

Конические роликоподшипники TDO, TDI, Metric, Inch Технические характеристики

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1 Structure of tapered roller bearings

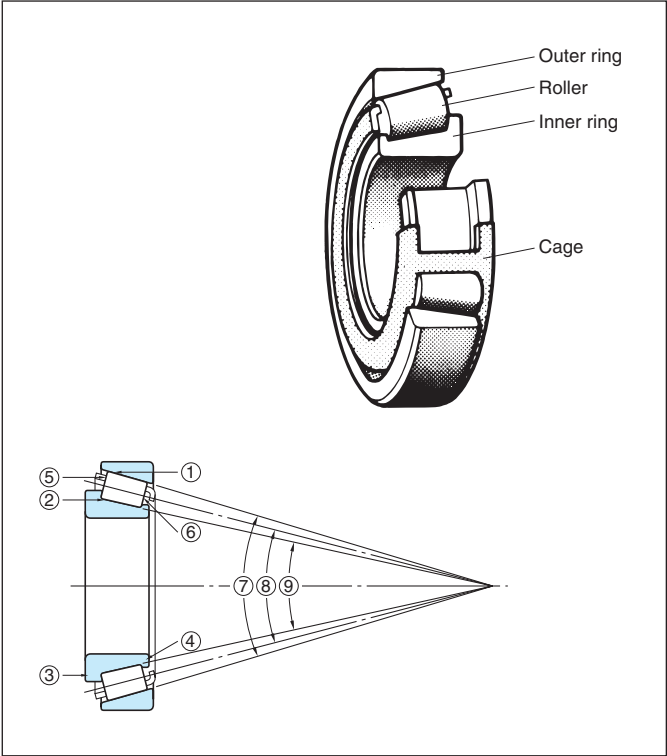
1 Structure of tapered roller bearings

Tapered roller bearings consist of outer ring, inner ring, rollers and a cage. This bearing contains tapered rollers for its rolling element which are guided by the inner ring back-face rib on the roller large end face.

The raceway surfaces of inner ring and outer ring and the rolling contact surface of rollers are designed so that the respective apexes converge at a point on the bearing center line.

Bearings are classified into standard, intermediate and steep types, in accordance with their contact angle (α).

The larger the contact angle is, the greater the bearing resistance to axial load.



- ① Outer ring raceway
- ② Inner ring raceway
- ③ Inner ring backface rib
- ④ Inner ring front face rib
- ⑤ Roller large end face
- ⑥ Roller small end face
- ⑦ Included outer ring angle
- ⑧ Included roller center angle
- ⑨ Included inner ring angle

• Tapered roller bearing with standard contact angle

TS Type

• Tapered roller bearing with medium contact angle

TS Type

• Tapered roller bearing with steep contact angle

TSS Type

2 Outstanding features of tapered roller bearings

1) Higher load ratings

Tapered roller bearings with higher load ratings can accept radial loads or axial loads in one direction and combined radial and axial loads.

This type of bearing is suitable for use under heavy load or impact load.

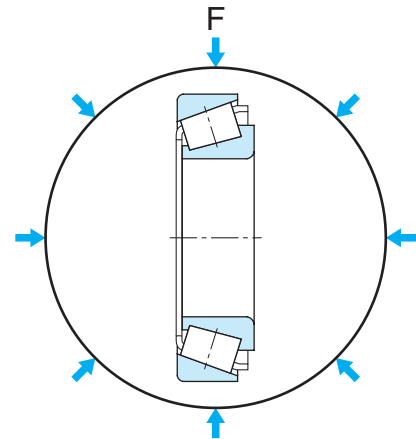
2) The outer ring can be mounted separately from the inner ring assembly

Since the outer ring is separable from the inner ring assembly, the inner ring assembly can be installed on the shaft and the outer ring in the housing, individually.

This feature facilitates mounting of the bearing while making the design of the shaft and housing simpler. In addition, more options regarding the fitting practice employed are available than with any other type of bearing.

3) Mounted clearance is adjustable

In general, bearings of unitized design are supplied with a predetermined radial clearance which will vary according to fitting practice and application. Tapered roller bearings on the other hand can be adjusted at the time of installation by varying the axial location of either the inner ring assembly or outer ring.



3 Bearing service life

3.1 Bearing service life

When bearings rotate under load, material flakes from the surfaces of inner and outer rings or rolling elements by fatigue arising from repeated contact stress.

This phenomenon is called flaking.

The total number of bearing rotations until flaking occurs is regarded as the bearing "(fatigue) service life".

"(Fatigue) service life" differs greatly depending upon bearing structures, dimensions, materials, and processing methods.

Since this phenomenon results from fatigue distribution in bearing materials themselves, differences in bearing service life should be statistically considered.

When a group of identical bearings are rotated under the same conditions, the total number of revolutions until 90 % of the bearings are left without flaking (i.e. a service life of 90 % reliability) is defined as the basic rating life. In operation at a constant speed, the basic rating life can be expressed in terms of time.

3.2 Basic dynamic load ratings

Basic dynamic load ratings, C

The basic dynamic load rating is either pure radial (for radial bearings) or central axial load (for thrust bearings) of constant magnitude in a constant direction, under which the basic rating life of 1 million revolutions can be obtained, when the inner ring rotates while the outer ring is stationary, or vice versa. The basic dynamic load rating, which represents the capacity of a bearing under rolling fatigue, is specified as the basic dynamic radial load rating (C_r) for radial bearings, and basic dynamic axial load rating (C_a) for thrust bearings. These load ratings are listed in the specification table.

These values are prescribed by ISO 281/1990, and are subject to change by conformance to the latest ISO standards.

3.3 Calculation of service life

Generally, the relationship between the dynamic load rating, applied load and basic rating life of the bearing is expressed as follows :

$$L_{10} = \left(\frac{C}{P} \right)^{10/3} \dots\dots\dots (3.1)$$

where :

L_{10} : basic rating life $\times 10^6$ revolutions

C : basic dynamic load rating N

P : dynamic equivalent radial (or axial) load N

In case the bearing operates at a constant speed, it is often convenient to express the life in terms of hours which can be obtained by the following equation :

$$L_{10h} = \left(\frac{C}{P} \right)^{10/3} \frac{16\,667}{n} \dots\dots\dots (3.2)$$

where :

L_{10h} : life in terms of hours h

$$\left\{ \begin{array}{l} L_{10h} = L_{10} \times \frac{10^6}{60n} \\ = \left(\frac{C}{P} \right)^{10/3} \frac{10^6}{60n} \\ = \left(\frac{C}{P} \right)^{10/3} \frac{16\,667}{n} \end{array} \right\}$$

n : rotational speed min^{-1}

Life calculation can be further simplified by the use of service life coefficient (f_h) and coefficient of rotational speed (f_n) as tabulated in **Tables 3.3** and **3.4**.

$$L_{10h} = 500 \cdot f_h^{10/3} \dots\dots\dots (3.3)$$

$$f_h = f_h \cdot \frac{C}{P} \dots\dots\dots (3.4)$$

$$f_h = \left(\frac{33.3}{P} \right)^{3/10} \dots\dots\dots (3.5)$$

3.4 Corrected rating life

The basic rating life (L_{10}), expressed using **Equation (3.1)**, is (fatigue) life, whose estimate of reliability is 90 %.

A certain application requires a service life whose reliability is more than 90 %.

Special materials help extend bearing life, and lubrication and other operating conditions may also affect bearing service life.

The corrected rating life can be obtained from the basic rating life using **Equation (3.6)**.

$$L_{na} = a_1 a_2 a_3 L_{10} \quad (3.6)$$

where :

L_{na} : corrected rating life 10^6 revolutions

(estimated reliability (100- n) % : the probability of failure occurrence is expressed by n , taking bearing characteristics and operating conditions into consideration.)

L_{10} : basic rating life 10^6 revolutions
(estimated reliability 90 %)

a_1 : reliability coefficient refer to section (1)

a_2 : bearing characteristic coefficient
..... refer to section (2)

a_3 : operating condition coefficient
..... refer to section (3)

[Remark]

When bearing dimensions are to be selected given L_{na} greater than 90 % in reliability, the strength of shaft and housing must be considered.

(1) Reliability coefficient a_1

Table 3.1 describes reliability coefficient, a_1 , which is necessary to obtain the corrected rating life of reliability greater than 90 %.

Table 3.1 Reliability coefficient a_1

Reliability, %	L_{na}	a_1
90	L_{10a}	1.00
95	L_{5a}	0.62
96	L_{4a}	0.53
97	L_{3a}	0.44
98	L_{2a}	0.33
99	L_{1a}	0.21

(2) Bearing characteristic coefficient a_2

The bearing characteristic in relation to bearing life may differ according to bearing materials (steel types and their quality), and may be altered by production process, design, etc. In such cases, the bearing life calculation can be corrected using the bearing characteristic coefficient a_2 .

JTEKT has employed vacuum-degassed bearing steel as JTEKT standard bearing material. It has a significant effect on bearing life extension which was verified through studies at JTEKT laboratory.

The basic dynamic load rating of bearings made of vacuum-degassed bearing steel is specified in the bearing specification table, taking the bearing characteristic coefficient as $a_2 = 1$.

For bearings made of special materials to extend fatigue life, the bearing characteristic coefficient is treated as $a_2 > 1$.

(3) Operating condition coefficient a_3

When bearings are used under operating conditions which directly affect their service life, including improper lubrication, the service life calculation can be corrected by using a_3 .

Under normal lubrication, the calculation can be performed with $a_3 = 1$; and, under favorable lubrication, with $a_3 > 1$.

In the following cases, the operating condition coefficient is treated as $a_3 < 1$:

- Operation using lubricant of low kinematic viscosity

Ball bearing	13 mm ² /s or less
Roller bearing	20 mm ² /s or less
- Operation at very slow rotational speed

Product of rolling element pitch diameter and rotational speed is 10 000 or less.

- Contamination of lubricant is expected
- Greater misalignment of inner and outer rings is present

[Note] When bearing hardness is diminished by heat, the basic dynamic load rating calculation must be corrected (ref. **Table 3.2**).

Table 3.2 Temperature coefficient values

Bearing temperature, °C	125	150	175	200	250
Temperature coefficient	1	1	0.95	0.90	0.75

[Remark]

When $a_2 > 1$ in employing a special material, if lubrication is not proper, $a_2 \times a_3$ is not always > 1 . In such cases, if $a_3 < 1$, bearing characteristic coefficient is normally treated as $a_2 \leq 1$.

As the above explanation shows, since a_2 and a_3 are inter-dependent, some calculations treat them as one coefficient, a_{23} .

