 471000	EE941205	941950
304.800 12.0000	495.300 19.5000	95.250 3.7500	1440000 324000	0.40	1.49	374000 84000	257000 57800	1.45	2550000 573000	EE724120	724195
304.800 12.0000	499.948 19.6830	101.600 4.0000	1140000 257000	1.17	0.51	296000 66600	594000 134000	0.50	1890000 424000	M959442	M959410
304.800 12.0000	558.800 22.0000	136.525 5.3750	2640000 594000	0.40	1.52	685000 154000	464000 104000	1.48	4100000 923000	EE790120	790221
312.738 12.3125	358.775 14.1250	22.225 0.8750	131000 29500	0.82	0.73	34000 7640	47900 10800	0.71	383000 86100	LL957049	LL957010
314.325 12.3750	495.300 19.5000	120.650 4.7500	1920000 432000	0.58	1.04	498000 112000	491000 110000	1.01	3950000 889000	H859049	H859010
317.500 12.5000	444.500 17.5000	63.500 2.5000	758000 170000	0.38	1.59	196000 44200	127000 28600	1.55	1390000 312000	EE291250	291749
317.500 12.5000	444.500 17.5000	63.500 2.5000	758000 170000	0.38	1.59	196000 44200	127000 28600	1.55	1390000 312000	EE291250	291750
317.500 12.5000	447.675 17.6250	85.725 3.3750	1320000 297000	0.33	1.79	342000 76900	196000 44100	1.74	2790000 628000	HM259048	HM259010
317.500 12.5000	447.675 17.6250	85.725 3.3750	1430000 322000	0.33	1.79	372000 83600	213000 47900	1.74	3140000 706000	HM259049	HM259010
317.500 12.5000	596.900 23.5000	136.525 5.3750	2830000 636000	0.42	1.42	733000 165000	530000 119000	1.38	4600000 1030000	EE720125	720236
317.500 12.5000	622.300 24.5000	147.638 5.8125	2700000 607000	0.94	0.64	700000 157000	1120000 253000	0.62	4130000 927000	H961649	H961610
323.850 12.7500	381.000 15.0000	28.575 1.1250	239000 53700	0.44	1.36	61900 13900	46600 10500	1.33	672000 151000	LL758744	LL758715
325.438 12.8125	596.900 23.5000	136.525 5.3750	2830000 636000	0.42	1.42	733000 165000	530000 119000	1.38	4600000 1030000	EE720128	720236
330.200 13.0000	415.925 16.3750	47.625 1.8750	475000 107000	0.50	1.20	123000 27700	105000 23600	1.17	1180000 266000	L860049	L860010
330.200 13.0000	482.600 19.0000	66.675 2.6250	878000 197000	0.42	1.44	228000 51200	162000 36500	1.40	1770000 398000	EE203130	203190

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
50.800 2.0000	44.450 1.7500	36.6 1.44	3.5 0.14	309.0 12.17	313.0 12.32	6.4 0.25	378.0 14.88	363.0 14.29	13.90 0.55	2.80 0.11	1230	302	0.1660	18.03 39.75
93.662 3.6875	69.850 2.7500	-7.6 -0.30	9.7 0.38	324.0 12.76	330.0 12.99	3.3 0.13	433.0 17.04	430.0 16.93	16.80 0.66	0.40 0.02	1890	143	0.1669	54.75 120.70
136.525 5.3750	98.425 3.8750	-24.4 -0.96	6.4 0.25	329.0 12.95	335.0 13.19	6.4 0.25	514.0 20.24	501.0 19.72	20.00 0.79	7.30 0.29	2660	170	0.1898	132.40 291.88
61.912 2.4375	39.688 1.5625	7.6 0.30	8.0 0.31	320.0 12.60	332.0 13.07	1.5 0.06	415.0 16.34	416.0 16.38	11.40 0.45	7.00 0.28	1580	245	0.1557	29.43 64.87
141.288 5.5625	114.300 4.5000	-34.5 -1.36	6.4 0.25	332.0 13.07	342.0 13.46	6.4 0.25	467.5 18.40	448.0 17.64	10.70 0.42	7.70 0.30	3850	220	0.2048	106.33 234.41
82.550 3.2500	63.500 2.5000	-5.6 -0.22	6.4 0.25	319.0 12.56	328.0 12.91	3.3 0.13	403.5 15.88	394.0 15.51	7.40 0.29	3.50 0.14	2550	282	0.1779	33.74 74.39
50.800 2.0000	38.100 1.5000	12.7 0.50	6.4 0.25	319.0 12.56	329.0 12.95	3.3 0.13	380.0 14.96	374.0 14.72	5.60 0.22	1.90 0.08	1750	301	0.1585	14.35 31.64
63.500 2.5000	47.625 1.8750	16.3 0.64	12.7 0.50	322.0 12.68	344.0 13.54	3.3 0.13	393.0 15.47	380.0 14.96	6.90 0.27	2.50 0.10	1990	260	0.1775	21.36 47.09
63.500 2.5000	47.625 1.8750	16.3 0.64	6.4 0.25	322.0 12.68	331.0 13.03	3.3 0.13	393.0 15.47	380.0 14.96	6.90 0.27	2.50 0.10	1990	260	0.1775	21.44 47.26
76.992 3.0312	53.975 2.1250	7.4 0.29	6.4 0.25	328.0 12.91	334.0 13.15	4.8 0.19	411.5 16.20	406.0 15.98	15.00 0.59	-2.00 -0.08	1880	273	0.1711	33.00 72.75
61.912 2.4375	39.688 1.5625	7.6 0.30	8.0 0.31	324.0 12.76	337.0 13.27	3.3 0.13	415.0 16.34	415.0 16.34	11.40 0.45	7.00 0.28	1580	245	0.1557	27.92 61.55
61.912 2.4375	39.688 1.5625	7.6 0.30	8.0 0.31	324.0 12.76	337.0 13.27	1.5 0.06	415.0 16.34	416.0 16.38	11.40 0.45	7.00 0.28	1580	245	0.1557	27.96 61.65
74.612 2.9375	53.975 2.1250	9.1 0.36	6.4 0.25	329.0 12.95	339.0 13.35	3.3 0.13	463.0 18.22	459.0 18.07	10.30 0.40	5.90 0.23	1770	187	0.1657	48.34 106.57
92.075 3.6250	69.850 2.7500	-1.5 -0.06	16.0 0.63	330.0 12.99	359.0 14.13	6.4 0.25	459.0 18.07	450.0 17.72	17.30 0.68	2.20 0.09	2180	166	0.1783	62.33 137.41
79.375 3.1250	53.975 2.1250	105.4 4.15	6.4 0.25	344.0 13.54	353.0 13.90	6.4 0.25	481.0 18.94	438.0 17.24	* *	* *	1520	157	0.2137	63.02 138.93
136.525 5.3750	98.425 3.8750	-24.4 -0.96	1.3 0.05	335.0 13.19	335.0 13.19	6.4 0.25	514.0 20.24	501.0 19.72	20.00 0.79	7.30 0.29	2660	170	0.1898	126.22 278.25
20.638 0.8125	14.288 0.5625	79.5 3.13	2.3 0.09	322.0 12.68	325.0 12.80	1.5 0.06	354.0 13.94	346.0 13.62	3.10 0.12	2.10 0.08	990	809	0.2091	3.06 6.75
119.062 4.6875	88.900 3.5000	8.4 0.33	6.4 0.25	344.5 13.57	361.0 14.21	6.4 0.25	473.0 18.62	439.0 17.28	17.80 0.70	3.60 0.14	2950	250	0.2225	83.09 183.19
61.912 2.4375	39.688 1.5625	7.6 0.30	8.0 0.31	334.0 13.15	346.0 13.62	3.3 0.13	415.0 16.34	415.0 16.34	11.40 0.45	7.00 0.28	1580	245	0.1557	24.90 54.90
61.912 2.4375	39.688 1.5625	7.6 0.30	8.0 0.31	334.0 13.15	346.0 13.62	1.5 0.06	415.0 16.34	416.0 16.38	11.40 0.45	7.00 0.28	1580	245	0.1557	24.95 55.00
85.725 3.3750	68.262 2.6875	-4.8 -0.19	3.5 0.14	337.0 13.27	341.0 13.43	3.3 0.13	427.5 16.84	418.0 16.46	6.40 0.25	3.70 0.15	2710	281	0.1809	40.55 89.39
85.725 3.3750	68.262 2.6875	-4.8 -0.19	3.5 0.14	337.0 13.27	341.0 13.43	3.3 0.13	427.5 16.84	418.0 16.46	6.80 0.27	3.70 0.15	2940	304	0.1863	40.26 88.76
136.525 5.3750	98.425 3.8750	-16.8 -0.66	19.8 0.78	353.0 13.90	390.0 15.35	6.4 0.25	547.5 21.55	534.0 21.02	20.40 0.80	7.90 0.31	3160	183	0.2053	152.24 335.63
131.762 5.1875	82.550 3.2500	60.5 2.38	14.3 0.56	373.0 14.69	410.0 16.14	12.7 0.50	581.5 22.90	531.0 20.91	25.10 0.99	17.60 0.69	2500	149	0.2401	169.68 374.08
28.575 1.1250	20.638 0.8125	35.1 1.38	3.5 0.14	333.0 13.11	339.0 13.35	3.3 0.13	373.0 14.69	365.0 14.37	2.80 0.11	2.50 0.10	1500	792	0.2007	5.27 11.61
136.525 5.3750	98.425 3.8750	-16.8 -0.66	6.4 0.25	359.0 14.13	369.0 14.53	6.4 0.25	547.5 21.55	534.0 21.02	20.40 0.80	8.20 0.32	3160	183	0.2053	147.98 326.23
47.625 1.8750	34.925 1.3750	35.3 1.39	3.5 0.14	345.0 13.58	349.0 13.74	3.3 0.13	402.0 15.83	394.0 15.51	7.30 0.29	0.10 0.00	1820	479	0.1774	14.01 30.88
63.500 2.5000	44.450 1.7500	16.3 0.64	6.8 0.27	354.0 13.94	364.0 14.33	6.8 0.27	456.0 17.96	449.0 17.68	15.50 0.61	5.80 0.23	2140	336	0.1778	35.76 78.83

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

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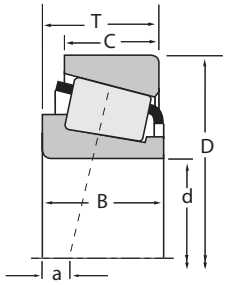
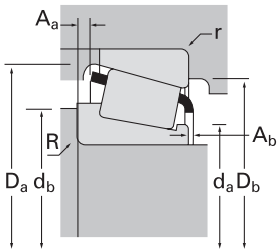
SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)		Factors (5)	Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
330.200 13.0000	482.600 19.0000	85.725 3.3750	1230000 276000	0.39	1.54	318000 71400	213000 47800	1.49	2320000 523000	EE526130	526190
333.375 13.1250	469.900 18.5000	90.488 3.5625	1570000 353000	0.33	1.79	407000 91400	233000 52400	1.74	3460000 777000	HM261049	HM261010
342.900 13.5000	450.850 17.7500	66.675 2.6250	953000 214000	0.35	1.70	247000 55600	149000 33500	1.66	2210000 497000	LM361649	LM361610
342.900 13.5000	457.098 17.9960	66.675 2.6250	807000 181000	0.71	0.84	209000 47000	255000 57400	0.82	1940000 436000	LM961548	LM961510
342.900 13.5000	457.098 17.9960	68.262 2.6875	807000 181000	0.71	0.84	209000 47000	255000 57400	0.82	1940000 436000	LM961548	LM961511
346.075 13.6250	469.900 18.5000	60.325 2.3750	537000 121000	0.50	1.20	139000 31300	119000 26800	1.17	1110000 250000	EE161363	161850
346.075 13.6250	482.600 19.0000	60.325 2.3750	537000 121000	0.50	1.20	139000 31300	119000 26800	1.17	1110000 250000	EE161363	161900
346.075 13.6250	482.600 19.0000	66.675 2.6250	878000 197000	0.42	1.44	228000 51200	162000 36500	1.40	1770000 398000	EE203136	203190
346.075 13.6250	482.600 19.0000	66.675 2.6250	878000 197000	0.42	1.44	228000 51200	162000 36500	1.40	1770000 398000	EE203137	203190
346.075 13.6250	488.950 19.2500	95.250 3.7500	1590000 358000	0.33	1.79	413000 92900	237000 53200	1.74	3440000 774000	HM262748	HM262710
346.075 13.6250	488.950 19.2500	95.250 3.7500	1690000 381000	0.33	1.79	439000 98700	252000 56600	1.74	3760000 845000	HM262749	HM262710
349.250 13.7500	501.650 19.7500	90.488 3.5625	1320000 298000	0.37	1.63	343000 77200	216000 48500	1.59	2780000 626000	EE333137	333197
354.012 13.9375	469.900 18.5000	60.325 2.3750	537000 121000	0.50	1.20	139000 31300	119000 26800	1.17	1110000 250000	EE161394	161850
354.012 13.9375	482.600 19.0000	60.325 2.3750	537000 121000	0.50	1.20	139000 31300	119000 26800	1.17	1110000 250000	EE161394	161900
355.600 14.0000	444.500 17.5000	60.325 2.3750	718000 162000	0.31	1.95	186000 41900	98000 22000	1.90	1970000 444000	L163149	L163110
355.600 14.0000	501.650 19.7500	74.612 2.9375	899000 202000	0.44	1.36	233000 52400	176000 39500	1.33	1870000 420000	EE231400	231975
355.600 14.0000	501.650 19.7500	90.488 3.5625	1320000 298000	0.37	1.63	343000 77200	216000 48500	1.59	2780000 626000	EE333140	333197
361.950 14.2500	406.400 16.0000	23.812 0.9375	194000 43600	0.40	1.49	50300 11300	34600 7780	1.45	574000 129000	LL562749	LL562710
368.250 14.4980	523.875 20.6250	101.600 4.0000	1940000 437000	0.33	1.80	504000 113000	287000 64500	1.76	4340000 977000	HM265049	HM265010
371.475 14.6250	501.650 19.7500	74.612 2.9375	899000 202000	0.44	1.36	233000 52400	176000 39500	1.33	1870000 420000	EE231462	231975
374.650 14.7500	431.800 17.0000	28.575 1.1250	249000 56000	0.33	1.80	64500 14500	36700 8260	1.76	745000 167000	LL264648	LL264610
381.000 15.0000	479.425 18.8750	49.212 1.9375	582000 131000	0.50	1.21	151000 33900	128000 28800	1.18	1380000 311000	L865547	L865512
381.000 15.0000	508.000 20.0000	63.500 2.5000	646000 145000	0.53	1.13	167000 37600	153000 34300	1.10	1480000 332000	EE192150	192200
381.000 15.0000	522.288 20.5625	85.725 3.3750	1360000 306000	0.39	1.56	353000 79400	233000 52400	1.51	2950000 663000	LM565949	LM565910
381.000 15.0000	546.100 21.5000	104.775 4.1250	1940000 436000	0.33	1.80	502000 113000	286000 64300	1.76	4210000 946000	HM266446	HM266410
381.000 15.0000	546.100 21.5000	104.775 4.1250	2100000 473000	0.33	1.80	545000 123000	311000 69800	1.76	4730000 1060000	HM266447	HM266410
381.000 15.0000	590.550 23.2500	114.300 4.5000	2440000 549000	0.33	1.80	633000 142000	360000 81000	1.76	5550000 1250000	M268730	M268710
384.175 15.1250	441.325 17.3750	28.575 1.1250	228000 51200	0.34	1.76	59100 13300	34400 7740	1.72	667000 150000	LL365348	LL365310

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight
Bearing			Shaft			Housing			Cage					kg (lbs.)
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
80.167 3.1562	60.325 2.3750	4.8 0.19	6.4 0.25	351.0 13.82	360.0 14.17	3.3 0.13	454.0 17.87	449.0 17.68	14.50 0.57	3.10 0.12	2280	287	0.1790	44.95 99.10
90.488 3.5625	71.438 2.8125	-6.1 -0.24	6.4 0.25	357.0 14.06	363.0 14.29	3.3 0.13	449.5 17.69	439.0 17.28	7.70 0.30	3.30 0.13	3310	324	0.1935	46.58 102.69
66.675 2.6250	52.388 2.0625	8.9 0.35	8.5 0.33	360.0 14.17	373.0 14.69	3.5 0.14	435.0 17.13	425.0 16.73	4.70 0.19	4.90 0.19	2730	433	0.1833	26.40 58.19
63.500 2.5000	46.038 1.8125	56.4 2.22	3.3 0.13	363.0 14.29	367.0 14.45	3.3 0.13	443.0 17.44	423.0 16.65	12.60 0.50	4.90 0.19	2280	300	0.2146	28.02 61.77
63.500 2.5000	47.625 1.8750	56.4 2.22	3.3 0.13	363.0 14.29	367.0 14.45	3.3 0.13	443.0 17.44	423.0 16.65	12.60 0.50	4.90 0.19	2280	300	0.2146	28.49 62.80
55.562 2.1875	38.100 1.5000	33.8 1.33	7.0 0.28	368.0 14.49	379.0 14.92	6.4 0.25	455.0 17.91	445.0 17.52	14.40 0.57	3.80 0.15	1730	299	0.1741	25.15 55.44
55.562 2.1875	38.100 1.5000	33.8 1.33	7.0 0.28	368.0 14.49	379.0 14.92	6.4 0.25	455.0 17.91	451.0 17.76	14.40 0.57	3.80 0.15	1730	299	0.1741	27.97 61.67
63.500 2.5000	44.450 1.7500	16.3 0.64	6.8 0.27	366.0 14.41	376.0 14.80	6.8 0.27	456.0 17.96	449.0 17.68	15.50 0.61	5.80 0.23	2140	336	0.1778	31.56 69.58
63.500 2.5000	44.450 1.7500	16.3 0.64	12.7 0.50	366.0 14.41	388.0 15.28	6.8 0.27	456.0 17.96	449.0 17.68	15.50 0.61	5.80 0.23	2140	336	0.1778	31.06 68.48
95.250 3.7500	74.612 2.9375	-6.4 -0.25	6.4 0.25	367.0 14.45	377.0 14.84	3.3 0.13	467.0 18.39	456.0 17.95	9.30 0.37	3.00 0.12	3430	322	0.1956	54.00 119.06
95.250 3.7500	74.612 2.9375	-6.4 -0.25	6.4 0.25	367.0 14.45	377.0 14.84	3.3 0.13	467.0 18.39	456.0 17.95	8.60 0.34	3.50 0.14	3650	342	0.1999	53.41 117.74
84.138 3.3125	69.850 2.7500	3.6 0.14	6.4 0.25	372.0 14.65	382.0 15.04	3.3 0.13	478.5 18.83	470.0 18.50	12.00 0.47	3.00 0.12	3040	337	0.1928	52.69 116.15
55.562 2.1875	38.100 1.5000	33.8 1.33	7.0 0.28	374.0 14.72	385.0 15.16	6.4 0.25	455.0 17.91	445.0 17.52	14.40 0.57	3.80 0.15	1730	299	0.1741	23.25 51.25
55.562 2.1875	38.100 1.5000	33.8 1.33	7.0 0.28	374.0 14.72	385.0 15.16	6.4 0.25	455.0 17.91	451.0 17.76	14.40 0.57	3.80 0.15	1730	299	0.1741	26.07 57.48
60.325 2.3750	47.625 1.8750	7.1 0.28	3.5 0.14	370.0 14.57	374.0 14.72	3.3 0.13	430.0 16.93	422.0 16.61	5.20 0.20	2.30 0.09	3210	621	0.1838	20.56 45.32
66.675 2.6250	50.800 2.0000	19.6 0.77	6.4 0.25	379.0 14.92	388.0 15.28	3.3 0.13	481.0 18.94	472.0 18.58	19.00 0.75	5.90 0.23	2390	366	0.1874	39.04 86.07
84.138 3.3125	69.850 2.7500	3.6 0.14	6.4 0.25	377.0 14.84	387.0 15.24	3.3 0.13	478.5 18.83	470.0 18.50	12.00 0.47	3.00 0.12	3040	337	0.1928	50.37 111.04
23.812 0.9375	17.462 0.6875	37.8 1.49	2.3 0.09	371.0 14.61	372.0 14.65	1.5 0.06	401.0 15.79	396.0 15.59	1.10 0.04	2.40 0.09	1670	1060	0.2005	3.68 8.11
101.600 4.0000	79.375 3.1250	-8.4 -0.33	6.4 0.25	394.0 15.51	400.0 15.75	6.4 0.25	498.5 19.63	487.0 19.17	9.30 0.36	3.70 0.14	4300	372	0.2106	66.03 145.57
66.675 2.6250	50.800 2.0000	19.6 0.77	6.4 0.25	390.0 15.35	400.0 15.75	3.3 0.13	481.0 18.94	472.0 18.58	19.00 0.75	5.90 0.23	2390	366	0.1874	34.31 75.63
28.575 1.1250	20.638 0.8125	27.9 1.10	3.5 0.14	384.0 15.12	389.0 15.31	3.3 0.13	424.0 16.69	417.0 16.42	1.90 0.08	2.90 0.12	2160	1050	0.2055	6.08 13.40
47.625 1.8750	34.925 1.3750	42.9 1.69	6.4 0.25	395.0 15.55	407.0 16.02	3.3 0.13	465.0 18.31	456.0 17.95	6.60 0.26	2.70 0.11	2260	529	0.1897	18.40 40.57
58.738 2.3125	38.100 1.5000	39.4 1.55	6.4 0.25	400.0 15.75	410.0 16.14	3.3 0.13	482.0 18.98	478.0 18.82	18.00 0.71	3.90 0.15	2290	398	0.1951	29.40 64.81
84.138 3.3125	61.912 2.4375	8.9 0.35	6.4 0.25	402.0 15.83	411.0 16.18	3.3 0.13	499.5 19.67	493.0 19.41	12.30 0.49	3.10 0.12	3380	378	0.2028	49.21 108.48
104.775 4.1250	82.550 3.2500	-7.1 -0.28	6.4 0.25	405.0 15.94	415.0 16.34	6.4 0.25	520.0 20.47	507.0 19.96	9.10 0.36	5.40 0.21	4380	279	0.2116	76.52 168.68
104.775 4.1250	82.550 3.2500	-7.1 -0.28	6.4 0.25	405.0 15.94	415.0 16.34	6.4 0.25	520.0 20.47	507.0 19.96	8.90 0.35	4.90 0.19	4760	301	0.2178	76.63 168.95
114.300 4.5000	88.900 3.5000	-9.4 -0.37	6.4 0.25	415.0 16.34	425.0 16.73	6.4 0.25	562.5 22.14	549.0 21.61	10.60 0.42	6.00 0.24	5750	421	0.2319	114.19 251.73
28.575 1.1250	20.638 0.8125	30.0 1.18	3.5 0.14	393.0 15.47	399.0 15.71	3.3 0.13	433.0 17.05	427.0 16.81	2.00 0.08	3.00 0.12	2060	1160	0.2033	6.14 13.55

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

B

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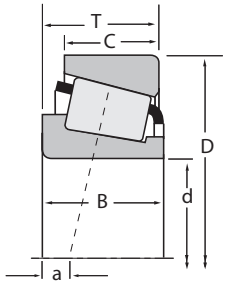
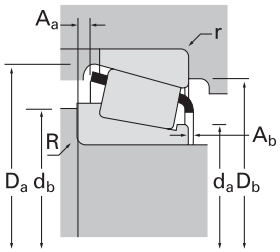
SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
384.175 15.1250	546.100 21.5000	104.775 4.1250	1940000 436000	0.33	1.80	502000 113000	286000 64300	1.76	4210000 946000	HM266448	HM266410
384.175 15.1250	546.100 21.5000	104.775 4.1250	2100000 473000	0.33	1.80	545000 123000	311000 69800	1.76	4730000 1060000	HM266449	HM266410
385.762 15.1875	514.350 20.2500	82.550 3.2500	1330000 298000	0.42	1.43	344000 77300	246000 55400	1.40	3160000 710000	LM665949	LM665910
387.248 15.2460	546.100 21.5000	87.312 3.4375	1600000 359000	0.42	1.44	414000 93000	296000 66500	1.40	3940000 886000	M667935	M667911
393.700 15.5000	546.100 21.5000	76.200 3.0000	928000 209000	0.48	1.26	241000 54100	196000 44100	1.23	2010000 451000	EE234154	234215
403.225 15.8750	460.375 18.1250	28.575 1.1250	225000 50600	0.40	1.49	58400 13100	40200 9030	1.45	708000 159000	LL566848	LL566810
406.400 16.0000	508.000 20.0000	61.912 2.4375	842000 189000	0.37	1.64	218000 49100	137000 30700	1.60	2230000 502000	L467549	L467510
406.400 16.0000	546.100 21.5000	76.200 3.0000	928000 209000	0.48	1.26	241000 54100	196000 44100	1.23	2010000 451000	EE234160	234215
406.400 16.0000	546.100 21.5000	87.312 3.4375	1600000 359000	0.42	1.44	414000 93000	296000 66500	1.40	3940000 886000	M667944	M667911
406.400 16.0000	549.275 21.6250	85.725 3.3750	1400000 316000	0.41	1.47	364000 81800	254000 57100	1.43	3130000 704000	LM567949	LM567910
406.400 16.0000	558.800 22.0000	65.088 2.5625	928000 209000	0.48	1.26	241000 54100	196000 44100	1.23	2010000 451000	EE234160	234220
406.400 16.0000	762.000 30.0000	180.975 7.1250	4100000 922000	0.94	0.64	1060000 239000	1710000 384000	0.62	6840000 1540000	H969249	H969210
409.575 16.1250	546.100 21.5000	87.312 3.4375	1440000 325000	0.42	1.44	374000 84200	268000 60100	1.40	3420000 768000	M667948	M667911
415.925 16.3750	590.550 23.2500	114.300 4.5000	2440000 549000	0.33	1.80	633000 142000	360000 81000	1.76	5550000 1250000	M268749	M268710
430.212 16.9375	603.250 23.7500	76.200 3.0000	963000 216000	0.52	1.14	250000 56100	224000 50400	1.11	2190000 491000	EE241693	242375
431.800 17.0000	533.400 21.0000	46.038 1.8125	612000 138000	0.31	1.96	159000 35700	83000 18700	1.91	1520000 342000	80385	80325
431.800 17.0000	552.450 21.7500	44.450 1.7500	614000 138000	0.32	1.88	159000 35800	86900 19500	1.83	1550000 348000	80170	80217
431.800 17.0000	565.150 22.2500	44.450 1.7500	614000 138000	0.32	1.88	159000 35800	86900 19500	1.83	1550000 348000	80170	80222
431.800 17.0000	571.500 22.5000	74.612 2.9375	1210000 271000	0.55	1.10	312000 70200	292000 65700	1.07	2810000 632000	LM869448	LM869410
431.800 17.0000	603.250 23.7500	76.200 3.0000	963000 216000	0.52	1.14	250000 56100	224000 50400	1.11	2190000 491000	EE241701	242375
447.675 17.6250	552.450 21.7500	44.450 1.7500	614000 138000	0.32	1.88	159000 35800	86900 19500	1.83	1550000 348000	80176	80217
447.675 17.6250	552.450 21.7500	44.450 1.7500	606000 136000	0.36	1.65	157000 35300	98200 22100	1.60	1510000 340000	LL469949	LL469910
447.675 17.6250	565.150 22.2500	44.450 1.7500	614000 138000	0.32	1.88	159000 35800	86900 19500	1.83	1550000 348000	80176	80222
450.850 17.7500	603.250 23.7500	85.725 3.3750	1460000 328000	0.45	1.32	379000 85100	294000 66000	1.29	3440000 773000	LM770945	LM770910
457.073 17.9950	573.088 22.5625	74.612 2.9375	1210000 271000	0.40	1.49	313000 70300	215000 48400	1.45	3170000 713000	L570648	L570610
457.200 18.0000	552.450 21.7500	44.450 1.7500	614000 138000	0.32	1.88	159000 35800	86900 19500	1.83	1550000 348000	80180	80217
457.200 18.0000	573.088 22.5625	74.612 2.9375	1210000 271000	0.40	1.49	313000 70300	215000 48400	1.45	3170000 713000	L570649	L570610
457.200 18.0000	596.900 23.5000	76.200 3.0000	1210000 272000	0.40	1.48	313000 70500	217000 48800	1.44	2890000 649000	EE244180	244235

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)													Weight kg (lbs.)
Bearing			Shaft			Housing			Cage		Factors			
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
104.775 4.1250	82.550 3.2500	-7.1 -0.28	6.4 0.25	407.0 16.02	417.0 16.42	6.4 0.25	520.0 20.47	507.0 19.96	9.10 0.36	5.40 0.21	4380	279	0.2116	74.95 165.23
104.775 4.1250	82.550 3.2500	-7.1 -0.28	6.4 0.25	407.0 16.02	417.0 16.42	6.4 0.25	520.0 20.47	507.0 19.96	8.90 0.35	4.90 0.19	4760	301	0.2178	75.07 165.50
82.550 3.2500	63.500 2.5000	16.3 0.64	6.4 0.25	406.0 15.98	415.0 16.34	3.3 0.13	495.0 19.49	482.0 18.98	9.40 0.37	2.80 0.11	3740	480	0.2155	44.79 98.74
87.312 3.4375	68.262 2.6875	17.8 0.70	6.4 0.25	414.0 16.30	424.0 16.69	6.4 0.25	527.0 20.74	510.0 20.08	8.10 0.32	2.70 0.11	4640	498	0.2316	63.17 139.27
61.120 2.4063	55.562 2.1875	35.6 1.40	6.4 0.25	416.0 16.38	426.0 16.77	6.4 0.25	515.5 20.30	504.0 19.84	13.90 0.55	6.10 0.24	2780	448	0.2018	44.70 98.54
28.575 1.1250	20.638 0.8125	41.4 1.63	3.5 0.14	414.0 16.30	418.0 16.46	3.3 0.13	452.0 17.80	445.0 17.52	2.10 0.08	2.00 0.08	2300	1580	0.2225	6.54 14.41
61.912 2.4375	47.625 1.8750	20.3 0.80	3.3 0.13	423.0 16.65	426.0 16.77	3.3 0.13	492.0 19.37	483.0 19.02	6.20 0.24	2.70 0.11	3720	673	0.2038	26.32 58.03
61.120 2.4063	55.562 2.1875	35.6 1.40	6.4 0.25	425.0 16.73	435.0 17.13	6.4 0.25	515.5 20.30	504.0 19.84	13.90 0.55	6.10 0.24	2780	448	0.2018	40.88 90.12
87.312 3.4375	68.262 2.6875	17.8 0.70	6.4 0.25	428.0 16.85	438.0 17.24	6.4 0.25	527.0 20.74	510.0 20.08	8.10 0.32	2.20 0.08	4640	498	0.2316	55.01 121.28
84.138 3.3125	61.912 2.4375	15.5 0.61	6.4 0.25	427.0 16.81	437.0 17.20	3.3 0.13	526.5 20.72	519.0 20.43	12.70 0.50	3.20 0.12	3800	427	0.2143	53.68 118.34
61.120 2.4063	44.450 1.7500	35.6 1.40	6.4 0.25	425.0 16.73	435.0 17.13	6.4 0.25	516.0 20.31	516.0 20.31	13.90 0.55	6.10 0.24	2780	448	0.2018	40.30 88.84
161.925 6.3750	107.950 4.2500	79.2 3.12	12.7 0.50	463.5 18.24	513.0 20.20	12.7 0.50	719.5 28.32	657.0 25.87	25.80 1.02	20.50 0.81	4610	207	0.2945	313.78 691.76
87.312 3.4375	68.262 2.6875	17.8 0.70	6.4 0.25	431.0 16.97	440.0 17.32	6.4 0.25	527.0 20.74	510.0 20.08	9.40 0.37	3.10 0.12	4200	453	0.2235	53.52 117.98
114.300 4.5000	88.900 3.5000	-9.4 -0.37	6.4 0.25	441.0 17.36	451.0 17.76	6.4 0.25	562.5 22.14	549.0 21.61	10.60 0.42	6.00 0.24	5750	421	0.2319	94.63 208.62
73.025 2.8750	50.800 2.0000	47.0 1.85	6.4 0.25	455.0 17.91	465.0 18.31	6.4 0.25	563.0 22.16	558.0 21.97	18.70 0.74	-1.50 -0.06	3350	551	0.2207	59.19 130.50
46.038 1.8125	34.925 1.3750	23.4 0.92	3.3 0.13	446.0 17.56	450.0 17.72	3.3 0.13	510.0 20.08	510.0 20.08	4.20 0.16	1.20 0.05	3210	801	0.1815	20.48 45.14
44.450 1.7500	31.750 1.2500	26.2 1.03	3.3 0.13	452.0 17.80	456.0 17.95	3.3 0.13	531.0 20.91	531.0 20.91	5.90 0.23	4.40 0.17	3440	868	0.1880	25.03 55.18
44.450 1.7500	31.750 1.2500	26.2 1.03	3.3 0.13	452.0 17.80	456.0 17.95	3.3 0.13	531.0 20.91	537.0 21.14	5.90 0.23	4.40 0.17	3440	868	0.1880	27.80 61.28
74.612 2.9375	52.388 2.0625	50.0 1.97	3.3 0.13	453.0 17.83	457.0 17.99	3.3 0.13	549.0 21.61	537.0 21.14	11.40 0.45	-0.10 0.00	3720	491	0.2326	47.54 104.81
73.025 2.8750	50.800 2.0000	47.0 1.85	6.4 0.25	457.0 17.99	466.0 18.35	6.4 0.25	563.0 22.16	558.0 21.97	18.70 0.74	-1.50 -0.06	3350	551	0.2207	58.58 129.14
44.450 1.7500	31.750 1.2500	26.2 1.03	3.3 0.13	464.0 18.27	467.0 18.39	3.3 0.13	531.0 20.91	531.0 20.91	5.90 0.23	4.40 0.17	3440	868	0.1880	21.22 46.77
41.618 1.6385	32.545 1.2813	35.1 1.38	3.3 0.13	462.0 18.19	466.0 18.35	3.3 0.13	525.0 20.67	528.0 20.79	3.70 0.15	5.00 0.20	3160	930	0.1912	20.72 45.69
44.450 1.7500	31.750 1.2500	26.2 1.03	3.3 0.13	464.0 18.27	467.0 18.39	3.3 0.13	531.0 20.91	537.0 21.14	5.90 0.23	4.40 0.17	3440	868	0.1880	23.98 52.87
84.138 3.3125	60.325 2.3750	30.5 1.20	6.4 0.25	474.0 18.66	484.0 19.06	3.3 0.13	579.5 22.82	570.0 22.44	13.40 0.53	3.30 0.13	4660	537	0.2366	64.28 141.70
74.612 2.9375	57.150 2.2500	27.2 1.07	6.4 0.25	475.0 18.70	485.0 19.09	6.4 0.25	558.0 21.97	543.0 21.38	7.40 0.29	3.60 0.14	4970	560	0.2321	41.71 91.95
44.450 1.7500	31.750 1.2500	26.2 1.03	3.3 0.13	471.0 18.54	474.0 18.66	3.3 0.13	531.0 20.91	531.0 20.91	5.90 0.23	4.40 0.17	3440	868	0.1880	18.85 41.57
74.612 2.9375	57.150 2.2500	27.2 1.07	6.4 0.25	475.0 18.70	485.0 19.09	6.4 0.25	558.0 21.97	543.0 21.38	7.40 0.29	3.60 0.14	4970	560	0.2321	41.64 91.80
73.025 2.8750	53.975 2.1250	26.7 1.05	9.7 0.38	478.0 18.82	494.0 19.45	3.3 0.13	570.5 22.47	567.0 22.32	13.80 0.54	4.00 0.16	4410	627	0.2233	49.15 108.35

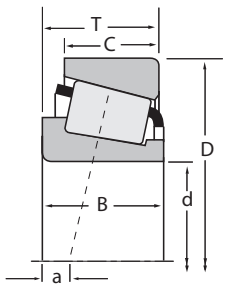
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

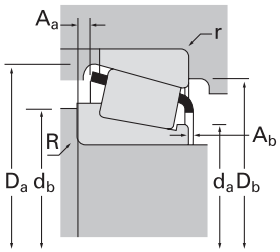
Continued on next page.