Table 3.3 Speed factor

Rotational speed n (min ⁻¹)	Coefficient of rotational speed f_n	Rotational speed n (min ⁻¹)	Coefficient of rotational speed f_n	Rotational speed n (min ⁻¹)	Coefficient of rotational speed f_n	Rotational speed n (min ⁻¹)	Coefficient of rotational speed f_n
10	1.435	65	0.819	650	0.410	4 000	0.238
11	1.395	70	0.800	700	0.401	4 200	0.234
12	1.359	75	0.784	750	0.393	4 400	0.231
13	1.326	80	0.769	800	0.385	4 600	0.228
14	1.297	85	0.756	850	0.379	4 800	0.225
15	1.271	90	0.742	900	0.372	5 000	0.222
16	1.246	95	0.731	950	0.366	5 200	0.220
17	1.224	100	0.719	1 000	0.361	5 400	0.217
18	1.203	110	0.699	1 050	0.355	5 600	0.215
19	1.184	120	0.681	1 100	0.350	5 800	0.213
20	1.166	130	0.665	1 150	0.346	6 000	0.211
21	1.149	140	0.650	1 200	0.341	6 200	0.209
22	1.133	150	0.637	1 250	0.337	6 400	0.207
23	1.118	160	0.625	1 300	0.333	6 600	0.205
24	1.104	170	0.613	1 400	0.326	6 800	0.203
25	1.090	180	0.603	1 500	0.319	7 000	0.201
26	1.077	190	0.593	1 600	0.313	7 200	0.199
27	1.065	200	0.584	1 700	0.307	7 400	0.198
28	1.054	220	0.568	1 800	0.302	7 600	0.196
29	1.043	240	0.553	1 900	0.297	8 000	0.193
30	1.032	260	0.540	2 000	0.293	8 500	0.190
31	1.022	280	0.528	2 100	0.289	9 000	0.187
32	1.012	300	0.517	2 200	0.285	9 500	0.184
33.3	1.000	320	0.507	2 300	0.281	10 000	0.181
34	0.994	340	0.498	2 400	0.277	11 000	0.176
36	0.977	360	0.490	2 500	0.274	12 000	0.171
38	0.962	380	0.482	2 600	0.271	13 000	0.167
40	0.947	400	0.475	2 700	0.268	14 000	0.163
42	0.933	420	0.467	2 800	0.265	15 000	0.160
44	0.920	440	0.461	2 900	0.262	16 000	0.157
46	0.908	460	0.455	3 000	0.259	17 000	0.154
48	0.896	480	0.449	3 200	0.254	18 000	0.152
50	0.886	500	0.444	3 400	0.250	19 000	0.149
55	0.866	550	0.432	3 600	0.246	20 000	0.147
60	0.838	600	0.420	3 800	0.242		

3.5 Basic static load rating

Excessive static load or impact load even at very low rotation causes partial permanent deformation of the rolling element and raceway contacting surfaces. This permanent deformation increases with the load; if it exceeds a certain limit, smooth rotation will be hindered.

The basic static load rating is the static load which responds to the calculated contact stress shown below, at the contact center between the raceway and rolling elements which receive the maximum load.

- Roller bearings 4 000 MPa

The total extent of contact stress-caused permanent deformation on surfaces of rolling elements and raceway will

be approximately 0.000 1 times greater than the rolling element diameter.

The basic static load rating for radial bearings is specified as the basic static radial load rating. This load ratings are listed in the bearing specification table, using C_0 .

This value is prescribed by ISO 78/1987 and is subject to change by conformance to the latest ISO standards.

3.6 Safety coefficient

The allowable static equivalent load for a bearing is determined by the basic static load rating of the bearing; however, bearing service life, which is affected by permanent deforma-

Table 3.4 Life factor

Service life coefficient f_h	L_{10} (10^6 rev.)	L_{10h} (h)	Service life coefficient f_h	L_{10} (10^6 rev.)	L_{10h} (h)	Service life coefficient f_h	L_{10} (10^6 rev.)	L_{10h} (h)
0.70	0.30	150	2.45	19.8	9 920	4.20	120	59 800
0.75	0.38	190	2.50	21.2	10 600	4.25	124	62 200
0.80	0.48	240	2.55	22.6	11 300	4.30	129	64 600
0.85	0.58	290	2.60	24.2	12 100	4.35	134	67 200
0.90	0.70	350	2.65	25.8	12 900	4.40	140	69 800
0.95	0.84	420	2.70	27.4	13 700	4.45	145	72 500
1.00	1.00	500	2.75	29.1	14 600	4.50	150	75 200
1.05	1.18	590	2.80	30.9	15 500	4.55	156	78 000
1.10	1.37	685	2.85	32.8	16 400	4.60	162	80 900
1.15	1.59	795	2.90	34.8	17 400	4.65	168	83 900
1.20	1.84	920	2.95	36.8	18 400	4.70	174	87 000
1.25	2.10	1 050	3.00	38.9	19 500	4.75	180	90 800
1.30	2.40	1 200	3.05	41.1	20 600	4.80	187	93 300
1.35	2.72	1 360	3.10	43.4	21 700	4.85	193	96 600
1.40	3.07	1 530	3.15	45.8	22 900	4.90	200	99 900
1.45	3.45	1 730	3.20	48.3	24 100	4.95	207	103 000
1.50	3.86	1 930	3.25	50.8	25 400	5.00	214	107 000
1.55	4.31	2 160	3.30	53.5	26 800	5.10	228	114 000
1.60	4.79	2 400	3.35	56.3	28 100	5.20	244	122 000
1.65	5.31	2 650	3.40	59.1	29 600	5.30	260	130 000
1.70	5.86	2 930	3.45	62.0	31 000	5.40	276	138 000
1.75	6.46	3 230	3.50	65.1	32 500	5.50	294	147 000
1.80	7.09	3 550	3.55	68.2	34 100	5.60	312	156 000
1.85	7.77	3 890	3.60	71.5	35 800	5.70	331	165 000
1.90	8.50	4 250	3.65	74.9	37 400	5.80	351	175 000
1.95	9.26	4 630	3.70	78.3	39 200	5.90	371	186 000
2.00	10.1	5 040	3.75	81.9	41 000	6.00	392	196 000
2.05	10.9	5 470	3.80	85.6	42 800	6.50	513	256 000
2.10	11.9	5 930	3.85	89.4	44 700	7.00	656	328 000
2.15	12.8	6 420	3.90	93.4	46 700	7.50	826	413 000
2.20	13.8	6 920	3.95	97.4	48 700	8.00	1 020	512 000
2.25	14.9	7 460	4.00	102	50 800	8.50	1 250	627 000
2.30	16.1	8 030	4.05	106	52 900	9.00	1 520	758 000
2.35	17.2	8 620	4.10	110	55 200	9.50	1 820	908 000
2.40	18.5	9 250	4.15	115	57 400	10.00	2 150	1 080 000

tion, differs in accordance with the performance required of the bearing and operating conditions.

Therefore, a safety coefficient is designated, based on empirical data, so as to ensure safety in relation to basic static load rating.

$$f_s = \frac{C_0}{P_0} \dots\dots\dots (3.7)$$

where :

f_s : safety coefficient (ref. **Table 3.5**)

C_0 : basic static load rating N

P_0 : static equivalent load N

Table 3.5 Values of safety coefficient f_s

Operating condition		f_s (min.)	
		Ball bearing	Roller bearing
With bearing rotation	When high accuracy is required	2	3
	Normal operation	1	1.5
	When impact load is applied	1.5	3
Without bearing rotation (occasional oscillation)	Normal operation	0.5	1
	When impact load or uneven distribution load is applied	1	2

[Remark] For spherical thrust roller bearings, $f_s \geq 4$.

4 Equivalent load

4.1 Dynamic equivalent load

Bearings are used under various operating conditions; however, in most cases, bearings receive radial and axial load combined, while the load magnitude fluctuates during operation.

Therefore, it is impossible to directly compare the actual load and basic dynamic load rating.

The two are compared by replacing the loads applied to the shaft center with one of a constant magnitude and in a specific direction, that yields the same bearing service life as under actual load and rotational speed.

This theoretical load is referred to as the dynamic equivalent load (P).

4.1.1 Calculation of dynamic equivalent load

Dynamic equivalent loads for radial bearings and thrust bearings ($\alpha \neq 90^\circ$) which receive a combined load of a constant magnitude in a specific direction can be calculated using the following equation,

$$P = XF_r + YF_a \dots\dots\dots (4.1)$$

where :

P : dynamic equivalent load

N

$\left(\begin{array}{l} \text{for radial bearings,} \\ P_r : \text{dynamic equivalent radial load} \\ \text{for thrust bearings,} \\ P_a : \text{dynamic equivalent axial load} \end{array} \right)$

F_r : radial load

N

F_a : axial load

N

X : radial load factor

Y : axial load factor

$\left(\begin{array}{l} \text{values of } X \text{ and } Y \text{ are listed in the bearing} \\ \text{specification table.} \end{array} \right)$

- When $F_a/F_r \leq e$ for single-row radial bearings, it is taken that $X = 1$, and $Y = 0$.
Hence, the dynamic equivalent load rating is $P_r = F_r$.

(Values of e , which designates the limit of F_a/F_r , are listed in the bearing specification table.)
- For single-row tapered roller bearings, axial component forces (F_{ac}) are generated as shown in **Fig. 4.1**, therefore a pair of bearings is arranged face-to-face or back-to-back.
The axial component force can be calculated using the following equation.

$$F_{ac} = \frac{F_r}{2 Y} \dots\dots\dots (4.2)$$

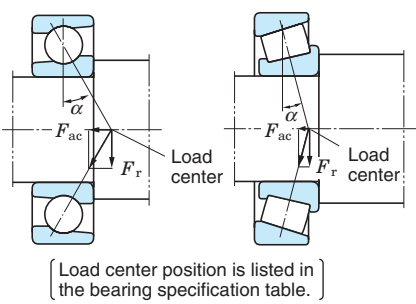


Fig. 4.1 Axial component force

For instance, when radial loads F_{rA} and F_{rB} are on tapered roller bearings A and B as shown in **Table 4.1** and, in addition, a axial load K_a from the outside is on bearing A, the dynamic equivalent loads P_A and P_B on bearings A and B are as follows :

Table 4.1 Dynamic equivalent load calculation :
when a pair of tapered roller bearings is arranged face-to-face or back-to-back.

Paired mounting		Loading condition	Bearing	Axial load	Dynamic equivalent load
Back-to-back arrangement	Face-to-face arrangement				
		$\frac{F_{rB}}{2 Y_B} + K_a \geq \frac{F_{rA}}{2 Y_A}$	Bearing A	$\frac{F_{rB}}{2 Y_B} + K_a$	$P_A = XF_{rA} + Y_A \left(\frac{F_{rB}}{2 Y_B} + K_a \right)$ $P_A = F_{rA}$, where $P_A < F_{rA}$
			Bearing B	—	$P_B = F_{rB}$
		$\frac{F_{rB}}{2 Y_B} + K_a < \frac{F_{rA}}{2 Y_A}$	Bearing A	—	$P_A = F_{rA}$
			Bearing B	$\frac{F_{rA}}{2 Y_A} - K_a$	$P_B = XF_{rB} + Y_B \left(\frac{F_{rA}}{2 Y_A} - K_a \right)$ $P_B = F_{rB}$, where $P_B < F_{rB}$

5 Bearing tolerances

5 Bearing tolerances

5.1 Boundary tolerances for tapered roller bearings

Koyo Inch Series tapered roller bearings are manufactured to the five tolerance levels recognized by the ANSI/ABMA, Classes 4, 2, 3, 0 and 00, in order to ascending precision.

Metric J series For "J" prefix Bearing No. tapered roller bearings are produced in Classes PK, PN, PC and PB, in accordance with industry standards. These classes provide

quality levels suitable for all applications. The higher grades have reduced runout tolerances, producing smoother rotation of the bearings with less noise and vibration.

Improved mounting fits are also obtained because of closer tolerances on bore and outside diameter. Tolerances class 4 to class 00 and class PK to class PB are shown in **Table 5.1**, **5.2**. Koyo tapered roller bearings may be supplied in any precision desired.

Table 5.1 Tolerances and permissible values for Inch series tapered roller bearings

(1) Inner ring

Unit : μm

Nominal bore diameter d				Deviation of a single bore diameter Δ_{ds}									
over		up to		Class 4		Class 2		Class 3		Class 0		Class 00	
mm	inch	mm	inch	upper	lower	upper	lower	upper	lower	upper	lower	upper	lower
–	–	76.2	3.0	+ 13	0	+13	0	+13	0	+13	0	+8	0
76.2	3.0	304.8	12.0	+ 25	0	+25	0	+13	0	+13	0	+8	0
304.8	12.0	609.6	24.0	+ 51	0	+51	0	+25	0	–	–	–	–
609.6	24.0	914.4	36.0	+ 76	0	–	–	+38	0	–	–	–	–
914.4	36.0	1 219.2	48.0	+102	0	–	–	+51	0	–	–	–	–
1 219.2	48.0	–	–	+127	0	–	–	+76	0	–	–	–	–

(2) Outer ring

Unit : μm

Nominal outside diameter D				Deviation of a single outside diameter Δ_{Ds}									
over		up to		Class 4		Class 2		Class 3		Class 0		Class 00	
mm	inch	mm	inch	upper	lower	upper	lower	upper	lower	upper	lower	upper	lower
–	–	304.8	12.0	+ 25	0	+25	0	+13	0	+13	0	+8	0
304.8	12.0	609.6	24.0	+ 51	0	+51	0	+25	0	–	–	–	–
609.6	24.0	914.4	36.0	+ 76	0	+76	0	+38	0	–	–	–	–
914.4	36.0	1 219.2	48.0	+102	0	–	–	+51	0	–	–	–	–
1 219.2	48.0	–	–	+127	0	–	–	+76	0	–	–	–	–

(3) Assembled bearing width

Unit : μm

Nominal bore diameter d				Deviation of the actual bearing width Δ_{Ts}									
over		up to		Class 4		Class 2		Class 3		Class 0		Class 00	
mm	inch	mm	inch	upper	lower	upper	lower	upper	lower	upper	lower	upper	lower
–	–	101.6	4.0	+203	0	+203	0	+203	–203	+203	–203	+203	–203
101.6	4.0	266.7	10.5	+356	–254	+203	0	+203	–203	+203	–203	+203	–203
266.7	10.5	304.8	12.0	+356	–254	+203	0	+203	–203	+203	–203	–	–
304.8	12.0	609.6	24.0 ¹⁾	–	–	+381	–381	+203	–203	–	–	–	–
304.8	12.0	609.6	24.0 ²⁾	–	–	+381	–381	+381	–381	–	–	–	–
609.6	24.0	–	–	+381	–381	–	–	+381	–381	–	–	–	–

[Note] 1) Nominal outside dia. ≤ 508.0 mm (20.0 inches)., 2) Nominal outside diameter > 508.0 mm (20.0 inches).

(4) Radial runout of assembled bearing inner ring / outer ring

Unit : μm

Nominal outside diameter D				Radial runout of assembled bearing K_{ia}, K_{ea}				
over		up to		Class 4	Class 2	Class 3	Class 0	Class 00
mm	inch	mm	inch	max.	max.	max.	max.	max.
–	–	304.8	12.0	51	38	8	4	2
304.8	12.0	609.6	24.0	51	38	18	–	–
609.6	24.0	914.4	36.0	76	51	51	–	–
914.4	36.0	–	–	76	–	76	–	–

Table 5.2 Tolerances for metric "J" series tapered roller bearings

(1) Bore diameter and width of inner ring and assembled bearing width

Unit : μm

Nominal bore diameter d (mm)		Deviation of a single bore diameter Δ_{ds}								Deviation of a single inner ring width Δ_{Bs}								Deviation of the actual bearing width Δ_{Ts}							
		Class PK		Class PN		Class PC		Class PB		Class PK		Class PN		Class PC		Class PB		Class PK		Class PN		Class PC		Class PB	
over	up to	upper	lower	upper	lower	upper	lower	upper	lower	upper	lower	upper	lower	upper	lower	upper	lower	upper	lower	upper	lower	upper	lower	upper	lower
10	18	0	-12	0	-12	0	-7	0	-5	0	-100	0	-50	0	-200	0	-200	+200	0	+100	0	+200	-200	+200	-200
18	30	0	-12	0	-12	0	-8	0	-6	0	-100	0	-50	0	-200	0	-200	+200	0	+100	0	+200	-200	+200	-200
30	50	0	-12	0	-12	0	-10	0	-8	0	-100	0	-50	0	-200	0	-200	+200	0	+100	0	+200	-200	+200	-200
50	80	0	-15	0	-15	0	-12	0	-9	0	-150	0	-50	0	-300	0	-300	+200	0	+100	0	+200	-200	+200	-200
80	120	0	-20	0	-20	0	-15	0	-10	0	-150	0	-50	0	-300	0	-300	+200	-200	+100	0	+200	-200	+200	-200
120	180	0	-25	0	-25	0	-18	0	-13	0	-200	0	-50	0	-300	0	-300	+350	-250	+150	0	+350	-250	+200	-250
180	250	0	-30	0	-30	0	-22	0	-15	0	-200	0	-50	0	-350	0	-350	+350	-250	+150	0	+350	-250	+200	-300
250	315	0	-35	0	-35	0	-22	0	-15	0	-200	0	-50	0	-350	0	-350	+350	-250	+200	0	+350	-300	+200	-300

(2) Outside diameter and width of outer ring and radial runout of assembled bearing inner ring / outer ring

Unit : μm

Nominal outside diameter D (mm)		Deviation of a single outside diameter Δ_{Ds}								Deviation of a single outer ring width Δ_{Cs}								Radial runout of assembled bearing K_{ia}, K_{ea}			
		Class PK		Class PN		Class PC		Class PB		Class PK		Class PN		Class PC		Class PB		Class PK	Class PN	Class PC	Class PB
over	up to	upper	lower	upper	lower	upper	lower	upper	lower	upper	lower	upper	lower	upper	lower	upper	lower	max.	max.	max.	max.
18	30	0	-12	0	-12	0	-8	0	-6	0	-150	0	-100	0	-150	0	-150	18	18	5	3
30	50	0	-14	0	-14	0	-9	0	-7	0	-150	0	-100	0	-150	0	-150	20	20	6	3
50	80	0	-16	0	-16	0	-11	0	-9	0	-150	0	-100	0	-150	0	-150	25	25	6	4
80	120	0	-18	0	-18	0	-13	0	-10	0	-200	0	-100	0	-200	0	-200	35	35	6	4
120	150	0	-20	0	-20	0	-15	0	-11	0	-200	0	-100	0	-200	0	-200	40	40	7	4
150	180	0	-25	0	-25	0	-18	0	-13	0	-200	0	-100	0	-250	0	-250	45	45	8	4
180	250	0	-30	0	-30	0	-20	0	-15	0	-250	0	-100	0	-250	0	-250	50	50	10	5
250	315	0	-35	0	-35	0	-25	0	-18	0	-250	0	-100	0	-300	0	-300	60	60	11	5
315	400	0	-40	0	-40	0	-28	–	–	0	-250	0	-100	0	-300	–	–	70	70	13	–

6 Numbering system

The numbering system of the inch series tapered roller bearings is specified by the ABMA Standard as follows.

This will provide a guideline for identification of duty,

angularity and dimensions of the inch series tapered roller bearings.

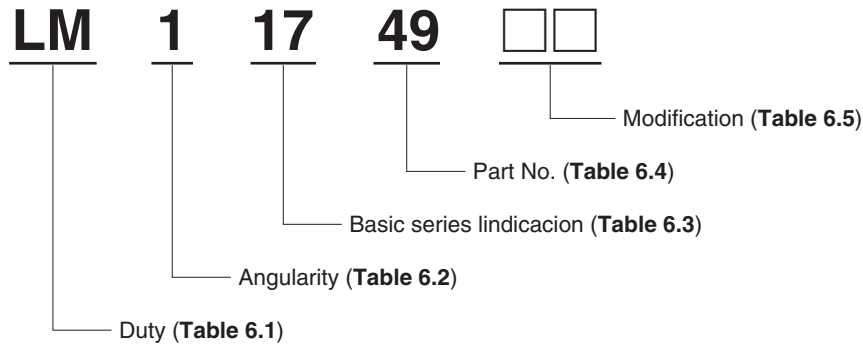


Table 6.1 Duty

Inch series tapered roller bearings will be divided into ten classes according to their duty as follows :

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

Table 6.2 Angularity

The first digit following the prefix letters will indicate approximately the included angle (α) of the outer race or the outer ring angle according to the following code.

Code	Details
1	0 $< \alpha < 24^\circ$
2	$24^\circ \leq \alpha < 25^\circ 30'$
3	$25^\circ 30' \leq \alpha < 27^\circ$
4	$27^\circ \leq \alpha < 28^\circ 30'$
5	$28^\circ 30' \leq \alpha < 28^\circ 30'$
6	$30^\circ 30' < \alpha < 32^\circ 30'$
7	$32^\circ 30' \leq \alpha < 36^\circ$
8	$36^\circ \leq \alpha < 45^\circ$
9	$45^\circ \leq \alpha$, but not thrust only
0	Thrust bearing only

Table 6.3 Basic series indication

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

Series indication	Max. bore range (inch)
00 to 19 incl.	0 – 1
20 to 99 incl.	1 – 2
000 to 029 incl.	
039 to 129 incl.	2 – 3
130 to 189 incl.	3 – 4
190 to 239 incl.	4 – 5
240 to 289 incl.	5 – 6
290 to 339 incl.	6 – 7
340 to 389 incl.	7 – 8
390 to 429 incl.	8 – 9

Table 6.4 Part No.

The 5th and 6th digits or the last two digits of the bearing number indicate the part number of the individual member of the bearing.

Bearing member	Code
Outer ring : (Cup)	Expressed by 10 to 19, and 10 is used for the outer ring of the minimum outside diameter of the series.
Inner ring : (Cone)	Expressed by 30 to 49, and 49 is used for the inner ring of the maximum bore size of the series.

Table 6.5 Modification

These codes indicate the special design features. Some examples are;

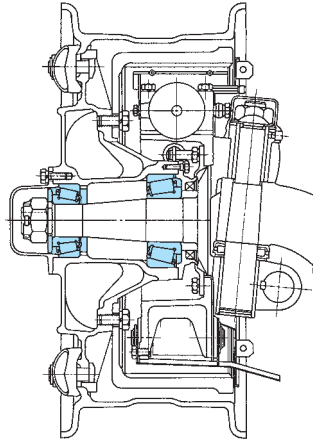
Code	Details
A	Bearing limit for overall width or size in master closer then standard.
B	Single outer ring with flange.
BR	Single or double outer ring or inner ring with snap ring.
BW	Single outer ring with flange and slotted.
CR	Rib outer ring.
CP	Chrome plated inner ring and outer ring.
D	Double inner ring or outer ring – minimum length.
DA	Spherical O.D. – double outer ring – self-aligning –

7 Typical applications

Automotive

• Front wheels

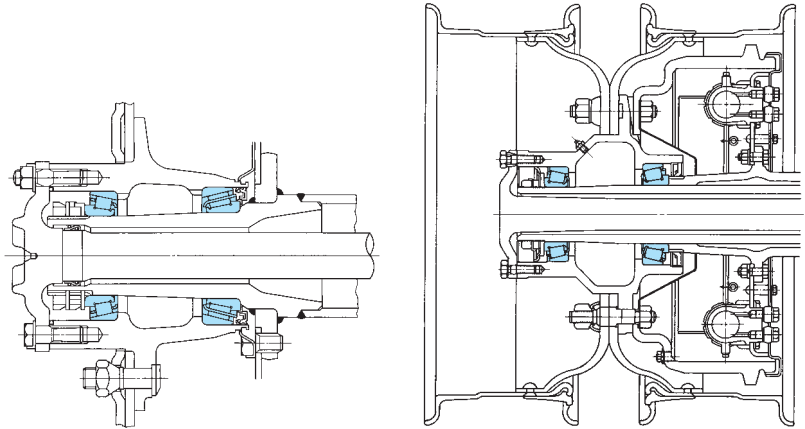
In general, automotive front wheel bearings are primarily subjected to radial loads. However, during cornering or running on bad roads, substantial moment loads can be imposed. Therefore, it is extremely important to select bearings which can absorb these moment loads without difficulty. At the present time, two tapered roller bearings are generally used in each front wheels of trucks.