B

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
457.200 18.0000	603.250 23.7500	85.725 3.3750	1460000 328000	0.45	1.32	379000 85100	294000 66000	1.29	3440000 773000	LM770949	LM770910
457.200 18.0000	615.950 24.2500	85.725 3.3750	1660000 373000	0.33	1.80	430000 96700	245000 55000	1.76	4100000 921000	LM272235	LM272210
457.200 18.0000	730.148 28.7460	120.650 4.7500	2770000 623000	0.39	1.53	718000 161000	483000 109000	1.49	4870000 1100000	EE671801	672873
476.250 18.7500	565.150 22.2500	41.275 1.6250	460000 103000	0.47	1.28	119000 26800	95900 21600	1.24	1400000 315000	LL771948	LL771911
479.425 18.8750	679.450 26.7500	128.588 5.0625	3190000 717000	0.33	1.80	827000 186000	471000 106000	1.76	7400000 1660000	M272749	M272710
482.600 19.0000	615.950 24.2500	53.975 2.1250	643000 145000	0.35	1.72	167000 37500	99700 22400	1.67	1710000 384000	80480	80425
482.600 19.0000	615.950 24.2500	85.725 3.3750	1660000 373000	0.33	1.80	430000 96700	245000 55000	1.76	4100000 921000	LM272249	LM272210
482.600 19.0000	634.873 24.9950	80.962 3.1875	1440000 323000	0.34	1.75	373000 83900	219000 49200	1.70	3660000 822000	EE243190	243250
488.950 19.2500	634.873 24.9950	84.138 3.3125	1590000 357000	0.47	1.27	412000 92700	334000 75000	1.24	3870000 871000	LM772748	LM772710
488.950 19.2500	660.400 26.0000	93.662 3.6875	2030000 455000	0.31	1.95	525000 118000	276000 62000	1.90	4590000 1030000	EE640192	640260
498.323 19.6190	634.873 24.9950	80.962 3.1875	1440000 323000	0.34	1.75	373000 83900	219000 49200	1.70	3660000 822000	EE243197	243250
498.323 19.6190	634.873 24.9950	80.962 3.1875	1570000 352000	0.34	1.75	406000 91200	238000 53500	1.70	4130000 927000	EE243198	243250
498.475 19.6250	634.873 24.9950	80.962 3.1875	1570000 352000	0.34	1.75	406000 91200	238000 53500	1.70	4130000 927000	EE243195	243250
498.475 19.6250	634.873 24.9950	80.962 3.1875	1440000 323000	0.34	1.75	373000 83900	219000 49200	1.70	3660000 822000	EE243196	243250
508.000 20.0000	838.200 33.0000	146.050 5.7500	3540000 796000	0.48	1.25	918000 206000	754000 169000	1.22	6530000 1470000	EE426200	426330
533.400 21.0000	635.000 25.0000	50.800 2.0000	762000 171000	0.41	1.48	198000 44400	137000 30900	1.44	2040000 459000	LL575343	LL575310
536.575 21.1250	761.873 29.9950	146.050 5.7500	3930000 884000	0.33	1.80	1020000 229000	580000 130000	1.76	9250000 2080000	M276449	M276410
539.750 21.2500	635.000 25.0000	50.800 2.0000	762000 171000	0.41	1.48	198000 44400	137000 30900	1.44	2040000 459000	LL575349	LL575310
549.097 21.6180	692.150 27.2500	80.962 3.1875	1490000 335000	0.38	1.59	386000 86800	249000 55900	1.55	3970000 892000	L476548	L476510
549.275 21.6250	692.150 27.2500	80.962 3.1875	1490000 335000	0.38	1.59	386000 86800	249000 55900	1.55	3970000 892000	L476549	L476510
558.800 22.0000	736.600 29.0000	104.775 4.1250	2520000 567000	0.35	1.73	653000 147000	387000 87100	1.69	6370000 1430000	LM377449	LM377410
571.500 22.5000	812.800 32.0000	155.575 6.1250	4440000 999000	0.33	1.80	1150000 259000	656000 147000	1.76	10600000 2370000	M278749	M278710
584.200 23.0000	685.800 27.0000	49.212 1.9375	783000 176000	0.44	1.37	203000 45600	152000 34100	1.34	2280000 513000	LL778149	LL778110
596.900 23.5000	685.800 27.0000	31.750 1.2500	337000 75800	0.53	1.14	87400 19600	78800 17700	1.11	963000 217000	680235	680270
602.945 23.7380	787.400 31.0000	93.662 3.6875	2230000 502000	0.37	1.62	579000 130000	367000 82600	1.58	5620000 1260000	EE649237	649310
609.346 23.9900	787.400 31.0000	93.662 3.6875	2230000 502000	0.37	1.62	579000 130000	367000 82600	1.58	5620000 1260000	EE649238	649310
609.396 23.9920	762.000 30.0000	95.250 3.7500	1940000 437000	0.49	1.23	503000 113000	420000 94400	1.20	5470000 1230000	L879946	L879910
609.600 24.0000	762.000 30.0000	95.250 3.7500	1940000 437000	0.49	1.23	503000 113000	420000 94400	1.20	5470000 1230000	L879947	L879910

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

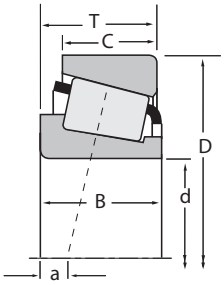
Dimensions, mm (inches)											Factors			Weight
Bearing			Shaft			Housing			Cage					kg (lbs.)
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	a[3]	R[4]	d_a	d_b	r[4]	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
84.138 3.3125	60.325 2.3750	30.5 1.20	6.4 0.25	479.0 18.86	489.0 19.25	3.3 0.13	579.5 22.82	570.0 22.44	13.40 0.53	3.30 0.13	4660	537	0.2366	61.29 135.12
85.725 3.3750	66.675 2.6250	12.4 0.49	6.4 0.25	483.0 19.02	493.0 19.41	6.4 0.25	596.5 23.48	585.0 23.03	8.10 0.32	4.00 0.16	6040	665	0.2333	71.13 156.81
114.300 4.5000	82.550 3.2500	5.3 0.21	9.7 0.38	491.0 19.33	507.0 19.96	6.4 0.25	680.5 26.79	675.0 26.57	19.80 0.78	10.20 0.40	4970	343	0.2315	163.93 361.40
41.275 1.6250	31.750 1.2500	58.4 2.30	3.3 0.13	491.0 19.33	495.0 19.49	3.3 0.13	549.0 21.61	543.0 21.38	3.50 0.14	1.30 0.05	3790	1240	0.2189	19.28 42.51
128.588 5.0625	101.600 4.0000	-8.9 -0.35	6.4 0.25	507.0 19.96	516.0 20.31	6.4 0.25	648.0 25.52	633.0 24.92	9.90 0.39	7.60 0.30	8110	508	0.2598	141.63 312.24
46.038 1.8125	41.275 1.6250	36.6 1.44	3.3 0.13	501.0 19.72	504.0 19.84	3.3 0.13	579.0 22.80	582.0 22.91	6.20 0.24	2.90 0.12	4150	1070	0.2056	34.81 76.74
85.725 3.3750	66.675 2.6250	12.4 0.49	6.4 0.25	501.0 19.72	513.0 20.20	6.4 0.25	596.5 23.48	585.0 23.03	8.10 0.32	4.00 0.16	6040	665	0.2333	58.43 128.81
80.962 3.1875	63.500 2.5000	19.0 0.75	6.4 0.25	510.0 20.08	516.0 20.31	3.3 0.13	609.5 24.00	603.0 23.74	8.10 0.32	2.50 0.10	6060	726	0.2350	66.08 145.67
84.138 3.3125	61.912 2.4375	40.9 1.61	6.4 0.25	510.0 20.08	522.0 20.55	3.3 0.13	613.5 24.15	600.0 23.62	10.30 0.40	2.90 0.12	5450	602	0.2525	64.08 141.27
94.458 3.7188	69.850 2.7500	4.8 0.19	6.4 0.25	513.0 20.20	522.0 20.55	6.4 0.25	630.5 24.82	624.0 24.57	10.50 0.41	4.60 0.18	6320	601	0.2310	83.41 183.89
80.962 3.1875	63.500 2.5000	19.0 0.75	6.4 0.25	522.0 20.55	528.0 20.79	3.3 0.13	609.5 24.00	603.0 23.74	8.10 0.32	2.50 0.10	6060	726	0.2350	58.40 128.74
80.962 3.1875	63.500 2.5000	19.0 0.75	6.4 0.25	522.0 20.55	528.0 20.79	3.3 0.13	609.5 24.00	603.0 23.74	9.20 0.36	1.60 0.06	6590	788	0.2422	57.63 127.06
80.962 3.1875	63.500 2.5000	19.0 0.75	6.4 0.25	522.0 20.55	528.0 20.79	3.3 0.13	609.5 24.00	603.0 23.74	9.20 0.36	1.60 0.06	6590	788	0.2422	57.56 126.89
80.962 3.1875	63.500 2.5000	19.0 0.75	6.4 0.25	522.0 20.55	528.0 20.79	3.3 0.13	609.5 24.00	603.0 23.74	8.10 0.32	2.50 0.10	6060	726	0.2350	58.32 128.58
139.700 5.5000	104.775 4.1250	23.9 0.94	9.7 0.38	552.0 21.73	564.0 22.20	9.7 0.38	768.0 30.23	759.0 29.88	21.50 0.85	8.30 0.33	6650	435	0.2722	276.10 608.68
50.800 2.0000	38.100 1.5000	50.8 2.00	6.4 0.25	549.0 21.61	558.0 21.97	6.4 0.25	621.0 24.45	612.0 24.09	4.60 0.18	2.80 0.11	4810	1200	0.2270	28.27 62.33
146.050 5.7500	114.300 4.5000	-9.7 -0.38	6.4 0.25	570.0 22.44	576.0 22.68	6.4 0.25	725.5 28.57	711.0 27.99	13.30 0.52	5.50 0.22	10600	614	0.2839	202.61 446.67
50.800 2.0000	38.100 1.5000	50.8 2.00	6.4 0.25	555.0 21.85	564.0 22.20	6.4 0.25	621.0 24.45	612.0 24.09	4.60 0.18	2.80 0.11	4810	1200	0.2270	26.14 57.62
80.962 3.1875	61.912 2.4375	32.3 1.27	6.4 0.25	570.0 22.44	579.0 22.80	6.4 0.25	666.0 26.22	657.0 25.87	8.60 0.34	2.60 0.10	7260	889	0.2567	67.26 148.29
80.962 3.1875	61.912 2.4375	32.3 1.27	6.4 0.25	570.0 22.44	579.0 22.80	6.4 0.25	666.0 26.22	657.0 25.87	8.60 0.34	2.60 0.10	7260	889	0.2567	67.17 148.08
104.775 4.1250	80.962 3.1875	15.7 0.62	6.4 0.25	585.0 23.03	594.0 23.39	6.4 0.25	708.0 27.87	696.0 27.40	9.00 0.35	5.50 0.22	9310	907	0.2735	113.21 249.58
155.575 6.1250	120.650 4.7500	-11.4 -0.45	6.4 0.25	609.0 23.98	615.0 24.21	6.4 0.25	773.5 30.46	756.0 29.76	15.10 0.59	5.80 0.23	12400	669	0.2990	244.54 539.12
49.212 1.9375	34.925 1.3750	64.5 2.54	3.5 0.14	600.0 23.62	603.0 23.74	3.3 0.13	669.0 26.34	663.0 26.10	5.10 0.20	2.60 0.10	5980	1580	0.2494	28.83 63.57
31.750 1.2500	25.400 1.0000	96.0 3.78	3.5 0.14	615.0 24.21	615.0 24.21	3.3 0.13	669.0 26.34	663.0 26.10	1.80 0.07	1.50 -0.06	3740	1810	0.2225	16.76 36.95
93.662 3.6875	69.850 2.7500	31.5 1.24	6.4 0.25	630.0 24.80	639.0 25.16	6.4 0.25	755.5 29.74	747.0 29.41	11.20 0.44	6.20 0.24	9380	929	0.2790	110.72 244.10
93.662 3.6875	69.850 2.7500	31.5 1.24	6.4 0.25	633.0 24.92	642.0 25.28	6.4 0.25	755.5 29.74	747.0 29.41	11.20 0.44	6.20 0.24	9380	929	0.2790	106.26 234.25
92.075 3.6250	71.438 2.8125	57.9 2.28	6.4 0.25	633.0 24.92	642.0 25.28	6.4 0.25	741.0 29.17	720.0 28.35	11.70 0.46	5.10 0.20	9580	1010	0.3063	92.92 204.86
92.075 3.6250	71.438 2.8125	57.9 2.28	6.4 0.25	633.0 24.92	642.0 25.28	6.4 0.25	741.0 29.17	720.0 28.35	11.70 0.46	5.10 0.20	9580	1010	0.3063	92.78 204.55

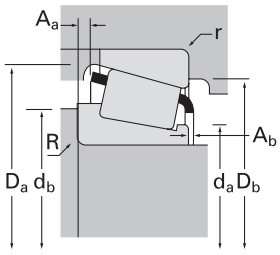
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

Continued on next page.

TS

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
				Factors (5)							
d	D	T	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
609.600 24.0000	774.700 30.5000	85.725 3.3750	1980000 444000	0.40	1.49	512000 115000	353000 79300	1.45	4620000 1040000	L580049	L580010
609.600 24.0000	787.400 31.0000	93.662 3.6875	2230000 502000	0.37	1.62	579000 130000	367000 82600	1.58	5620000 1260000	EE649240	649310
615.950 24.2500	708.025 27.8750	41.275 1.6250	593000 133000	0.39	1.55	154000 34500	102000 22900	1.51	1840000 414000	LL580049	LL580010
635.000 25.0000	933.450 36.7500	179.388 7.0625	5750000 1290000	0.33	1.80	1490000 335000	848000 191000	1.76	13900000 3120000	M281635	M281610
660.235 25.9935	812.800 32.0000	95.250 3.7500	2170000 487000	0.33	1.80	561000 126000	320000 71900	1.76	5940000 1340000	L281146	L281110
660.400 26.0000	812.800 32.0000	95.250 3.7500	2170000 487000	0.33	1.80	561000 126000	320000 71900	1.76	5940000 1340000	L281148	L281110
660.400 26.0000	854.075 33.6250	85.725 3.3750	1920000 431000	0.35	1.71	496000 112000	299000 67100	1.66	4620000 1040000	EE749260	749336
673.100 26.5000	793.750 31.2500	66.675 2.6250	1090000 244000	0.36	1.67	282000 63300	174000 39000	1.62	3140000 707000	LL481448	LL481411
679.450 26.7500	901.700 35.5000	142.875 5.6250	4290000 964000	0.33	1.80	1110000 250000	633000 142000	1.76	11000000 2480000	LM281849	LM281810
682.625 26.8750	965.200 38.0000	185.738 7.3125	6120000 1380000	0.33	1.80	1590000 357000	903000 203000	1.76	14900000 3340000	M282249	M282210
759.925 29.9183	889.000 35.0000	88.900 3.5000	2010000 452000	0.31	1.97	522000 117000	272000 61300	1.91	6230000 1400000	L183448	L183410
762.000 30.0000	889.000 35.0000	88.900 3.5000	2010000 452000	0.31	1.97	522000 117000	272000 61300	1.91	6230000 1400000	L183449	L183410
801.688 31.5625	914.400 36.0000	58.738 2.3125	1060000 239000	0.40	1.51	276000 62000	187000 42100	1.47	3460000 778000	LL584449	LL584410
838.200 33.0000	1041.400 41.0000	93.662 3.6875	2160000 487000	0.44	1.37	561000 126000	420000 94500	1.33	5930000 1330000	EE763330	763410
1092.200 43.0000	1320.800 52.0000	95.250 3.7500	2280000 512000	0.57	1.05	591000 133000	577000 130000	1.02	6990000 1570000	EE776430	776520

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.
(4) These maximum fillet radii will be cleared by the bearing corners.
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

Dimensions, mm (inches)											Factors			Weight kg (lbs.)
Bearing			Shaft			Housing			Cage					
			max shaft fillet radius	backing shoulder dia.	backing shoulder dia.		backing shoulder dia.							
B	C	$a^{(3)}$	$R^{(4)}$	d_a	d_b	$r^{(4)}$	D_a	D_b	A_a	A_b	G_1	G_2	C_g	
79.375 3.1250	**60.325** 2.3750	**45.2** 1.78	**6.4** 0.25	**633.0** 24.92	**642.0** 25.28	**6.4** 0.25	**749.5** 29.51	**741.0** 29.17	**-8.90** -0.35	**3.80** 0.15	**7660**	**933**	**0.2671**	**82.53** 181.94
93.662 3.6875	**69.850** 2.7500	**31.5** 1.24	**6.4** 0.25	**633.0** 24.92	**642.0** 25.28	**6.4** 0.25	**755.5** 29.74	**747.0** 29.41	**11.20** 0.44	**6.20** 0.24	**9380**	**929**	**0.2790**	**106.08** 233.86
41.275 1.6250	**29.367** 1.1562	**61.7** 2.43	**3.5** 0.14	**630.0** 24.80	**633.0** 24.92	**3.3** 0.13	**690.0** 27.17	**687.0** 27.05	**3.10** 0.12	**2.80** 0.11	**6270**	**2020**	**0.2418**	**23.23** 51.21
177.800 7.0000	**141.288** 5.5625	**-13.5** -0.53	**12.0** 0.47	**687.0** 27.05	**699.0** 27.52	**6.4** 0.25	**889.5** 35.02	**870.0** 34.25	**17.90** 0.71	**9.60** 0.38	**17300**	**805**	**0.3335**	**401.62** 885.40
95.250 3.7500	**73.025** 2.8750	**27.9** 1.10	**6.4** 0.25	**681.0** 26.81	**693.0** 27.28	**6.4** 0.25	**788.5** 31.04	**777.0** 30.59	**9.00** 0.35	**4.50** 0.18	**11700**	**915**	**0.2888**	**98.70** 217.60
95.250 3.7500	**73.025** 2.8750	**27.9** 1.10	**6.4** 0.25	**681.0** 26.81	**693.0** 27.28	**6.4** 0.25	**788.5** 31.04	**777.0** 30.59	**9.00** 0.35	**4.50** 0.18	**11700**	**915**	**0.2888**	**98.58** 217.32
85.468 3.3649	**60.325** 2.3750	**39.4** 1.55	**9.7** 0.38	**687.0** 27.05	**702.0** 27.64	**6.4** 0.25	**813.0** 32.01	**813.0** 32.01	**11.70** 0.46	**2.30** 0.09	**9220**	**1360**	**0.2707**	**108.93** 240.16
61.912 2.4375	**49.212** 1.9375	**53.8** 2.12	**6.4** 0.25	**690.0** 27.17	**702.0** 27.64	**6.4** 0.25	**771.0** 30.35	**765.0** 30.12	**4.10** 0.16	**1.60** 0.06	**8760**	**1650**	**0.2659**	**51.77** 114.12
142.875 5.6250	**111.125** 4.3750	**6.9** 0.27	**9.7** 0.38	**714.0** 28.11	**726.0** 28.58	**6.4** 0.25	**866.5** 34.12	**852.0** 33.54	**12.80** 0.50	**7.40** 0.29	**16300**	**961**	**0.3252**	**235.16** 518.42
185.738 7.3125	**142.875** 5.6250	**-15.2** -0.60	**9.7** 0.38	**723.0** 28.46	**738.0** 29.06	**6.4** 0.25	**919.5** 36.21	**900.0** 35.43	**19.20** 0.76	**10.50** 0.41	**18800**	**842**	**0.3426**	**408.57** 900.73
88.900 3.5000	**72.000** 2.8346	**34.5** 1.36	**3.3** 0.13	**780.0** 30.71	**783.0** 30.83	**3.3** 0.13	**872.0** 34.33	**864.0** 34.02	**4.60** 0.18	**6.00** 0.24	**16100**	**2020**	**0.3102**	**89.99** 198.38
88.900 3.5000	**72.000** 2.8346	**34.5** 1.36	**3.3** 0.13	**780.0** 30.71	**783.0** 30.83	**3.3** 0.13	**872.0** 34.33	**864.0** 34.02	**4.60** 0.18	**6.00** 0.24	**16100**	**2020**	**0.3102**	**88.26** 194.58
58.738 2.3125	**41.275** 1.6250	**79.0** 3.11	**3.5** 0.14	**819.0** 32.24	**822.0** 32.36	**3.3** 0.13	**894.0** 35.20	**888.0** 34.96	**7.90** 0.31	**3.10** 0.12	**12400**	**2700**	**0.3058**	**52.69** 116.16
88.900 3.5000	**66.675** 2.6250	**83.1** 3.27	**6.4** 0.25	**870.0** 34.25	**876.0** 34.49	**6.4** 0.25	**1001.0** 39.41	**996.0** 39.21	**16.10** 0.63	**4.80** 0.19	**14700**	**1740**	**0.3374**	**154.58** 340.78
88.900 3.5000	**69.850** 2.7500	**175.8** 6.92	**6.4** 0.25	**1130.0** 44.49	**1135.0** 44.69	**6.4** 0.25	**1273.5** 50.14	**1260.0** 49.61	**15.60** 0.61	**4.90** 0.19	**23200**	**2940**	**0.4231**	**228.66** 504.09

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.
[7] Compound radius on inner race. Details on drawing for bearing.
[8] Pin-type cage. Please consult The Timken Company.

If you need a product other than those shown here, please contact your Timken representative.

NOTES

TSF

TAPERED ROLLER BEARINGS

- Flange of the single-row type bearing is used for axial location in a housing.
- Through-boring of the housing results in accurately aligned seats.
- Flange is not normally clamped in position.
- To place an order or obtain a quotation, specify the inner- and outer-race part numbers.

Example: inner race — outer race

37425 - 37625-B

- Flanged outer race can be used with any single inner race from the same 'series.'
- The most commonly specified inner race part numbers are shown in the tables provided.
- Please consult a Timken representative for more information.

BEARING DATA TABLES

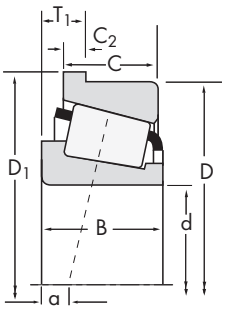
In the following bearing data tables, part numbers are listed in ascending order of bore, outside diameter and width.

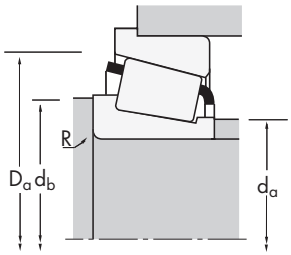
Bearing ratings shown in tables are based on environmental reference conditions. Effects of known operating conditions on bearing performance in an application should be investigated before final bearing selection is made.

Approximate mass is listed for every part number. For weight-critical applications or exact freight cost evaluation purposes, a more accurate value should be obtained from your Timken representative.

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
7.938 0.3125	31.991 1.2595	4.458 0.1755	10600 2380	0.41	1.48	2750 618	1910 429	1.44	9230 2070	A2031	A2126-B
9.525 0.3750	31.991 1.2595	4.458 0.1755	10600 2380	0.41	1.48	2750 618	1910 429	1.44	9230 2070	A2037	A2126-B
11.987 0.4719	31.991 1.2595	4.458 0.1755	10600 2380	0.41	1.48	2750 618	1910 429	1.44	9230 2070	A2047	A2126-B
12.700 0.5000	34.988 1.3775	4.630 0.1823	12200 2740	0.45	1.32	3160 710	2450 550	1.29	11500 2580	A4050	A4138-B
14.987 0.5901	34.988 1.3775	4.630 0.1823	12200 2740	0.45	1.32	3160 710	2450 550	1.29	11500 2580	A4059	A4138-B
15.875 0.6250	39.992 1.5745	4.851 0.1910	12400 2790	0.53	1.14	3220 724	2900 653	1.11	12300 2770	A6062	A6157-B
15.875 0.6250	42.862 1.6875	6.350 0.2500	29100 6540	0.33	1.81	7550 1700	4280 962	1.76	29200 6560	17580	17520-B
15.875 0.6250	47.000 1.8504	6.038 0.2377	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05062	05185-B
16.993 0.6690	39.992 1.5745	4.851 0.1910	12400 2790	0.53	1.14	3220 724	2900 653	1.11	12300 2770	A6067	A6157-B
16.993 0.6690	47.000 1.8504	6.038 0.2377	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05066	05185-B
19.050 0.7500	39.992 1.5745	4.851 0.1910	12400 2790	0.53	1.14	3220 724	2900 653	1.11	12300 2770	A6075	A6157-B
19.050 0.7500	47.000 1.8504	6.038 0.2377	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05075	05185-B
19.050 0.7500	47.000 1.8504	14.381 0.5662	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05075X	05185-B
19.050 0.7500	49.225 1.9380	6.998 0.2755	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09067	09195AB
19.050 0.7500	53.975 2.1250	10.317 0.4062	43000 9670	0.59	1.02	11200 2510	11300 2540	0.99	42500 9560	21075	21212-B
19.050 0.7500	56.896 2.2400	7.455 0.2935	42000 9450	0.31	1.95	10900 2450	5740 1290	1.90	45300 10200	1775	1729-B
19.987 0.7869	47.000 1.8504	6.048 0.2381	24700 5560	0.36	1.68	6420 1440	3920 881	1.64	25400 5720	05079	05185-B
20.000 0.7874	51.994 2.0470	5.080 0.2000	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07079	07204-B
20.625 0.8120	49.225 1.9380	8.809 0.3468	39700 8920	0.27	2.26	10300 2310	4680 1050	2.20	40500 9100	09081	09195AB
20.638 0.8125	61.912 2.4375	9.525 0.3750	82000 18400	0.28	2.13	21300 4780	10300 2310	2.07	89800 20200	3660	3620-B
22.225 0.8750	50.005 1.9687	6.749 0.2657	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07087	07196-B
22.225 0.8750	50.800 2.0000	5.080 0.2000	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07087X	07210XB
22.225 0.8750	51.994 2.0470	5.080 0.2000	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07087	07204-B
22.225 0.8750	56.896 2.2400	7.463 0.2938	42000 9450	0.31	1.95	10900 2450	5740 1290	1.90	45300 10200	1755	1729-B
22.225 0.8750	60.325 2.3750	7.938 0.3125	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1975	1931-B
22.225 0.8750	66.421 2.6150	8.725 0.3435	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2684	2631-B
23.812 0.9375	51.994 2.0470	5.080 0.2000	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07093	07204-B
23.812 0.9375	56.896 2.2400	7.463 0.2938	42000 9450	0.31	1.95	10900 2450	5740 1290	1.90	45300 10200	1779	1729-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)									Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
10.785 0.4246	7.938 0.3125	-3.0 -0.12	35.166 1.3845	2.388 0.0940	0.5 0.02	12.5 0.49	13.0 0.51	30.0 1.18	1.7	3.17	0.0308	0.05 0.11
10.785 0.4246	7.938 0.3125	-3.0 -0.12	35.166 1.3845	2.388 0.0940	1.3 0.05	13.5 0.53	15.0 0.59	30.0 1.18	1.7	3.17	0.0308	0.05 0.11
10.785 0.4246	7.938 0.3125	-3.0 -0.12	35.166 1.3845	2.388 0.0940	0.8 0.03	15.5 0.61	16.5 0.65	30.0 1.18	1.7	3.17	0.0308	0.05 0.10
10.988 0.4326	8.730 0.3437	-2.5 -0.10	38.062 1.4985	2.362 0.0930	1.3 0.05	17.0 0.67	18.5 0.73	33.5 1.32	2.3	4.12	0.0355	0.06 0.12
10.988 0.4326	8.730 0.3437	-2.5 -0.10	38.062 1.4985	2.362 0.0930	0.8 0.03	19.0 0.75	19.5 0.77	33.5 1.32	2.3	4.12	0.0355	0.05 0.12
11.153 0.4391	9.525 0.3750	-1.5 -0.06	43.066 1.6955	2.362 0.0930	1.3 0.05	20.5 0.81	22.0 0.87	38.0 1.50	2.9	5.64	0.0404	0.08 0.17
16.670 0.6563	13.495 0.5313	-5.8 -0.23	45.936 1.8085	3.175 0.1250	1.5 0.06	21.0 0.83	23.0 0.91	40.5 1.59	5.3	4.53	0.0423	0.13 0.29
14.381 0.5662	11.112 0.4375	-4.1 -0.16	50.861 2.0024	2.769 0.1090	1.5 0.06	21.0 0.83	23.5 0.93	44.5 1.75	5.8	5.55	0.0448	0.14 0.31
11.153 0.4391	9.525 0.3750	-1.5 -0.06	43.066 1.6955	2.362 0.0930	0.8 0.03	21.0 0.83	22.0 0.87	38.0 1.50	2.9	5.64	0.0404	0.08 0.17
14.381 0.5662	11.112 0.4375	-4.1 -0.16	50.861 2.0024	2.769 0.1090	1.5 0.06	22.0 0.87	24.5 0.96	44.5 1.75	5.8	5.55	0.0448	0.14 0.30
11.153 0.4391	9.525 0.3750	-1.5 -0.06	43.066 1.6955	2.362 0.0930	1.0 0.04	23.0 0.91	24.0 0.94	38.0 1.50	2.9	5.64	0.0404	0.07 0.16
14.381 0.5662	11.112 0.4375	-4.1 -0.16	50.861 2.0024	2.769 0.1090	1.3 0.05	23.5 0.93	25.0 0.98	44.5 1.75	5.8	5.55	0.0448	0.13 0.29
14.381 0.5662	11.112 0.4375	-4.1 -0.16	50.861 2.0024	2.769 0.1090	1.5 0.06	23.5 0.93	25.5 1.00	44.5 1.75	5.8	5.55	0.0448	0.13 0.29
19.050 0.7500	14.288 0.5625	-7.4 -0.29	53.081 2.0898	3.251 0.1280	1.3 0.05	24.0 0.94	25.5 1.00	46.5 1.83	8	4.05	0.0452	0.18 0.40
21.839 0.8598	15.875 0.6250	-5.8 -0.23	57.841 2.2772	3.967 0.1562	1.5 0.06	26.0 1.03	31.5 1.24	52.0 2.05	7	3.55	0.0558	0.26 0.57
19.837 0.7810	15.875 0.6250	-6.9 -0.27	60.757 2.3920	3.962 0.1560	1.5 0.06	25.0 0.98	27.0 1.06	53.0 2.09	10.6	5.39	0.0521	0.28 0.62
14.381 0.5662	11.112 0.4375	-4.1 -0.16	50.861 2.0024	2.769 0.1090	1.5 0.06	24.0 0.94	26.5 1.04	44.5 1.75	5.8	5.55	0.0448	0.13 0.28
14.260 0.5614	12.700 0.5000	-2.8 -0.11	55.855 2.1990	2.769 0.1090	1.5 0.06	26.0 1.02	27.5 1.08	50.0 1.97	7.6	7.07	0.0509	0.17 0.38
21.539 0.8480	14.288 0.5625	-9.1 -0.36	53.081 2.0898	3.251 0.1280	1.5 0.06	25.5 1.00	27.5 1.08	46.5 1.83	8	4.05	0.0452	0.18 0.40
30.416 1.1975	23.812 0.9375	-11.9 -0.47	66.571 2.6209	4.762 0.1875	2.3 0.09	29.5 1.16	33.5 1.32	59.0 2.32	17	6.38	0.0592	0.48 1.07
14.260 0.5614	9.525 0.3750	-2.8 -0.11	53.871 2.1209	2.779 0.1094	1.3 0.05	27.0 1.06	28.5 1.12	49.0 1.93	7.6	7.07	0.0509	0.13 0.30
14.260 0.5614	12.700 0.5000	-2.8 -0.11	54.762 2.1560	2.769 0.1090	1.5 0.06	27.0 1.06	29.0 1.14	49.0 1.93	7.6	7.07	0.0509	0.15 0.34
14.260 0.5614	12.700 0.5000	-2.8 -0.11	55.855 2.1990	2.769 0.1090	1.3 0.05	27.0 1.06	28.5 1.12	50.0 1.97	7.6	7.07	0.0509	0.16 0.36
19.837 0.7810	15.875 0.6250	-6.9 -0.27	60.757 2.3920	3.962 0.1560	1.3 0.05	27.5 1.08	29.0 1.14	53.0 2.09	10.6	5.39	0.0521	0.26 0.58
19.355 0.7620	15.875 0.6250	-5.8 -0.23	64.186 2.5270	3.967 0.1562	0.8 0.03	28.0 1.10	29.0 1.14	57.0 2.24	12.5	6.33	0.0565	0.31 0.68
25.433 1.0013	19.050 0.7500	-9.4 -0.37	70.282 2.7670	3.962 0.1560	1.5 0.06	32.0 1.26	34.0 1.34	62.0 2.44	19.3	8	0.0598	0.47 1.04
14.260 0.5614	12.700 0.5000	-2.8 -0.11	55.855 2.1990	2.769 0.1090	1.5 0.06	28.5 1.12	30.5 1.20	50.0 1.97	7.6	7.07	0.0509	0.16 0.34
19.837 0.7810	15.875 0.6250	-6.9 -0.27	60.757 2.3920	3.962 0.1560	0.8 0.03	28.5 1.12	29.5 1.16	53.0 2.09	10.6	5.39	0.0521	0.26 0.56

(4) These maximum fillet radii will be cleared by the bearing corners.

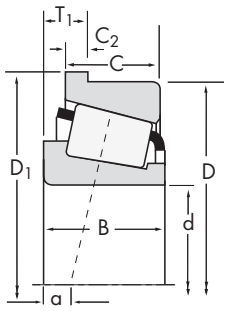
Continued on next page.

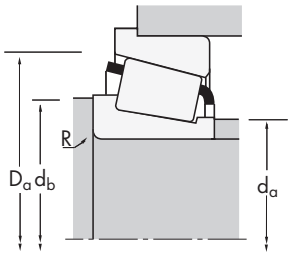
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

(6) For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	Ca_{90}	K	C_0	Inner	Outer
23.812 0.9375	72.000 2.8346	7.087 0.2790	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26093	26283-B
24.981 0.9835	50.005 1.9687	6.749 0.2657	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07098	07196-B
24.981 0.9835	51.994 2.0470	5.080 0.2000	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07098	07204-B
25.400 1.0000	50.800 2.0000	5.080 0.2000	27000 6060	0.40	1.49	6990 1570	4810 1080	1.45	29600 6650	07100-SA	07210XB
25.400 1.0000	57.150 2.2500	7.938 0.3125	42600 9570	0.35	1.73	11000 2480	6550 1470	1.69	50100 11300	15578	15520-B
25.400 1.0000	58.738 2.3125	7.938 0.3125	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1986	1932-B
25.400 1.0000	60.325 2.3750	7.938 0.3125	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1986	1931-B
25.400 1.0000	65.088 2.5625	10.320 0.4063	50600 11400	0.73	0.82	13100 2950	16400 3690	0.80	55800 12500	23100	23256-B
25.400 1.0000	66.421 2.6150	8.725 0.3435	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2687	2631-B
25.400 1.0000	68.262 2.6875	8.730 0.3437	59100 13300	0.42	1.44	15300 3440	10900 2450	1.40	70200 15800	02473	02420-B
25.400 1.0000	72.000 2.8346	7.087 0.2790	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26100	26283-B
25.400 1.0000	72.626 2.8593	11.112 0.4375	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3189	3120-B
25.400 1.0000	72.626 2.8593	12.700 0.5000	64600 14500	0.60	1.00	16700 3760	17300 3880	0.97	64100 14400	41100	41286-B
26.975 1.0620	60.325 2.3750	7.938 0.3125	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1987	1931-B
26.987 1.0625	66.421 2.6150	8.725 0.3435	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2688	2631-B
26.987 1.0625	72.626 2.8593	12.700 0.5000	64600 14500	0.60	1.00	16700 3760	17300 3880	0.97	64100 14400	41106	41286-B
28.575 1.1250	57.150 2.2500	8.166 0.3215	42600 9570	0.35	1.73	11000 2480	6550 1470	1.69	50100 11300	15590	15520-B
28.575 1.1250	60.325 2.3750	7.938 0.3125	44800 10100	0.33	1.82	11600 2610	6560 1470	1.77	50200 11300	1985	1931-B
28.575 1.1250	66.421 2.6150	8.725 0.3435	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2689	2631-B
28.575 1.1250	69.850 2.7500	8.733 0.3438	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2578	2523-B
28.575 1.1250	72.000 2.8346	7.087 0.2790	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26112	26283-B
28.575 1.1250	72.626 2.8593	11.112 0.4375	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3192	3120-B
28.575 1.1250	72.626 2.8593	11.112 0.4375	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3198	3120-B
28.575 1.1250	72.626 2.8593	12.700 0.5000	64600 14500	0.60	1.00	16700 3760	17300 3880	0.97	64100 14400	41125	41286-B
29.367 1.1562	66.421 2.6150	8.725 0.3435	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2690	2631-B
29.367 1.1562	66.421 2.6150	8.725 0.3435	71000 16000	0.25	2.36	18400 4140	8000 1800	2.30	81700 18400	2691	2631-B
29.987 1.1806	62.000 2.4409	5.270 0.2075	40000 9000	0.38	1.57	10400 2330	6800 1530	1.53	44100 9910	17118	17244-B
29.987 1.1806	68.262 2.6875	8.730 0.3437	59100 13300	0.42	1.44	15300 3440	10900 2450	1.40	70200 15800	02474A	02420-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)								Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
18.923 0.7450	15.875 0.6250	-4.1 -0.16	75.857 2.9865	3.962 0.1560	2.3 0.09	31.0 1.22	35.0 1.38	66.0 2.60	16.1	10.1	0.0630	0.44 0.96
14.260 0.5614	9.525 0.3750	-2.8 -0.11	53.871 2.1209	2.779 0.1094	1.5 0.06	29.0 1.14	31.0 1.22	49.0 1.93	7.6	7.07	0.0509	0.12 0.27
14.260 0.5614	12.700 0.5000	-2.8 -0.11	55.855 2.1990	2.769 0.1090	1.5 0.06	29.0 1.14	31.0 1.22	50.0 1.97	7.6	7.07	0.0509	0.15 0.33
14.260 0.5614	12.700 0.5000	-2.8 -0.11	54.762 2.1560	2.769 0.1090	3.3 0.13	29.5 1.16	35.0 1.38	49.0 1.93	7.6	7.07	0.0509	0.14 0.30
17.462 0.6875	13.495 0.5313	-5.1 -0.20	61.016 2.4022	3.970 0.1563	1.3 0.05	30.5 1.20	32.5 1.28	60.0 2.36	12.7	10.3	0.0577	0.24 0.52
19.355 0.7620	15.080 0.5937	-5.8 -0.23	62.598 2.4645	3.967 0.1562	1.3 0.05	30.5 1.20	32.5 1.28	56.0 2.20	12.5	6.33	0.0565	0.27 0.59
19.355 0.7620	15.875 0.6250	-5.8 -0.23	64.186 2.5270	3.967 0.1562	1.3 0.05	30.5 1.20	32.5 1.28	57.0 2.24	12.5	6.33	0.0565	0.29 0.64
21.463 0.8450	15.875 0.6250	-2.3 -0.09	68.953 2.7147	3.970 0.1563	1.5 0.06	34.5 1.36	39.0 1.54	63.0 2.48	11.3	6.57	0.0700	0.38 0.83
25.433 1.0013	19.050 0.7500	-9.4 -0.37	70.282 2.7670	3.962 0.1560	1.3 0.05	31.5 1.24	33.5 1.32	62.0 2.44	19.3	8	0.0598	0.45 0.99
22.225 0.8750	17.462 0.6875	-5.1 -0.20	72.128 2.8397	3.967 0.1562	0.8 0.03	33.5 1.32	34.5 1.36	65.0 2.56	17.5	8.48	0.0681	0.48 1.06
18.923 0.7450	15.875 0.6250	-4.1 -0.16	75.857 2.9865	3.962 0.1560	1.5 0.06	32.5 1.28	34.5 1.36	66.0 2.60	16.1	10.1	0.0630	0.43 0.94
29.997 1.1810	23.812 0.9375	-10.2 -0.40	77.300 3.0433	4.762 0.1875	0.8 0.03	35.0 1.38	35.5 1.40	69.0 2.72	23.4	8.76	0.0697	0.67 1.49
24.257 0.9550	17.462 0.6875	-4.1 -0.16	78.082 3.0741	5.555 0.2187	2.3 0.09	36.5 1.44	41.0 1.61	70.0 2.76	13	5.83	0.0686	0.52 1.16
19.355 0.7620	15.875 0.6250	-5.8 -0.23	64.186 2.5270	3.967 0.1562	0.8 0.03	31.5 1.24	32.5 1.28	57.0 2.24	12.5	6.33	0.0565	0.28 0.62
25.433 1.0013	19.050 0.7500	-9.4 -0.37	70.282 2.7670	3.962 0.1560	1.5 0.06	33.0 1.30	35.0 1.38	62.0 2.44	19.3	8	0.0598	0.44 0.96
24.257 0.9550	17.462 0.6875	-4.1 -0.16	78.082 3.0741	5.555 0.2187	2.3 0.09	36.5 1.44	42.0 1.65	70.0 2.76	13	5.83	0.0686	0.51 1.13
17.462 0.6875	13.495 0.5313	-5.1 -0.20	61.016 2.4022	3.970 0.1563	3.5 0.14	33.5 1.32	39.5 1.56	60.0 2.36	12.7	10.3	0.0577	0.21 0.47
19.355 0.7620	15.875 0.6250	-5.8 -0.23	64.186 2.5270	3.967 0.1562	0.8 0.03	33.5 1.32	34.0 1.34	57.0 2.24	12.5	6.33	0.0565	0.27 0.59
25.433 1.0013	19.050 0.7500	-9.4 -0.37	70.282 2.7670	3.962 0.1560	1.3 0.05	34.0 1.34	36.0 1.42	62.0 2.44	19.3	8	0.0598	0.42 0.93
25.357 0.9983	19.050 0.7500	-8.6 -0.34	73.711 2.9020	3.962 0.1560	2.3 0.09	35.0 1.38	39.0 1.54	66.0 2.60	23.6	9.63	0.0656	0.49 1.09
18.923 0.7450	15.875 0.6250	-4.1 -0.16	75.857 2.9865	3.962 0.1560	1.5 0.06	35.0 1.38	37.0 1.46	66.0 2.60	16.1	10.1	0.0630	0.41 0.90
29.997 1.1810	23.812 0.9375	-10.2 -0.40	77.300 3.0433	4.762 0.1875	3.5 0.14	37.0 1.46	43.5 1.71	69.0 2.72	23.4	8.76	0.0697	0.64 1.41
29.997 1.1810	23.812 0.9375	-10.2 -0.40	77.300 3.0433	4.762 0.1875	1.3 0.05	37.0 1.46	39.0 1.54	69.0 2.72	23.4	8.76	0.0697	0.64 1.42
24.257 0.9550	17.462 0.6875	-4.1 -0.16	78.082 3.0741	5.555 0.2187	4.8 0.19	36.5 1.44	48.0 1.89	70.0 2.76	13	5.83	0.0686	0.49 1.09
25.433 1.0013	19.050 0.7500	-9.4 -0.37	70.282 2.7670	3.962 0.1560	3.5 0.14	35.0 1.38	41.0 1.61	62.0 2.44	19.3	8	0.0598	0.41 0.91
25.433 1.0013	19.050 0.7500	-9.4 -0.37	70.282 2.7670	3.962 0.1560	0.8 0.03	36.5 1.44	37.5 1.48	62.0 2.44	19.3	8	0.0598	0.42 0.92
16.566 0.6522	14.288 0.5625	-3.6 -0.14	65.862 2.5930	3.556 0.1400	1.5 0.06	34.5 1.36	37.0 1.46	59.0 2.32	11.8	7.49	0.0579	0.24 0.53
22.225 0.8750	17.462 0.6875	-5.1 -0.20	72.128 2.8397	3.967 0.1562	0.8 0.03	38.5 1.52	39.5 1.56	65.0 2.56	17.5	8.48	0.0681	0.45 0.99

(4) These maximum fillet radii will be cleared by the bearing corners.

Continued on next page.

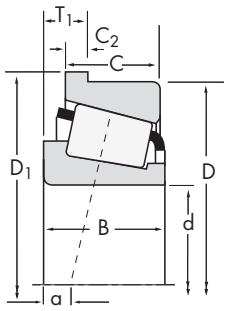
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

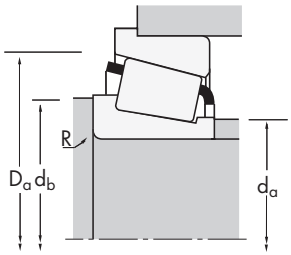
(6) For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

B

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
29.987 1.1806	72.000 2.8346	7.087 0.2790	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26118	26283-B
30.000 1.1811	69.012 2.7170	7.932 0.3123	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14117A	14276-B
30.000 1.1811	69.012 2.7170	7.932 0.3123	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14118	14276-B
30.000 1.1811	72.000 2.8346	7.087 0.2790	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26118-S	26283-B
30.000 1.1811	72.626 2.8593	11.112 0.4375	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3190	3120-B
30.162 1.1875	62.000 2.4409	5.270 0.2075	40000 9000	0.38	1.57	10400 2330	6800 1530	1.53	44100 9910	17119	17244-B
30.162 1.1875	64.292 2.5312	8.763 0.3450	55700 12500	0.55	1.10	14500 3250	13500 3040	1.07	71700 16100	M86649	M86611-B
30.162 1.1875	69.850 2.7500	8.733 0.3438	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2558	2523-B
30.162 1.1875	72.626 2.8593	11.112 0.4375	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3187	3120-B
30.162 1.1875	72.626 2.8593	11.112 0.4375	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3191	3120-B
30.162 1.1875	79.375 3.1250	10.320 0.4063	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3474	3420-B
30.162 1.1875	80.000 3.1496	7.938 0.3125	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	334	332-B
30.162 1.1875	80.000 3.1496	9.100 0.3583	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28118	28315-B
30.213 1.1895	63.500 2.5000	8.730 0.3437	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15118	15250-B
31.750 1.2500	58.738 2.3125	6.736 0.2652	29300 6600	0.47	1.27	7610 1710	6170 1390	1.23	35000 7880	08125	08231-B
31.750 1.2500	58.877 2.3180	6.833 0.2690	36500 8210	0.41	1.46	9460 2130	6680 1500	1.42	44600 10000	LM67048	LM67010-BA
31.750 1.2500	59.131 2.3280	6.833 0.2690	36500 8210	0.41	1.46	9460 2130	6680 1500	1.42	44600 10000	LM67047	LM67010-B
31.750 1.2500	59.131 2.3280	15.875 0.6250	36500 8210	0.41	1.46	9460 2130	6680 1500	1.42	44600 10000	LM67048	LM67010-B
31.750 1.2500	63.500 2.5000	7.841 0.3087	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15123	15250-B
31.750 1.2500	63.500 2.5000	8.730 0.3437	46800 10500	0.35	1.71	12100 2730	7280 1640	1.67	53900 12100	15125	15250-B
31.750 1.2500	68.262 2.6875	8.730 0.3437	59100 13300	0.42	1.44	15300 3440	10900 2450	1.40	70200 15800	02475	02420-B
31.750 1.2500	68.262 2.6875	8.730 0.3437	59100 13300	0.42	1.44	15300 3440	10900 2450	1.40	70200 15800	02476	02420-B
31.750 1.2500	69.012 2.7170	7.932 0.3123	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14125A	14276-B
31.750 1.2500	69.850 2.7500	8.733 0.3438	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2580	2523-B
31.750 1.2500	69.850 2.7500	8.733 0.3438	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2582	2523-B
31.750 1.2500	72.626 2.8593	11.112 0.4375	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3188	3120-B
31.750 1.2500	72.626 2.8593	11.112 0.4375	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3193	3120-B
31.750 1.2500	72.626 2.8593	11.112 0.4375	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3199	3120-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)									Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
18.923 0.7450	15.875 0.6250	-4.1 -0.16	75.857 2.9865	3.962 0.1560	1.5 0.06	36.0 1.42	38.0 1.50	66.0 2.60	16.1	10.1	0.0630	0.40 0.88
19.583 0.7710	15.875 0.6250	-4.3 -0.17	72.873 2.8690	3.962 0.1560	3.5 0.14	40.0 1.57	43.0 1.69	65.0 2.56	18	9.4	0.0668	0.37 0.82
19.202 0.7560	15.875 0.6250	-4.3 -0.17	72.873 2.8690	3.962 0.1560	0.8 0.03	36.5 1.44	37.0 1.46	65.0 2.56	18	9.4	0.0668	0.37 0.82
18.923 0.7450	15.875 0.6250	-4.1 -0.16	75.857 2.9865	3.962 0.1560	1.5 0.06	36.0 1.42	38.0 1.50	66.0 2.60	16.1	10.1	0.0630	0.40 0.88
29.997 1.1810	23.812 0.9375	-10.2 -0.40	77.300 3.0433	4.762 0.1875	3.5 0.14	38.0 1.50	44.5 1.75	69.0 2.72	23.4	8.76	0.0697	0.62 1.37
16.566 0.6522	14.288 0.5625	-3.6 -0.14	65.862 2.5930	3.556 0.1400	1.5 0.06	34.5 1.36	37.0 1.46	59.0 2.32	11.8	7.49	0.0579	0.24 0.53
21.433 0.8438	16.670 0.6563	-3.3 -0.13	70.000 2.7559	4.000 0.1575	1.5 0.06	38.0 1.50	41.0 1.61	63.0 2.48	16.8	9.36	0.0736	0.36 0.79
25.357 0.9983	19.050 0.7500	-8.6 -0.34	73.711 2.9020	3.962 0.1560	2.3 0.09	36.5 1.44	40.0 1.57	66.0 2.60	23.6	9.63	0.0656	0.48 1.05
29.997 1.1810	23.812 0.9375	-10.2 -0.40	77.300 3.0433	4.762 0.1875	0.8 0.03	38.5 1.52	39.0 1.54	69.0 2.72	23.4	8.76	0.0697	0.63 1.38
29.997 1.1810	23.812 0.9375	-10.2 -0.40	77.300 3.0433	4.762 0.1875	3.5 0.14	38.5 1.52	44.5 1.75	69.0 2.72	23.4	8.76	0.0697	0.62 1.37
29.771 1.1721	23.812 0.9375	-8.6 -0.34	84.049 3.3090	4.762 0.1875	0.8 0.03	40.0 1.57	41.0 1.61	76.0 2.99	29.9	11.2	0.0781	0.79 1.73
22.403 0.8820	17.826 0.7018	-6.4 -0.25	84.658 3.3330	4.762 0.1875	0.8 0.03	38.0 1.50	39.0 1.54	77.0 3.03	26.5	13	0.0676	0.60 1.32
20.940 0.8244	15.875 0.6250	-4.8 -0.19	83.858 3.3015	3.970 0.1563	1.5 0.06	37.5 1.48	40.0 1.57	73.0 2.87	20.7	12.5	0.0709	0.55 1.21
20.638 0.8125	15.875 0.6250	-5.8 -0.23	67.366 2.6522	3.967 0.1562	3.5 0.14	35.5 1.40	41.5 1.63	60.0 2.36	14.6	7.58	0.0606	0.31 0.67
15.080 0.5937	10.716 0.4219	-1.3 -0.05	62.598 2.4645	2.769 0.1090	1.0 0.04	36.0 1.42	37.5 1.48	57.0 2.24	10.7	10.6	0.0601	0.17 0.38
16.764 0.6600	11.811 0.4650	-3.0 -0.12	61.773 2.4320	2.769 0.1090	3.5 0.14	36.0 1.42	42.5 1.67	57.0 2.24	12.8	9.93	0.0612	0.18 0.40
16.764 0.6600	11.811 0.4650	-3.0 -0.12	61.912 2.4375	2.769 0.1090	2.3 0.09	36.0 1.42	40.0 1.57	57.0 2.24	12.8	9.93	0.0612	0.19 0.41
16.764 0.6600	11.811 0.4650	-3.0 -0.12	61.912 2.4375	2.769 0.1090	3.5 0.14	36.0 1.42	42.5 1.67	57.0 2.24	12.8	9.93	0.0612	0.18 0.39
19.050 0.7500	15.875 0.6250	-4.8 -0.19	67.366 2.6522	3.967 0.1562	0.0 0.00	36.5 1.44	42.5 1.67	60.0 2.36	14.6	7.58	0.0606	0.28 0.62
20.638 0.8125	15.875 0.6250	-5.8 -0.23	67.366 2.6522	3.967 0.1562	3.5 0.14	36.5 1.44	42.5 1.67	60.0 2.36	14.6	7.58	0.0606	0.29 0.65
22.225 0.8750	17.462 0.6875	-5.1 -0.20	72.128 2.8397	3.967 0.1562	3.5 0.14	38.5 1.52	44.5 1.75	65.0 2.56	17.5	8.48	0.0681	0.43 0.94
22.225 0.8750	17.462 0.6875	-5.1 -0.20	72.128 2.8397	3.967 0.1562	0.8 0.03	38.5 1.52	39.0 1.54	65.0 2.56	17.5	8.48	0.0681	0.43 0.95
19.583 0.7710	15.875 0.6250	-4.3 -0.17	72.873 2.8690	3.962 0.1560	3.5 0.14	38.5 1.52	44.5 1.75	65.0 2.56	18	9.4	0.0668	0.36 0.79
25.357 0.9983	19.050 0.7500	-8.6 -0.34	73.711 2.9020	3.962 0.1560	0.8 0.03	37.5 1.48	38.5 1.52	66.0 2.60	23.6	9.63	0.0656	0.47 1.03
25.357 0.9983	19.050 0.7500	-8.6 -0.34	73.711 2.9020	3.962 0.1560	3.5 0.14	37.5 1.48	44.0 1.73	66.0 2.60	23.6	9.63	0.0656	0.46 1.01
29.997 1.1810	23.812 0.9375	-10.2 -0.40	77.300 3.0433	4.762 0.1875	0.8 0.03	39.5 1.56	40.0 1.57	69.0 2.72	23.4	8.76	0.0697	0.61 1.34
29.997 1.1810	23.812 0.9375	-10.2 -0.40	77.300 3.0433	4.762 0.1875	3.5 0.14	39.5 1.56	45.5 1.79	69.0 2.72	23.4	8.76	0.0697	0.60 1.33
29.997 1.1810	23.812 0.9375	-10.2 -0.40	77.300 3.0433	4.762 0.1875	2.3 0.09	39.5 1.56	43.0 1.69	69.0 2.72	23.4	8.76	0.0697	0.61 1.34

[4] These maximum fillet radii will be cleared by the bearing corners.

Continued on next page.

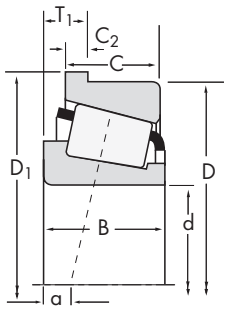
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

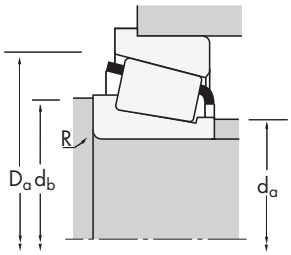
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

B

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Factors (5) Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	Ca_{90}	K	C_0	Inner	Outer
31.750 1.2500	79.375 3.1250	10.320 0.4063	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3476	3420-B
31.750 1.2500	80.000 3.1496	7.938 0.3125	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	346	332-B
32.004 1.2600	72.000 2.8346	7.087 0.2790	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26126	26283-B
33.338 1.3125	69.012 2.7170	7.938 0.3125	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14130	14276-B
33.338 1.3125	69.012 2.7170	7.938 0.3125	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14131	14276-B
33.338 1.3125	69.850 2.7500	8.725 0.3435	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2581	2523-B
33.338 1.3125	69.850 2.7500	8.733 0.3438	77500 17400	0.27	2.19	20100 4520	9410 2120	2.14	94400 21200	2585	2523-B
33.338 1.3125	72.000 2.8346	7.087 0.2790	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26131	26283-B
33.338 1.3125	72.000 2.8346	7.087 0.2790	54400 12200	0.36	1.67	14100 3170	8700 1960	1.62	60100 13500	26132	26283-B
33.338 1.3125	72.238 2.8440	8.733 0.3438	52400 11800	0.40	1.49	13600 3060	9350 2100	1.45	65800 14800	16131	16284-B
33.338 1.3125	72.626 2.8593	11.112 0.4375	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3196	3120-B
33.338 1.3125	72.626 2.8593	11.112 0.4375	87700 19700	0.33	1.80	22700 5110	13000 2910	1.76	102000 22800	3197	3120-B
33.338 1.3125	76.200 3.0000	11.112 0.4375	86200 19400	0.55	1.10	22400 5030	20900 4700	1.07	119000 26700	HM89443	HM89410-B
33.338 1.3125	79.375 3.1250	10.320 0.4063	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3477	3420-B
33.338 1.3125	79.375 3.1250	10.320 0.4063	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3483	3420-B
33.338 1.3125	80.000 3.1496	7.938 0.3125	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	335-S	332-B
34.925 1.3750	69.012 2.7170	7.938 0.3125	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14137A	14276-B
34.925 1.3750	69.012 2.7170	7.938 0.3125	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14138A	14276-B
34.925 1.3750	72.238 2.8440	8.733 0.3438	52400 11800	0.40	1.49	13600 3060	9350 2100	1.45	65800 14800	16137	16284-B
34.925 1.3750	76.200 3.0000	10.320 0.4063	87700 19700	0.40	1.49	22700 5110	15600 3520	1.45	107000 24100	31593	31520-B
34.925 1.3750	76.200 3.0000	11.112 0.4375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2786	2720-B
34.925 1.3750	76.200 3.0000	11.112 0.4375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2793	2720-B
34.925 1.3750	76.200 3.0000	11.112 0.4375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2796	2720-B
34.925 1.3750	76.200 3.0000	11.112 0.4375	86200 19400	0.55	1.10	22400 5030	20900 4700	1.07	119000 26700	HM89446	HM89410-B
34.925 1.3750	79.375 3.1250	10.320 0.4063	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3478	3420-B
34.925 1.3750	79.375 3.1250	10.320 0.4063	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3482	3420-B
34.925 1.3750	80.000 3.1496	7.938 0.3125	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	335	332-B
34.925 1.3750	80.000 3.1496	7.938 0.3125	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	343	332-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)									Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
29.771 1.1721	23.812 0.9375	-8.6 -0.34	84.049 3.3090	4.762 0.1875	1.3 0.05	41.0 1.61	43.0 1.69	76.0 2.99	29.9	11.2	0.0781	0.77 1.69
22.403 0.8820	17.826 0.7018	-6.4 -0.25	84.658 3.3330	4.762 0.1875	0.8 0.03	39.5 1.56	40.0 1.57	77.0 3.03	26.5	13	0.0676	0.58 1.29
18.923 0.7450	15.875 0.6250	-4.1 -0.16	75.857 2.9865	3.962 0.1560	1.5 0.06	37.5 1.48	39.5 1.56	66.0 2.60	16.1	10.1	0.0630	0.38 0.85
19.583 0.7710	15.875 0.6250	-4.3 -0.17	72.873 2.8690	3.962 0.1560	3.5 0.14	39.5 1.56	46.0 1.81	65.0 2.56	18	9.4	0.0668	0.35 0.77
19.583 0.7710	15.875 0.6250	-4.3 -0.17	72.873 2.8690	3.962 0.1560	0.8 0.03	39.5 1.56	40.5 1.59	65.0 2.56	18	9.4	0.0668	0.35 0.77
25.357 0.9983	19.050 0.7500	-8.6 -0.34	73.711 2.9020	3.962 0.1560	0.8 0.03	39.0 1.54	39.5 1.56	66.0 2.60	23.6	9.63	0.0656	0.45 0.99
25.357 0.9983	19.050 0.7500	-8.6 -0.34	73.711 2.9020	3.962 0.1560	3.5 0.14	39.0 1.54	45.0 1.77	66.0 2.60	23.6	9.63	0.0656	0.44 0.98
18.923 0.7450	15.875 0.6250	-4.1 -0.16	75.857 2.9865	3.962 0.1560	3.5 0.14	38.5 1.52	44.5 1.75	66.0 2.60	16.1	10.1	0.0630	0.37 0.81
18.923 0.7450	15.875 0.6250	-4.1 -0.16	75.857 2.9865	3.962 0.1560	1.5 0.06	38.5 1.52	40.5 1.59	66.0 2.60	16.1	10.1	0.0630	0.37 0.82
20.638 0.8125	15.875 0.6250	-4.1 -0.16	76.098 2.9960	3.970 0.1563	3.5 0.14	39.5 1.56	46.0 1.81	69.0 2.72	20.3	10.6	0.0707	0.41 0.91
29.997 1.1810	23.812 0.9375	-10.2 -0.40	77.300 3.0433	4.762 0.1875	3.5 0.14	40.5 1.59	47.0 1.85	69.0 2.72	23.4	8.76	0.0697	0.58 1.29
29.997 1.1810	23.812 0.9375	-10.2 -0.40	77.300 3.0433	4.762 0.1875	0.8 0.03	40.5 1.59	41.5 1.63	69.0 2.72	23.4	8.76	0.0697	0.59 1.30
28.575 1.1250	23.020 0.9063	-5.6 -0.22	80.863 3.1836	4.762 0.1875	0.8 0.03	44.5 1.75	46.5 1.83	75.0 2.95	28.9	13.1	0.0883	0.68 1.49
29.771 1.1721	23.812 0.9375	-8.6 -0.34	84.049 3.3090	4.762 0.1875	3.5 0.14	42.5 1.67	49.0 1.93	76.0 2.99	29.9	11.2	0.0781	0.74 1.64
29.771 1.1721	23.812 0.9375	-8.6 -0.34	84.049 3.3090	4.762 0.1875	0.8 0.03	42.5 1.67	43.0 1.69	76.0 2.99	29.9	11.2	0.0781	0.75 1.65
22.403 0.8820	17.826 0.7018	-6.4 -0.25	84.658 3.3330	4.762 0.1875	0.8 0.03	40.5 1.59	41.0 1.61	77.0 3.03	26.5	13	0.0676	0.57 1.26
19.583 0.7710	15.875 0.6250	-4.3 -0.17	72.873 2.8690	3.962 0.1560	1.5 0.06	41.0 1.61	43.0 1.69	65.0 2.56	18	9.4	0.0668	0.34 0.74
19.583 0.7710	15.875 0.6250	-4.3 -0.17	72.873 2.8690	3.962 0.1560	3.5 0.14	41.0 1.61	47.0 1.85	65.0 2.56	18	9.4	0.0668	0.34 0.74
20.638 0.8125	15.875 0.6250	-4.1 -0.16	76.098 2.9960	3.970 0.1563	3.5 0.14	40.5 1.59	47.0 1.85	69.0 2.72	20.3	10.6	0.0707	0.40 0.88
28.575 1.1250	23.812 0.9375	-7.6 -0.30	80.863 3.1836	4.762 0.1875	3.5 0.14	43.5 1.71	50.0 1.97	74.0 2.91	26.3	9.08	0.0773	0.64 1.42
25.654 1.0100	19.050 0.7500	-8.1 -0.32	82.550 3.2500	6.350 0.2500	5.0 0.20	41.0 1.61	51.0 2.01	73.0 2.87	28.7	12.2	0.0725	0.57 1.26
25.654 1.0100	19.050 0.7500	-8.1 -0.32	82.550 3.2500	6.350 0.2500	0.8 0.03	41.0 1.61	42.0 1.65	73.0 2.87	28.7	12.2	0.0725	0.59 1.29
25.654 1.0100	19.050 0.7500	-8.1 -0.32	82.550 3.2500	6.350 0.2500	3.5 0.14	41.0 1.61	47.5 1.87	73.0 2.87	28.7	12.2	0.0725	0.58 1.28
28.575 1.1250	23.020 0.9063	-5.6 -0.22	80.863 3.1836	4.762 0.1875	3.5 0.14	44.5 1.75	56.0 2.20	75.0 2.95	28.9	13.1	0.0883	0.66 1.45
29.771 1.1721	23.812 0.9375	-8.6 -0.34	84.049 3.3090	4.762 0.1875	3.5 0.14	43.5 1.71	50.0 1.97	76.0 2.99	29.9	11.2	0.0781	0.72 1.60
29.771 1.1721	23.812 0.9375	-8.6 -0.34	84.049 3.3090	4.762 0.1875	0.8 0.03	43.5 1.71	44.0 1.73	76.0 2.99	29.9	11.2	0.0781	0.73 1.61
22.403 0.8820	17.826 0.7018	-6.4 -0.25	84.658 3.3330	4.762 0.1875	0.8 0.03	41.5 1.63	42.5 1.67	77.0 3.03	26.5	13	0.0676	0.55 1.22
22.403 0.8820	17.826 0.7018	-6.4 -0.25	84.658 3.3330	4.762 0.1875	3.5 0.14	41.5 1.63	48.0 1.89	77.0 3.03	26.5	13	0.0676	0.55 1.21

[4] These maximum fillet radii will be cleared by the bearing corners.

Continued on next page.