• Rear wheels

Tapered roller bearings are generally used in rear wheels of trucks and buses over 2 tons in gross vehicle weight.

Since the inner ring and outer ring can misalign during cornering, which can have an adverse affect on service life, bearings which offer superior performance under these conditions should be selected.

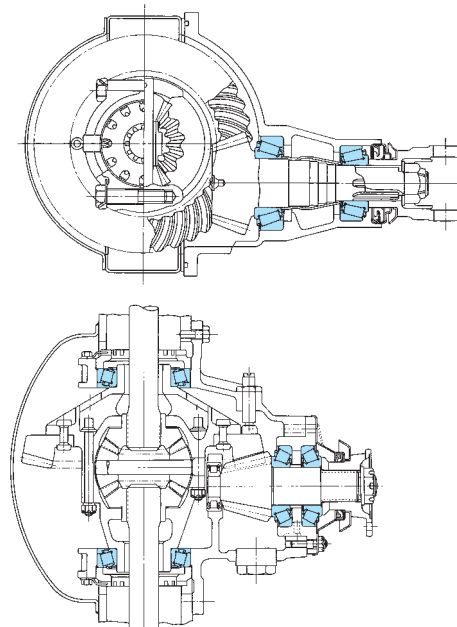


• Differentials

The bearings used in automotive differentials are preloaded to maintain accuracy between the drive pinion and ring gear. The accuracy of gear engagement affects greatly the performance of the differential as well as running noise.

From this point of view, it is necessary to select bearings which will provide optimum rigidity so that satisfactory engagement of the gears is obtained during operation. The pinion shaft is supported by either two tapered roller bearings (cantilever mount) mounted back to back, or two steep angle tapered roller bearings plus a single cylindrical roller bearing opposite the tapered roller bearings (straddle mount).

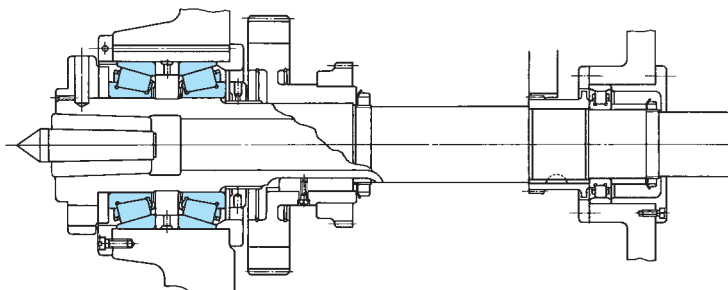
The differential ring gear is supported by tapered roller bearings mounted face to face.



General industries

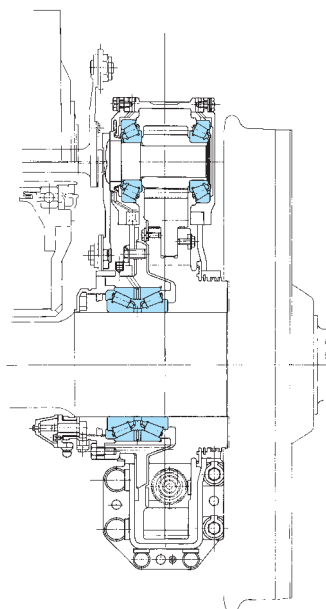
• Machine tool spindles

Tapered roller bearings are widely used to support spindles of various machine tools such as engine lathes and milling machines. Since these spindles require rigidity and accuracy of guidance in both radial and axial directions, a pair of tapered roller bearings are usually mounted in a back-to-back arrangement and adjusted to obtain the proper preload. In addition to providing rigid radial and axial support, tapered roller bearings simplify the machine structure and promote simple preload adjustment.

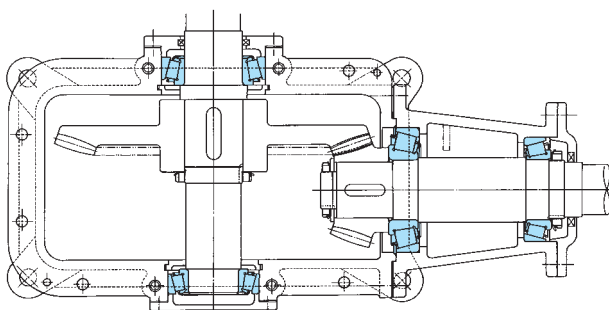


• Electric railway car gear units

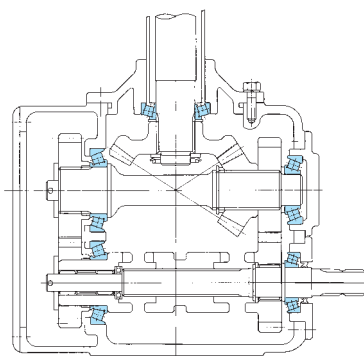
The driving axes of electric cars are equipped with gearing units to transmit the torque and rotation generated by the traction main motors. In the parallel cardan gear units (currently more widely used than square cardan gear units), both the pinion shaft and gear housing are generally fitted with tapered roller bearings.



• Bevel-gear units



• Farm equipment, transmission



Specification tables of tapered roller bearings

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	339	49		
	339X	49		
	340	47		
	341	37		
	342	55		
	342A	55		
	342S	57		
	343	47		
	344	53		
	344A	53		
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	355A	59	354A	53,57,59,61
	355X	59	354X	53
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	358	61		
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	367	61		
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Series No.	Inner ring (Cone)	Page	Outer ring (Cup)	Page
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	389S	69		
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	416	41		55
	417	47	414A	41,49,53
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	420	55		
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	436	61		59
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Series No.	Inner ring (Cone)	Page	Outer ring (Cup)	Page
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	496	83		
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	529	65		
	529X	65		
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	539A	67	533A	67
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	568	81		
	569	75		
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	862R	89		
	863R	91		
	863XR	91		
	864R	89		
	864XR	83		
	865XR	85		
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			1329	37
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L555200	L555249	97	L555210	97
L570600	L570649	97	L570610	97
LL575300	LL575349	97	LL575310	97
LM603000	LM603049	61	LM603011	61
			LM603012	61
			LM603014	61
			LM603015	61
LM613400	LM613449	77	LM613410	77
HM617000	HM617045	85	HM617010	85
	HM617048	85		
	HM617049	85		
L623100	L623149	93	L623110	93
			L623114	93
HM624700	HM624749	93	HM624710	93
			HM624716	93
640000	EE640192	97	640260	97
649000	EE649240	97	649310	97

Series No.	Inner ring (Cone)	Page	Outer ring (Cup)	Page
LL713000	LL713049	77	LL713010	77
H715300	H715332	73	H715310	73,75,77,79
	H715334	73		
	H715336	75		
	H715340	75		
	H715341	77		
	H715343	77		
	H715344	79		
LM770900	LM770945	97	LM770910	97
LM772700	LM772748	97	LM772710	97
776000	EE776430	97	776520	97
LL778100	LL778149	97	LL778110	97
HM801300	HM801346	51	HM801310	51,55
	HM801346X	51		
	HM801349	55		
M802000	M802048	55	M802011	55
HM803100	HM803145	55	HM803110	55,59
	HM803146	55		
	HM803149	59		
M804000	M804049	61	M804010	61
HM804800	HM804840	57	HM804810	57,59,61,63
	HM804842	59		
	HM804843	59		
	HM804846	61		
	HM804848	63		
	HM804849	63		
	HM804849	63		
LM806600	LM806649	67	LM806610	67
HM807000	HM807035	57	HM807010	57,59,63,65,67
	HM807040	59		
	HM807044	63		
	HM807046	65		
	HM807049	67		
	HM807049	67		
HM813800	HM813836	67	HM813810	69,73,75,77,79
	HM813840	69		
	HM813841	73		
	HM813841A	73		
	HM813842	75		
	HM813843	73		
	HM813844	77		
	HM813846	79		
	HM813849	79		
LM814800	LM814845	79	LM814810	79,83
	LM814849	83		
L879900	L879947	97	L879910	97

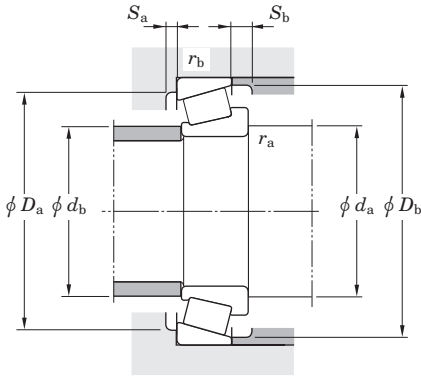
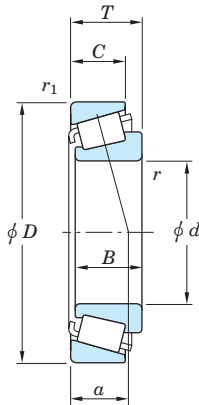
8 Series No. INDEX

Series No.	Inner ring (Cone)	Page	Outer ring (Cup)	Page
HM903200	HM903241	99	HM903210	99,101
	HM903245	99		
	HM903248	101		
	HM903249	99		
M903300	M903345	99	M903310	99
HM907600	HM907635	99	HM907614	99,101
	HM907639	101		
	HM907643	101		
HM911200R	HM911242R	101	HM911210	101
	HM911245R	101		
	HM911249R	101		
H913800R	H913842R	101	H913810	101,103
	H913849R	103		
HH914400	HH914449	101	HH914412	101
HH923600	HH923649	103	HH923610	103
			HH923611	103
H924000	H924045	103	H924010	103
HH926700	HH926744	93	HH926710	93
	HH926749	93	HH926716	93
HM926700	HM926740	103	HM926710	103
	HM926747	103		
	HM926749	103		
HH932100	HH932132	103	HH932110	103
	HH932145	103		
H936300	H936340	103	H936310	103
	H936349	103	H936316	103
HH953700	HH953749	103	HH953710	103
H961600	H961649	103	H961610	103
LM961500	LM961548	103	LM961510	103