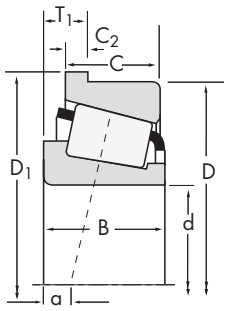
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

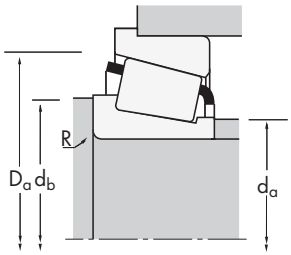
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

B

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
34.925 1.3750	80.000 3.1496	9.100 0.3583	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28137	28315-B
34.925 1.3750	80.167 3.1562	10.320 0.4063	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3379	3320-B
34.925 1.3750	81.755 3.2187	10.320 0.4063	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3379	3329-B
34.925 1.3750	87.312 3.4375	11.112 0.4375	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3581	3525-B
34.925 1.3750	92.075 3.6250	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	449	432AB
34.925 1.3750	95.250 3.7500	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	449	432-B
34.975 1.3770	69.012 2.7170	7.932 0.3123	50600 11400	0.38	1.57	13100 2950	8570 1930	1.53	61700 13900	14139	14276-B
34.976 1.3770	72.000 2.8346	6.287 0.2475	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19138	19283-B
34.975 1.3770	80.000 3.1496	9.100 0.3583	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28138	28315-B
35.000 1.3780	68.262 2.6875	7.539 0.2968	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19138X	19268-B
35.000 1.3780	72.000 2.8346	6.287 0.2475	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19138X	19283-B
35.000 1.3780	79.375 3.1250	10.320 0.4063	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3480	3420-B
35.000 1.3780	80.000 3.1496	7.938 0.3125	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	339	332-B
35.000 1.3780	92.075 3.6250	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	441	432AB
35.000 1.3780	95.250 3.7500	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	441	432-B
36.512 1.4375	68.262 2.6875	7.539 0.2968	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19143	19268-B
36.512 1.4375	72.000 2.8346	6.287 0.2475	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19143	19283-B
36.512 1.4375	72.238 2.8440	8.733 0.3438	52400 11800	0.40	1.49	13600 3060	9350 2100	1.45	65800 14800	16143	16284-B
36.512 1.4375	76.200 3.0000	11.112 0.4375	86200 19400	0.55	1.10	22400 5030	20900 4700	1.07	119000 26700	HM89448	HM89410-B
36.512 1.4375	76.200 3.0000	11.112 0.4375	86200 19400	0.55	1.10	22400 5030	20900 4700	1.07	119000 26700	HM89449	HM89410-B
36.512 1.4375	79.375 3.1250	10.320 0.4063	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3479	3420-B
36.512 1.4375	88.500 3.4843	13.492 0.5312	77900 17500	0.78	0.77	20200 4540	27000 6070	0.75	88600 19900	44143	44348-B
38.100 1.5000	65.088 2.5625	5.944 0.2340	25100 5650	0.35	1.73	6520 1470	3860 869	1.69	33000 7430	13889	13836-B
38.100 1.5000	68.262 2.6875	7.539 0.2968	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19150	19268-B
38.100 1.5000	72.000 2.8346	6.287 0.2475	46900 10600	0.44	1.35	12200 2740	9260 2080	1.31	57800 13000	19150	19283-B
38.100 1.5000	72.238 2.8440	8.733 0.3438	52400 11800	0.40	1.49	13600 3060	9350 2100	1.45	65800 14800	16150	16284-B
38.100 1.5000	76.200 3.0000	11.112 0.4375	80400 18100	0.30	1.98	20800 4690	10800 2430	1.93	102000 23000	2788	2720-B
38.100 1.5000	79.375 3.1250	10.320 0.4063	96900 21800	0.37	1.64	25100 5650	15700 3530	1.60	119000 26800	3490	3420-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)									Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
20.940 0.8244	15.875 0.6250	-4.8 -0.19	83.858 3.3015	3.970 0.1563	1.5 0.06	41.0 1.61	43.5 1.71	73.0 2.87	20.7	12.5	0.0709	0.51 1.12
30.391 1.1965	23.812 0.9375	-10.9 -0.43	84.826 3.3396	4.762 0.1875	3.5 0.14	41.5 1.63	48.0 1.89	77.0 3.03	34.6	12.1	0.0744	0.78 1.72
30.391 1.1965	23.812 0.9375	-10.9 -0.43	86.413 3.4021	4.762 0.1875	3.5 0.14	41.5 1.63	48.0 1.89	77.0 3.03	34.6	12.1	0.0744	0.79 1.75
30.886 1.2160	23.812 0.9375	-10.2 -0.40	91.986 3.6215	4.750 0.1870	3.5 0.14	43.0 1.69	49.5 1.95	82.0 3.23	39.5	10.5	0.0808	0.94 2.07
29.900 1.1772	22.225 0.8750	-9.1 -0.36	97.536 3.8400	5.558 0.2188	0.8 0.03	43.5 1.71	44.0 1.73	87.0 3.43	42.5	11.3	0.0805	1.04 2.28
29.900 1.1772	22.225 0.8750	-9.1 -0.36	100.686 3.9640	5.558 0.2188	0.8 0.03	43.5 1.71	44.0 1.73	87.0 3.43	42.5	11.3	0.0805	1.12 2.47
19.583 0.7710	15.875 0.6250	-4.3 -0.17	72.873 2.8690	3.962 0.1560	1.3 0.05	41.0 1.61	42.5 1.67	65.0 2.56	18	9.4	0.0668	0.34 0.74
16.520 0.6504	14.288 0.5625	-1.5 -0.06	75.857 2.9865	3.556 0.1400	1.5 0.06	40.5 1.59	42.5 1.67	68.0 2.68	17.5	11.5	0.0694	0.33 0.73
20.940 0.8244	15.875 0.6250	-4.8 -0.19	83.858 3.3015	3.970 0.1563	1.5 0.06	41.0 1.61	43.5 1.71	73.0 2.87	20.7	12.5	0.0709	0.51 1.12
16.520 0.6504	11.908 0.4688	-1.5 -0.06	72.128 2.8397	3.571 0.1406	2.0 0.08	40.5 1.59	43.5 1.71	67.0 2.64	17.5	11.5	0.0694	0.27 0.60
16.520 0.6504	14.288 0.5625	-1.5 -0.06	75.857 2.9865	3.556 0.1400	2.0 0.08	40.5 1.59	43.5 1.71	68.0 2.68	17.5	11.5	0.0694	0.33 0.73
29.771 1.1721	23.812 0.9375	-8.6 -0.34	84.049 3.3090	4.762 0.1875	1.5 0.06	43.5 1.71	46.0 1.81	76.0 2.99	29.9	11.2	0.0781	0.73 1.60
22.403 0.8820	17.826 0.7018	-6.4 -0.25	84.658 3.3330	4.762 0.1875	0.8 0.03	41.5 1.63	42.5 1.67	77.0 3.03	26.5	13	0.0676	0.55 1.22
29.900 1.1772	22.225 0.8750	-9.1 -0.36	97.536 3.8400	5.558 0.2188	3.5 0.14	43.5 1.71	50.0 1.97	87.0 3.43	42.5	11.3	0.0805	1.03 2.27
29.900 1.1772	22.225 0.8750	-9.1 -0.36	100.686 3.9640	5.558 0.2188	3.5 0.14	43.5 1.71	50.0 1.97	87.0 3.43	42.5	11.3	0.0805	1.11 2.45
16.520 0.6504	11.908 0.4688	-1.5 -0.06	72.128 2.8397	3.571 0.1406	1.5 0.06	41.5 1.63	44.0 1.73	67.0 2.64	17.5	11.5	0.0694	0.26 0.58
16.520 0.6504	14.288 0.5625	-1.5 -0.06	75.857 2.9865	3.556 0.1400	1.5 0.06	41.5 1.63	44.0 1.73	68.0 2.68	17.5	11.5	0.0694	0.32 0.71
20.638 0.8125	15.875 0.6250	-4.1 -0.16	76.098 2.9960	3.970 0.1563	3.5 0.14	42.0 1.65	48.5 1.91	69.0 2.72	20.3	10.6	0.0707	0.38 0.84
28.575 1.1250	23.020 0.9063	-5.6 -0.22	80.863 3.1836	4.762 0.1875	0.8 0.03	44.5 1.75	48.5 1.91	75.0 2.95	28.9	13.1	0.0883	0.64 1.41
28.575 1.1250	23.020 0.9063	-5.6 -0.22	80.863 3.1836	4.762 0.1875	3.5 0.14	44.5 1.75	57.0 2.24	75.0 2.95	28.9	13.1	0.0883	0.64 1.41
29.771 1.1721	23.812 0.9375	-8.6 -0.34	84.049 3.3090	4.762 0.1875	0.8 0.03	44.5 1.75	45.5 1.79	76.0 2.99	29.9	11.2	0.0781	0.71 1.56
23.698 0.9330	17.462 0.6875	2.3 0.09	93.937 3.6983	5.555 0.2187	2.3 0.09	50.0 1.97	54.0 2.13	86.0 3.39	22.9	8.71	0.0899	0.76 1.68
11.908 0.4688	9.525 0.3750	-0.8 -0.03	68.161 2.6835	2.769 0.1090	1.5 0.06	42.5 1.67	45.0 1.77	63.0 2.48	14.8	23.3	0.0601	0.17 0.37
16.520 0.6504	11.908 0.4688	-1.5 -0.06	72.128 2.8397	3.571 0.1406	1.5 0.06	43.0 1.69	45.0 1.77	67.0 2.64	17.5	11.5	0.0694	0.25 0.55
16.520 0.6504	14.288 0.5625	-1.5 -0.06	75.857 2.9865	3.556 0.1400	1.5 0.06	43.0 1.69	45.0 1.77	68.0 2.68	17.5	11.5	0.0694	0.31 0.68
20.638 0.8125	15.875 0.6250	-4.1 -0.16	76.098 2.9960	3.970 0.1563	3.5 0.14	43.0 1.69	49.5 1.95	69.0 2.72	20.3	10.6	0.0707	0.37 0.81
25.654 1.0100	19.050 0.7500	-8.1 -0.32	82.550 3.2500	6.350 0.2500	3.5 0.14	43.5 1.71	50.0 1.97	73.0 2.87	28.7	12.2	0.0725	0.54 1.20
29.771 1.1721	23.812 0.9375	-8.6 -0.34	84.049 3.3090	4.762 0.1875	3.5 0.14	45.5 1.80	52.0 2.05	76.0 2.99	29.9	11.2	0.0781	0.68 1.50

[4] These maximum fillet radii will be cleared by the bearing corners.

Continued on next page.

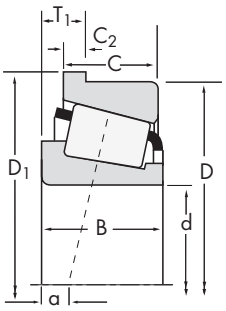
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

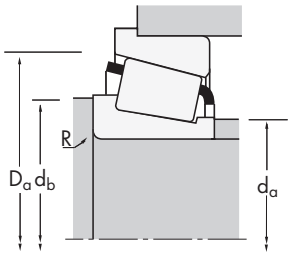
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

B

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	Ca_{90}	K	C_0	Inner	Outer
38.100 1.5000	80.000 3.1496	7.938 0.3125	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	347	332-B
38.100 1.5000	80.000 3.1496	9.100 0.3583	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28150	28315-B
38.100 1.5000	80.000 3.1496	9.100 0.3583	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28151	28315-B
38.100 1.5000	80.167 3.1562	10.320 0.4063	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3381	3320-B
38.100 1.5000	80.167 3.1562	10.320 0.4063	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3387	3320-B
38.100 1.5000	81.755 3.2187	10.320 0.4063	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3381	3329-B
38.100 1.5000	81.755 3.2187	10.320 0.4063	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3387	3329-B
38.100 1.5000	87.312 3.4375	11.112 0.4375	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3580	3525-B
38.100 1.5000	87.312 3.4375	11.112 0.4375	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3583	3525-B
38.100 1.5000	88.500 3.4843	13.492 0.5312	77900 17500	0.78	0.77	20200 4540	27000 6070	0.75	88600 19900	44150	44348-B
38.100 1.5000	92.075 3.6250	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	440	432AB
38.100 1.5000	92.075 3.6250	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	444	432AB
38.100 1.5000	95.250 3.7500	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	440	432-B
38.100 1.5000	95.250 3.7500	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	444	432-B
38.100 1.5000	111.125 4.3750	14.288 0.5625	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	542	532-B
38.481 1.5150	65.088 2.5625	5.944 0.2340	25100 5650	0.35	1.73	6520 1470	3860 869	1.69	33000 7430	13890	13836-B
39.688 1.5625	80.167 3.1562	10.320 0.4063	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3382	3320-B
39.688 1.5625	80.167 3.1562	10.320 0.4063	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3386	3320-B
39.688 1.5625	81.755 3.2187	10.320 0.4063	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3382	3329-B
39.688 1.5625	81.755 3.2187	10.320 0.4063	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3386	3329-B
39.688 1.5625	88.500 3.4843	13.492 0.5312	77900 17500	0.78	0.77	20200 4540	27000 6070	0.75	88600 19900	44156	44348-B
39.688 1.5625	88.500 3.4843	13.492 0.5312	77900 17500	0.78	0.77	20200 4540	27000 6070	0.75	88600 19900	44158	44348-B
39.688 1.5625	120.650 4.7500	16.667 0.6562	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	620	612-B
40.000 1.5748	80.000 3.1496	7.938 0.3125	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	344A	332-B
40.000 1.5748	80.000 3.1496	9.100 0.3583	58800 13200	0.40	1.49	15200 3430	10500 2360	1.45	68900 15500	28158	28315-B
40.000 1.5748	85.725 3.3750	11.112 0.4375	115000 25900	0.40	1.49	29800 6710	20500 4610	1.45	148000 33200	3879	3820-B
40.000 1.5748	88.500 3.4843	13.492 0.5312	77900 17500	0.78	0.77	20200 4540	27000 6070	0.75	88600 19900	44157	44348-B
40.000 1.5748	92.075 3.6250	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	442-S	432AB

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)									Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
22.403 0.8820	17.826 0.7018	-6.4 -0.25	84.658 3.3330	4.762 0.1875	3.5 0.14	44.0 1.73	50.0 1.97	77.0 3.03	26.5	13	0.0676	0.52 1.14
20.940 0.8244	15.875 0.6250	-4.8 -0.19	83.858 3.3015	3.970 0.1563	1.5 0.06	43.5 1.71	45.5 1.79	73.0 2.87	20.7	12.5	0.0709	0.48 1.05
20.940 0.8244	15.875 0.6250	-4.8 -0.19	83.858 3.3015	3.970 0.1563	3.5 0.14	43.5 1.71	50.0 1.97	73.0 2.87	20.7	12.5	0.0709	0.47 1.04
30.391 1.1965	23.812 0.9375	-10.9 -0.43	84.826 3.3396	4.762 0.1875	3.5 0.14	44.5 1.75	51.0 2.01	77.0 3.03	34.6	12.1	0.0744	0.73 1.62
30.391 1.1965	23.812 0.9375	-10.9 -0.43	84.826 3.3396	4.762 0.1875	0.8 0.03	44.5 1.75	45.0 1.77	77.0 3.03	34.6	12.1	0.0744	0.74 1.63
30.391 1.1965	23.812 0.9375	-10.9 -0.43	86.413 3.4021	4.762 0.1875	3.5 0.14	44.5 1.75	51.0 2.01	77.0 3.03	34.6	12.1	0.0744	0.75 1.65
30.391 1.1965	23.812 0.9375	-10.9 -0.43	86.413 3.4021	4.762 0.1875	0.8 0.03	44.5 1.75	45.0 1.77	77.0 3.03	34.6	12.1	0.0744	0.76 1.67
30.886 1.2160	23.812 0.9375	-10.2 -0.40	91.986 3.6215	4.750 0.1870	1.5 0.06	45.5 1.79	48.0 1.89	82.0 3.23	39.5	10.5	0.0808	0.90 1.98
30.886 1.2160	23.812 0.9375	-10.2 -0.40	91.986 3.6215	4.750 0.1870	3.5 0.14	45.5 1.79	52.0 2.05	82.0 3.23	39.5	10.5	0.0808	0.89 1.97
23.698 0.9330	17.462 0.6875	2.3 0.09	93.937 3.6983	5.555 0.2187	2.3 0.09	51.0 2.00	55.0 2.17	86.0 3.39	22.9	8.71	0.0899	0.74 1.64
29.900 1.1772	22.225 0.8750	-9.1 -0.36	97.536 3.8400	5.558 0.2188	0.8 0.03	45.5 1.79	46.5 1.83	87.0 3.43	42.5	11.3	0.0805	0.99 2.19
29.900 1.1772	22.225 0.8750	-9.1 -0.36	97.536 3.8400	5.558 0.2188	3.5 0.14	45.5 1.79	52.0 2.05	87.0 3.43	42.5	11.3	0.0805	0.99 2.18
29.900 1.1772	22.225 0.8750	-9.1 -0.36	100.686 3.9640	5.558 0.2188	0.8 0.03	45.5 1.79	46.5 1.83	87.0 3.43	42.5	11.3	0.0805	1.08 2.37
29.900 1.1772	22.225 0.8750	-9.1 -0.36	100.686 3.9640	5.558 0.2188	3.5 0.14	45.5 1.79	52.0 2.05	87.0 3.43	42.5	11.3	0.0805	1.07 2.36
36.957 1.4550	30.162 1.1875	-12.2 -0.48	117.373 4.6210	6.350 0.2500	3.5 0.14	49.0 1.93	55.0 2.17	100.0 3.94	64.3	16.1	0.0938	2.01 4.43
11.908 0.4688	9.525 0.3750	-0.8 -0.03	68.161 2.6835	2.769 0.1090	0.4 0.02	43.0 1.69	43.0 1.69	63.0 2.48	14.8	23.3	0.0601	0.16 0.36
30.391 1.1965	23.812 0.9375	-10.9 -0.43	84.826 3.3396	4.762 0.1875	3.5 0.14	45.5 1.79	52.0 2.05	77.0 3.03	34.6	12.1	0.0744	0.71 1.57
30.391 1.1965	23.812 0.9375	-10.9 -0.43	84.826 3.3396	4.762 0.1875	0.8 0.03	45.5 1.79	46.5 1.83	77.0 3.03	34.6	12.1	0.0744	0.72 1.58
30.391 1.1965	23.812 0.9375	-10.9 -0.43	86.413 3.4021	4.762 0.1875	3.5 0.14	45.5 1.79	52.0 2.05	77.0 3.03	34.6	12.1	0.0744	0.73 1.60
30.391 1.1965	23.812 0.9375	-10.9 -0.43	86.413 3.4021	4.762 0.1875	0.8 0.03	45.5 1.79	46.5 1.83	77.0 3.03	34.6	12.1	0.0744	0.73 1.61
23.698 0.9330	17.462 0.6875	2.3 0.09	93.937 3.6983	5.555 0.2187	2.3 0.09	51.0 2.00	56.0 2.20	86.0 3.39	22.9	8.71	0.0899	0.73 1.60
23.698 0.9330	17.462 0.6875	2.3 0.09	93.937 3.6983	5.555 0.2187	3.5 0.14	51.0 2.00	58.0 2.28	86.0 3.39	22.9	8.71	0.0899	0.72 1.59
41.275 1.6250	31.750 1.2500	-14.0 -0.55	127.691 5.0272	7.142 0.2812	0.8 0.03	52.0 2.05	53.0 2.09	110.0 4.33	75.9	16.2	0.0694	2.60 5.74
22.403 0.8820	17.826 0.7018	-6.4 -0.25	84.658 3.3330	4.762 0.1875	0.8 0.03	45.5 1.79	46.0 1.81	77.0 3.03	26.5	13	0.0676	0.50 1.11
20.940 0.8244	15.875 0.6250	-4.8 -0.19	83.858 3.3015	3.970 0.1563	1.5 0.06	45.0 1.77	47.5 1.87	73.0 2.87	20.7	12.5	0.0709	0.46 1.01
30.162 1.1875	23.812 0.9375	-8.1 -0.32	89.586 3.5270	4.762 0.1875	0.8 0.03	50.0 1.97	51.0 2.01	83.0 3.27	37.8	13.5	0.0873	0.84 1.86
23.698 0.9330	17.462 0.6875	2.3 0.09	93.937 3.6983	5.555 0.2187	2.3 0.09	51.0 2.00	56.0 2.20	86.0 3.39	22.9	8.71	0.0899	0.72 1.59
29.900 1.1772	22.225 0.8750	-9.1 -0.36	97.536 3.8400	5.558 0.2188	3.5 0.14	47.0 1.85	54.0 2.13	87.0 3.43	42.5	11.3	0.0805	0.96 2.12

(4) These maximum fillet radii will be cleared by the bearing corners.

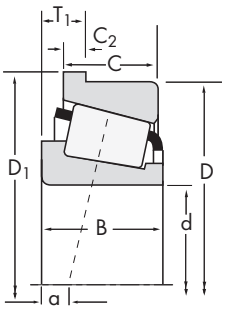
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

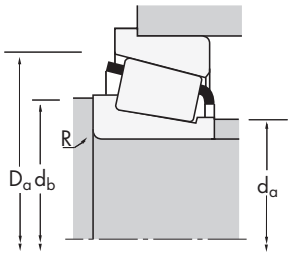
(6) For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

Continued on next page.

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
40.000 1.5748	95.000 3.7402	10.000 0.3937	120000 27000	0.41	1.45	31200 7010	22100 4960	1.41	166000 37300	XGA33210	YSA33210R
40.000 1.5748	95.250 3.7500	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	442-S	432-B
41.275 1.6250	76.200 3.0000	7.292 0.2871	44500 10000	0.49	1.23	11500 2600	9630 2170	1.20	55100 12400	11162	11300-B
41.275 1.6250	79.375 3.1250	8.733 0.3438	84300 19000	0.32	1.88	21900 4920	11900 2680	1.83	110000 24800	26882	26822-B
41.275 1.6250	80.000 3.1496	7.938 0.3125	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	336	332-B
41.275 1.6250	80.000 3.1496	7.938 0.3125	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	342	332-B
41.275 1.6250	80.167 3.1562	10.320 0.4063	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3383	3320-B
41.275 1.6250	81.755 3.2187	10.320 0.4063	106000 23900	0.27	2.20	27600 6200	12900 2900	2.14	129000 29100	3383	3329-B
41.275 1.6250	85.725 3.3750	11.112 0.4375	115000 25900	0.40	1.49	29800 6710	20500 4610	1.45	148000 33200	3877	3820-B
41.275 1.6250	87.312 3.4375	11.100 0.4370	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3585	3525-B
41.275 1.6250	87.312 3.4375	11.112 0.4375	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3576	3525-B
41.275 1.6250	87.312 3.4375	11.112 0.4375	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3577	3525-B
41.275 1.6250	88.500 3.4843	13.492 0.5312	77900 17500	0.78	0.77	20200 4540	27000 6070	0.75	88600 19900	44162	44348-B
41.275 1.6250	92.075 3.6250	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	447	432AB
41.275 1.6250	95.250 3.7500	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	447	432-B
41.275 1.6250	98.425 3.8750	16.670 0.6563	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53162	53387-B
42.850 1.6870	107.950 4.2500	11.112 0.4375	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	461	453-B
42.862 1.6875	83.058 3.2700	8.733 0.3438	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25576	25521-B
42.862 1.6875	85.000 3.3465	9.525 0.3750	86400 19400	0.35	1.73	22400 5040	13300 2980	1.69	117000 26200	2973	2924-B
42.862 1.6875	87.312 3.4375	11.112 0.4375	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3579	3525-B
42.875 1.6880	80.000 3.1496	7.938 0.3125	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	342-S	332-B
43.000 1.6929	80.000 3.1496	7.938 0.3125	73600 16600	0.27	2.20	19100 4290	8920 2010	2.14	83400 18700	342X	332-B
44.450 1.7500	71.438 2.8125	5.969 0.2350	33400 7510	0.31	1.97	8660 1950	4530 1020	1.91	43600 9790	LL103049	LL103010-B
44.450 1.7500	73.025 2.8750	6.350 0.2500	52800 11900	0.32	1.88	13700 3080	7460 1680	1.83	78300 17600	L102849	L102810-B
44.450 1.7500	76.992 3.0312	9.126 0.3593	45900 10300	0.51	1.19	11900 2670	10300 2320	1.15	58100 13100	12175	12303-B
44.450 1.7500	79.375 3.1250	7.539 0.2968	48200 10800	0.37	1.60	12500 2810	7990 1800	1.56	61300 13800	18685	18620-B
44.450 1.7500	83.058 3.2700	8.733 0.3438	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25580	25521-B
44.450 1.7500	85.000 3.3465	7.938 0.3125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	355	354-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)								Factors			Weight kg (lbs.)
Bearing					Shaft			Housing			
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.			
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
32.000 1.2598	27.000 1.0630	-8.6 -0.34	102.000 4.0157	5.000 0.1968	1.5 0.06	54.0 2.13	56.0 2.20	89.0 3.50	48.4	15.3	0.0957	1.23 2.70
29.900 1.1772	22.225 0.8750	-9.1 -0.36	100.686 3.9640	5.558 0.2188	3.5 0.14	47.0 1.85	54.0 2.13	87.0 3.43	42.5	11.3	0.0805	1.04 2.30
17.384 0.6844	14.288 0.5625	-0.8 -0.03	80.863 3.1836	3.571 0.1406	1.5 0.06	46.5 1.83	49.0 1.93	73.0 2.87	19.2	12.8	0.0735	0.36 0.79
25.400 1.0000	19.050 0.7500	-7.4 -0.29	83.241 3.2772	3.970 0.1563	3.5 0.14	47.0 1.85	54.0 2.13	76.0 2.99	32.8	13.3	0.0770	0.55 1.21
22.403 0.8820	17.826 0.7018	-6.4 -0.25	84.658 3.3330	4.762 0.1875	0.8 0.03	46.0 1.81	47.0 1.85	77.0 3.03	26.5	13	0.0676	0.49 1.08
22.403 0.8820	17.826 0.7018	-6.4 -0.25	84.658 3.3330	4.762 0.1875	3.5 0.14	46.0 1.81	53.0 2.09	77.0 3.03	26.5	13	0.0676	0.48 1.06
30.391 1.1965	23.812 0.9375	-10.9 -0.43	84.826 3.3396	4.762 0.1875	3.5 0.14	47.0 1.85	54.0 2.13	77.0 3.03	34.6	12.1	0.0744	0.69 1.51
30.391 1.1965	23.812 0.9375	-10.9 -0.43	86.413 3.4021	4.762 0.1875	3.5 0.14	47.0 1.85	54.0 2.13	77.0 3.03	34.6	12.1	0.0744	0.70 1.55
30.162 1.1875	23.812 0.9375	-8.1 -0.32	89.586 3.5270	4.762 0.1875	3.5 0.14	50.5 1.98	57.0 2.24	83.0 3.27	37.8	13.5	0.0873	0.82 1.80
30.886 1.2160	23.812 0.9375	-10.2 -0.40	91.986 3.6215	4.750 0.1870	1.5 0.06	48.0 1.89	50.0 1.97	82.0 3.23	39.5	10.5	0.0808	0.85 1.88
30.886 1.2160	23.812 0.9375	-10.2 -0.40	91.986 3.6215	4.750 0.1870	0.8 0.03	48.0 1.89	49.0 1.93	82.0 3.23	39.5	10.5	0.0808	0.85 1.88
30.886 1.2160	23.812 0.9375	-10.2 -0.40	91.986 3.6215	4.750 0.1870	3.5 0.14	48.0 1.89	54.0 2.13	82.0 3.23	39.5	10.5	0.0808	0.85 1.87
23.698 0.9330	17.462 0.6875	2.3 0.09	93.937 3.6983	5.555 0.2187	2.3 0.09	51.0 2.00	57.0 2.24	86.0 3.39	22.9	8.71	0.0899	0.71 1.56
29.900 1.1772	22.225 0.8750	-9.1 -0.36	97.536 3.8400	5.558 0.2188	3.5 0.14	48.5 1.91	55.0 2.17	87.0 3.43	42.5	11.3	0.0805	0.94 2.07
29.900 1.1772	22.225 0.8750	-9.1 -0.36	100.686 3.9640	5.558 0.2188	3.5 0.14	48.5 1.91	55.0 2.17	87.0 3.43	42.5	11.3	0.0805	1.02 2.26
28.301 1.1142	20.638 0.8125	-0.3 -0.01	104.673 4.1210	6.350 0.2500	1.5 0.06	52.5 2.07	57.0 2.24	92.0 3.62	26.7	9.63	0.0930	1.11 2.44
29.317 1.1542	22.225 0.8750	-7.1 -0.28	113.386 4.4640	5.558 0.2188	0.8 0.03	53.0 2.09	54.0 2.13	100.0 3.94	58.6	17.1	0.0946	1.40 3.09
25.400 1.0000	19.050 0.7500	-6.4 -0.25	86.919 3.4220	3.970 0.1563	3.5 0.14	49.0 1.93	55.0 2.17	80.0 3.15	35.2	14.3	0.0801	0.60 1.32
25.608 1.0082	20.638 0.8125	-6.4 -0.25	89.764 3.5340	4.762 0.1875	3.5 0.14	49.5 1.95	56.0 2.20	82.0 3.23	38.2	15.7	0.0832	0.69 1.53
30.886 1.2160	23.812 0.9375	-10.2 -0.40	91.986 3.6215	4.750 0.1870	3.5 0.14	49.5 1.95	56.0 2.20	82.0 3.23	39.5	10.5	0.0808	0.82 1.81
22.403 0.8820	17.826 0.7018	-6.4 -0.25	84.658 3.3330	4.762 0.1875	3.5 0.14	47.5 1.87	54.0 2.13	77.0 3.03	26.5	13	0.0676	0.46 1.02
22.403 0.8820	17.826 0.7018	-6.1 -0.24	84.658 3.3330	4.762 0.1875	3.5 0.14	48.0 1.89	55.0 2.17	77.0 3.03	26.5	13	0.0676	0.47 1.03
12.700 0.5000	9.525 0.3750	-1.3 -0.05	74.231 2.9225	2.794 0.1100	1.5 0.06	48.5 1.91	51.0 2.01	69.0 2.72	20	23.6	0.0637	0.19 0.42
18.258 0.7188	15.083 0.5938	-3.8 -0.15	76.200 3.0000	3.175 0.1250	1.5 0.06	49.0 1.93	51.0 2.01	71.0 2.80	30.6	23.7	0.0751	0.31 0.68
17.145 0.6750	11.908 0.4688	0.0 0.00	80.564 3.1718	3.571 0.1406	1.5 0.06	49.5 1.95	52.0 2.05	75.0 2.95	21	15.8	0.0766	0.32 0.71
17.462 0.6875	13.495 0.5313	-2.0 -0.08	84.038 3.3086	3.571 0.1406	2.8 0.11	49.5 1.95	54.0 2.13	77.0 3.03	23.9	17.7	0.0725	0.37 0.81
25.400 1.0000	19.050 0.7500	-6.4 -0.25	86.919 3.4220	3.970 0.1563	3.5 0.14	50.0 1.97	57.0 2.24	80.0 3.15	35.2	14.3	0.0801	0.58 1.27
21.692 0.8540	17.462 0.6875	-4.8 -0.19	89.659 3.5299	4.762 0.1875	2.3 0.09	50.0 1.97	54.0 2.13	82.0 3.23	30	12.2	0.0732	0.54 1.20

[4] These maximum fillet radii will be cleared by the bearing corners.

Continued on next page.

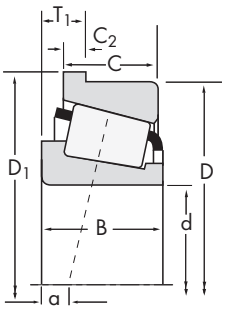
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

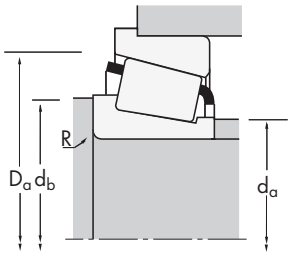
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

B

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
44.450 1.7500	85.000 3.3465	7.938 0.3125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	355X	354-B
44.450 1.7500	87.312 3.4375	11.112 0.4375	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3578	3525-B
44.450 1.7500	92.075 3.6250	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	435	432AB
44.450 1.7500	92.075 3.6250	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	438	432AB
44.450 1.7500	95.250 3.7500	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	435	432-B
44.450 1.7500	95.250 3.7500	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	438	432-B
44.450 1.7500	98.425 3.8750	16.670 0.6563	92800 20900	0.74	0.81	24000 5410	30500 6850	0.79	104000 23400	53176	53387-B
44.450 1.7500	101.600 4.0000	11.908 0.4688	123000 27600	0.40	1.50	31900 7160	21900 4910	1.46	155000 35000	49576	49520-B
44.450 1.7500	107.950 4.2500	11.115 0.4376	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	460	453-B
44.450 1.7500	108.966 4.2900	14.288 0.5625	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59175	59429-B
44.450 1.7500	120.650 4.7500	16.574 0.6525	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	615	612-B
44.450 1.7500	127.000 5.0000	17.462 0.6875	283000 63700	0.30	2.01	73500 16500	37500 8440	1.96	370000 83300	6277	6220-B
44.983 1.7710	83.058 3.2700	8.733 0.3438	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25584	25521-B
44.983 1.7710	93.264 3.6718	11.112 0.4375	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3776	3720-B
45.000 1.7717	75.000 2.9528	8.000 0.3150	61500 13800	0.39	1.53	15900 3580	10700 2410	1.49	84300 19000	X32009X	Y32009XR
45.000 1.7717	80.000 3.1496	10.000 0.3937	88000 19800	0.38	1.57	22800 5130	15000 3370	1.52	119000 26800	X33109	Y33109R
45.000 1.7717	85.000 3.3465	7.938 0.3125	75800 17000	0.31	1.96	19600 4420	10300 2320	1.91	88800 20000	358	354-B
45.000 1.7717	90.000 3.5433	8.887 0.3499	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	367	362-B
45.237 1.7810	87.312 3.4375	11.112 0.4375	105000 23600	0.31	1.96	27200 6120	14300 3210	1.91	134000 30100	3586	3525-B
45.618 1.7960	83.058 3.2700	8.733 0.3438	83800 18800	0.33	1.79	21700 4880	12500 2800	1.74	111000 24900	25590	25521-B
46.038 1.8125	79.375 3.1250	7.539 0.2968	48200 10800	0.37	1.60	12500 2810	7990 1800	1.56	61300 13800	18690	18620-B
46.038 1.8125	85.000 3.3465	9.525 0.3750	86400 19400	0.35	1.73	22400 5040	13300 2980	1.69	117000 26200	2984	2924-B
46.038 1.8125	92.075 3.6250	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	436	432AB
46.038 1.8125	95.250 3.7500	11.115 0.4376	118000 26400	0.28	2.11	30500 6850	14800 3330	2.05	144000 32400	436	432-B
47.625 1.8750	88.900 3.5000	8.887 0.3499	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	369-S	362AB
47.625 1.8750	90.000 3.5433	8.887 0.3499	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	369A	362-B
47.625 1.8750	90.000 3.5433	8.887 0.3499	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	369-S	362-B
47.625 1.8750	93.264 3.6718	11.112 0.4375	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3778	3720-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)									Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
21.692 0.8540	17.462 0.6875	-4.8 -0.19	89.659 3.5299	4.762 0.1875	3.5 0.14	50.0 1.97	56.0 2.20	82.0 3.23	30	12.2	0.0732	0.54 1.19
30.886 1.2160	23.812 0.9375	-10.2 -0.40	91.986 3.6215	4.750 0.1870	3.5 0.14	51.0 2.01	57.0 2.24	82.0 3.23	39.5	10.5	0.0808	0.79 1.75
29.900 1.1772	22.225 0.8750	-9.1 -0.36	97.536 3.8400	5.558 0.2188	0.8 0.03	51.0 2.01	52.0 2.05	87.0 3.43	42.5	11.3	0.0805	0.90 1.98
29.900 1.1772	22.225 0.8750	-9.1 -0.36	97.536 3.8400	5.558 0.2188	3.5 0.14	51.0 2.01	57.0 2.24	87.0 3.43	42.5	11.3	0.0805	0.89 1.96
29.900 1.1772	22.225 0.8750	-9.1 -0.36	100.686 3.9640	5.558 0.2188	0.8 0.03	51.0 2.01	52.0 2.05	87.0 3.43	42.5	11.3	0.0805	0.98 2.16
29.900 1.1772	22.225 0.8750	-9.1 -0.36	100.686 3.9640	5.558 0.2188	3.5 0.14	51.0 2.01	57.0 2.24	87.0 3.43	42.5	11.3	0.0805	0.97 2.15
28.301 1.1142	20.638 0.8125	-0.3 -0.01	104.673 4.1210	6.350 0.2500	1.3 0.05	52.5 2.07	59.0 2.32	92.0 3.62	26.7	9.63	0.0930	1.06 2.33
31.750 1.2500	25.400 1.0000	-7.1 -0.28	107.056 4.2148	5.558 0.2188	0.8 0.03	54.0 2.13	55.0 2.17	98.0 3.86	49.1	14.2	0.0946	1.31 2.88
29.317 1.1542	22.225 0.8750	-7.1 -0.28	113.386 4.4640	5.558 0.2188	3.5 0.14	54.0 2.13	60.0 2.36	100.0 3.94	58.6	17.1	0.0946	1.37 3.02
36.512 1.4375	26.988 1.0625	-9.7 -0.38	115.214 4.5360	6.350 0.2500	3.5 0.14	56.0 2.20	63.0 2.48	101.0 3.98	57.3	14.7	0.0999	1.72 3.79
41.275 1.6250	31.750 1.2500	-14.0 -0.55	127.691 5.0272	7.142 0.2812	3.5 0.14	56.0 2.20	62.0 2.44	110.0 4.33	75.9	16.2	0.0694	2.49 5.50
52.388 2.0625	41.275 1.6250	-19.6 -0.77	134.925 5.3120	7.938 0.3125	3.5 0.14	60.0 2.36	67.0 2.64	117.0 4.61	103	18.7	0.0757	3.66 8.07
25.400 1.0000	19.050 0.7500	-6.4 -0.25	86.919 3.4220	3.970 0.1563	1.5 0.06	51.0 2.01	53.0 2.09	80.0 3.15	35.2	14.3	0.0801	0.57 1.27
30.302 1.1930	23.812 0.9375	-8.1 -0.32	97.937 3.8558	4.762 0.1875	3.5 0.14	53.0 2.09	59.0 2.32	90.0 3.54	49.9	14.5	0.0903	0.98 2.16
20.000 0.7874	15.500 0.6102	-3.3 -0.13	79.000 3.1102	3.500 0.1378	1.0 0.04	51.0 2.01	53.0 2.09	74.0 2.91	28.7	16.2	0.0788	0.36 0.79
26.000 1.0236	20.500 0.8071	-6.6 -0.26	85.000 3.3465	4.500 0.1772	1.5 0.06	52.0 2.05	55.0 2.17	79.0 3.11	35.7	14.5	0.0843	0.55 1.22
21.692 0.8540	17.462 0.6875	-4.8 -0.19	89.659 3.5299	4.762 0.1875	1.5 0.06	50.0 1.97	53.0 2.09	82.0 3.23	30	12.2	0.0732	0.54 1.19
22.225 0.8750	15.875 0.6250	-4.3 -0.17	94.661 3.7268	4.762 0.1875	2.0 0.08	51.0 2.01	55.0 2.17	86.0 3.39	33.8	14	0.0773	0.62 1.37
30.886 1.2160	23.812 0.9375	-10.2 -0.40	91.986 3.6215	4.750 0.1870	3.5 0.14	52.0 2.05	58.0 2.28	82.0 3.23	39.5	10.5	0.0808	0.78 1.72
25.400 1.0000	19.050 0.7500	-6.4 -0.25	86.919 3.4220	3.970 0.1563	3.5 0.14	51.0 2.01	58.0 2.28	80.0 3.15	35.2	14.3	0.0801	0.56 1.23
17.462 0.6875	13.495 0.5313	-2.0 -0.08	84.038 3.3086	3.571 0.1406	2.8 0.11	51.0 2.01	56.0 2.20	77.0 3.03	23.9	17.7	0.0725	0.35 0.77
25.608 1.0082	20.638 0.8125	-6.4 -0.25	89.764 3.5340	4.762 0.1875	3.5 0.14	52.0 2.05	58.0 2.28	82.0 3.23	38.2	15.7	0.0832	0.65 1.43
29.900 1.1772	22.225 0.8750	-9.1 -0.36	97.536 3.8400	5.558 0.2188	3.5 0.14	52.0 2.05	59.0 2.32	87.0 3.43	42.5	11.3	0.0805	0.86 1.90
29.900 1.1772	22.225 0.8750	-9.1 -0.36	100.686 3.9640	5.558 0.2188	3.5 0.14	52.0 2.05	59.0 2.32	87.0 3.43	42.5	11.3	0.0805	0.95 2.09
22.225 0.8750	16.513 0.6501	-4.3 -0.17	93.662 3.6875	4.762 0.1875	2.3 0.09	53.0 2.09	57.0 2.24	86.0 3.39	33.8	14	0.0773	0.58 1.28
22.225 0.8750	15.875 0.6250	-4.3 -0.17	94.661 3.7268	4.762 0.1875	3.5 0.14	53.0 2.09	60.0 2.36	86.0 3.39	33.8	14	0.0773	0.59 1.29
22.225 0.8750	15.875 0.6250	-4.3 -0.17	94.661 3.7268	4.762 0.1875	2.3 0.09	53.0 2.09	57.0 2.24	86.0 3.39	33.8	14	0.0773	0.59 1.30
30.302 1.1930	23.812 0.9375	-8.1 -0.32	97.937 3.8558	4.762 0.1875	6.4 0.25	55.0 2.17	67.0 2.64	90.0 3.54	49.9	14.5	0.0903	0.92 2.02

[4] These maximum fillet radii will be cleared by the bearing corners.

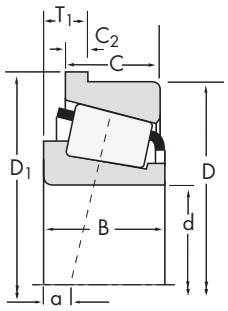
Continued on next page.

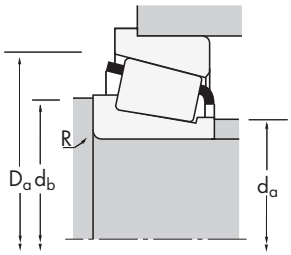
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
47.625 1.8750	93.264 3.6718	11.112 0.4375	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3779	3720-B
47.625 1.8750	95.250 3.7500	11.140 0.4386	115000 25900	0.55	1.10	29900 6710	27900 6280	1.07	157000 35400	HM804846	HM804811-B
47.625 1.8750	107.950 4.2500	11.112 0.4375	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	463	453-B
47.625 1.8750	107.950 4.2500	11.112 0.4375	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	467	453-B
47.625 1.8750	108.966 4.2900	14.288 0.5625	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59187	59429-B
47.625 1.8750	120.650 4.7500	16.574 0.6525	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	617	612-B
49.212 1.9375	90.000 3.5433	8.887 0.3499	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	365-S	362-B
49.212 1.9375	111.125 4.3750	14.288 0.5625	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	545	532-B
49.212 1.9375	114.300 4.5000	16.670 0.6563	207000 46500	0.43	1.39	53700 12100	39500 8880	1.36	256000 57500	65390	65320-B
49.982 1.9678	111.125 4.3750	14.288 0.5625	159000 35800	0.30	2.02	41300 9290	21000 4720	1.97	206000 46200	546	532-B
49.987 1.9680	80.962 3.1875	7.145 0.2813	56300 12700	0.36	1.69	14600 3280	8880 2000	1.64	88800 20000	L305648	L305610-B
50.000 1.9685	90.000 3.5433	8.887 0.3499	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	365	362-B
50.000 1.9685	90.000 3.5433	8.887 0.3499	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	366	362-B
50.800 2.0000	77.788 3.0625	5.969 0.2350	34600 7770	0.34	1.78	8960 2010	5160 1160	1.74	47200 10600	LL205449	LL205410-B
50.800 2.0000	80.962 3.1875	7.145 0.2813	56300 12700	0.36	1.69	14600 3280	8880 2000	1.64	88800 20000	L305649	L305610-B
50.800 2.0000	85.000 3.3465	7.539 0.2968	50600 11400	0.41	1.48	13100 2950	9110 2050	1.44	67500 15200	18790	18720-B
50.800 2.0000	85.725 3.3750	9.906 0.3900	47800 10700	0.57	1.06	12400 2780	12000 2710	1.03	63900 14400	18200	18337-B
50.800 2.0000	88.900 3.5000	8.887 0.3499	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	368	362AB
50.800 2.0000	88.900 3.5000	8.887 0.3499	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	368A	362AB
50.800 2.0000	90.000 3.5433	8.887 0.3499	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	368	362-B
50.800 2.0000	90.000 3.5433	8.887 0.3499	79500 17900	0.32	1.88	20600 4640	11300 2540	1.83	95800 21500	368A	362-B
50.800 2.0000	92.075 3.6250	8.730 0.3437	91600 20600	0.38	1.59	23700 5340	15300 3450	1.55	130000 29200	28580	28521-B
50.800 2.0000	93.264 3.6718	11.112 0.4375	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3775	3720-B
50.800 2.0000	93.264 3.6718	11.112 0.4375	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3780	3720-B
50.800 2.0000	101.600 4.0000	11.908 0.4688	123000 27600	0.40	1.50	31900 7160	21900 4910	1.46	155000 35000	49585	49520-B
50.800 2.0000	104.775 4.1250	11.908 0.4688	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45285	45220-B
50.800 2.0000	104.775 4.1250	11.908 0.4688	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45285A	45220-B
50.800 2.0000	104.775 4.1250	11.908 0.4688	158000 35500	0.40	1.49	41000 9210	28200 6340	1.45	202000 45400	59201	59412-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)								Factors			Weight kg (lbs.)
Bearing					Shaft			Housing			
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.			
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
30.302 1.1930	23.812 0.9375	-8.1 -0.32	97.937 3.8558	4.762 0.1875	3.5 0.14	55.0 2.17	61.0 2.40	90.0 3.54	49.9	14.5	0.0903	0.93 2.06
29.370 1.1563	24.021 0.9457	-3.8 -0.15	100.686 3.9640	5.001 0.1969	3.5 0.14	57.5 2.26	66.0 2.60	93.0 3.66	44.8	14.6	0.1017	1.01 2.24
29.317 1.1542	22.225 0.8750	-7.1 -0.28	113.386 4.4640	5.558 0.2188	4.8 0.19	56.0 2.20	65.0 2.56	100.0 3.94	58.6	17.1	0.0946	1.31 2.89
29.317 1.1542	22.225 0.8750	-7.1 -0.28	113.386 4.4640	5.558 0.2188	0.8 0.03	56.0 2.20	57.0 2.24	100.0 3.94	58.6	17.1	0.0946	1.32 2.92
36.512 1.4375	26.988 1.0625	-9.7 -0.38	115.214 4.5360	6.350 0.2500	3.5 0.14	59.0 2.32	65.0 2.56	101.0 3.98	57.3	14.7	0.0999	1.65 3.64
41.275 1.6250	31.750 1.2500	-14.0 -0.55	127.691 5.0272	7.142 0.2812	3.5 0.14	58.0 2.28	65.0 2.56	110.0 4.33	75.9	16.2	0.0694	2.42 5.33
22.225 0.8750	15.875 0.6250	-4.3 -0.17	94.661 3.7268	4.762 0.1875	0.8 0.03	54.0 2.13	55.0 2.17	86.0 3.39	33.8	14	0.0773	0.57 1.25
36.957 1.4550	30.162 1.1875	-12.2 -0.48	117.373 4.6210	6.350 0.2500	3.5 0.14	57.0 2.24	64.0 2.52	100.0 3.94	64.3	16.1	0.0938	1.79 3.94
44.450 1.7500	34.925 1.3750	-12.4 -0.49	121.341 4.7772	7.145 0.2813	3.5 0.14	60.0 2.36	70.0 2.76	107.0 4.21	63.1	13	0.1053	2.30 5.07
36.957 1.4550	30.162 1.1875	-12.2 -0.48	117.373 4.6210	6.350 0.2500	3.5 0.14	58.0 2.28	65.0 2.56	100.0 3.94	64.3	16.1	0.0938	1.77 3.90
18.258 0.7188	14.288 0.5625	-2.5 -0.10	84.036 3.3085	3.175 0.1250	1.5 0.06	55.0 2.17	57.0 2.24	78.0 3.07	38.8	27.8	0.0841	0.38 0.83
22.225 0.8750	15.875 0.6250	-4.3 -0.17	94.661 3.7268	4.762 0.1875	2.0 0.08	55.0 2.17	58.0 2.28	86.0 3.39	33.8	14	0.0773	0.56 1.23
22.225 0.8750	15.875 0.6250	-4.3 -0.17	94.661 3.7268	4.762 0.1875	2.3 0.09	55.0 2.17	59.0 2.32	86.0 3.39	33.8	14	0.0773	0.56 1.23
12.700 0.5000	9.525 0.3750	0.0 0.00	80.582 3.1725	2.794 0.1100	1.5 0.06	55.0 2.17	57.0 2.24	75.0 2.95	24.2	29.1	0.0699	0.21 0.47
18.258 0.7188	14.288 0.5625	-2.5 -0.10	84.036 3.3085	3.175 0.1250	1.5 0.06	56.0 2.20	58.0 2.28	78.0 3.07	38.8	27.8	0.0841	0.37 0.81
17.462 0.6875	13.495 0.5313	-0.8 -0.03	88.570 3.4870	3.571 0.1406	3.5 0.14	56.0 2.20	62.0 2.44	82.0 3.23	28.6	21.5	0.0789	0.40 0.89
18.263 0.7190	12.700 0.5000	2.0 0.08	89.586 3.5270	3.556 0.1400	1.5 0.06	56.0 2.20	59.0 2.32	83.0 3.27	26.1	20.3	0.0852	0.42 0.92
22.225 0.8750	16.513 0.6501	-4.3 -0.17	93.662 3.6875	4.762 0.1875	1.5 0.06	56.0 2.20	58.0 2.28	86.0 3.39	33.8	14	0.0773	0.53 1.18
22.225 0.8750	16.513 0.6501	-4.3 -0.17	93.662 3.6875	4.762 0.1875	3.5 0.14	56.0 2.20	62.0 2.44	86.0 3.39	33.8	12.7	0.0773	0.53 1.16
22.225 0.8750	15.875 0.6250	-4.3 -0.17	94.661 3.7268	4.762 0.1875	1.5 0.06	56.0 2.20	58.0 2.28	86.0 3.39	33.8	14	0.0773	0.54 1.20
22.225 0.8750	15.875 0.6250	-4.3 -0.17	94.661 3.7268	4.762 0.1875	3.5 0.14	56.0 2.20	62.0 2.44	86.0 3.39	33.8	12.7	0.0773	0.54 1.19
25.400 1.0000	19.845 0.7813	-4.8 -0.19	95.941 3.7772	3.967 0.1562	3.5 0.14	57.0 2.24	63.0 2.48	89.0 3.50	46.4	22.6	0.0912	0.73 1.61
30.302 1.1930	23.812 0.9375	-8.1 -0.32	97.937 3.8558	4.762 0.1875	0.8 0.03	58.0 2.28	58.0 2.28	90.0 3.54	49.9	14.5	0.0903	0.88 1.95
30.302 1.1930	23.812 0.9375	-8.1 -0.32	97.937 3.8558	4.762 0.1875	3.5 0.14	58.0 2.28	64.0 2.52	90.0 3.54	49.9	14.5	0.0903	0.87 1.93
31.750 1.2500	25.400 1.0000	-7.1 -0.28	107.056 4.2148	5.558 0.2188	3.5 0.14	59.0 2.32	66.0 2.60	98.0 3.86	49.1	14.2	0.0946	1.18 2.61
30.958 1.2188	23.812 0.9375	-8.1 -0.32	110.231 4.3398	5.558 0.2188	2.3 0.09	59.0 2.32	63.0 2.48	101.0 3.98	63.5	16.9	0.0971	1.26 2.77
30.958 1.2188	23.812 0.9375	-8.1 -0.32	110.231 4.3398	5.558 0.2188	0.8 0.03	59.0 2.32	60.0 2.36	101.0 3.98	63.5	16.9	0.0971	1.25 2.76
36.512 1.4375	28.575 1.1250	-9.7 -0.38	110.500 4.3504	3.970 0.1563	0.8 0.03	61.0 2.40	62.0 2.44	101.0 3.98	57.3	14.7	0.0999	1.45 3.19

[4] These maximum fillet radii will be cleared by the bearing corners.

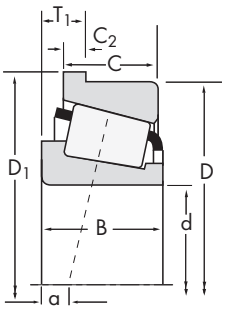
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

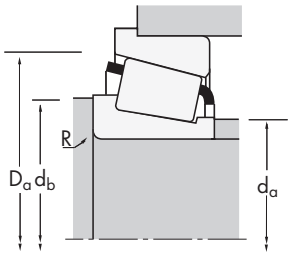
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

Continued on next page.

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
50.800 2.0000	104.775 4.1250	15.875 0.6250	159000 35700	0.49	1.23	41200 9260	34400 7730	1.20	223000 50200	HM807046	HM807010-B
50.800 2.0000	107.950 4.2500	11.112 0.4375	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	455	453-B
50.800 2.0000	107.950 4.2500	11.115 0.4376	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	455-S	453-B
50.800 2.0000	111.125 4.3750	15.083 0.5938	98500 22100	0.88	0.68	25500 5740	38600 8690	0.66	119000 26700	55200	55437-B
50.800 2.0000	120.650 4.7500	16.667 0.6562	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	619	612-B
50.800 2.0000	127.000 5.0000	16.670 0.6563	225000 50700	0.49	1.23	58500 13100	48800 11000	1.20	297000 66700	65200	65500-B
52.000 2.0472	85.725 3.3750	9.906 0.3900	47800 10700	0.57	1.06	12400 2780	12000 2710	1.03	63900 14400	18204X	18337-B
52.388 2.0625	92.075 3.6250	8.730 0.3437	91600 20600	0.38	1.59	23700 5340	15300 3450	1.55	130000 29200	28584	28521-B
52.388 2.0625	93.264 3.6718	11.112 0.4375	113000 25400	0.34	1.77	29300 6590	17000 3820	1.73	153000 34300	3767	3720-B
52.388 2.0625	111.125 4.3750	15.083 0.5938	98500 22100	0.88	0.68	25500 5740	38600 8690	0.66	119000 26700	55206	55437-B
53.975 2.1250	93.264 3.6718	10.320 0.4063	120000 27000	0.33	1.82	31100 7000	17600 3950	1.77	161000 36200	33895	33820-B
53.975 2.1250	107.950 4.2500	11.115 0.4376	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	456	453-B
53.975 2.1250	120.650 4.7500	16.667 0.6562	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	621	612-B
53.975 2.1250	123.825 4.8750	14.288 0.5625	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	557-S	552-B
53.975 2.1250	127.000 5.0000	7.137 0.2810	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	557-S	553-BA
53.975 2.1250	127.000 5.0000	17.462 0.6875	283000 63700	0.30	2.01	73500 16500	37500 8440	1.96	370000 83300	6280	6220-B
53.975 2.1250	136.525 5.3750	16.662 0.6560	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	636	632-B
54.813 2.1580	135.755 5.3447	17.462 0.6875	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	6380	6320-B
54.987 2.1649	135.755 5.3447	17.462 0.6875	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	6381	6320-B
55.000 2.1654	96.838 3.8125	7.938 0.3125	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	385	382-B
55.000 2.1654	110.000 4.3307	16.000 0.6299	183000 41200	0.40	1.48	47500 10700	32800 7380	1.44	253000 56800	XGB-33212	Y33212R
55.000 2.1654	120.000 4.7244	11.095 0.4368	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	475	472-B
55.562 2.1875	107.950 4.2500	11.112 0.4375	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	466-S	453-B
55.575 2.1880	96.838 3.8125	7.938 0.3125	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	389	382-B
57.150 2.2500	84.933 3.3438	5.969 0.2350	33500 7520	0.37	1.62	8670 1950	5500 1240	1.58	46800 10500	LL408049	LL408010-B
57.150 2.2500	87.312 3.4375	7.145 0.2813	58100 13100	0.39	1.54	15100 3380	10000 2250	1.50	95600 21500	L507949	L507910-B
57.150 2.2500	96.838 3.8125	7.938 0.3125	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	387	382-B
57.150 2.2500	96.838 3.8125	7.938 0.3125	84200 18900	0.35	1.69	21800 4910	13200 2980	1.65	107000 24100	387A	382-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)								Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
36.512 1.4375	28.575 1.1250	-7.4 -0.29	114.300 4.5000	7.937 0.3125	3.5 0.14	63.0 2.48	70.0 2.76	103.0 4.06	63.9	17.1	0.0760	1.60 3.53
29.317 1.1542	22.225 0.8750	-7.1 -0.28	113.386 4.4640	5.558 0.2188	0.8 0.03	59.0 2.32	60.0 2.36	100.0 3.94	58.6	17.1	0.0946	1.27 2.79
29.317 1.1542	22.225 0.8750	-7.1 -0.28	113.386 4.4640	5.558 0.2188	3.5 0.14	59.0 2.32	65.0 2.56	100.0 3.94	58.6	17.1	0.0946	1.26 2.78
26.909 1.0594	20.638 0.8125	7.1 0.28	116.683 4.5938	5.558 0.2188	3.5 0.14	64.0 2.51	71.0 2.80	107.0 4.21	36.8	13.2	0.1085	1.28 2.83
41.275 1.6250	31.750 1.2500	-14.0 -0.55	127.691 5.0272	7.142 0.2812	3.5 0.14	61.0 2.40	67.0 2.64	110.0 4.33	75.9	16.2	0.0694	2.34 5.16
44.450 1.7500	34.925 1.3750	-9.4 -0.37	134.041 5.2772	7.145 0.2813	3.5 0.14	69.0 2.72	75.0 2.95	120.0 4.72	83.2	17.2	0.0827	2.99 6.59
18.263 0.7190	12.700 0.5000	2.0 0.08	89.586 3.5270	3.556 0.1400	2.0 0.08	57.0 2.24	60.0 2.36	83.0 3.27	26.1	20.3	0.0852	0.40 0.89
25.400 1.0000	19.845 0.7813	-4.8 -0.19	95.941 3.7772	3.967 0.1562	3.5 0.14	58.0 2.28	65.0 2.56	89.0 3.50	46.4	22.6	0.0912	0.69 1.53
30.302 1.1930	23.812 0.9375	-8.1 -0.32	97.937 3.8558	4.762 0.1875	2.3 0.09	59.0 2.32	63.0 2.48	90.0 3.54	49.9	14.5	0.0903	0.85 1.87
26.909 1.0594	20.638 0.8125	7.1 0.28	116.683 4.5938	5.558 0.2188	3.5 0.14	64.0 2.51	72.0 2.83	107.0 4.21	36.8	13.2	0.1085	1.25 2.77
28.575 1.1250	22.225 0.8750	-7.6 -0.30	97.937 3.8558	4.762 0.1875	1.5 0.06	60.0 2.36	63.0 2.48	91.0 3.58	52.5	18.5	0.0910	0.78 1.72
29.317 1.1542	22.225 0.8750	-7.1 -0.28	113.386 4.4640	5.558 0.2188	3.5 0.14	61.0 2.40	68.0 2.68	100.0 3.94	58.6	17.1	0.0946	1.20 2.64
41.275 1.6250	31.750 1.2500	-14.0 -0.55	127.691 5.0272	7.142 0.2812	3.5 0.14	63.0 2.48	70.0 2.76	110.0 4.33	75.9	16.2	0.0694	2.25 4.97
36.678 1.4440	30.162 1.1875	-9.4 -0.37	130.073 5.1210	6.350 0.2500	3.5 0.14	65.0 2.56	71.0 2.80	116.0 4.57	91	21.1	0.1108	2.30 5.07
36.678 1.4440	34.925 1.3750	-9.4 -0.37	133.248 5.2460	6.350 0.2500	3.5 0.14	65.0 2.56	71.0 2.80	116.0 4.57	91	21.1	0.1108	2.45 5.39
52.388 2.0625	41.275 1.6250	-19.6 -0.77	134.925 5.3120	7.938 0.3125	3.5 0.14	67.0 2.64	74.0 2.91	117.0 4.61	103	18.7	0.0757	3.36 7.40
41.275 1.6250	31.750 1.2500	-11.2 -0.44	143.561 5.6520	7.137 0.2810	3.5 0.14	67.0 2.64	73.0 2.87	125.0 4.92	106	21	0.0814	3.20 7.06
56.007 2.2050	44.450 1.7500	-19.3 -0.76	143.579 5.6527	7.938 0.3125	0.8 0.03	70.0 2.76	71.0 2.80	126.0 4.96	124	22.4	0.0827	4.17 9.20
56.007 2.2050	44.450 1.7500	-19.3 -0.76	143.579 5.6527	7.938 0.3125	3.5 0.14	70.0 2.76	76.0 2.99	126.0 4.96	124	22.4	0.0827	4.16 9.17
21.946 0.8640	17.826 0.7018	-3.0 -0.12	101.498 3.9960	4.762 0.1875	2.3 0.09	61.0 2.40	65.0 2.56	94.0 3.70	42	15.7	0.0859	0.66 1.46
38.000 1.4961	29.000 1.1417	-9.9 -0.39	116.000 4.5669	7.000 0.2756	0.8 0.03	68.0 2.68	71.0 2.80	107.0 4.21	76.2	18.1	0.0758	1.72 3.80
29.007 1.1420	24.237 0.9542	-4.1 -0.16	125.435 4.9384	5.537 0.2180	0.8 0.03	66.0 2.60	67.0 2.64	115.0 4.53	77.2	23	0.1083	1.70 3.74
29.317 1.1542	22.225 0.8750	-7.1 -0.28	113.386 4.4640	5.558 0.2188	2.3 0.09	62.0 2.44	66.0 2.60	100.0 3.94	58.6	17.1	0.0946	1.17 2.59
21.946 0.8640	17.826 0.7018	-3.0 -0.12	101.498 3.9960	4.762 0.1875	2.3 0.09	61.0 2.40	65.0 2.56	94.0 3.70	42	15.7	0.0859	0.65 1.44
12.700 0.5000	9.525 0.3750	1.5 0.06	87.727 3.4538	2.794 0.1100	1.5 0.06	61.0 2.40	64.0 2.52	82.0 3.23	27.4	36.3	0.0749	0.24 0.52
18.258 0.7188	14.288 0.5625	-0.8 -0.03	90.487 3.5625	3.175 0.1250	1.5 0.06	62.0 2.44	65.0 2.56	85.0 3.35	46.1	36.9	0.0914	0.40 0.88
21.946 0.8640	17.826 0.7018	-3.0 -0.12	101.498 3.9960	4.762 0.1875	2.3 0.09	62.0 2.44	66.0 2.60	94.0 3.70	42	15.7	0.0859	0.63 1.38
21.946 0.8640	17.826 0.7018	-3.0 -0.12	101.498 3.9960	4.762 0.1875	3.5 0.14	62.0 2.44	69.0 2.72	94.0 3.70	42	15.7	0.0859	0.62 1.37

(4) These maximum fillet radii will be cleared by the bearing corners.

Continued on next page.