Metric "J" series

Series No.	Inner ring (Cone)	Page	Outer ring (Cup)	Page
JL69300	JL69349	105	JL69310	105
JLM104900	JLM104948	105	JLM104910	105
JM205100	JM205149	105	JM205110	105
JM207000	JM207049	105	JM207010	105
JH211700	JH211749	105	JH211710	105
	JH211749A	105		
JH217200	JH217249	105	JH217210	105
JH307700	JH307749	105	JH307710	105
JHM318400	JHM318448	105	JHM318410	105
JH415600	JH415647	105	JH415610	105
JLM506800	JLM506849	105	JLM506810	105
JLM508700	JLM508748	105	JLM508710	105
JM511900	JM511946	105	JM511910	105
JM515600	JM515649	105	JM515610	105
JHM516800	JHM516849	105	JHM516810	105
JHM522600	JHM522649	105	JHM522610	105
JHM534100	JHM534149	105	JHM534110	105
JM612900	JM612949	105	JM612910	105
JLM710900	JLM710949	105	JLM710910	105
JLM714100	JLM714149	105	JLM714110	105
JM714200	JM714249	105	JM714210	105
JM716600	JM716649	105	JM716610	105
JM718100	JM718149	105	JM718110	105
JM719100	JM719149	105	JM719113	105
JHM720200	JHM720249	105	JHM720210	105
JM720200	JM720249	105	JM720210	105
JM734400	JM734449	105	JM734410	105
JM736100	JM736149	105	JM736110	105
JM738200	JM738249	105	JM738210	105
JHM807000	JHM807045	105	JHM807012	105
JLM813000	JLM813049	105	JLM813010	105
JM822000	JM822049	105	JM822010	105
JHM840400	JHM840449	105	JHM840410	105

TS type
d 7.938 ~ 20.638 mm
0.3125 ~ 0.8125 inch

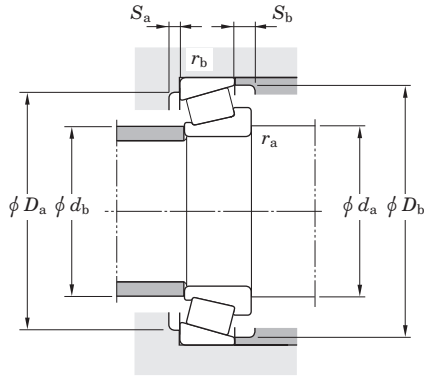
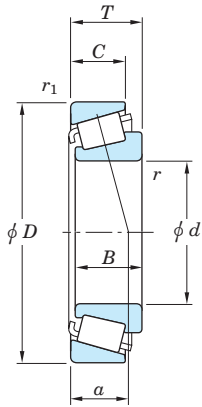


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN) (500 rpm for 3 000 Hrs.)		Factor		
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>	<i>a</i>	<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	(500 rpm for 3 000 Hrs.)		<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				Radial	Axial	
7.938	0.3125	31.991	1.2595	10.008	0.3940	10.785	0.4246	7.938	0.3125	0.5	0.02	1.2	0.05	10.7	9.30		A2031	A2126	7.1	0.28	12.5	0.49	12.5	0.49	26.0	1.02	29.0	1.14	0.40	1.48	0.82	3.10	2.15	1.45
9.525	0.3750	31.991	1.2595	10.008	0.3940	10.785	0.4246	7.938	0.3125	1.2	0.05	1.2	0.05	10.7	9.30		A2037	A2126	7.1	0.28	15.0	0.59	13.5	0.53	26.0	1.02	29.0	1.14	0.40	1.48	0.82	3.10	2.15	1.45
11.112	0.4375	31.991	1.2595	10.008	0.3940	14.351	0.5650	7.938	0.3125	0.8	0.03	1.2	0.05	10.7	9.30		A2043	A2126	7.1	0.28	15.5	0.61	14.5	0.57	26.0	1.02	29.0	1.14	0.40	1.48	0.82	3.10	2.15	1.45
	0.4375	34.988	1.3775	10.998	0.4330	10.988	0.4326	8.730	0.3437	1.2	0.05	1.2	0.05	12.6	11.9		A4044	A4138	8.3	0.33	17.5	0.69	15.5	0.61	29.0	1.14	32.0	1.26	0.45	1.33	0.73	3.65	2.80	1.29
11.986	0.4719	31.991	1.2595	10.008	0.3940	10.785	0.4246	7.938	0.3125	0.8	0.03	1.2	0.05	10.7	9.30		A2047	A2126	7.1	0.28	16.5	0.65	15.5	0.61	26.0	1.02	29.0	1.14	0.40	1.48	0.82	3.10	2.15	1.45
12.700	0.5000	34.988	1.3775	10.998	0.4330	10.988	0.4326	8.730	0.3437	1.2	0.05	1.2	0.05	12.6	11.9		A4050	A4138	8.3	0.33	18.5	0.73	17.0	0.67	29.0	1.14	32.0	1.26	0.45	1.33	0.73	3.65	2.80	1.29
14.989	0.5901	34.988	1.3775	10.998	0.4330	10.988	0.4326	8.730	0.3437	0.8	0.03	1.2	0.05	12.6	11.9		A4059	A4138	8.3	0.33	19.5	0.77	19.0	0.75	29.0	1.14	32.0	1.26	0.45	1.33	0.73	3.65	2.80	1.29
15.875	0.6250	34.988	1.3775	10.998	0.4330	10.998	0.4330	8.712	0.3430	1.2	0.05	1.2	0.05	14.5	14.3		L21549	L21511	7.6	0.30	21.5	0.85	19.5	0.77	29.0	1.14	32.5	1.28	0.32	1.88	1.04	4.15	2.25	1.83
	0.6250	39.992	1.5745	12.014	0.4730	11.153	0.4391	9.525	0.3750	1.2	0.05	1.2	0.05	14.5	15.1		A6062	A6157	10.3	0.41	22.0	0.87	20.5	0.81	34.0	1.34	37.0	1.46	0.53	1.14	0.63	4.20	3.75	1.11
	0.6250	41.275	1.6250	14.288	0.5625	14.681	0.5780	11.112	0.4375	1.2	0.05	2.0	0.08	21.8	20.5		03062	03162	9.3	0.37	21.5	0.85	20.0	0.79	34.0	1.34	37.5	1.48	0.31	1.93	1.06	6.30	3.35	1.88
	0.6250	42.862	1.6875	16.670	0.6563	16.670	0.6563	13.495	0.5313	1.6	0.06	1.6	0.06	30.6	29.5		17580R	17520	10.9	0.43	23.0	0.91	21.0	0.83	36.5	1.44	39.0	1.54	0.33	1.81	1.00	8.80	4.95	1.77
	0.6250	49.225	1.9380	19.845	0.7813	21.539	0.8480	14.288	0.5625	0.8	0.03	1.2	0.05	37.7	37.7		09062	09195	10.6	0.42	22.0	0.87	21.5	0.85	42.0	1.65	44.5	1.75	0.27	2.26	1.24	10.9	4.95	2.20
	0.6250	53.975	2.1250	22.225	0.8750	21.839	0.8598	15.875	0.6250	0.8	0.03	2.4	0.09	42.0	41.2		21063	21212	16.6	0.65	29.0	1.14	26.5	1.04	43.0	1.69	50.0	1.97	0.59	1.02	0.56	12.2	12.3	0.99
16.000	0.6299	47.000	1.8504	21.000	0.8268	21.000	0.8268	16.000	0.6299	1.0	0.04	2.0	0.08	36.3	37.7		HM81649	HM81610	15.0	0.59	27.5	1.08	23.0	0.91	37.5	1.48	43.0	1.69	0.55	1.10	0.60	10.5	9.85	1.07
16.993	0.6690	41.275	1.6250	11.905	0.4687	11.153	0.4391	8.730	0.3437	0.8	0.03	1.2	0.05	14.5	15.1		A6067	A6162	10.2	0.40	22.0	0.87	21.0	0.83	34.5	1.36	37.0	1.46	0.53	1.14	0.63	4.20	3.75	1.11
17.000	0.6693	49.225	1.9380	23.020	0.9063	21.539	0.8480	17.462	0.6875	2.0	0.08	1.6	0.06	37.7	37.7		09099X	09196	13.8	0.54	27.0	1.06	24.0	0.94	41.5	1.63	44.5	1.75	0.27	2.26	1.24	10.9	4.95	2.20
17.462	0.6875	39.878	1.5700	13.843	0.5450	14.605	0.5750	10.668	0.4200	1.2	0.05	1.2	0.05	25.4	26.0		LM11749R	LM11710	8.6	0.34	23.0	0.91	21.5	0.85	34.0	1.34	37.0	1.46	0.29	2.10	1.15	7.30	3.55	2.04
17.653	0.6950	49.225	1.9380	23.020	0.9063	21.539	0.8480	17.462	0.6875	2.4	0.09	1.6	0.06	37.7	37.7		09070	09196	13.8	0.54	26.0	1.02	24.0	0.94	41.5	1.63	44.5	1.75	0.27	2.26	1.24	10.9	4.95	2.20
18.000	0.7087	49.225	1.9380	23.020	0.9063	21.539	0.8480	17.462	0.6875	1.0	0.04	1.6	0.06	37.7	37.7		09073X	09196	13.8	0.54	23.0	0.91	24.0	0.94	41.5	1.63	44.5	1.75	0.27	2.26	1.24	10.9	4.95	2.20
19.004	0.7482	56.896	2.2400	19.368	0.7625	19.837	0.7810	15.875	0.6250	1.6	0.06	1.2	0.05	40.0	43.1		1774	1729	12.5	0.49	27.0	1.06	25.0	0.98	49.0	1.93	51.0	2.01	0.31	1.95	1.07	11.6	6.10	1.90
	0.7482	56.896	2.2400	19.368	0.7625	19.837	0.7810	15.875	0.6250	1.6	0.06	1.6	0.06	40.0	43.1		1774	1729X	12.5	0.49	27.0	1.06	25.0	0.98	49.0	1.93	52.0	2.05	0.31	1.95	1.07	11.6	6.10	1.90
19.050	0.7500	39.992	1.5745	12.014	0.4730	11.153	0.4391	9.525	0.3750	1.0	0.04	1.2	0.05	14.5	15.1		A6075	A6157	10.3	0.41	24.0	0.94	23.0	0.91	34.0	1.34	37.0	1.46	0.53	1.14	0.63	4.20	3.75	1.11
	0.7500	45.237	1.7810	15.494	0.6100	16.637	0.6550	12.065	0.4750	1.2	0.05	1.2	0.05	29.4	30.1		LM11949	LM11910	10.0	0.39	25.0	0.98	23.5	0.93	39.5	1.56	41.5	1.63	0.30	2.00	1.10	8.45	4.35	1.95
	0.7500	49.225	1.9380	19.845	0.7813	21.539	0.8480	14.288	0.5625	1.2	0.05	1.2	0.05	37.7	37.7		09078	09195	10.6	0.42	25.5	1.00	24.0	0.94	42.0	1.65	44.5	1.75	0.27	2.26	1.24	10.9	4.95	2.20
	0.7500	49.225	1.9380	21.209	0.8350	19.050	0.7500	17.462	0.6875	1.2	0.05	1.6	0.06	37.7	37.7		09067	09196	13.8	0.54	25.5	1.00	24.0	0.94	41.5	1.63	44.5	1.75	0.27	2.26	1.24	10.9	4.95	2.20
	0.7500	49.225	1.9380	23.020	0.9063	21.539	0.8480	17.462	0.6875	SP ¹⁾	SP ¹⁾	3.6	0.14	37.7	37.7		09074	09194	13.8	0.54	26.0	1.02	24.0	0.94	39.0	1.54	44.5	1.75	0.27	2.26	1.24	10.9	4.95	2.20
	0.7500	49.225	1.9380	23.020	0.9063	21.539	0.8480	17.462	0.6875	1.6	0.06	1.6	0.06	37.7	37.7		09078X	09196	13.8	0.54	25.5	1.00	24.0	0.94	41.5	1.63	44.5	1.75	0.27	2.26	1.24	10.9	4.95	2.20
	0.7500	53.975	2.1250	19.368	0.7625	19.837	0.7810	15.875	0.6250	1.6	0.06</																							