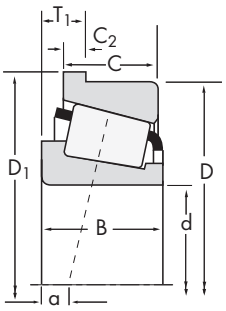
(5) These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

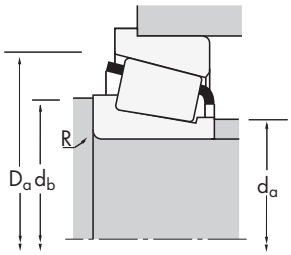
(6) For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

B

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
57.150 2.2500	97.630 3.8437	9.124 0.3592	96300 21600	0.40	1.49	25000 5610	17200 3870	1.45	142000 32000	28682	28622-B
57.150 2.2500	104.775 4.1250	11.908 0.4688	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45290	45220-B
57.150 2.2500	104.775 4.1250	11.908 0.4688	142000 31900	0.33	1.80	36800 8270	20900 4710	1.76	189000 42600	45291	45220-B
57.150 2.2500	107.950 4.2500	11.115 0.4376	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	462	453-B
57.150 2.2500	107.950 4.2500	11.115 0.4376	126000 28200	0.34	1.79	32600 7320	18700 4200	1.74	166000 37200	469	453-B
57.150 2.2500	112.712 4.4375	11.112 0.4375	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3979	3920-B
57.150 2.2500	120.650 4.7500	16.667 0.6562	192000 43200	0.31	1.91	49800 11200	26800 6020	1.86	244000 54800	623	612-B
57.150 2.2500	123.825 4.8750	14.288 0.5625	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	555-S	552-B
57.150 2.2500	135.755 5.3447	17.462 0.6875	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	6375	6320-B
57.150 2.2500	136.525 5.3750	16.662 0.6560	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	635	632-B
57.150 2.2500	139.700 5.5000	17.462 0.6875	225000 50700	0.49	1.23	58500 13100	48800 11000	1.20	297000 66700	65225	65550-B
57.150 2.2500	149.225 5.8750	17.462 0.6875	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6455	6420-B
58.738 2.3125	112.712 4.4375	11.112 0.4375	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3981	3920-B
59.931 2.3595	150.089 5.9090	15.875 0.6250	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	745	742-B
59.977 2.3613	100.000 3.9370	9.525 0.3750	98200 22100	0.43	1.41	25500 5720	18500 4170	1.37	149000 33500	28980	28921-B
59.987 2.3617	104.775 4.1250	10.320 0.4063	89600 20100	0.39	1.55	23200 5220	15400 3470	1.51	120000 27000	39236	39412-B
59.987 2.3617	129.944 5.1159	14.288 0.5625	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	558-S	553-SB
59.987 2.3617	130.175 5.1250	16.637 0.6550	154000 34700	0.82	0.73	40000 9000	56200 12600	0.71	183000 41100	HM911244	HM911210-B
60.000 2.3622	100.000 3.9370	8.500 0.3346	80900 18200	0.47	1.27	21000 4710	17000 3820	1.24	101000 22800	JP6049	JP6010-B
60.000 2.3622	107.950 4.2500	10.320 0.4063	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29580	29520-B
60.000 2.3622	110.000 4.3307	10.320 0.4063	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29580	29521-B
60.000 2.3622	112.712 4.4375	11.112 0.4375	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3977	3920-B
60.000 2.3622	120.000 4.7244	11.095 0.4368	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	476	472-B
60.325 2.3750	100.000 3.9370	9.525 0.3750	98200 22100	0.43	1.41	25500 5720	18500 4170	1.37	149000 33500	28985	28921-B
60.325 2.3750	112.712 4.4375	11.112 0.4375	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3980	3920-B
60.325 2.3750	123.825 4.8750	14.288 0.5625	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	558	552-B
60.325 2.3750	130.175 5.1250	19.050 0.7500	154000 34700	0.82	0.73	40000 9000	56200 12600	0.71	183000 41100	HM911245	HM911210-B
60.325 2.3750	135.755 5.3447	17.462 0.6875	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	6376	6320-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)								Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
24.608 0.9688	19.446 0.7656	-3.3 -0.13	101.498 3.9960	3.962 0.1560	3.5 0.14	63.0 2.48	70.0 2.76	94.0 3.70	54	20.2	0.0979	0.75 1.66
30.958 1.2188	23.812 0.9375	-8.1 -0.32	110.231 4.3398	5.558 0.2188	2.3 0.09	65.0 2.56	68.0 2.68	101.0 3.98	63.5	16.9	0.0971	1.12 2.48
30.958 1.2188	23.812 0.9375	-8.1 -0.32	110.231 4.3398	5.558 0.2188	6.4 0.25	65.0 2.56	76.0 2.99	101.0 3.98	63.5	16.9	0.0971	1.09 2.41
29.317 1.1542	22.225 0.8750	-7.1 -0.28	113.386 4.4640	5.558 0.2188	2.3 0.09	63.0 2.48	67.0 2.64	100.0 3.94	58.6	17.1	0.0946	1.14 2.51
29.317 1.1542	22.225 0.8750	-7.1 -0.28	113.386 4.4640	5.558 0.2188	3.5 0.14	63.0 2.48	70.0 2.76	100.0 3.94	58.6	17.1	0.0946	1.14 2.50
30.048 1.1830	23.812 0.9375	-4.6 -0.18	117.373 4.6210	4.762 0.1875	3.5 0.14	66.0 2.60	72.0 2.83	108.0 4.25	75.2	21.3	0.1092	1.41 3.10
41.275 1.6250	31.750 1.2500	-14.0 -0.55	127.691 5.0272	7.142 0.2812	3.5 0.14	66.0 2.60	72.0 2.83	110.0 4.33	75.9	16.2	0.0694	2.16 4.77
36.678 1.4440	30.162 1.1875	-9.4 -0.37	130.073 5.1210	6.350 0.2500	3.5 0.14	67.0 2.64	73.0 2.87	116.0 4.57	91	21.1	0.1108	2.22 4.89
56.007 2.2050	44.450 1.7500	-19.3 -0.76	143.579 5.6527	7.938 0.3125	4.3 0.17	72.0 2.83	80.0 3.15	126.0 4.96	124	22.4	0.0827	4.07 8.97
41.275 1.6250	31.750 1.2500	-11.2 -0.44	143.561 5.6520	7.137 0.2810	3.5 0.14	69.0 2.72	75.0 2.95	125.0 4.92	106	21	0.0814	3.11 6.86
44.450 1.7500	34.925 1.3750	-9.4 -0.37	152.400 6.0000	7.938 0.3125	3.5 0.14	71.0 2.79	80.0 3.15	120.0 4.72	83.2	17.2	0.0827	3.60 7.94
54.229 2.1350	44.450 1.7500	-15.0 -0.59	157.061 6.1835	7.938 0.3125	3.5 0.14	75.0 2.95	81.0 3.19	140.0 5.51	158	29.1	0.0931	5.20 11.46
30.048 1.1830	23.812 0.9375	-4.6 -0.18	117.373 4.6210	4.762 0.1875	3.5 0.14	67.0 2.64	73.0 2.87	108.0 4.25	75.2	21.3	0.1092	1.37 3.02
46.672 1.8375	36.512 1.4375	-11.9 -0.47	157.912 6.2170	7.938 0.3125	3.5 0.14	75.0 2.95	81.0 3.19	143.0 5.63	160	26.3	0.0898	4.39 9.68
25.400 1.0000	19.845 0.7813	-2.5 -0.10	103.962 4.0930	3.970 0.1563	3.5 0.14	67.0 2.64	73.0 2.87	98.0 3.86	60.1	24.5	0.1032	0.79 1.75
22.000 0.8661	15.875 0.6250	-1.5 -0.06	109.433 4.3084	4.762 0.1875	2.3 0.09	67.0 2.64	71.0 2.80	102.0 4.02	51.7	19.5	0.0947	0.77 1.71
36.678 1.4440	30.162 1.1875	-9.4 -0.37	136.025 5.3553	6.350 0.2500	3.5 0.14	69.0 2.72	75.0 2.95	116.0 4.57	91	21.1	0.1108	2.45 5.41
30.924 1.2175	23.812 0.9375	7.9 0.31	136.525 5.3750	6.350 0.2500	3.5 0.14	74.5 2.93	84.0 3.31	123.5 4.87	56.4	16.5	0.0842	2.09 4.60
20.000 0.7874	15.500 0.6102	1.3 0.05	105.000 4.1339	3.000 0.1181	2.0 0.08	66.0 2.60	69.0 2.72	98.0 3.86	39.5	22.5	0.0922	0.62 1.37
25.400 1.0000	19.050 0.7500	-0.8 -0.03	111.816 4.4022	3.970 0.1563	3.5 0.14	68.0 2.68	75.0 2.95	105.0 4.13	70.3	25.8	0.1112	1.02 2.26
25.400 1.0000	19.050 0.7500	-0.8 -0.03	113.800 4.4803	3.970 0.1563	3.5 0.14	68.0 2.68	75.0 2.95	105.0 4.13	70.3	25.8	0.1112	1.08 2.37
30.048 1.1830	23.812 0.9375	-4.6 -0.18	117.373 4.6210	4.762 0.1875	3.5 0.14	68.0 2.68	74.0 2.91	108.0 4.25	75.2	21.3	0.1092	1.34 2.96
29.007 1.1420	24.237 0.9542	-4.1 -0.16	125.435 4.9384	5.537 0.2180	2.0 0.08	69.0 2.72	73.0 2.87	115.0 4.53	77.2	23	0.1083	1.59 3.51
25.400 1.0000	19.845 0.7813	-2.5 -0.10	103.962 4.0930	3.970 0.1563	3.5 0.14	67.0 2.64	73.0 2.87	98.0 3.86	60.1	24.5	0.1032	0.79 1.73
30.048 1.1830	23.812 0.9375	-4.6 -0.18	117.373 4.6210	4.762 0.1875	3.5 0.14	68.0 2.68	75.0 2.95	108.0 4.25	75.2	21.3	0.1092	1.34 2.95
36.678 1.4440	30.162 1.1875	-9.4 -0.37	130.073 5.1210	6.350 0.2500	2.3 0.09	69.0 2.72	73.0 2.87	116.0 4.57	91	21.1	0.1108	2.14 4.72
33.338 1.3125	23.812 0.9375	5.3 0.21	136.525 5.3750	6.350 0.2500	5.0 0.20	74.5 2.93	87.0 3.43	123.5 4.87	56.4	16.5	0.0842	2.15 4.75
56.007 2.2050	44.450 1.7500	-19.3 -0.76	143.579 5.6527	7.938 0.3125	3.5 0.14	74.0 2.91	81.0 3.19	126.0 4.96	124	22.4	0.0827	3.94 8.70

[4] These maximum fillet radii will be cleared by the bearing corners.

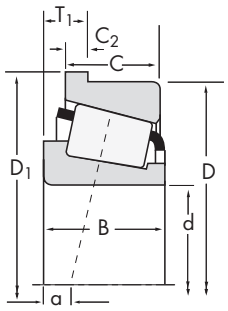
Continued on next page.

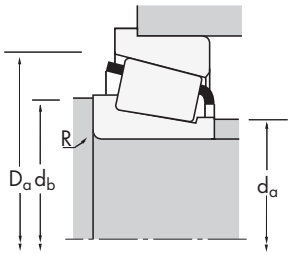
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
60.325 2.3750	136.525 5.3750	16.662 0.6560	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	637	632-B
60.325 2.3750	161.925 6.3750	23.012 0.9060	275000 61900	0.71	0.85	71400 16100	86700 19500	0.82	330000 74200	9275	9221-B
61.912 2.4375	123.825 4.8750	14.288 0.5625	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	554	552-B
61.912 2.4375	130.175 5.1250	19.050 0.7500	154000 34700	0.82	0.73	40000 9000	56200 12600	0.71	183000 41100	HM911249	HM911210-B
63.500 2.5000	104.775 4.1250	10.320 0.4063	89600 20100	0.39	1.55	23200 5220	15400 3470	1.51	120000 27000	39250	39412-B
63.500 2.5000	107.950 4.2500	10.320 0.4063	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29585	29520-B
63.500 2.5000	112.712 4.4375	7.917 0.3117	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	395	3920-B
63.500 2.5000	112.712 4.4375	11.112 0.4375	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3982	3920-B
63.500 2.5000	120.000 4.7244	11.095 0.4368	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	477	472-B
63.500 2.5000	120.000 4.7244	11.095 0.4368	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	483	472-B
63.500 2.5000	123.825 4.8750	14.288 0.5625	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	559	552-B
63.500 2.5000	127.000 5.0000	14.288 0.5625	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	565	563-B
63.500 2.5000	136.525 5.3750	16.637 0.6550	252000 56700	0.36	1.67	65400 14700	40300 9060	1.62	335000 75400	H414235	H414210-B
63.500 2.5000	136.525 5.3750	16.662 0.6560	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	639	632-B
63.500 2.5000	149.225 5.8750	17.462 0.6875	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6475	6420-B
64.960 2.5575	149.225 5.8750	17.462 0.6875	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6464	6420-B
64.963 2.5576	127.000 5.0000	14.288 0.5625	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	569	563-B
65.000 2.5591	120.000 4.7244	11.095 0.4368	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	478	472-B
65.088 2.5625	135.755 5.3447	17.462 0.6875	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	6379	6320-B
65.883 2.5938	122.238 4.8125	13.495 0.5313	219000 49200	0.36	1.67	56800 12800	34800 7830	1.63	327000 73500	5595	5535-B
66.675 2.6250	107.950 4.2500	10.320 0.4063	102000 22900	0.46	1.31	26400 5950	20800 4670	1.27	161000 36300	29590	29520-B
66.675 2.6250	112.712 4.4375	11.112 0.4375	129000 28900	0.40	1.49	33300 7490	22900 5160	1.45	191000 43000	3984	3920-B
66.675 2.6250	120.000 4.7244	11.095 0.4368	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	479	472-B
66.675 2.6250	123.825 4.8750	14.288 0.5625	177000 39700	0.35	1.73	45800 10300	27100 6100	1.69	248000 55700	560	552-B
66.675 2.6250	130.200 5.1260	19.865 0.7821	179000 40300	0.50	1.20	46400 10400	39900 8970	1.16	256000 57600	HM813844	HM813815-B
66.675 2.6250	135.755 5.3447	17.462 0.6875	298000 66900	0.32	1.85	77200 17300	42900 9640	1.80	404000 90900	6386	6320-B
66.675 2.6250	136.525 5.3750	16.662 0.6560	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	641	632-B
66.675 2.6250	139.700 5.5000	17.462 0.6875	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715341	H715310-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)									Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
41.275 1.6250	31.750 1.2500	-11.2 -0.44	143.561 5.6520	7.137 0.2810	3.5 0.14	72.0 2.83	78.0 3.07	125.0 4.92	106	21	0.0814	3.02 6.65
46.038 1.8125	30.162 1.1875	1.8 0.07	171.450 6.7500	7.137 0.2810	3.5 0.14	86.0 3.39	92.0 3.62	153.0 6.03	102	18.4	0.0984	4.83 10.64
36.678 1.4440	30.162 1.1875	-9.4 -0.37	130.073 5.1210	6.350 0.2500	3.5 0.14	71.0 2.80	77.0 3.03	116.0 4.57	91	21.1	0.1108	2.09 4.61
33.338 1.3125	23.812 0.9375	5.3 0.21	136.525 5.3750	6.350 0.2500	3.5 0.14	74.0 2.91	91.0 3.58	123.5 4.87	56.4	16.5	0.0842	2.13 4.68
22.000 0.8661	15.875 0.6250	-1.5 -0.06	109.433 4.3084	4.762 0.1875	2.0 0.08	69.0 2.72	73.0 2.87	102.0 4.02	51.7	19.5	0.0947	0.72 1.59
25.400 1.0000	19.050 0.7500	-0.8 -0.03	111.816 4.4022	3.970 0.1563	3.5 0.14	71.0 2.80	77.0 3.03	105.0 4.13	70.3	25.8	0.1112	0.96 2.11
21.996 0.8660	23.812 0.9375	-0.8 -0.03	117.373 4.6210	4.762 0.1875	3.5 0.14	70.0 2.76	77.0 3.03	108.0 4.25	56	21.4	0.0984	1.05 2.31
30.048 1.1830	23.812 0.9375	-4.6 -0.18	117.373 4.6210	4.762 0.1875	3.5 0.14	71.0 2.80	77.0 3.03	108.0 4.25	75.2	21.3	0.1092	1.26 2.78
29.007 1.1420	24.237 0.9542	-4.1 -0.16	125.435 4.9384	5.537 0.2180	0.8 0.03	72.0 2.83	73.0 2.87	115.0 4.53	77.2	23	0.1083	1.52 3.35
29.007 1.1420	24.237 0.9542	-4.1 -0.16	125.435 4.9384	5.537 0.2180	3.5 0.14	72.0 2.83	78.0 3.07	115.0 4.53	77.2	23	0.1083	1.51 3.32
36.678 1.4440	30.162 1.1875	-9.4 -0.37	130.073 5.1210	6.350 0.2500	3.5 0.14	72.0 2.83	78.0 3.07	116.0 4.57	91	21.1	0.1108	2.04 4.51
36.170 1.4240	28.575 1.1250	-8.1 -0.32	133.248 5.2460	6.350 0.2500	3.5 0.14	73.0 2.87	80.0 3.15	121.0 4.76	101	24	0.1167	2.16 4.76
41.275 1.6250	31.750 1.2500	-10.9 -0.43	143.637 5.6550	7.112 0.2800	3.5 0.14	78.0 3.07	82.0 3.23	130.0 5.12	113	22.8	0.0827	2.95 6.50
41.275 1.6250	31.750 1.2500	-11.2 -0.44	143.561 5.6520	7.137 0.2810	3.5 0.14	74.0 2.91	81.0 3.19	125.0 4.92	106	21	0.0814	2.92 6.43
54.229 2.1350	44.450 1.7500	-15.0 -0.59	157.061 6.1835	7.938 0.3125	3.5 0.14	80.0 3.15	86.0 3.39	140.0 5.51	158	29.1	0.0931	4.94 10.90
54.229 2.1350	44.450 1.7500	-15.0 -0.59	157.061 6.1835	7.938 0.3125	3.5 0.14	81.0 3.19	87.0 3.43	140.0 5.51	158	29.1	0.0931	4.88 10.76
36.170 1.4240	28.575 1.1250	-8.1 -0.32	133.248 5.2460	6.350 0.2500	3.5 0.14	74.0 2.91	81.0 3.19	121.0 4.76	101	24	0.1167	2.12 4.67
29.007 1.1420	24.237 0.9542	-4.1 -0.16	125.435 4.9384	5.537 0.2180	2.3 0.09	73.0 2.87	77.0 3.03	115.0 4.53	77.2	23	0.1083	1.48 3.26
56.007 2.2050	44.450 1.7500	-19.3 -0.76	143.579 5.6527	7.938 0.3125	3.5 0.14	77.0 3.04	84.0 3.31	126.0 4.96	124	22.4	0.0827	3.74 8.24
43.764 1.7230	36.512 1.4375	-12.2 -0.48	128.588 5.0625	6.350 0.2500	3.5 0.14	77.0 3.03	83.0 3.27	118.0 4.65	110	24.2	0.0825	2.29 5.05
25.400 1.0000	19.050 0.7500	-0.8 -0.03	111.816 4.4022	3.970 0.1563	3.5 0.14	73.0 2.87	80.0 3.15	105.0 4.13	70.3	25.8	0.1112	0.89 1.97
30.048 1.1830	23.812 0.9375	-4.6 -0.18	117.373 4.6210	4.762 0.1875	3.5 0.14	74.0 2.91	80.0 3.15	108.0 4.25	75.2	21.3	0.1092	1.19 2.61
29.007 1.1420	24.237 0.9542	-4.1 -0.16	125.435 4.9384	5.537 0.2180	2.3 0.09	74.0 2.91	78.0 3.07	115.0 4.53	77.2	23	0.1083	1.44 3.17
36.678 1.4440	30.162 1.1875	-9.4 -0.37	130.073 5.1210	6.350 0.2500	3.5 0.14	75.0 2.95	81.0 3.19	116.0 4.57	91	21.1	0.1108	1.95 4.30
36.512 1.4375	26.988 1.0625	-3.8 -0.15	138.200 5.4410	10.340 0.4071	3.5 0.14	82.0 3.23	88.0 3.46	124.0 4.88	91.7	24.3	0.1252	2.26 4.98
56.007 2.2050	44.450 1.7500	-19.3 -0.76	143.579 5.6527	7.938 0.3125	4.3 0.17	77.0 3.04	87.0 3.43	126.0 4.96	124	22.4	0.0827	3.66 8.07
41.275 1.6250	31.750 1.2500	-11.2 -0.44	143.561 5.6520	7.137 0.2810	3.5 0.14	77.0 3.03	83.0 3.27	125.0 4.92	106	21	0.0814	2.81 6.20
46.038 1.8125	36.512 1.4375	-8.6 -0.34	152.400 6.0000	7.938 0.3125	3.5 0.14	85.0 3.35	91.0 3.58	135.0 5.31	147	32.8	0.0993	3.67 8.08

[4] These maximum fillet radii will be cleared by the bearing corners.

Continued on next page.

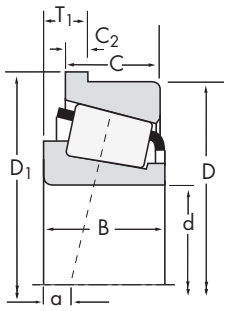
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

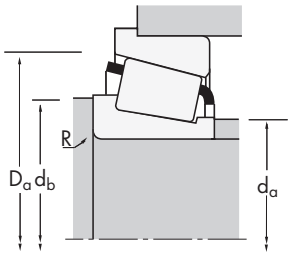
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

B

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
68.262 2.6875	110.000 4.3307	7.925 0.3120	91600 20600	0.40	1.49	23700 5340	16300 3670	1.45	125000 28100	399A	394AB
68.262 2.6875	120.000 4.7244	11.095 0.4368	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	480	472-B
68.262 2.6875	127.000 5.0000	14.288 0.5625	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	570	563-B
68.262 2.6875	136.525 5.3750	16.662 0.6560	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	642	632-B
68.262 2.6875	161.925 6.3750	24.600 0.9685	275000 61900	0.71	0.85	71400 16100	86700 19500	0.82	330000 74200	9278	9221-B
69.850 2.7500	112.712 4.4375	10.320 0.4063	102000 23000	0.49	1.23	26500 5960	22100 4980	1.20	166000 37200	29675	29620-B
69.850 2.7500	112.712 4.4375	11.112 0.4375	93400 21000	0.42	1.44	24200 5450	17300 3880	1.40	130000 29300	LM613449	LM613410-B
69.850 2.7500	120.000 4.7244	11.095 0.4368	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	482	472-B
69.850 2.7500	127.000 5.0000	14.288 0.5625	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	566	563-B
69.850 2.7500	136.525 5.3750	16.662 0.6560	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	643	632-B
69.850 2.7500	149.225 5.8750	17.462 0.6875	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6454	6420-B
69.850 2.7500	150.089 5.9090	15.875 0.6250	294000 66100	0.33	1.84	76300 17100	42500 9550	1.80	417000 93800	745A	742-B
69.850 2.7500	152.400 6.0000	16.667 0.6562	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	655	652-B
69.850 2.7500	168.275 6.6250	22.225 0.8750	379000 85100	0.30	2.00	98200 22100	50300 11300	1.95	522000 117000	835	832-B
69.952 2.7540	122.238 4.8125	7.938 0.3125	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34274	34481-B
70.000 2.7559	110.000 4.3307	8.500 0.3346	84800 19100	0.46	1.30	22000 4940	17400 3900	1.27	112000 25200	JP7049	JP7010-B
70.000 2.7559	120.000 4.7244	11.095 0.4368	133000 29900	0.38	1.56	34400 7740	22700 5100	1.52	186000 41900	484	472-B
70.000 2.7559	122.238 4.8125	7.938 0.3125	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34275	34481-B
71.438 2.8125	117.475 4.6250	11.112 0.4375	128000 28800	0.44	1.38	33200 7470	24800 5570	1.34	197000 44300	33281	33462-B
71.438 2.8125	127.000 5.0000	14.288 0.5625	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	567A	563-B
71.438 2.8125	136.525 5.3750	16.637 0.6550	252000 56700	0.36	1.67	65400 14700	40300 9060	1.62	335000 75400	H414249	H414210-B
71.438 2.8125	136.525 5.3750	16.662 0.6560	216000 48500	0.36	1.66	55900 12600	34700 7790	1.61	298000 67000	645	632-B
71.438 2.8125	139.700 5.5000	17.462 0.6875	249000 56000	0.47	1.27	64600 14500	52300 11800	1.24	405000 91000	H715345	H715310-B
73.025 2.8750	112.712 4.4375	10.320 0.4063	102000 23000	0.49	1.23	26500 5960	22100 4980	1.20	166000 37200	29685	29620-B
73.025 2.8750	117.475 4.6250	11.112 0.4375	109000 24500	0.51	1.18	28300 6360	24700 5550	1.15	183000 41200	LM814845	LM814810-B
73.025 2.8750	127.000 5.0000	14.288 0.5625	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	567	563-B
73.025 2.8750	127.000 5.0000	14.288 0.5625	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	567X	563-B
73.025 2.8750	149.225 5.8750	17.462 0.6875	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6460	6420-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)									Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
21.996 0.8660	18.825 0.7411	-0.8 -0.03	114.673 4.5147	4.750 0.1870	2.3 0.09	74.0 2.91	78.0 3.07	106.0 4.17	56	21.4	0.0984	0.78 1.73
29.007 1.1420	24.237 0.9542	-4.1 -0.16	125.435 4.9384	5.537 0.2180	3.5 0.14	75.0 2.95	82.0 3.23	115.0 4.53	77.2	23	0.1083	1.40 3.08
36.170 1.4240	28.575 1.1250	-8.1 -0.32	133.248 5.2460	6.350 0.2500	3.5 0.14	77.0 3.03	83.0 3.27	121.0 4.76	101	24	0.1167	2.02 4.45
41.275 1.6250	31.750 1.2500	-11.2 -0.44	143.561 5.6520	7.137 0.2810	3.5 0.14	78.0 3.07	85.0 3.35	125.0 4.92	106	21	0.0814	2.76 6.08
46.038 1.8125	30.162 1.1875	0.0 0.00	171.450 6.7500	7.137 0.2810	3.5 0.14	90.5 3.56	97.0 3.82	153.0 6.03	102	18.4	0.0984	4.59 10.12
25.400 1.0000	19.050 0.7500	1.0 0.04	116.586 4.5900	3.970 0.1563	1.5 0.06	77.0 3.03	80.0 3.15	110.0 4.33	77.7	43.3	0.1170	1.00 2.20
21.996 0.8660	15.875 0.6250	0.0 0.00	119.062 4.6875	4.762 0.1875	1.5 0.06	76.0 2.99	78.0 3.07	110.0 4.33	60.3	23.1	0.1019	0.83 1.82
29.007 1.1420	24.237 0.9542	-4.1 -0.16	125.435 4.9384	5.537 0.2180	3.5 0.14	77.0 3.03	83.0 3.27	115.0 4.53	77.2	23	0.1083	1.36 2.99
36.170 1.4240	28.575 1.1250	-8.1 -0.32	133.248 5.2460	6.350 0.2500	3.5 0.14	78.0 3.07	85.0 3.35	121.0 4.76	101	24	0.1167	1.97 4.34
41.275 1.6250	31.750 1.2500	-11.2 -0.44	143.561 5.6520	7.137 0.2810	3.5 0.14	80.0 3.15	86.0 3.39	125.0 4.92	106	21	0.0814	2.70 5.96
54.229 2.1350	44.450 1.7500	-15.0 -0.59	157.061 6.1835	7.938 0.3125	5.0 0.20	85.0 3.35	94.0 3.70	140.0 5.51	158	29.1	0.0931	4.65 10.25
46.672 1.8375	36.512 1.4375	-11.9 -0.47	157.912 6.2170	7.938 0.3125	3.5 0.14	82.0 3.23	88.0 3.46	143.0 5.63	160	26.3	0.0898	4.02 8.87
41.275 1.6250	31.750 1.2500	-7.9 -0.31	159.441 6.2772	7.142 0.2812	3.5 0.14	82.0 3.23	88.0 3.46	141.0 5.55	137	27.3	0.0919	3.70 8.16
56.363 2.2190	41.275 1.6250	-18.5 -0.73	177.698 6.9960	9.525 0.3750	3.5 0.14	84.0 3.31	91.0 3.58	155.0 6.10	198	34.8	0.0937	6.28 13.84
23.012 0.9060	21.430 0.8437	1.5 0.06	126.901 4.9961	4.762 0.1875	2.0 0.08	78.0 3.07	81.0 3.19	118.0 4.65	69.3	27	0.1093	1.18 2.60
20.000 0.7874	15.500 0.6102	2.5 0.10	116.000 4.5669	3.000 0.1181	2.0 0.08	76.0 2.99	80.0 3.15	105.5 4.15	51.1	30.9	0.0995	0.70 1.55
29.007 1.1420	24.237 0.9542	-4.1 -0.16	125.435 4.9384	5.537 0.2180	2.0 0.08	77.0 3.03	80.0 3.15	115.0 4.53	77.2	23	0.1083	1.36 3.00
23.012 0.9060	21.430 0.8437	1.5 0.06	126.901 4.9961	4.762 0.1875	2.0 0.08	78.0 3.07	82.0 3.23	118.0 4.65	69.3	27	0.1093	1.18 2.60
30.162 1.1875	23.812 0.9375	-2.8 -0.11	122.133 4.8084	4.762 0.1875	3.5 0.14	79.0 3.11	85.0 3.35	114.0 4.49	84.2	24.4	0.1162	1.29 2.85
36.170 1.4240	28.575 1.1250	-8.1 -0.32	133.248 5.2460	6.350 0.2500	3.5 0.14	80.0 3.15	86.0 3.39	121.0 4.76	101	24	0.1167	1.92 4.23
41.275 1.6250	31.750 1.2500	-10.9 -0.43	143.637 5.6550	7.112 0.2800	3.5 0.14	83.0 3.27	89.0 3.50	130.0 5.12	113	22.8	0.0827	2.68 5.90
41.275 1.6250	31.750 1.2500	-11.2 -0.44	143.561 5.6520	7.137 0.2810	6.4 0.25	81.0 3.19	93.0 3.66	125.0 4.92	106	21	0.0814	2.62 5.77
46.038 1.8125	36.512 1.4375	-8.6 -0.34	152.400 6.0000	7.938 0.3125	3.5 0.14	88.0 3.46	94.0 3.70	135.0 5.31	147	32.8	0.0993	3.48 7.68
25.400 1.0000	19.050 0.7500	1.0 0.04	116.586 4.5900	3.970 0.1563	3.5 0.14	80.0 3.15	86.0 3.39	110.0 4.33	77.7	43.3	0.1170	0.92 2.03
25.400 1.0000	19.050 0.7500	2.3 0.09	122.133 4.8084	4.762 0.1875	3.5 0.14	81.0 3.19	87.0 3.43	116.0 4.57	88.6	36.6	0.1239	1.07 2.35
36.170 1.4240	28.575 1.1250	-8.1 -0.32	133.248 5.2460	6.350 0.2500	3.5 0.14	81.0 3.19	88.0 3.46	121.0 4.76	101	24	0.1167	1.87 4.12
36.170 1.4240	28.575 1.1250	-8.1 -0.32	133.248 5.2460	6.350 0.2500	4.8 0.19	81.0 3.19	90.0 3.54	121.0 4.76	101	24	0.1167	1.87 4.13
54.229 2.1350	44.450 1.7500	-15.0 -0.59	157.061 6.1835	7.938 0.3125	3.5 0.14	87.0 3.43	93.0 3.66	140.0 5.51	158	29.1	0.0931	4.51 9.94

[4] These maximum fillet radii will be cleared by the bearing corners.

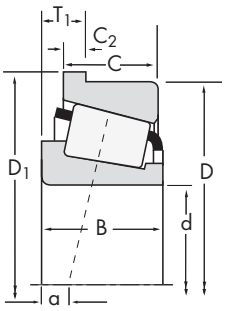
Continued on next page.

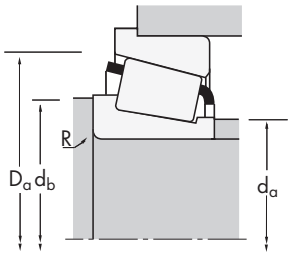
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
73.025 2.8750	152.400 6.0000	16.667 0.6562	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	657	652-B
73.817 2.9062	127.000 5.0000	14.288 0.5625	182000 40900	0.36	1.65	47100 10600	29400 6600	1.61	262000 58900	568	563-B
74.612 2.9375	139.992 5.5115	14.288 0.5625	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	577	572-B
76.200 3.0000	122.238 4.8125	7.938 0.3125	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34300	34481-B
76.200 3.0000	122.238 4.8125	7.940 0.3126	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34301	34481-B
76.200 3.0000	125.412 4.9375	10.317 0.4062	109000 24400	0.42	1.44	28100 6320	20000 4500	1.40	178000 39900	27684	27620-B
76.200 3.0000	130.000 5.1181	13.495 0.5313	149000 33500	0.42	1.43	38700 8690	27700 6230	1.39	222000 49800	42687	42623-B
76.200 3.0000	136.525 5.3750	13.475 0.5305	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	495A	493-B
76.200 3.0000	139.992 5.5115	14.288 0.5625	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	575	572-B
76.200 3.0000	149.225 5.8750	17.462 0.6875	321000 72200	0.36	1.66	83300 18700	51600 11600	1.61	463000 104000	6461	6420-B
76.200 3.0000	161.925 6.3750	17.450 0.6870	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	755	752-B
76.200 3.0000	161.925 6.3750	19.050 0.7500	343000 77200	0.40	1.50	89000 20000	61000 13700	1.46	523000 118000	6575	6535-B
76.200 3.0000	161.925 6.3750	24.600 0.9685	275000 61900	0.71	0.85	71400 16100	86700 19500	0.82	330000 74200	9285	9221-B
76.200 3.0000	168.275 6.6250	22.225 0.8750	379000 85100	0.30	2.00	98200 22100	50300 11300	1.95	522000 117000	837	832-B
77.788 3.0625	117.475 4.6250	11.112 0.4375	109000 24500	0.51	1.18	28300 6360	24700 5550	1.15	183000 41200	LM814849	LM814810-B
77.788 3.0625	122.238 4.8125	7.938 0.3125	94600 21300	0.45	1.33	24500 5510	18900 4260	1.30	136000 30600	34306	34481-B
77.788 3.0625	127.000 5.0000	13.495 0.5313	149000 33500	0.42	1.43	38700 8690	27700 6230	1.39	222000 49800	42690	42620-B
79.375 3.1250	152.400 6.0000	15.875 0.6250	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	595A	592-B
79.985 3.1490	152.400 6.0000	15.875 0.6250	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	590	592-B
80.000 3.1496	125.000 4.9213	10.500 0.4134	105000 23600	0.45	1.33	27200 6110	21000 4730	1.29	141000 31800	JP8049	JP8010-B
80.962 3.1875	133.350 5.2500	12.700 0.5000	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47681	47620-B
80.962 3.1875	136.525 5.3750	13.475 0.5305	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	496	493-B
80.962 3.1875	139.992 5.5115	14.288 0.5625	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	581	572-B
80.962 3.1875	168.275 6.6250	22.225 0.8750	379000 85100	0.30	2.00	98200 22100	50300 11300	1.95	522000 117000	838	832-B
82.550 3.2500	115.888 4.5625	7.938 0.3125	83500 18800	0.31	1.95	21700 4870	11400 2570	1.90	147000 33100	L116149	L116110-B
82.550 3.2500	125.412 4.9375	10.317 0.4062	109000 24400	0.42	1.44	28100 6320	20000 4500	1.40	178000 39900	27687	27620-B
82.550 3.2500	133.350 5.2500	12.700 0.5000	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47685	47620-B
82.550 3.2500	133.350 5.2500	12.700 0.5000	167000 37600	0.40	1.48	43400 9750	30000 6750	1.44	262000 58900	47686	47620-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)									Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
41.275 1.6250	31.750 1.2500	-7.9 -0.31	159.441 6.2772	7.142 0.2812	3.5 0.14	85.0 3.35	91.0 3.58	141.0 5.55	137	27.3	0.0919	3.58 7.90
36.170 1.4240	28.575 1.1250	-8.1 -0.32	133.248 5.2460	6.350 0.2500	0.8 0.03	82.0 3.23	83.0 3.27	121.0 4.76	101	24	0.1167	1.86 4.09
36.098 1.4212	28.575 1.1250	-5.3 -0.21	146.240 5.7575	6.350 0.2500	3.5 0.14	85.0 3.35	91.0 3.58	134.0 5.28	126	32	0.1295	2.48 5.47
23.012 0.9060	21.430 0.8437	1.5 0.06	126.901 4.9961	4.762 0.1875	2.0 0.08	83.0 3.27	86.0 3.39	118.0 4.65	69.3	27	0.1093	1.05 2.32
23.012 0.9060	21.430 0.8437	1.5 0.06	126.901 4.9961	4.762 0.1875	3.5 0.14	83.0 3.27	89.0 3.50	118.0 4.65	69.3	27	0.1093	1.04 2.30
25.400 1.0000	19.845 0.7813	0.5 0.02	130.076 5.1211	4.762 0.1875	3.5 0.14	84.0 3.31	91.0 3.58	123.0 4.84	98.2	41.8	0.1198	1.25 2.76
31.000 1.2205	22.225 0.8750	-2.8 -0.11	135.456 5.3329	5.558 0.2188	3.5 0.14	84.0 3.31	90.0 3.54	124.0 4.88	96.2	28.6	0.1197	1.62 3.58
29.769 1.1720	22.225 0.8750	-0.8 -0.03	141.961 5.5890	5.537 0.2180	3.5 0.14	86.0 3.39	92.0 3.62	131.0 5.16	105	29.3	0.1252	1.85 4.09
36.098 1.4212	28.575 1.1250	-5.3 -0.21	146.240 5.7575	6.350 0.2500	3.5 0.14	86.0 3.39	92.0 3.62	134.0 5.28	126	32	0.1295	2.43 5.35
54.229 2.1350	44.450 1.7500	-15.0 -0.59	157.061 6.1835	7.938 0.3125	3.5 0.14	89.5 3.52	96.0 3.78	140.0 5.51	158	29.1	0.0931	4.35 9.59
48.260 1.9000	38.100 1.5000	-11.9 -0.47	169.748 6.6830	7.925 0.3120	3.5 0.14	88.0 3.46	95.0 3.74	150.0 5.91	177	29.4	0.0945	4.82 10.63
55.100 2.1693	42.862 1.6875	-13.2 -0.52	171.450 6.7500	7.938 0.3125	6.4 0.25	92.0 3.62	104.0 4.09	155.0 6.10	199	33.5	0.1037	5.43 11.98
46.038 1.8125	30.162 1.1875	0.0 0.00	171.450 6.7500	7.137 0.2810	3.5 0.14	90.5 3.56	103.0 4.06	153.0 6.03	102	18.4	0.0984	4.27 9.40
56.363 2.2190	41.275 1.6250	-18.5 -0.73	177.698 6.9960	9.525 0.3750	0.8 0.03	89.0 3.50	90.0 3.54	155.0 6.10	198	34.8	0.0937	5.97 13.15
25.400 1.0000	19.050 0.7500	2.3 0.09	122.133 4.8084	4.762 0.1875	3.5 0.14	85.0 3.35	91.0 3.58	116.0 4.57	88.6	36.6	0.1239	0.95 2.11
23.012 0.9060	21.430 0.8437	1.5 0.06	126.901 4.9961	4.762 0.1875	3.5 0.14	84.0 3.31	90.0 3.54	118.0 4.65	69.3	27	0.1093	1.01 2.22
31.000 1.2205	22.225 0.8750	-2.8 -0.11	133.248 5.2460	5.558 0.2188	3.5 0.14	85.0 3.35	91.0 3.58	124.0 4.88	96.2	28.6	0.1197	1.44 3.18
36.322 1.4300	30.162 1.1875	-2.5 -0.10	158.648 6.2460	6.350 0.2500	3.5 0.14	91.0 3.58	98.0 3.86	144.0 5.67	151	38.3	0.1416	3.19 7.03
36.322 1.4300	30.162 1.1875	-2.5 -0.10	158.648 6.2460	6.350 0.2500	3.5 0.14	91.0 3.58	98.0 3.86	144.0 5.67	151	38.3	0.1416	3.17 6.98
22.500 0.8858	17.500 0.6890	2.3 0.09	132.000 5.1969	4.000 0.1575	2.0 0.08	86.0 3.39	89.0 3.50	129.0 5.08	69.7	37.4	0.1095	1.01 2.22
33.338 1.3125	26.195 1.0313	-4.3 -0.17	138.811 5.4650	5.558 0.2188	3.5 0.14	89.0 3.50	95.0 3.74	130.0 5.12	119	29.2	0.1273	1.90 4.18
29.769 1.1720	22.225 0.8750	-0.8 -0.03	141.961 5.5890	5.537 0.2180	3.5 0.14	89.0 3.50	95.0 3.74	131.0 5.16	105	29.3	0.1252	1.72 3.79
36.098 1.4212	28.575 1.1250	-5.3 -0.21	146.240 5.7575	6.350 0.2500	3.5 0.14	90.0 3.54	96.0 3.78	134.0 5.28	126	32	0.1295	2.26 4.98
56.363 2.2190	41.275 1.6250	-18.5 -0.73	177.698 6.9960	9.525 0.3750	0.8 0.03	93.0 3.66	94.0 3.70	155.0 6.10	198	34.8	0.0937	5.71 12.58
21.433 0.8438	16.670 0.6563	-1.3 -0.05	119.855 4.7187	3.970 0.1563	1.5 0.06	88.0 3.46	90.0 3.54	113.0 4.45	97.2	64.3	0.1079	0.69 1.52
25.400 1.0000	19.845 0.7813	0.5 0.02	130.076 5.1211	4.762 0.1875	3.5 0.14	89.0 3.50	96.0 3.78	123.0 4.84	98.2	41.8	0.1198	1.10 2.41
33.338 1.3125	26.195 1.0313	-4.3 -0.17	138.811 5.4650	5.558 0.2188	0.8 0.03	90.0 3.54	91.0 3.58	130.0 5.12	119	29.2	0.1273	1.86 4.09
33.338 1.3125	26.195 1.0313	-4.3 -0.17	138.811 5.4650	5.558 0.2188	3.5 0.14	90.0 3.54	97.0 3.82	130.0 5.12	119	29.2	0.1273	1.84 4.06

[4] These maximum fillet radii will be cleared by the bearing corners.