TS type
d 21.430 ~ (25.400) mm
0.8437 ~ (1.0000) inch

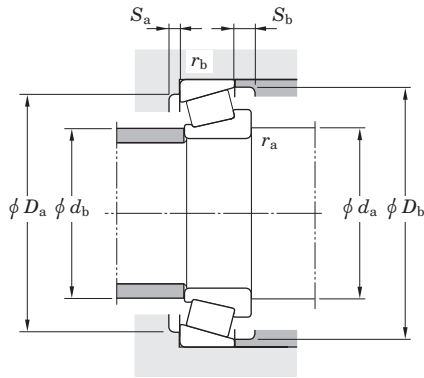
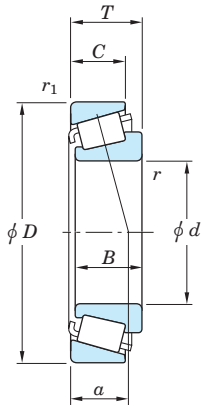


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN) (500 rpm for 3 000 Hrs.)		Factor		
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀			<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				Radial	Axial	
21.430	0.8437	50.005	1.9687	17.526	0.6900	18.288	0.7200	13.970	0.5500	1.2	0.05	1.2	0.05	39.1	40.7		M12649	M12610	11.1	0.44	27.5	1.08	25.5	1.00	44.0	1.73	46.0	1.81	0.28	2.16	1.19	11.2	5.35	2.10
21.987	0.8656	45.974	1.8100	15.494	0.6100	16.637	0.6550	12.065	0.4750	1.2	0.05	1.2	0.05	30.1	34.6		LM12749	LM12711	10.0	0.39	27.5	1.08	26.0	1.02	40.0	1.57	42.5	1.67	0.31	1.96	1.08	8.65	4.50	1.91
22.225	0.8750	50.005	1.9687	17.526	0.6900	18.288	0.7200	13.970	0.5500	1.2	0.05	1.2	0.05	39.1	40.7		M12648	M12610	11.1	0.44	28.5	1.12	26.5	1.04	44.0	1.73	46.0	1.81	0.28	2.16	1.19	11.2	5.35	2.10
	0.8750	50.005	1.9687	17.526	0.6900	18.288	0.7200	13.970	0.5500	1.2	0.05	1.2	0.05	39.1	40.7		M12648A	M12610	11.1	0.44	28.5	1.12	26.5	1.04	44.0	1.73	46.0	1.81	0.28	2.16	1.19	11.2	5.35	2.10
	0.8750	50.800	2.0000	15.011	0.5910	14.260	0.5614	12.700	0.5000	1.2	0.05	1.6	0.06	26.7	28.8		07087	07210X	12.3	0.48	28.5	1.12	27.0	1.06	44.5	1.75	47.5	1.87	0.40	1.49	0.82	7.65	5.25	1.46
	0.8750	52.388	2.0625	19.368	0.7625	20.168	0.7940	14.288	0.5625	1.6	0.06	1.6	0.06	36.7	37.9		1380	1328	11.6	0.46	29.5	1.16	29.5	1.16	45.0	1.77	48.5	1.91	0.29	2.05	1.13	10.7	5.35	2.00
	0.8750	53.975	2.1250	19.368	0.7625	20.168	0.7940	14.288	0.5625	1.6	0.06	1.6	0.06	36.7	37.9		1380	1329	11.6	0.46	29.5	1.16	29.5	1.16	46.0	1.81	49.0	1.93	0.29	2.05	1.13	10.7	5.35	2.00
	0.8750	56.896	2.2400	19.368	0.7625	19.837	0.7810	15.875	0.6250	1.2	0.05	1.2	0.05	40.0	43.1		1755	1729	12.5	0.49	29.0	1.14	27.5	1.08	49.0	1.93	51.0	2.01	0.31	1.95	1.07	11.6	6.10	1.90
	0.8750	57.150	2.2500	17.462	0.6875	17.462	0.6875	13.495	0.5313	1.6	0.06	1.6	0.06	37.8	42.7		15572	15520	12.7	0.50	32.5	1.28	30.5	1.20	51.0	2.01	53.0	2.09	0.35	1.73	0.95	10.8	6.40	1.69
	0.8750	57.150	2.2500	19.845	0.7813	19.355	0.7620	15.875	0.6250	0.8	0.03	1.6	0.06	48.8	57.1		1975R	1922	13.9	0.55	29.0	1.14	28.0	1.10	51.0	2.01	53.5	2.11	0.33	1.82	1.00	14.0	7.90	1.77
	0.8750	57.150	2.2500	22.225	0.8750	22.225	0.8750	17.462	0.6875	0.8	0.03	1.6	0.06	52.6	55.7		1280	1220	15.3	0.60	29.5	1.16	29.0	1.14	49.0	1.93	52.0	2.05	0.35	1.73	0.95	15.2	9.00	1.69
	0.8750	66.421	2.6150	23.812	0.9375	25.433	1.0013	19.050	0.7500	1.6	0.06	1.2	0.05	67.0	75.2		2684	2631	13.9	0.55	31.5	1.24	29.0	1.14	58.0	2.28	60.0	2.36	0.25	2.36	1.30	19.5	8.45	2.30
0.8750	80.000	3.1496	20.996	0.8266	22.403	0.8820	17.826	0.7018	0.8	0.03	1.2	0.05	68.0	74.8		341	332	15.1	0.59	33.5	1.32	32.0	1.26	73.0	2.87	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14	
22.606	0.8900	47.000	1.8504	15.500	0.6102	15.500	0.6102	12.000	0.4724	1.6	0.06	1.0	0.04	28.0	32.8		LM72849	LM72810	12.3	0.48	30.0	1.18	28.0	1.10	40.5	1.59	44.0	1.73	0.47	1.27	0.70	8.05	6.50	1.24
23.812	0.9375	50.292	1.9800	14.224	0.5600	14.732	0.5800	10.668	0.4200	1.6	0.06	1.2	0.05	31.2	37.0		L44640R	L44610	10.8	0.43	30.5	1.20	28.5	1.12	44.5	1.75	47.0	1.85	0.37	1.60	0.88	8.95	5.70	1.56
	0.9375	52.000	2.0472	15.011	0.5910	14.260	0.5614	12.700	0.5000	1.6	0.06	2.0	0.08	26.7	28.8		07093	07205	12.3	0.48	30.5	1.20	28.5	1.12	44.5	1.75	48.0	1.89	0.40	1.49	0.82	7.65	5.25	1.46
	0.9375	56.896	2.2400	19.368	0.7625	19.837	0.7810	15.875	0.6250	0.8	0.03	1.2	0.05	40.0	43.1		1779	1729	12.5	0.49	29.5	1.16	28.5	1.12	49.0	1.93	51.0	2.01	0.31	1.95	1.07	11.6	6.10	1.90
	0.9375	56.896	2.2400	19.368	0.7625	19.837	0.7810	15.875	0.6250	0.8	0.03	1.6	0.06	40.0	43.1		1779	1729X	12.5	0.49	29.5	1.16	28.5	1.12	49.0	1.93	52.0	2.05	0.31	1.95	1.07	11.6	6.10	1.90
	0.9375	66.421	2.6150	23.812	0.9375	25.433	1.0013	19.050	0.7500	0.8	0.03	1.2	0.05	67.0	75.2		2685	2631	13.9	0.55	30.5	1.20	30.0	1.18	58.0	2.28	60.0	2.36	0.25	2.36	1.30	19.5	8.45	2.30
	0.9375	71.996	2.8345	19.000	0.7480	18.923	0.7450	15.875	0.6250	2.4	0.09	1.6	0.06	47.5	49.6		26093	26283	15.3	0.60	35.0	1.38	32.0	1.26	62.0	2.44	65.0	2.56	0.36	1.67	0.92	13.7	8.40	1.63
24.981	0.9835	50.005	1.9687	13.495	0.5313	14.260	0.5614	9.525	0.3750	1.6	0.06	1.0	0.04	26.7	28.8		07098	07196	10.8	0.43	31.0	1.22	29.0	1.14	44.5	1.75	47.0	1.85	0.40	1.49	0.82	7.65	5.25	1.46
	0.9835	62.000	2.4409	16.002	0.6300	16.566	0.6522	14.288	0.5625	1.6	0.06	1.6	0.06	38.0	40.6		17098	17244	12.7	0.50	33.0	1.30	30.5	1.20	54.0	2.13	57.0	2.24	0.38	1.57	0.86	10.9	7.15	1.53
25.000	0.9842	50.005	1.9687	13.495	0.5313	14.260	0.5614	9.525	0.3750	1.6	0.06	1.0	0.04	26.7	28.8		07097	07196	10.8	0.43	31.0	1.22	29.0	1.14	44.5	1.75	47.0	1.85	0.40	1.49	0.82	7.65	5.25	1.46
	0.9842	62.000	2.4409	16.002	0.6300	16.566	0.6522	14.288	0.5625	1.6	0.06	1.6	0.06	38.0	40.6		17098X	17244	12.7	0.50	33.0	1.30	30.5	1.20	54.0	2.13	57.0	2.24	0.38	1.57	0.86	10.9	7.15	1.53
	0.9842	66.421	2.6150	23.812	0.9375	25.433	1.0013	19.050	0.7500	2.0	0.08	1.2	0.05	67.0	75.2		2694X	2631	13.9	0.55	33.0	1.30	31.0	1.22	58.0	2.28	60.0	2.36	0.25	2.36	1.30	19.5	8.45	2.30
	0.9842	72.626	2.8593	30.162	1.1875	29.997	1.1810	23.812	0.9375	3.6	0.14	3.2	0.13	78.8	89.3		3188X	3120	20.3	0.80	40.0	1.57	35.0	1.38	61.0	2.40	67.0	2.64	0.33	1.80	0.99	23.0	13.1	1.76
25.400	1.0000	50.005	1.9687	13.495	0.5313	14.260	0.5614	9.525	0.3750	1.0	0.04	1.0	0.04	26.7	28.8		07100	07196	10.8	0.43	30.5	1.20	29.5	1.16	44.5	1.75	47.0	1.85	0.40	1.49	0.82	7.65	5.25	1.46
	1.0000	50.005	1.9687	13.495	0.5313	14.260	0.5614	9.525	0.3750	1.6	0.06	1.0	0.04	26.7	28.8		07100S	07196	10.8	0.43	31.5	1.24	29.5	1.16	44.5	1.75	47.0							

TS type
d (25.400) ~ (28.575) mm
(1.0000) ~ (1.1250) inch

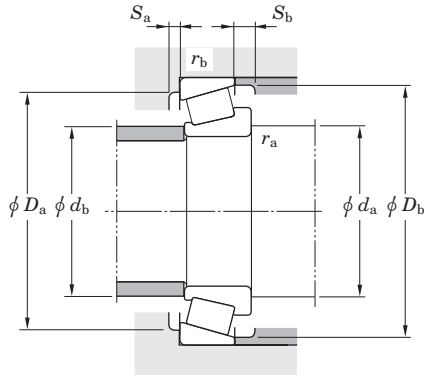
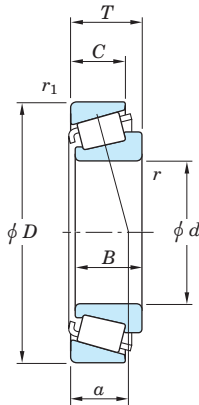