Continued on next page.

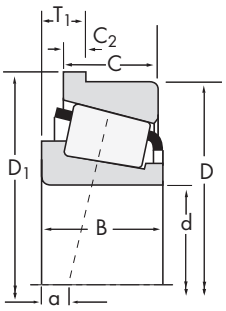
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

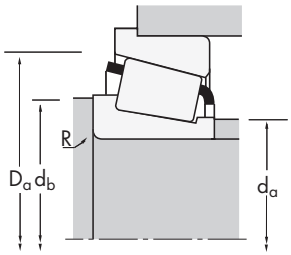
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

B

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
82.550 3.2500	136.525 5.3750	13.475 0.5305	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	495	493-B
82.550 3.2500	139.992 5.5115	14.288 0.5625	191000 43000	0.40	1.49	49600 11200	34300 7720	1.45	291000 65400	580	572-B
82.550 3.2500	152.400 6.0000	15.875 0.6250	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	595	592-B
82.550 3.2500	152.400 6.0000	16.667 0.6562	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	663	652-B
82.550 3.2500	161.925 6.3750	17.450 0.6870	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	757	752-B
82.550 3.2500	168.275 6.6250	22.225 0.8750	379000 85100	0.30	2.00	98200 22100	50300 11300	1.95	522000 117000	839	832-B
82.550 3.2500	168.275 6.6250	22.225 0.8750	379000 85100	0.30	2.00	98200 22100	50300 11300	1.95	522000 117000	842	832-B
83.345 3.2813	125.412 4.9375	10.317 0.4062	109000 24400	0.42	1.44	28100 6320	20000 4500	1.40	178000 39900	27690	27620-B
84.138 3.3125	136.525 5.3750	13.475 0.5305	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	498	493-B
85.000 3.3465	130.000 5.1181	11.560 0.4550	149000 33600	0.44	1.35	38700 8700	29400 6620	1.31	245000 55100	JM716649	JM716610-B
85.725 3.3750	136.525 5.3750	13.475 0.5305	143000 32100	0.44	1.35	37100 8330	28200 6340	1.31	216000 48600	497	493-B
85.725 3.3750	152.400 6.0000	15.875 0.6250	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	596	592-B
85.725 3.3750	152.400 6.0000	16.667 0.6562	229000 51400	0.41	1.47	59300 13300	41500 9330	1.43	335000 75300	665	652-B
85.725 3.3750	161.925 6.3750	17.450 0.6870	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	758	752-B
85.725 3.3750	168.275 6.6250	18.255 0.7187	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	677	672-B
85.725 3.3750	168.275 6.6250	22.225 0.8750	379000 85100	0.30	2.00	98200 22100	50300 11300	1.95	522000 117000	841	832-B
87.312 3.4375	152.400 6.0000	15.875 0.6250	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	596-S	592-B
88.900 3.5000	149.225 5.8750	12.700 0.5000	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42350	42587-B
88.900 3.5000	152.400 6.0000	15.875 0.6250	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	593	592-B
88.900 3.5000	161.925 6.3750	17.450 0.6870	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	766	752-B
88.900 3.5000	161.925 6.3750	17.462 0.6875	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	759	752-B
88.900 3.5000	161.925 6.3750	19.050 0.7500	343000 77200	0.40	1.50	89000 20000	61000 13700	1.46	523000 118000	6580	6535-B
88.900 3.5000	168.275 6.6250	18.255 0.7187	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	679	672-B
88.900 3.5000	180.975 7.1250	17.462 0.6875	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	775	772-B
88.900 3.5000	190.500 7.5000	22.225 0.8750	424000 95300	0.33	1.79	110000 24700	63000 14200	1.74	630000 142000	855	854-B
88.900 3.5000	190.500 7.5000	22.225 0.8750	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	HH221434	HH221410-B
88.900 3.5000	200.000 7.8740	27.361 1.0772	376000 84600	0.63	0.95	97500 21900	106000 23700	0.92	519000 117000	98350	98788-B
90.000 3.5433	135.000 5.3150	10.500 0.4134	110000 24600	0.49	1.21	28400 6390	24000 5410	1.18	155000 34900	JP9049	JP9010-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)									Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
29.769 1.1720	22.225 0.8750	-0.8 -0.03	141.961 5.5890	5.537 0.2180	3.5 0.14	90.0 3.54	97.0 3.82	131.0 5.16	105	29.3	0.1252	1.67 3.68
36.098 1.4212	28.575 1.1250	-5.3 -0.21	146.240 5.7575	6.350 0.2500	3.5 0.14	91.0 3.58	98.0 3.86	134.0 5.28	126	32	0.1295	2.21 4.86
36.322 1.4300	30.162 1.1875	-2.5 -0.10	158.648 6.2460	6.350 0.2500	3.5 0.14	93.0 3.66	100.0 3.94	144.0 5.67	151	36.8	0.1416	3.07 6.78
41.275 1.6250	31.750 1.2500	-7.9 -0.31	159.441 6.2772	7.142 0.2812	3.5 0.14	92.0 3.62	99.0 3.90	141.0 5.55	137	27.3	0.0919	3.21 7.07
48.260 1.9000	38.100 1.5000	-11.9 -0.47	169.748 6.6830	7.925 0.3120	3.5 0.14	94.0 3.70	100.0 3.94	150.0 5.91	177	29.4	0.0945	4.52 9.97
56.363 2.2190	41.275 1.6250	-18.5 -0.73	177.698 6.9960	9.525 0.3750	0.8 0.03	94.0 3.70	95.0 3.74	155.0 6.10	198	34.8	0.0937	5.62 12.38
56.363 2.2190	41.275 1.6250	-18.5 -0.73	177.698 6.9960	9.525 0.3750	3.5 0.14	94.0 3.70	101.0 3.98	155.0 6.10	198	34.8	0.0937	5.60 12.35
25.400 1.0000	19.845 0.7813	0.5 0.02	130.076 5.1211	4.762 0.1875	3.5 0.14	90.0 3.54	96.0 3.78	123.0 4.84	98.2	41.8	0.1198	1.07 2.37
29.769 1.1720	22.225 0.8750	-0.8 -0.03	141.961 5.5890	5.537 0.2180	3.5 0.14	91.0 3.58	98.0 3.86	131.0 5.16	105	29.3	0.1252	1.62 3.57
29.000 1.1417	24.000 0.9449	-0.3 -0.01	135.448 5.3346	5.558 0.2188	3.0 0.12	92.0 3.62	98.0 3.86	127.0 5.00	117	36.6	0.1303	1.40 3.09
29.769 1.1720	22.225 0.8750	-0.8 -0.03	141.961 5.5890	5.537 0.2180	3.5 0.14	93.0 3.66	99.0 3.90	131.0 5.16	105	29.3	0.1252	1.57 3.46
36.322 1.4300	30.162 1.1875	-2.5 -0.10	158.648 6.2460	6.350 0.2500	3.5 0.14	96.0 3.78	102.0 4.02	144.0 5.67	151	36.8	0.1416	2.95 6.51
41.275 1.6250	31.750 1.2500	-7.9 -0.31	159.441 6.2772	7.142 0.2812	3.5 0.14	95.0 3.74	102.0 4.02	141.0 5.55	137	27.3	0.0919	3.07 6.77
48.260 1.9000	38.100 1.5000	-11.9 -0.47	169.748 6.6830	7.925 0.3120	3.5 0.14	97.0 3.82	103.0 4.06	150.0 5.91	177	29.4	0.0945	4.37 9.62
41.275 1.6250	30.162 1.1875	-2.8 -0.11	175.336 6.9030	7.142 0.2812	3.5 0.14	99.0 3.90	105.0 4.13	160.0 6.30	182	37.2	0.1056	4.23 9.33
56.363 2.2190	41.275 1.6250	-18.5 -0.73	177.698 6.9960	9.525 0.3750	3.5 0.14	97.0 3.82	104.0 4.09	155.0 6.10	198	34.8	0.0937	5.42 11.95
36.322 1.4300	30.162 1.1875	-2.5 -0.10	158.648 6.2460	6.350 0.2500	3.5 0.14	97.0 3.82	103.0 4.06	144.0 5.67	151	38.3	0.1416	2.89 6.38
28.971 1.1406	24.608 0.9688	3.0 0.12	154.681 6.0898	5.558 0.2188	3.0 0.12	98.0 3.86	104.0 4.09	152.0 5.98	130	37.2	0.1386	2.13 4.70
36.322 1.4300	30.162 1.1875	-2.5 -0.10	158.648 6.2460	6.350 0.2500	3.5 0.14	98.0 3.86	104.0 4.09	144.0 5.67	151	36.8	0.1416	2.83 6.24
48.260 1.9000	38.100 1.5000	-11.9 -0.47	169.748 6.6830	7.925 0.3120	7.0 0.28	99.0 3.90	113.0 4.45	150.0 5.91	177	29.4	0.0945	4.16 9.16
48.260 1.9000	38.100 1.5000	-11.9 -0.47	169.748 6.6830	7.925 0.3120	3.5 0.14	99.0 3.90	106.0 4.17	150.0 5.91	177	29.4	0.0945	4.20 9.26
55.100 2.1693	42.862 1.6875	-13.2 -0.52	171.450 6.7500	7.938 0.3125	3.5 0.14	102.0 4.01	109.0 4.29	155.0 6.10	199	33.5	0.1037	4.75 10.47
41.275 1.6250	30.162 1.1875	-2.8 -0.11	175.336 6.9030	7.142 0.2812	3.5 0.14	101.0 3.98	107.0 4.21	160.0 6.30	182	37.2	0.1056	4.09 9.02
48.006 1.8900	38.100 1.5000	-8.1 -0.32	188.798 7.4330	7.938 0.3125	4.8 0.19	103.0 4.06	112.0 4.41	168.0 6.61	227	41.3	0.1067	5.89 12.98
57.531 2.2650	44.450 1.7500	-15.2 -0.60	199.923 7.8710	9.525 0.3750	8.0 0.31	103.0 4.06	118.0 4.65	174.0 6.85	264	44.9	0.1072	7.89 17.39
57.531 2.2650	46.038 1.8125	-15.0 -0.59	199.923 7.8710	11.112 0.4375	8.0 0.31	105.0 4.13	120.0 4.72	179.0 7.05	266	28.4	0.1072	8.33 18.36
49.212 1.9375	34.925 1.3750	1.3 0.05	209.550 8.2500	9.525 0.3750	3.5 0.14	112.0 4.41	118.0 4.65	188.0 7.40	203	37.4	0.1197	7.72 17.02
22.500 0.8858	17.500 0.6890	5.6 0.22	142.000 5.5906	4.000 0.1575	2.0 0.08	97.0 3.82	100.0 3.94	133.0 5.24	83.8	46	0.1196	1.14 2.51

[4] These maximum fillet radii will be cleared by the bearing corners.

Continued on next page.

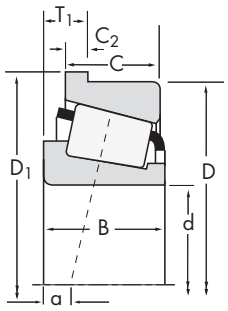
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

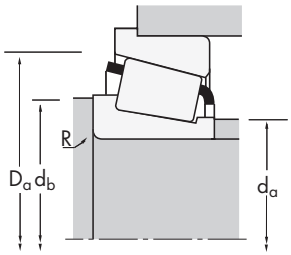
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

B

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
90.488 3.5625	161.925 6.3750	17.450 0.6870	303000 68100	0.34	1.76	78500 17700	45900 10300	1.71	441000 99200	760	752-B
92.075 3.6250	142.875 5.6250	15.080 0.5937	182000 41000	0.45	1.34	47300 10600	36300 8160	1.30	307000 69000	47890	47825-B
92.075 3.6250	149.225 5.8750	12.700 0.5000	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42362	42587-B
92.075 3.6250	152.400 6.0000	15.875 0.6250	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	598	592-B
92.075 3.6250	168.275 6.6250	18.255 0.7187	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	681	672-B
93.662 3.6875	149.225 5.8750	12.700 0.5000	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42368	42587-B
93.662 3.6875	152.400 6.0000	15.875 0.6250	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	597	592-B
95.250 3.7500	142.875 5.6250	15.080 0.5937	182000 41000	0.45	1.34	47300 10600	36300 8160	1.30	307000 69000	47896	47825-B
95.250 3.7500	149.225 5.8750	12.700 0.5000	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42375	42587-B
95.250 3.7500	152.400 6.0000	15.875 0.6250	200000 45000	0.44	1.36	51900 11700	39200 8820	1.32	319000 71600	594	592-B
95.250 3.7500	160.000 6.2992	16.667 0.6562	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52375	52630XB
95.250 3.7500	161.925 6.3750	16.667 0.6562	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52375	52637-B
95.250 3.7500	168.275 6.6250	18.255 0.7187	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	683	672-B
95.250 3.7500	171.450 6.7500	17.462 0.6875	315000 70700	0.37	1.63	81500 18300	51200 11500	1.59	474000 107000	77375	77675-B
95.250 3.7500	180.975 7.1250	17.462 0.6875	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	776	772-B
95.250 3.7500	180.975 7.1250	17.462 0.6875	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	777	772-B
95.250 3.7500	190.500 7.5000	22.225 0.8750	424000 95300	0.33	1.79	110000 24700	63000 14200	1.74	630000 142000	864	854-B
95.250 3.7500	190.500 7.5000	22.225 0.8750	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	HH221440	HH221410-B
96.838 3.8125	149.225 5.8750	12.700 0.5000	151000 33900	0.49	1.22	39100 8790	33000 7410	1.19	241000 54300	42381	42587-B
98.425 3.8750	161.925 6.3750	16.667 0.6562	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52387	52637-B
98.425 3.8750	168.275 6.6250	18.255 0.7187	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	685	672-B
98.425 3.8750	180.975 7.1250	17.462 0.6875	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	779	772-B
98.425 3.8750	190.500 7.5000	22.225 0.8750	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	HH221442	HH221410-B
98.425 3.8750	212.725 8.3750	23.812 0.9375	630000 142000	0.33	1.84	163000 36700	91000 20500	1.79	906000 204000	HH224332	HH224310-B
99.982 3.9363	190.500 7.5000	22.225 0.8750	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	HH221447	HH221410-B
100.000 3.9370	145.000 5.7087	10.500 0.4134	116000 26100	0.47	1.27	30100 6770	24400 5480	1.24	172000 38700	JP10049	JP10010-B
100.000 3.9370	180.975 7.1250	17.462 0.6875	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	783	772-B
101.600 4.0000	157.162 6.1875	16.667 0.6562	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52400	52618-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)									Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
48.260 1.9000	38.100 1.5000	-11.9 -0.47	169.748 6.6830	7.925 0.3120	3.5 0.14	101.0 3.98	107.0 4.21	150.0 5.91	177	29.4	0.0945	4.12 9.07
34.925 1.3750	26.195 1.0313	-1.0 -0.04	149.123 5.8710	7.938 0.3125	3.5 0.14	101.0 3.98	107.0 4.21	142.0 5.59	153	38.1	0.1428	2.00 4.41
28.971 1.1406	24.608 0.9688	3.0 0.12	154.681 6.0898	5.558 0.2188	3.5 0.14	101.0 3.98	107.0 4.21	152.0 5.98	130	37.2	0.1386	2.03 4.46
36.322 1.4300	30.162 1.1875	-2.5 -0.10	158.648 6.2460	6.350 0.2500	3.5 0.14	101.0 3.98	107.0 4.21	144.0 5.67	151	36.8	0.1416	2.70 5.96
41.275 1.6250	30.162 1.1875	-2.8 -0.11	175.336 6.9030	7.142 0.2812	3.5 0.14	104.0 4.09	110.0 4.33	160.0 6.30	182	37.2	0.1056	3.94 8.70
28.971 1.1406	24.608 0.9688	3.0 0.12	154.681 6.0898	5.558 0.2188	3.0 0.12	102.0 4.02	107.0 4.21	152.0 5.98	130	37.2	0.1386	1.98 4.36
36.322 1.4300	30.162 1.1875	-2.5 -0.10	158.648 6.2460	6.350 0.2500	3.5 0.14	102.0 4.02	109.0 4.29	144.0 5.67	151	38.3	0.1416	2.64 5.81
34.925 1.3750	26.195 1.0313	-1.0 -0.04	149.123 5.8710	7.938 0.3125	3.5 0.14	103.0 4.06	110.0 4.33	142.0 5.59	153	38.1	0.1428	1.87 4.13
28.971 1.1406	24.608 0.9688	3.0 0.12	154.681 6.0898	5.558 0.2188	3.0 0.12	103.0 4.06	108.0 4.25	152.0 5.98	130	37.2	0.1386	1.93 4.26
36.322 1.4300	30.162 1.1875	-2.5 -0.10	158.648 6.2460	6.350 0.2500	3.5 0.14	104.0 4.09	110.0 4.33	144.0 5.67	151	36.8	0.1416	2.57 5.66
36.116 1.4219	26.195 1.0313	-0.5 -0.02	166.345 6.5490	6.350 0.2500	3.5 0.14	105.0 4.13	112.0 4.41	155.0 6.10	175	41.7	0.1519	2.91 6.41
36.116 1.4219	26.195 1.0313	-0.5 -0.02	168.173 6.6210	6.350 0.2500	3.5 0.14	105.0 4.13	112.0 4.41	155.0 6.10	175	41.7	0.1519	2.99 6.59
41.275 1.6250	30.162 1.1875	-2.8 -0.11	175.336 6.9030	7.142 0.2812	3.5 0.14	106.0 4.17	113.0 4.45	160.0 6.30	182	37.2	0.1056	3.79 8.36
48.260 1.9000	38.100 1.5000	-9.7 -0.38	179.283 7.0584	7.938 0.3125	3.5 0.14	106.0 4.17	113.0 4.45	161.0 6.34	206	37.7	0.1017	4.72 10.40
48.006 1.8900	38.100 1.5000	-8.1 -0.32	188.798 7.4330	7.938 0.3125	3.5 0.14	107.0 4.21	114.0 4.49	168.0 6.61	227	41.3	0.1067	5.55 12.24
48.006 1.8900	38.100 1.5000	-8.1 -0.32	188.798 7.4330	7.938 0.3125	9.7 0.38	107.0 4.21	126.0 4.96	168.0 6.61	227	41.3	0.1067	5.45 12.03
57.531 2.2650	44.450 1.7500	-15.2 -0.60	199.923 7.8710	9.525 0.3750	8.0 0.31	108.0 4.25	123.0 4.84	174.0 6.85	264	44.9	0.1072	7.47 16.46
57.531 2.2650	46.038 1.8125	-15.0 -0.59	199.923 7.8710	11.112 0.4375	8.0 0.31	110.0 4.33	125.0 4.92	179.0 7.05	266	28.4	0.1072	7.91 17.44
28.971 1.1406	24.608 0.9688	3.0 0.12	154.681 6.0898	5.558 0.2188	3.5 0.14	104.0 4.09	110.0 4.33	152.0 5.98	130	37.2	0.1386	1.86 4.11
36.116 1.4219	26.195 1.0313	-0.5 -0.02	168.173 6.6210	6.350 0.2500	3.5 0.14	108.0 4.25	114.0 4.49	155.0 6.10	175	41.7	0.1519	2.85 6.28
41.275 1.6250	30.162 1.1875	-2.8 -0.11	175.336 6.9030	7.142 0.2812	3.5 0.14	109.0 4.29	116.0 4.57	160.0 6.30	182	37.2	0.1056	3.64 8.02
48.006 1.8900	38.100 1.5000	-8.1 -0.32	188.798 7.4330	7.938 0.3125	3.5 0.14	110.0 4.33	116.0 4.57	168.0 6.61	227	41.3	0.1067	5.37 11.84
57.531 2.2650	46.038 1.8125	-15.0 -0.59	199.923 7.8710	11.112 0.4375	3.5 0.14	113.0 4.45	119.0 4.69	179.0 7.05	266	28.4	0.1072	7.75 17.09
66.675 2.6250	53.975 2.1250	-18.8 -0.74	223.733 8.8084	11.112 0.4375	3.5 0.14	119.0 4.69	123.0 4.84	204.0 8.03	367	47.8	0.1182	12.40 27.34
57.531 2.2650	46.038 1.8125	-15.0 -0.59	199.923 7.8710	11.112 0.4375	6.4 0.25	114.0 4.49	126.0 4.96	179.0 7.05	266	28.4	0.1072	7.61 16.77
22.500 0.8858	17.500 0.6890	6.1 0.24	152.000 5.9843	4.000 0.1575	3.0 0.12	106.0 4.17	112.0 4.41	142.0 5.59	104	40.9	0.1264	1.18 2.61
48.006 1.8900	38.100 1.5000	-8.1 -0.32	188.798 7.4330	7.938 0.3125	3.5 0.14	111.0 4.37	118.0 4.65	168.0 6.61	227	41.3	0.1067	5.28 11.64
36.116 1.4219	26.195 1.0313	-5.1 -0.20	163.512 6.4375	6.350 0.2500	3.5 0.14	111.0 4.37	117.0 4.61	155.0 6.10	175	41.7	0.1519	2.47 5.45

[4] These maximum fillet radii will be cleared by the bearing corners.

[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

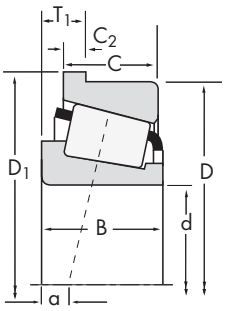
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

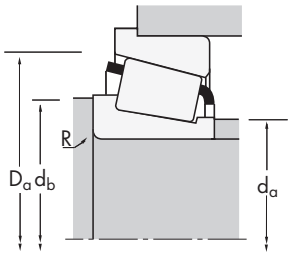
Continued on next page.

B

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
101.600 4.0000	160.000 6.2992	16.667 0.6562	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52400	52630XB
101.600 4.0000	161.925 6.3750	16.667 0.6562	207000 46500	0.47	1.26	53600 12100	43600 9800	1.23	343000 77000	52400	52637-B
101.600 4.0000	168.275 6.6250	18.255 0.7187	245000 55100	0.47	1.28	63500 14300	51200 11500	1.24	386000 86700	687	672-B
101.600 4.0000	180.975 7.1250	17.462 0.6875	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	780	772-B
101.600 4.0000	190.500 7.5000	22.225 0.8750	424000 95300	0.33	1.79	110000 24700	63000 14200	1.74	630000 142000	861	854-B
101.600 4.0000	190.500 7.5000	22.225 0.8750	494000 111000	0.33	1.79	128000 28800	73400 16500	1.74	692000 156000	HH221449	HH221410-B
101.600 4.0000	200.000 7.8740	27.361 1.0772	376000 84600	0.63	0.95	97500 21900	106000 23700	0.92	519000 117000	98400	98788-B
101.600 4.0000	212.725 8.3750	23.812 0.9375	530000 119000	0.33	1.84	137000 30900	76600 17200	1.79	786000 177000	941	932-B
104.775 4.1250	180.975 7.1250	17.462 0.6875	320000 72000	0.39	1.56	83100 18700	54800 12300	1.51	495000 111000	782	772-B
104.775 4.1250	190.500 7.5000	20.638 0.8125	337000 75700	0.42	1.44	87300 19600	62200 14000	1.40	543000 122000	71412	71750-B
107.950 4.2500	165.100 6.5000	15.875 0.6250	210000 47100	0.50	1.21	54400 12200	46300 10400	1.18	355000 79700	56425	56650-B
107.950 4.2500	190.500 7.5000	20.638 0.8125	337000 75700	0.42	1.44	87300 19600	62200 14000	1.40	543000 122000	71425	71750-B
107.950 4.2500	212.725 8.3750	23.812 0.9375	530000 119000	0.33	1.84	137000 30900	76600 17200	1.79	786000 177000	936	932-B
107.950 4.2500	212.725 8.3750	23.812 0.9375	630000 142000	0.33	1.84	163000 36700	91000 20500	1.79	906000 204000	HH224340	HH224310-B
109.538 4.3125	158.750 6.2500	11.908 0.4688	107000 24000	0.61	0.99	27600 6220	28700 6450	0.96	179000 40100	37431	37625-B
109.992 4.3304	177.800 7.0000	18.258 0.7188	254000 57200	0.52	1.16	65900 14800	58300 13100	1.13	419000 94200	64433	64700-B
111.125 4.3750	190.500 7.5000	20.638 0.8125	337000 75700	0.42	1.44	87300 19600	62200 14000	1.40	543000 122000	71437	71750-B
114.300 4.5000	177.800 7.0000	18.258 0.7188	254000 57200	0.52	1.16	65900 14800	58300 13100	1.13	419000 94200	64450	64700-B
114.300 4.5000	190.500 7.5000	20.638 0.8125	337000 75700	0.42	1.44	87300 19600	62200 14000	1.40	543000 122000	71450	71750-B
114.300 4.5000	212.725 8.3750	23.812 0.9375	530000 119000	0.33	1.84	137000 30900	76600 17200	1.79	786000 177000	938	932-B
115.000 4.5276	165.000 6.4961	12.500 0.4921	148000 33200	0.46	1.31	38300 8620	30100 6770	1.27	245000 55100	JLM722948	JLM722912-B
117.475 4.6250	180.975 7.1250	16.667 0.6562	181000 40700	0.50	1.21	46900 10600	39900 8980	1.18	271000 61000	68462	68712-B
120.000 4.7244	180.000 7.0866	16.350 0.6437	229000 51400	0.41	1.45	59300 13300	41900 9430	1.41	377000 84700	JM624649	JM624610-B
120.650 4.7500	160.338 6.3125	8.733 0.3438	97500 21900	0.43	1.38	25300 5680	18800 4230	1.34	206000 46400	L624549	L624510-B
120.650 4.7500	234.950 9.2500	25.400 1.0000	582000 131000	0.37	1.62	151000 33900	95500 21500	1.58	931000 209000	95475	95925-B
123.825 4.8750	182.562 7.1875	12.700 0.5000	248000 55800	0.31	1.97	64300 14500	33600 7550	1.91	493000 111000	48286	48220-B
127.000 5.0000	182.562 7.1875	12.700 0.5000	248000 55800	0.31	1.97	64300 14500	33600 7550	1.91	493000 111000	48290	48220-B
127.000 5.0000	215.900 8.5000	20.638 0.8125	354000 79500	0.49	1.23	91700 20600	76500 17200	1.20	614000 138000	74500	74850-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)									Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
36.116 1.4219	26.195 1.0313	-5.1 -0.20	166.345 6.5490	6.350 0.2500	3.5 0.14	111.0 4.37	117.0 4.61	155.0 6.10	175	41.7	0.1519	2.64 5.83
36.116 1.4219	26.195 1.0313	-5.1 -0.20	168.173 6.6210	6.350 0.2500	3.5 0.14	111.0 4.37	117.0 4.61	155.0 6.10	175	41.7	0.1519	2.72 6.01
41.275 1.6250	30.162 1.1875	-2.8 -0.11	175.336 6.9030	7.142 0.2812	3.5 0.14	112.0 4.41	118.0 4.65	160.0 6.30	182	37.2	0.1056	3.48 7.66
48.006 1.8900	38.100 1.5000	-8.1 -0.32	188.798 7.4330	7.938 0.3125	3.5 0.14	113.0 4.45	119.0 4.69	168.0 6.61	227	38.2	0.1067	5.18 11.43
57.531 2.2650	44.450 1.7500	-15.2 -0.60	199.923 7.8710	9.525 0.3750	8.0 0.31	114.0 4.49	129.0 5.08	174.0 6.85	264	44.9	0.1072	7.02 15.48
57.531 2.2650	46.038 1.8125	-15.0 -0.59	199.923 7.8710	11.112 0.4375	8.0 0.31	116.0 4.56	131.0 5.16	179.0 7.05	266	28.4	0.1072	7.46 16.45
49.212 1.9375	34.925 1.3750	1.3 0.05	209.550 8.2500	9.525 0.3750	3.5 0.14	120.5 4.75	128.0 5.04	188.0 7.40	203	37.4	0.1197	6.99 15.40
66.675 2.6250	53.975 2.1250	-19.8 -0.78	223.736 8.8085	11.112 0.4375	7.0 0.28	117.0 4.61	130.0 5.12	199.0 7.83	339	39.7	0.1153	11.31 24.93
48.006 1.8900	38.100 1.5000	-8.1 -0.32	188.798 7.4330	7.938 0.3125	3.5 0.14	116.0 4.57	122.0 4.80	168.0 6.61	227	38.2	0.1067	4.99 11.00
49.212 1.9375	34.925 1.3750	-6.6 -0.26	198.323 7.8080	7.937 0.3125	3.5 0.14	118.0 4.65	124.0 4.88	181.0 7.13	269	45.7	0.1156	5.94 13.09
36.512 1.4375	26.988 1.0625	2.0 0.08	171.348 6.7460	6.350 0.2500	3.5 0.14	117.0 4.61	123.0 4.84	162.0 6.38	191	47.7	0.1584	2.73 6.01
49.212 1.9375	34.925 1.3750	-6.6 -0.26	198.323 7.8080	7.937 0.3125	3.5 0.14	120.0 4.72	126.0 4.96	181.0 7.13	269	45.7	0.1156	5.73 12.64
66.675 2.6250	53.975 2.1250	-19.8 -0.78	223.736 8.8085	11.112 0.4375	8.0 0.31	122.0 4.80	137.0 5.39	199.0 7.83	339	39.7	0.1153	10.74 23.69
66.675 2.6250	53.975 2.1250	-18.8 -0.74	223.733 8.8084	11.112 0.4375	8.0 0.31	126.0 4.96	139.0 5.47	204.0 8.03	367	47.8	0.1182	11.53 25.41
21.438 0.8440	15.875 0.6250	13.7 0.54	163.413 6.4336	4.762 0.1875	3.5 0.14	116.0 4.57	123.0 4.84	153.0 6.02	124	48.7	0.1443	1.38 3.05
41.275 1.6250	30.162 1.1875	1.3 0.05	184.841 7.2772	7.145 0.2813	3.5 0.14	121.0 4.76	128.0 5.04	174.0 6.85	219	45.3	0.1153	3.92 8.65
49.212 1.9375	34.925 1.3750	-6.6 -0.26	198.323 7.8080	7.937 0.3125	3.5 0.14	123.0 4.84	129.0 5.08	181.0 7.13	269	45.7	0.1156	5.52 12.17
41.275 1.6250	30.162 1.1875	1.3 0.05	184.841 7.2772	7.145 0.2813	3.5 0.14	125.0 4.92	131.0 5.16	174.0 6.85	219	45.3	0.1153	3.68 8.11
49.212 1.9375	34.925 1.3750	-6.6 -0.26	198.323 7.8080	7.937 0.3125	3.5 0.14	125.0 4.92	132.0 5.20	181.0 7.13	269	45.7	0.1156	5.31 11.70
66.675 2.6250	53.975 2.1250	-19.8 -0.78	223.736 8.8085	11.112 0.4375	7.0 0.28	128.0 5.04	141.0 5.55	199.0 7.83	339	39.7	0.1153	10.18 22.44
27.000 1.0630	21.000 0.8268	5.6 0.22	172.000 6.7717	5.500 0.2165	3.3 0.13	121.0 4.76	127.0 5.00	160.0 6.30	161	57.2	0.1449	1.83 4.05
31.750 1.2500	25.400 1.0000	5.3 0.21	188.016 7.4022	7.145 0.2813	3.5 0.14	125.0 4.92	132.0 5.20	172.0 6.77	163	51.7	0.1026	2.86 6.31
36.000 1.4173	26.000 1.0236	0.0 0.00	188.000 7.4016	6.580 0.2590	3.5 0.14	128.0 5.04	135.0 5.31	175.0 6.89	227	61.6	0.1084	3.04 6.70
21.433 0.8438	16.670 0.6563	8.4 0.33	164.203 6.4647	3.970 0.1563	1.5 0.06	127.0 5.00	129.0 5.08	157.0 6.18	195	139	0.1509	1.19 2.63
63.500 2.5000	49.212 1.9375	-14.0 -0.55	245.958 9.6834	11.112 0.4375	6.4 0.25	137.0 5.39	149.0 5.87	217.0 8.54	454	59.3	0.1323	12.90 28.43
38.100 1.5000	33.338 1.3125	-5.6 -0.22	188.811 7.4335	6.350 0.2500	3.5 0.14	133.0 5.24	139.0 5.47	177.0 6.97	353	91.3	0.1138	3.63 8.00
38.100 1.5000	33.338 1.3125	-5.6 -0.22	188.811 7.4335	6.350 0.2500	3.5 0.14	135.0 5.31	141.0 5.55	177.0 6.97	353	91.3	0.1138	3.44 7.59
47.625 1.8750	34.925 1.3750	2.3 0.09	223.733 8.8084	7.938 0.3125	3.5 0.14	141.0 5.55	148.0 5.83	209.0 8.23	363	68.5	0.1338	7.19 15.84

[4] These maximum fillet radii will be cleared by the bearing corners.

Continued on next page.

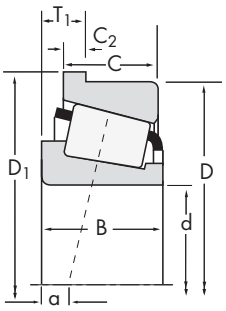
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

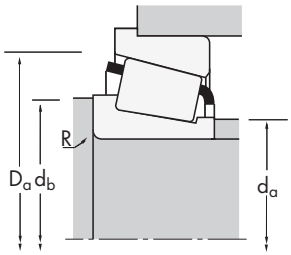
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

B

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
127.000 5.0000	234.950 9.2500	25.400 1.0000	582000 131000	0.37	1.62	151000 33900	95500 21500	1.58	931000 209000	95500	95925-B
130.000 5.1181	185.000 7.2835	13.000 0.5118	181000 40800	0.47	1.27	47000 10600	38100 8560	1.24	283000 63600	JP13049	JP13010-B
130.175 5.1250	196.850 7.7500	15.083 0.5938	340000 76500	0.34	1.74	88200 19800	52000 11700	1.70	625000 141000	67389	67322-B
133.350 5.2500	190.500 7.5000	11.908 0.4688	262000 58900	0.32	1.87	67900 15300	37300 8390	1.82	542000 122000	48385	48320-B
133.350 5.2500	215.900 8.5000	20.638 0.8125	354000 79500	0.49	1.23	91700 20600	76500 17200	1.20	614000 138000	74525	74850-B
133.350 5.2500	234.950 9.2500	25.400 1.0000	582000 131000	0.37	1.62	151000 33900	95500 21500	1.58	931000 209000	95525	95925-B
136.525 5.3750	215.900 8.5000	20.638 0.8125	354000 79500	0.49	1.23	91700 20600	76500 17200	1.20	614000 138000	74537	74850-B
136.525 5.3750	254.000 10.0000	30.162 1.1875	611000 137000	0.41	1.47	158000 35600	110000 24800	1.43	1030000 231000	99537	99100-B
139.700 5.5000	215.900 8.5000	20.638 0.8125	354000 79500	0.49	1.23	91700 20600	76500 17200	1.20	614000 138000	74550	74850-B
139.700 5.5000	241.300 9.5000	22.225 0.8750	553000 124000	0.32	1.88	143000 32200	78200 17600	1.83	932000 210000	HM231132	HM231115-B
139.700 5.5000	254.000 10.0000	30.162 1.1875	611000 137000	0.41	1.47	158000 35600	110000 24800	1.43	1030000 231000	99550	99100-B
140.000 5.5118	195.000 7.6772	13.000 0.5118	188000 42300	0.50	1.19	48800 11000	42000 9440	1.16	304000 68400	JP14049	JP14010-B
142.875 5.6250	193.675 7.6250	9.525 0.3750	182000 40900	0.37	1.63	47100 10600	29700 6690	1.59	394000 88600	36686	36620-B
142.875 5.6250	200.025 7.8750	12.700 0.5000	265000 59600	0.34	1.78	68800 15500	39600 8900	1.74	560000 126000	48685	48620-B
142.875 5.6250	241.300 9.5000	22.225 0.8750	553000 124000	0.32	1.88	143000 32200	78200 17600	1.83	932000 210000	HM231136	HM231115-B
146.050 5.7500	193.675 7.6250	9.525 0.3750	182000 40900	0.37	1.63	47100 10600	29700 6690	1.59	394000 88600	36690	36620-B
146.050 5.7500	241.300 9.5000	22.225 0.8750	477000 107000	0.44	1.36	124000 27800	93600 21000	1.32	810000 182000	82576	82950-B
146.050 5.7500	241.300 9.5000	22.225 0.8750	553000 124000	0.32	1.88	143000 32200	78200 17600	1.83	932000 210000	HM231140	HM231115-B
146.050 5.7500	254.000 10.0000	30.162 1.1875	611000 137000	0.41	1.47	158000 35600	110000 24800	1.43	1030000 231000	99575	99100-B
149.225 5.8750	241.300 9.5000	22.225 0.8750	553000 124000	0.32	1.88	143000 32200	78200 17600	1.83	932000 210000	HM231149	HM231115-B
149.225 5.8750	254.000 10.0000	30.162 1.1875	611000 137000	0.41	1.47	158000 35600	110000 24800	1.43	1030000 231000	99587	99100-B
150.000 5.9055	205.000 8.0709	12.000 0.4724	179000 40300	0.46	1.31	46500 10500	36500 8210	1.27	339000 76100	JL730646	JL730612-B
152.400 6.0000	192.088 7.5625	9.970 0.3925	132000 29700	0.42	1.44	34200 7690	24400 5480	1.40	277000 62200	L630349	L630310-B
152.400 6.0000	254.000 10.0000	30.162 1.1875	611000 137000	0.41	1.47	158000 35600	110000 24800	1.43	1030000 231000	99600	99100-B
158.750 6.2500	225.425 8.8750	13.495 0.5313	281000 63100	0.38	1.57	72800 16400	47800 10700	1.52	635000 143000	46780	46720-B
160.325 6.3120	288.925 11.3750	26.988 1.0625	763000 171000	0.32	1.88	198000 44500	108000 24300	1.83	1240000 278000	HM237532	HM237510-B
165.100 6.5000	225.425 8.8750	13.495 0.5313	281000 63100	0.38	1.57	72800 16400	47800 10700	1.52	635000 143000	46790	46720-B
165.100 6.5000	247.650 9.7500	16.670 0.6563	375000 84300	0.44	1.36	97200 21900	73200 16500	1.33	779000 175000	67780	67720-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)								Factors			Weight kg (lbs.)
Bearing					Shaft		Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
63.500 2.5000	49.212 1.9375	-14.0 -0.55	245.958 9.6834	11.112 0.4375	6.4 0.25	142.0 5.59	154.0 6.06	217.0 8.54	454	53.8	0.1323	12.28 27.07
27.000 1.0630	21.000 0.8268	8.9 0.35	192.000 7.5591	5.000 0.1969	3.0 0.12	137.0 5.39	143.0 5.63	188.0 7.40	192	60.3	0.1064	2.24 4.95
46.038 1.8125	38.100 1.5000	-6.4 -0.25	203.891 8.0272	7.145 0.2813	3.5 0.14	141.0 5.55	146.0 5.75	191.0 7.52	384	70.1	0.1220	5.04 11.11
39.688 1.5625	33.338 1.3125	-4.1 -0.16	195.956 7.7148	5.558 0.2188	3.5 0.14	142.0 5.59	148.0 5.83	186.0 7.32	404	95.6	0.1209	3.60 7.94
47.625 1.8750	34.925 1.3750	2.3 0.09	223.733 8.8084	7.938 0.3125	3.5 0.14	146.0 5.75	152.0 5.98	209.0 8.23	363	63.3	0.1338	6.70 14.77
63.500 2.5000	49.212 1.9375	-14.0 -0.55	245.958 9.6834	11.112 0.4375	9.7 0.38	148.0 5.83	166.0 6.54	217.0 8.54	454	53.8	0.1323	11.54 25.44
47.625 1.8750	34.925 1.3750	2.3 0.09	223.733 8.8084	7.938 0.3125	3.5 0.14	148.0 5.83	155.0 6.10	209.0 8.23	363	68.5	0.1338	6.45 14.22
66.675 2.6250	47.625 1.8750	-12.2 -0.48	264.973 10.4320	11.112 0.4375	7.0 0.28	156.0 6.14	167.0 6.57	238.0 9.37	556	73.5	0.1459	14.75 32.53
47.625 1.8750	34.925 1.3750	2.3 0.09	223.733 8.8084	7.938 0.3125	3.5 0.14	151.0 5.94	158.0 6.22	209.0 8.23	363	63.3	0.1338	6.19 13.65
56.642 2.2300	44.450 1.7500	-11.4 -0.45	250.723 9.8710	9.525 0.3750	3.5 0.14	156.0 6.14	160.0 6.30	224.0 8.82	533	85.9	0.1327	10.73 23.65
66.675 2.6250	47.625 1.8750	-12.2 -0.48	264.973 10.4320	11.112 0.4375	7.0 0.28	156.0 6.14	170.0 6.69	238.0 9.37	556	73.5	0.1459	14.37 31.68
27.000 1.0630	21.000 0.8268	11.9 0.47	202.000 7.9528	5.000 0.1969	3.0 0.12	148.0 5.83	153.0 6.02	198.0 7.80	220	68.1	0.1133	2.40 5.30
28.575 1.1250	23.020 0.9063	4.8 0.19	197.541 7.7772	3.970 0.1563	1.5 0.06	151.0 5.94	153.0 6.02	190.0 7.48	366	152	0.1768	2.48 5.46
39.688 1.5625	34.130 1.3437	-3.0 -0.12	205.481 8.0898	5.555 0.2187	3.5 0.14	151.0 5.94	158.0 6.22	194.0 7.64	440	115	0.1261	3.85 8.50
56.642 2.2300	44.450 1.7500	-11.4 -0.45	250.723 9.8710	9.525 0.3750	3.5 0.14	158.0 6.22	162.0 6.38	224.0 8.82	533	85.9	0.1327	10.42 22.96
28.575 1.1250	23.020 0.9063	4.8 0.19	197.541 7.7772	3.970 0.1563	1.5 0.06	153.0 6.02	155.0 6.10	190.0 7.48	366	121	0.1768	2.31 5.10
56.642 2.2300	44.450 1.7500	-3.6 -0.14	250.723 9.8710	9.525 0.3750	3.5 0.14	160.0 6.30	166.0 6.54	226.0 8.90	460	81.1	0.1405	10.34 22.79
56.642 2.2300	44.450 1.7500	-11.4 -0.45	250.723 9.8710	9.525 0.3750	3.5 0.14	160.0 6.30	164.0 6.46	224.0 8.82	533	85.9	0.1327	10.10 22.26
66.675 2.6250	47.625 1.8750	-12.2 -0.48	264.973 10.4320	11.112 0.4375	7.0 0.28	162.0 6.38	175.0 6.89	238.0 9.37	556	73.5	0.1459	13.62 30.03
56.642 2.2300	44.450 1.7500	-11.4 -0.45	250.723 9.8710	9.525 0.3750	3.5 0.14	163.0 6.42	167.0 6.57	224.0 8.82	533	85.9	0.1327	9.77 21.54
66.675 2.6250	47.625 1.8750	-12.2 -0.48	264.973 10.4320	11.112 0.4375	7.0 0.28	165.0 6.50	178.0 7.01	238.0 9.37	556	73.5	0.1459	13.24 29.18
28.575 1.1250	21.438 0.8440	11.4 0.45	210.000 8.2677	4.862 0.1914	3.3 0.13	158.0 6.22	164.0 6.46	200.0 7.87	295	103	0.1763	2.68 5.90
24.000 0.9449	19.000 0.7480	10.2 0.40	197.371 7.7705	3.967 0.1562	2.0 0.08	158.0 6.22	162.0 6.38	190.0 7.48	293	164	0.1698	1.63 3.59
66.675 2.6250	47.625 1.8750	-12.2 -0.48	264.973 10.4320	11.112 0.4375	7.0 0.28	169.5 6.68	181.0 7.13	238.0 9.37	556	66.7	0.1459	12.84 28.31
39.688 1.5625	33.337 1.3125	2.5 0.10	230.881 9.0898	5.557 0.2188	3.5 0.14	169.0 6.65	176.0 6.93	219.0 8.62	572	133	0.1432	5.18 11.42
63.500 2.5000	47.625 1.8750	-11.7 -0.46	299.933 11.8084	11.112 0.4375	7.0 0.28	181.0 7.13	192.0 7.56	279.0 10.98	751	101	0.1168	17.84 39.33
39.688 1.5625	33.337 1.3125	2.5 0.10	230.881 9.0898	5.557 0.2188	3.5 0.14	174.0 6.85	181.0 7.13	219.0 8.62	572	175	0.1432	4.68 10.32
47.625 1.8750	38.100 1.5000	4.8 0.19	254.691 10.0272	7.145 0.2813	3.5 0.14	179.0 7.05	185.0 7.28	241.0 9.49	622	122	0.1214	8.48 18.70

[4] These maximum fillet radii will be cleared by the bearing corners.

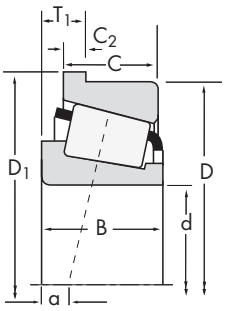
Continued on next page.

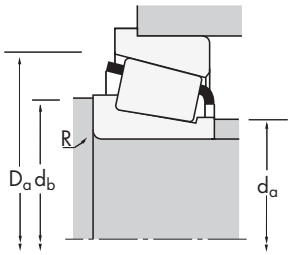
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C_1	e	Y	C_{90}	C_{a90}	K	C_0	Inner	Outer
165.100 6.5000	254.000 10.0000	22.225 0.8750	389000 87400	0.37	1.62	101000 22700	63800 14300	1.58	644000 145000	86650	86100-B
171.450 6.7500	260.350 10.2500	25.400 1.0000	605000 136000	0.40	1.49	157000 35300	108000 24300	1.45	1180000 265000	HM535349	HM535310-B
174.625 6.8750	288.925 11.3750	26.988 1.0625	611000 137000	0.47	1.28	159000 35600	127000 28600	1.25	1070000 242000	94687	94113-B
174.625 6.8750	288.925 11.3750	26.988 1.0625	763000 171000	0.32	1.88	198000 44500	108000 24300	1.83	1240000 278000	HM237542	HM237510-B
177.800 7.0000	247.650 9.7500	16.670 0.6563	375000 84300	0.44	1.36	97200 21900	73200 16500	1.33	779000 175000	67790	67720-B
177.800 7.0000	288.925 11.3750	26.988 1.0625	611000 137000	0.47	1.28	159000 35600	127000 28600	1.25	1070000 242000	94700	94113-B
179.975 7.0856	317.500 12.5000	28.575 1.1250	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93708	93125-B
190.500 7.5000	266.700 10.5000	16.670 0.6563	386000 86700	0.48	1.26	99900 22500	81700 18400	1.22	835000 188000	67885	67820-B
190.500 7.5000	317.500 12.5000	28.575 1.1250	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93750	93125-B
193.675 7.6250	282.575 11.1250	23.812 0.9375	398000 89400	0.42	1.44	103000 23200	73300 16500	1.41	692000 156000	87762	87111-B
200.025 7.8750	317.500 12.5000	28.575 1.1250	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93787	93125-B
203.200 8.0000	282.575 11.1250	16.670 0.6563	393000 88300	0.51	1.18	102000 22900	88700 19900	1.15	876000 197000	67983	67920-B
203.200 8.0000	317.500 12.5000	28.575 1.1250	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93800	93125-B
206.375 8.1250	282.575 11.1250	16.670 0.6563	393000 88300	0.51	1.18	102000 22900	88700 19900	1.15	876000 197000	67985	67920-B
209.550 8.2500	317.500 12.5000	28.575 1.1250	677000 152000	0.52	1.15	175000 39500	157000 35300	1.12	1290000 290000	93825	93125-B
215.900 8.5000	285.750 11.2500	19.050 0.7500	398000 89500	0.48	1.25	103000 23200	85000 19100	1.21	892000 200000	LM742749	LM742710-B
228.600 9.0000	327.025 12.8750	25.400 1.0000	517000 116000	0.41	1.48	134000 30100	93300 21000	1.44	1070000 240000	8573	8520-B
241.300 9.5000	327.025 12.8750	25.400 1.0000	517000 116000	0.41	1.48	134000 30100	93300 21000	1.44	1070000 240000	8578	8520-B
244.475 9.6250	381.000 15.0000	34.925 1.3750	889000 200000	0.52	1.16	231000 51800	204000 45800	1.13	1690000 381000	EE126097	126150-B
254.000 10.0000	358.775 14.1250	30.162 1.1875	896000 202000	0.33	1.80	232000 52200	132000 29700	1.76	1850000 416000	M249749	M249710-B
254.000 10.0000	403.225 15.8750	38.100 1.5000	865000 195000	0.40	1.49	224000 50400	154000 34700	1.45	1600000 359000	EE275100	275158-B
266.700 10.5000	355.600 14.0000	22.225 0.8750	688000 155000	0.36	1.67	178000 40100	110000 24700	1.62	1510000 339000	LM451349	LM451310-B
266.700 10.5000	403.225 15.8750	38.100 1.5000	865000 195000	0.40	1.49	224000 50400	154000 34700	1.45	1600000 359000	EE275105	275158-B
273.050 10.7500	403.225 15.8750	38.100 1.5000	865000 195000	0.40	1.49	224000 50400	154000 34700	1.45	1600000 359000	EE275108	275158-B
276.225 10.8750	349.948 13.7775	18.700 0.7362	326000 73400	0.54	1.11	84600 19000	78000 17500	1.08	750000 169000	L853049	L853011-B
280.192 11.0312	406.400 16.0000	28.575 1.1250	906000 204000	0.39	1.55	235000 52800	155000 34900	1.51	1820000 409000	EE128110	128160-B
280.192 11.0312	406.400 16.0000	28.575 1.1250	851000 191000	0.39	1.55	221000 49600	146000 32800	1.51	1660000 374000	EE128111	128160-B
298.450 11.7500	444.500 17.5000	36.512 1.4375	758000 170000	0.38	1.59	196000 44200	127000 28600	1.55	1390000 312000	EE291175	291750-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)								Factors			Weight kg (lbs.)
Bearing					Shaft		Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
46.038 1.8125	33.338 1.3125	-1.5 -0.06	263.525 10.3750	9.525 0.3750	4.8 0.19	176.0 6.93	185.0 7.28	239.0 9.41	466	112	0.1041	7.96 17.55
66.675 2.6250	52.388 2.0625	-8.6 -0.34	271.374 10.6840	11.112 0.4375	3.5 0.14	188.0 7.40	192.0 7.56	250.0 9.84	750	116	0.1263	12.71 28.02
63.500 2.5000	47.625 1.8750	-0.8 -0.03	299.933 11.8084	11.112 0.4375	7.0 0.28	193.0 7.60	204.0 8.03	272.0 10.71	692	93.8	0.1287	16.36 36.07
63.500 2.5000	47.625 1.8750	-11.7 -0.46	299.933 11.8084	11.112 0.4375	7.0 0.28	191.0 7.52	202.0 7.95	279.0 10.98	751	101	0.1168	15.96 35.20
47.625 1.8750	38.100 1.5000	4.8 0.19	254.691 10.0272	7.145 0.2813	3.5 0.14	188.0 7.40	194.0 7.64	241.0 9.49	622	122	0.1214	7.21 15.89
63.500 2.5000	47.625 1.8750	-0.8 -0.03	299.933 11.8084	11.112 0.4375	7.0 0.28	195.0 7.68	207.0 8.15	272.0 10.71	692	93.8	0.1287	15.92 35.10
63.500 2.5000	46.038 1.8125	7.9 0.31	328.523 12.9340	11.112 0.4375	3.5 0.14	204.0 8.03	209.0 8.23	300.0 11.81	912	126	0.1460	21.69 47.82
46.833 1.8438	38.100 1.5000	10.2 0.40	273.741 10.7772	7.145 0.2813	3.5 0.14	203.0 7.99	209.0 8.23	259.0 10.20	728	147	0.1310	8.07 17.78
63.500 2.5000	46.038 1.8125	7.9 0.31	328.523 12.9340	11.112 0.4375	4.3 0.17	212.0 8.35	218.0 8.58	300.0 11.81	912	126	0.1460	20.15 44.43
47.625 1.8750	36.512 1.4375	3.8 0.15	292.000 11.4960	9.525 0.3750	3.5 0.14	206.0 8.11	211.0 8.31	272.0 10.71	575	131	0.1155	9.47 20.88
63.500 2.5000	46.038 1.8125	7.9 0.31	328.523 12.9340	11.112 0.4375	4.3 0.17	219.0 8.62	225.0 8.86	300.0 11.81	912	126	0.1460	18.70 41.22
46.038 1.8125	36.512 1.4375	16.0 0.63	289.616 11.4022	7.145 0.2813	3.5 0.14	216.0 8.50	222.0 8.74	275.0 10.83	820	172	0.1388	8.80 19.40
63.500 2.5000	46.038 1.8125	7.9 0.31	328.523 12.9340	11.112 0.4375	4.3 0.17	222.0 8.74	227.0 8.94	300.0 11.81	912	126	0.1460	18.20 40.12
46.038 1.8125	36.512 1.4375	16.0 0.63	289.616 11.4022	7.145 0.2813	3.5 0.14	219.0 8.62	224.0 8.82	275.0 10.83	820	172	0.1388	8.43 18.59
63.500 2.5000	46.038 1.8125	7.9 0.31	328.523 12.9340	11.112 0.4375	4.3 0.17	227.0 8.93	233.0 9.17	300.0 11.81	912	126	0.1460	17.18 37.87
46.038 1.8125	34.925 1.3750	14.2 0.56	293.685 11.5624	7.938 0.3125	3.5 0.14	227.0 8.94	233.0 9.17	280.0 11.02	867	225	0.1388	7.81 17.21
52.388 2.0625	36.512 1.4375	7.6 0.30	336.448 13.2460	9.525 0.3750	6.4 0.25	244.0 9.61	255.0 10.04	313.0 12.32	1050	172	0.1401	13.66 30.11
52.388 2.0625	36.512 1.4375	7.6 0.30	336.448 13.2460	9.525 0.3750	6.4 0.25	253.0 9.96	264.0 10.39	313.0 12.32	1050	172	0.1401	11.73 25.86
76.200 3.0000	57.150 2.2500	9.7 0.38	393.598 15.4960	12.700 0.5000	6.4 0.25	266.0 10.47	275.0 10.83	358.0 14.09	1320	169	0.1640	31.86 70.24
71.438 2.8125	53.975 2.1250	-6.9 -0.27	371.475 14.6250	12.700 0.5000	3.5 0.14	270.0 10.63	274.0 10.79	343.0 13.50	1630	168	0.1526	22.21 48.96
69.850 2.7500	46.038 1.8125	2.5 0.10	417.408 16.4334	14.288 0.5625	6.4 0.25	277.0 10.91	287.0 11.30	389.0 15.31	1450	201	0.1555	31.80 70.11
57.150 2.2500	44.450 1.7500	5.1 0.20	365.125 14.3750	9.525 0.3750	3.5 0.14	281.0 11.06	285.0 11.22	344.0 13.54	1550	212	0.1536	15.65 34.51
69.850 2.7500	46.038 1.8125	2.5 0.10	417.408 16.4334	14.288 0.5625	6.4 0.25	287.0 11.30	296.0 11.65	389.0 15.31	1450	201	0.1555	28.96 63.84
69.850 2.7500	46.038 1.8125	2.5 0.10	417.408 16.4334	14.288 0.5625	6.4 0.25	291.0 11.46	301.0 11.85	389.0 15.31	1450	201	0.1555	27.48 60.59
34.925 1.3750	23.812 0.9375	35.1 1.38	357.950 14.0925	6.000 0.2362	3.5 0.14	288.0 11.34	293.0 11.54	342.0 13.46	1060	350	0.1517	7.58 16.72
67.673 2.6643	53.975 2.1250	6.6 0.26	418.998 16.4960	12.700 0.5000	6.8 0.27	307.0 12.09	309.0 12.17	384.0 15.12	1730	255	0.1628	27.79 61.27
67.673 2.6643	53.975 2.1250	6.6 0.26	418.998 16.4960	12.700 0.5000	6.8 0.27	307.0 12.09	309.0 12.17	384.0 15.12	1620	240	0.1592	27.94 61.60
61.912 2.4375	39.688 1.5625	7.6 0.30	457.098 17.9960	12.700 0.5000	8.0 0.31	320.0 12.60	332.0 13.07	428.0 16.85	1580	245	0.1557	30.43 67.09

[4] These maximum fillet radii will be cleared by the bearing corners.

Continued on next page.

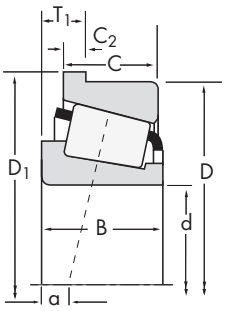
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

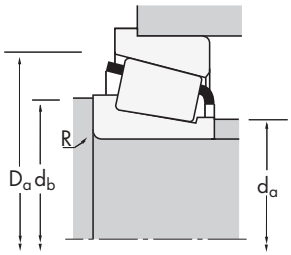
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

B

TSF

SINGLE-ROW





Dimensions, mm (inches)			Load Ratings, N (lbf.) Dynamic (1)			Dynamic (2)		Factors (5)	Static	Part Number	
d	D	T_1	C (1)	e	Y	C_{90}	Ca_{90}	K	C_0	Inner	Outer
304.800 12.0000	404.950 15.9429	22.225 0.8750	575000 129000	0.36	1.67	149000 33500	91600 20600	1.63	1310000 295000	L357049	L357019-B
304.800 12.0000	406.400 16.0000	25.400 1.0000	754000 170000	0.44	1.36	196000 44000	148000 33200	1.32	1740000 392000	LM757049	LM757010-B
304.800 12.0000	444.500 17.5000	36.512 1.4375	758000 170000	0.38	1.59	196000 44200	127000 28600	1.55	1390000 312000	EE291201	291750-B
317.500 12.5000	444.500 17.5000	36.512 1.4375	758000 170000	0.38	1.59	196000 44200	127000 28600	1.55	1390000 312000	EE291250	291750-B
330.200 13.0000	482.600 19.0000	41.275 1.6250	1230000 276000	0.39	1.54	318000 71400	213000 47800	1.49	2320000 523000	EE526130	526190-B
349.250 13.7500	501.650 19.7500	34.925 1.3750	1320000 298000	0.37	1.63	343000 77200	216000 48500	1.59	2780000 626000	EE333137	333197-B
371.475 14.6250	508.000 20.0000	38.100 1.5000	899000 202000	0.44	1.36	233000 52400	176000 39500	1.33	1870000 420000	EE231462	232000-B
381.000 15.0000	479.425 18.8750	23.812 0.9375	582000 131000	0.50	1.21	151000 33900	128000 28800	1.18	1380000 311000	L865547	L865512-B
381.000 15.0000	522.288 20.5625	38.100 1.5000	1360000 306000	0.39	1.56	353000 79400	233000 52400	1.51	2950000 663000	LM565949	LM565910-B
396.875 15.6250	549.275 21.6250	38.100 1.5000	1400000 316000	0.41	1.47	364000 81800	254000 57100	1.43	3130000 704000	LM567943	LM567910-B
406.400 16.0000	508.000 20.0000	25.400 1.0000	842000 189000	0.37	1.64	218000 49100	137000 30700	1.60	2230000 502000	L467549	L467510-B
406.400 16.0000	549.275 21.6250	38.100 1.5000	1400000 316000	0.41	1.47	364000 81800	254000 57100	1.43	3130000 704000	LM567949	LM567910-B
488.950 19.2500	660.400 26.0000	38.100 1.5000	2030000 455000	0.31	1.95	525000 118000	276000 62000	1.90	4590000 1030000	EE640192	640260-B

(1) Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
(2) Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and Ca_{90} are radial and thrust values.
(3) Negative value indicates effective center inside cone backface.

Dimensions, mm (inches)									Factors			Weight kg (lbs.)
Bearing					Shaft			Housing				
					max shaft fillet radius	backing shoulder dia.	backing shoulder dia.	backing shoulder dia.				
B	C	a[3]	D_1	C_2	R[4]	d_a	d_b	D_a	G_1	G_2	Cg	
50.800 2.0000	**38.100** 1.5000	**12.7** 0.50	**419.923** 16.5324	**9.525** 0.3750	**6.4** 0.25	**319.0** 12.56	**329.0** 12.95	**380.0** 14.96	**1750**	**301**	**0.1585**	**17.28** 38.10
63.500 2.5000	**47.625** 1.8750	**16.3** 0.64	**419.100** 16.5000	**9.525** 0.3750	**6.4** 0.25	**322.0** 12.68	**331.0** 13.03	**393.0** 15.47	**1990**	**260**	**0.1775**	**21.93** 48.35
61.912 2.4375	**39.688** 1.5625	**7.6** 0.30	**457.098** 17.9960	**12.700** 0.5000	**8.0** 0.31	**324.0** 12.76	**337.0** 13.27	**428.0** 16.85	**1580**	**245**	**0.1557**	**28.97** 63.87
61.912 2.4375	**39.688** 1.5625	**7.6** 0.30	**457.098** 17.9960	**12.700** 0.5000	**8.0** 0.31	**334.0** 13.15	**346.0** 13.62	**428.0** 16.85	**1580**	**245**	**0.1557**	**25.95** 57.22
80.167 3.1562	**60.325** 2.3750	**4.8** 0.19	**498.373** 19.6210	**15.875** 0.6250	**6.4** 0.25	**351.0** 13.82	**360.0** 14.17	**464.0** 18.27	**2280**	**287**	**0.1790**	**46.44** 102.38
84.138 3.3125	**69.850** 2.7500	**3.6** 0.14	**515.838** 20.3086	**14.288** 0.5625	**6.4** 0.25	**372.0** 14.65	**382.0** 15.04	**486.0** 19.13	**3040**	**337**	**0.1928**	**54.31** 119.74
66.675 2.6250	**50.800** 2.0000	**19.6** 0.77	**522.188** 20.5586	**14.288** 0.5625	**6.4** 0.25	**390.0** 15.35	**400.0** 15.75	**489.0** 19.25	**2390**	**366**	**0.1874**	**37.31** 82.25
47.625 1.8750	**34.925** 1.3750	**42.9** 1.69	**489.737** 19.2810	**9.525** 0.3750	**6.4** 0.25	**395.0** 15.55	**407.0** 16.02	**465.0** 18.31	**2260**	**529**	**0.1897**	**18.86** 41.58
84.138 3.3125	**61.912** 2.4375	**8.9** 0.35	**536.476** 21.1211	**14.288** 0.5625	**6.4** 0.25	**402.0** 15.83	**411.0** 16.18	**507.0** 19.96	**3380**	**378**	**0.2028**	**50.16** 110.59
84.138 3.3125	**61.912** 2.4375	**15.5** 0.61	**563.463** 22.1836	**14.288** 0.5625	**6.4** 0.25	**420.0** 16.54	**430.0** 16.93	**531.0** 20.91	**3800**	**427**	**0.2143**	**58.76** 129.54
61.912 2.4375	**47.625** 1.8750	**20.3** 0.80	**519.013** 20.4336	**11.112** 0.4375	**3.3** 0.13	**423.0** 16.65	**426.0** 16.77	**492.0** 19.37	**3720**	**673**	**0.2038**	**27.21** 59.98
84.138 3.3125	**61.912** 2.4375	**15.5** 0.61	**563.463** 22.1836	**14.288** 0.5625	**6.4** 0.25	**427.0** 16.81	**437.0** 17.20	**531.0** 20.91	**3800**	**427**	**0.2143**	**55.12** 121.52
94.458 3.7188	**69.850** 2.7500	**4.8** 0.19	**676.275** 26.6250	**14.288** 0.5625	**6.4** 0.25	**513.0** 20.20	**522.0** 20.55	**642.0** 25.28	**6320**	**601**	**0.2310**	**86.40** 190.48

[4] These maximum fillet radii will be cleared by the bearing corners.
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.
[6] For standard class (4 or 2) only, the maximum metric value is a whole millimeter dimension.

NOTES