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor			
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	(500 rpm for 3 000 Hrs.)		<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
25.400	1.0000	63.500	2.5000	19.050	0.7500	20.638	0.8125	14.288	0.5625	0.8	0.03	1.2	0.05	44.6	50.7		15101	15250R	13.2	0.52	32.5	1.28	31.5	1.24	55.0	2.17	59.0	2.32	0.35	1.71	0.94	12.9	7.75	1.67
	1.0000	63.500	2.5000	20.638	0.8125	20.638	0.8125	15.875	0.6250	3.6	0.14	1.2	0.05	44.6	50.7		15100	15250	15.0	0.59	38.0	1.50	31.5	1.24	55.0	2.17	59.0	2.32	0.35	1.71	0.94	12.9	7.75	1.67
	1.0000	63.500	2.5000	20.638	0.8125	20.638	0.8125	15.875	0.6250	3.6	0.14	1.6	0.06	44.6	50.7		15100	15250X	15.0	0.59	38.0	1.50	31.5	1.24	55.0	2.17	59.0	2.32	0.35	1.71	0.94	12.9	7.75	1.67
	1.0000	63.500	2.5000	20.638	0.8125	20.638	0.8125	15.875	0.6250	1.6	0.06	1.6	0.06	44.6	50.7		15102	15250X	15.0	0.59	34.0	1.34	31.5	1.24	55.0	2.17	59.0	2.32	0.35	1.71	0.94	12.9	7.75	1.67
	1.0000	64.292	2.5312	21.432	0.8438	21.432	0.8438	16.670	0.6563	1.6	0.06	1.6	0.06	55.2	70.7		M86643R	M86610	18.0	0.71	38.0	1.50	36.5	1.44	54.0	2.13	61.0	2.40	0.55	1.10	0.60	16.0	14.9	1.07
	1.0000	66.421	2.6150	23.812	0.9375	25.433	1.0013	19.050	0.7500	1.2	0.05	1.2	0.05	67.0	75.2		2687	2631	13.9	0.55	33.5	1.32	31.5	1.24	58.0	2.28	60.0	2.36	0.25	2.36	1.30	19.5	8.45	2.30
	1.0000	68.262	2.6875	22.225	0.8750	22.225	0.8750	17.462	0.6875	0.8	0.03	1.6	0.06	51.0	61.1		02473	02420	17.1	0.67	34.5	1.36	33.5	1.32	59.0	2.32	63.0	2.48	0.42	1.44	0.79	14.8	10.5	1.41
	1.0000	68.262	2.6875	22.225	0.8750	22.225	0.8750	17.462	0.6875	0.8	0.03	0.8	0.03	51.0	61.1		02473	02421	17.1	0.67	34.5	1.36	33.5	1.32	59.0	2.32	63.0	2.48	0.42	1.44	0.79	14.8	10.5	1.41
	1.0000	72.000	2.8346	19.000	0.7480	18.923	0.7450	15.875	0.6250	1.6	0.06	1.6	0.06	47.5	49.6		26100	26283	15.3	0.60	34.5	1.36	32.5	1.28	62.0	2.44	65.0	2.56	0.36	1.67	0.92	13.7	8.40	1.63
	1.0000	72.233	2.8438	25.400	1.0000	25.400	1.0000	19.842	0.7812	0.8	0.03	2.4	0.09	66.9	87.4		HM88630	HM88610	20.7	0.81	39.5	1.56	39.5	1.56	60.0	2.36	69.0	2.72	0.55	1.10	0.60	19.6	18.3	1.07
	1.0000	72.626	2.8593	24.608	0.9688	24.257	0.9550	17.462	0.6875	2.4	0.09	1.6	0.06	61.8	60.5		41100	41286	20.7	0.81	41.0	1.61	36.5	1.44	61.0	2.40	68.0	2.68	0.60	1.00	0.55	17.9	18.4	0.97
	1.0000	72.626	2.8593	30.162	1.1875	29.997	1.1810	23.812	0.9375	0.8	0.03	0.8	0.03	78.8	89.3		3189	3130	20.3	0.80	35.5	1.40	35.0	1.38	63.0	2.48	67.0	2.64	0.33	1.80	0.99	23.0	13.1	1.76
	1.0000	72.626	2.8593	30.162	1.1875	29.997	1.1810	23.812	0.9375	2.0	0.08	3.2	0.13	78.8	89.3		3189X	3120	20.3	0.80	37.5	1.48	35.0	1.38	61.0	2.40	67.0	2.64	0.33	1.80	0.99	23.0	13.1	1.76
	1.0000	80.000	3.1496	21.000	0.8268	22.403	0.8820	17.826	0.7018	0.8	0.03	1.2	0.05	68.0	74.8		338	332	15.1	0.59	36.5	1.44	35.0	1.38	73.0	2.87	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.0000	80.000	3.1496	24.176	0.9518	22.403	0.8820	21.000	0.8268	0.8	0.03	2.4	0.09	68.0	74.8		338	332A	18.3	0.72	36.5	1.44	35.0	1.38	71.0	2.80	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
25.987	1.0231	50.292	1.9800	14.224	0.5600	14.732	0.5800	10.668	0.4200	3.6	0.14	1.2	0.05	31.2	37.0		L44645R	L44610	10.8	0.43	36.5	1.44	31.0	1.22	44.5	1.75	47.0	1.85	0.37	1.60	0.88	8.95	5.70	1.56
	1.0231	57.150	2.2500	17.462	0.6875	17.462	0.6875	13.495	0.5313	3.6	0.14	1.6	0.06	37.8	42.7		15579X	15520	12.7	0.50	38.5	1.52	32.0	1.26	51.0	2.01	53.0	2.09	0.35	1.73	0.95	10.8	6.40	1.69
26.157	1.0298	63.500	2.5000	20.638	0.8125	20.638	0.8125	15.875	0.6250	0.8	0.03	1.2	0.05	44.6	50.7		15103	15250	15.0	0.59	33.5	1.32	33.0	1.30	55.0	2.17	59.0	2.32	0.35	1.71	0.94	12.9	7.75	1.67
26.162	1.0300	66.421	2.6150	23.812	0.9375	25.433	1.0013	19.050	0.7500	1.6	0.06	1.2	0.05	67.0	75.2		2682	2631	13.9	0.55	34.5	1.36	32.0	1.26	58.0	2.28	60.0	2.36	0.25	2.36	1.30	19.5	8.45	2.30
26.975	1.0620	57.150	2.2500	19.845	0.7813	19.355	0.7620	15.875	0.6250	0.8	0.03	1.6	0.06	48.8	57.1		1987R	1922	13.9	0.55	32.5	1.28	31.5	1.24	51.0	2.01	53.5	2.11	0.33	1.82	1.00	14.0	7.90	1.77
26.987	1.0625	72.626	2.8593	24.608	0.9688	24.257	0.9550	17.462	0.6875	2.4	0.09	1.6	0.06	61.8	60.5		41106	41286	20.7	0.81	42.0	1.65	36.5	1.44	61.0	2.40	68.0	2.68	0.60	1.00	0.55	17.9	18.4	0.97
26.988	1.0625	50.292	1.9800	14.224	0.5600	14.732	0.5800	10.668	0.4200	3.6	0.14	1.2	0.05	31.2	37.0		L44649R	L44610	10.8	0.43	37.5	1.48	31.0	1.22	44.5	1.75	47.0	1.85	0.37	1.60	0.88	8.95	5.70	1.56
	1.0625	57.150	2.2500	19.845	0.7813	19.355	0.7620	15.875	0.6250	3.2	0.13	1.6	0.06	48.8	57.1		1997XR	1922	13.9	0.55	37.5	1.48	31.5	1.24	51.0	2.01	53.5	2.11	0.33	1.82	1.00	14.0	7.90	1.77
	1.0625	60.325	2.3750	19.842	0.7812	17.462	0.6875	15.875	0.6250	3.6	0.14	1.6	0.06	37.8	42.7		15580	15523	15.1	0.59	38.5	1.52	32.0	1.26	51.0	2.01	54.0	2.13	0.35	1.73	0.95	10.8	6.40	1.69
	1.0625	62.000	2.4409	19.050	0.7500	20.638	0.8125	14.288	0.5625	0.8	0.03	1.2	0.05	44.6	50.7		15106	15245	13.2	0.52	33.5	1.32	33.0	1.30	55.0	2.17	58.0	2.28	0.35	1.71	0.94	12.9	7.75	1.67
	1.0625	66.421	2.6150	23.812	0.9375	25.433	1.0013	19.050	0.7500	1.6	0.06	1.2	0.05	67.0	75.2		2688	2631	13.9	0.55	35.0	1.38	33.0	1.30	58.0	2.28	60.0	2.36	0.25	2.36	1.30	19.5	8.45	2.30
28.575	1.1250	57.150	2.2500	17.462	0.6875	17.462	0.6875	13.495	0.5313	3.6	0.14	1.6	0.06	37.8	42.7		15590	15520	12.7	0.50	39.0	1.54	33.5	1.32	51.0	2.01	53.0	2.09	0.35	1.73	0.95	10.8	6.40	1.69
	1.1250	57.150	2.2500	19.845	0.7813	19.355	0.7620	15.875	0.6250	0.8	0.03	1.6	0.06	48.8	57.1		1985R	1922	13.9	0.55	34.0	1.34	33.5	1.32	51.0	2.01	53.5	2.11	0.33	1.82	1.00	14.0	7.90	1.77
	1.1250	57.150	2.2500	19.845	0.7813	19.355	0.7620	15.875	0.6250																									

TS type
d (28.575) ~ (30.162) mm
(1.1250) ~ (1.1875) inch

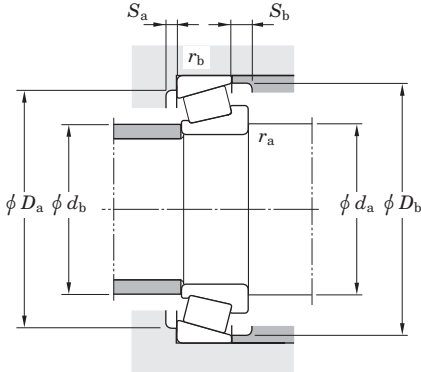
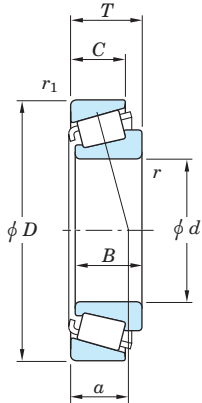


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant e	Axial load factors		Reference rating (kN) (500 rpm for 3 000 Hrs.)		Factor K				
d		D		T		B		C		r (min.)		r ₁ (min.)		C _r	C _{0r}	Inner ring (Cone)	Outer ring (Cup)	a	d _a		d _b		D _a		D _b		Y ₁	Y ₀	Radial	Axial					
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch					mm	inch	mm	inch	mm	inch	mm	inch										
28.575	1.1250	68.262	2.6875	22.225	0.8750	22.225	0.8750	17.462	0.6875	2.4	0.09	2.4	0.09	56.1	71.1	M88040 26112 41125	M88011 26283 41286	19.2	0.76	42.0	1.65	39.0	1.54	58.0	2.28	65.0	2.56	0.55	1.10	0.60	16.3	15.2	1.07		
	1.1250	72.000	2.8346	19.000	0.7480	18.923	0.7450	15.875	0.6250	1.6	0.06	1.6	0.06	47.5	49.6			15.3	0.60	37.0	1.46	35.0	1.38	62.0	2.44	65.0	2.56	0.36	1.67	0.92	13.7	8.40	1.63		
	1.1250	72.626	2.8593	24.608	0.9688	24.257	0.9550	17.462	0.6875	4.8	0.19	1.6	0.06	61.8	60.5			20.7	0.81	48.0	1.89	36.5	1.44	61.0	2.40	68.0	2.68	0.60	1.00	0.55	17.9	18.4	0.97		
	1.1250	72.626	2.8593	24.608	0.9688	24.257	0.9550	17.462	0.6875	1.6	0.06	1.6	0.06	61.8	60.5			20.7	0.81	41.5	1.63	36.5	1.44	61.0	2.40	68.0	2.68	0.60	1.00	0.55	17.9	18.4	0.97		
	1.1250	72.626	2.8593	30.162	1.1875	29.997	1.1810	23.812	0.9375	3.6	0.14	3.2	0.13	78.8	89.3			20.3	0.80	42.5	1.67	37.0	1.46	61.0	2.40	67.0	2.64	0.33	1.80	0.99	23.0	13.1	1.76		
	1.1250	72.626	2.8593	30.162	1.1875	29.997	1.1810	23.812	0.9375	1.2	0.05	3.2	0.13	78.8	89.3			20.3	0.80	39.0	1.54	37.0	1.46	61.0	2.40	67.0	2.64	0.33	1.80	0.99	23.0	13.1	1.76		
	1.1250	73.025	2.8750	22.225	0.8750	22.225	0.8750	17.462	0.6875	0.8	0.03	3.2	0.13	55.0	65.7			18.4	0.72	37.5	1.48	37.0	1.46	62.0	2.44	68.0	2.68	0.45	1.32	0.73	16.0	12.4	1.29		
	1.1250	73.025	2.8750	22.225	0.8750	22.225	0.8750	17.462	0.6875	0.8	0.03	0.8	0.03	55.0	65.7			18.4	0.72	37.5	1.48	37.0	1.46	64.0	2.52	69.0	2.72	0.45	1.32	0.73	16.0	12.4	1.29		
	1.1250	80.962	3.1875	22.225	0.8750	22.225	0.8750	17.462	0.6875	0.8	0.03	0.8	0.03	55.0	65.7			18.4	0.72	37.5	1.48	37.0	1.46	67.0	2.64	69.0	2.72	0.45	1.32	0.73	16.0	12.4	1.29		
29.000	1.1417	50.292	1.9800	14.224	0.5600	14.732	0.5800	10.668	0.4200	3.6	0.14	1.2	0.05	28.9	37.2	L45449 2695X	L45410 2631	10.9	0.43	39.5	1.56	33.0	1.30	44.5	1.75	48.0	1.89	0.37	1.62	0.89	8.35	5.25	1.58		
	1.1417	66.421	2.6150	23.812	0.9375	25.433	1.0013	19.050	0.7500	1.0	0.04	1.2	0.05	67.0	75.2			13.9	0.55	35.0	1.38	34.0	1.34	58.0	2.28	60.0	2.36	0.25	2.36	1.30	19.5	8.45	2.30		
29.367	1.1562	66.421	2.6150	23.812	0.9375	25.433	1.0013	19.050	0.7500	3.6	0.14	1.2	0.05	67.0	75.2	2690 2691	2631 2631	13.9	0.55	41.0	1.61	35.0	1.38	58.0	2.28	60.0	2.36	0.25	2.36	1.30	19.5	8.45	2.30		
	1.1562	66.421	2.6150	23.812	0.9375	25.433	1.0013	19.050	0.7500	0.8	0.03	1.2	0.05	67.0	75.2			13.9	0.55	35.5	1.40	35.0	1.38	58.0	2.28	60.0	2.36	0.25	2.36	1.30	19.5	8.45	2.30		
29.985	1.1805	72.626	2.8593	30.162	1.1875	29.997	1.1810	23.812	0.9375	0.8	0.03	3.2	0.13	78.8	89.3		3190S	3120	20.3	0.80	39.0	1.54	38.0	1.50	61.0	2.40	67.0	2.64	0.33	1.80	0.99	23.0	13.1	1.76	
29.987	1.1806	62.000	2.4409	16.002	0.6300	16.566	0.6522	14.288	0.5625	1.6	0.06	1.6	0.06	38.0	40.6		17118 15117 26118 26118	17244 15245 26283S 26283	12.7	0.50	37.0	1.46	34.5	1.36	54.0	2.13	57.0	2.24	0.38	1.57	0.86	10.9	7.15	1.53	
	1.1806	62.000	2.4409	19.050	0.7500	20.638	0.8125	14.288	0.5625	1.2	0.05	1.2	0.05	44.6	50.7				13.2	0.52	36.5	1.44	35.0	1.38	55.0	2.17	58.0	2.28	0.35	1.71	0.94	12.9	7.75	1.67	
	1.1806	71.996	2.8345	19.000	0.7480	18.923	0.7450	15.875	0.6250	1.6	0.06	2.0	0.08	47.5	49.6				15.3	0.60	38.0	1.50	36.0	1.42	62.0	2.44	65.0	2.56	0.36	1.67	0.92	13.7	8.40	1.63	
	1.1806	72.000	2.8346	19.000	0.7480	18.923	0.7450	15.875	0.6250	1.6	0.06	1.6	0.06	47.5	49.6				15.3	0.60	38.0	1.50	36.0	1.42	62.0	2.44	65.0	2.56	0.36	1.67	0.92	13.7	8.40	1.63	
30.000	1.1811	62.000	2.4409	16.002	0.6300	16.566	0.6522	14.288	0.5625	1.6	0.06	1.6	0.06	38.0	40.6		17118S 14118 14117A	17244 14274A 14276	12.7	0.50	37.0	1.46	34.5	1.36	54.0	2.13	57.0	2.24	0.38	1.57	0.86	10.9	7.15	1.53	
	1.1811	68.956	2.7148	19.845	0.7813	19.202	0.7560	15.875	0.6250	0.8	0.03	3.2	0.13	46.1	55.0				15.5	0.61	37.0	1.46	36.5	1.44	59.0	2.32	63.0	2.48	0.38	1.57	0.86	13.4	8.70	1.53	
	1.1811	69.012	2.7170	19.845	0.7813	19.583	0.7710	15.875	0.6250	3.6	0.14	1.2	0.05	46.1	55.0				15.5	0.61	42.5	1.67	39.5	1.56	60.0	2.36	63.0	2.48	0.38	1.57	0.86	13.4	8.70	1.53	
	1.1811	69.012	2.7170	19.845	0.7813	19.583	0.7710	15.875	0.6250	3.6	0.14	3.2	0.13	46.1	55.0		14118A 2586 26118S	14274 2523 26283	15.5	0.61	42.5	1.67	39.5	1.56	59.0	2.32	63.0	2.48	0.38	1.57	0.86	13.4	8.70	1.53	
	1.1811	69.850	2.7500	23.812	0.9375	25.357	0.9983	19.050	0.7500	3.6	0.14	1.2	0.05	71.4	85.1				14.4	0.57	42.0	1.65	35.5	1.40	61.0	2.40	64.0	2.52	0.27	2.19	1.21	20.7	9.65	2.14	
	1.1811	71.996	2.8345	19.000	0.7480	18.923	0.7450	15.875	0.6250	1.6	0.06	1.6	0.06	47.5	49.6				15.3	0.60	38.0	1.50	36.0	1.42	62.0	2.44	65.0	2.56	0.36	1.67	0.92	13.7	8.40	1.63	
	1.1811	72.085	2.8380	29.522	1.1623	26.721	1.0520	18.415	0.7250	3.6	0.14	2.4	0.09	46.1	55.0		14120A 3190 348	14283 3120 332	22.6	0.89	42.5	1.67	39.5	1.56	60.0	2.36	63.0	2.48	0.38	1.57	0.86	13.4	8.70	1.53	
	1.1811	72.626	2.8593	30.162	1.1875	29.997	1.1810	23.812	0.9375	3.6	0.14	3.2	0.13	78.8	89.3				20.3	0.80	43.0	1.69	38.0	1.50	61.0	2.40	67.0	2.64	0.33	1.80	0.99	23.0	13.1	1.76	
	1.1811	80.000	3.1496	21.000	0.8268	22.403	0.8820	17.826	0.7018	0.8	0.03	1.2	0.05	68.0	74.8				15.1	0.59	39.5	1.56	39.5	1.56	73.0	2.87	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14	
	1.1811	88.501	3.4843	26.988	1.0625	29.083	1.1450	22.225	0.8750	0.8	0.03	1.6	0.06	98.2	112			416 416	414 414A	16.9	0.67	39.5	1.56	39.5	1.56	77.0	3.03	80.0	3.15	0.26	2.28	1.25	28.6	12.9	2.22
	1.1811	88.501	3.4843	26.988	1.0625	29.083	1.1450	22.225	0.8750	0.8	0.03	3.2	0.13	98.2	112					16.9	0.67	39.5	1.56	39.5	1.56	76.0	2.99	79.0	3.11	0.26	2.28	1.25	28.6	12.9	2.22
30.112	1.1855	62.000	2.4409	19.050	0.7500	20.638	0.8125	14.288	0.5625	0.8	0.03	1.2	0.05	44.6	50.7		15116	15245	13.2	0.52	36.0	1.42	35.5	1.40	55.0	2.17	58.0	2.28	0.35	1.71	0.94	12.9	7.75	1.67	
30.162	1.1875	58.738	2.3125	14.684	0.5781	15.080	0.5937	10.716	0.4219	3.6	0.14	1.0	0.04	29.5	33.3		08118 17119 M86649R	08231 17244 M86610	13.5	0.53	41.5	1.63	35.0	1.38	52.0	2.05									

TS type
d (30.162) ~ (31.750) mm
(1.1875) ~ (1.2500) inch

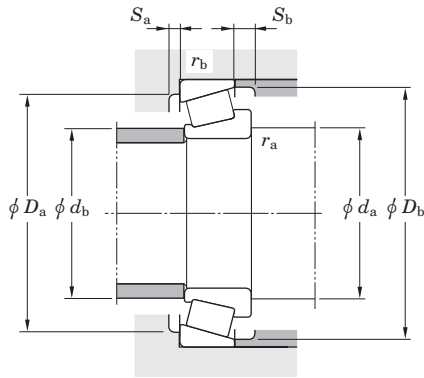
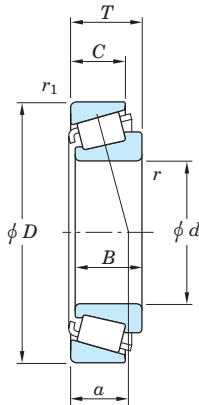


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions								Constant	Axial load factors		Reference rating (kN)		Factor
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	(500 rpm for 3 000 Hrs.)		<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch			mm			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm				inch	mm	
30.162	1.1875	72.626	2.8593	30.162	1.1875	29.997	1.1810	23.812	0.9375	0.8	0.03	0.8	0.03	78.8	89.3		3187	3130	20.3	0.80	39.0	1.54	38.5	1.52	63.0	2.48	67.0	2.64	0.33	1.80	0.99	23.0	13.1	1.76
	1.1875	72.626	2.8593	30.162	1.1875	29.997	1.1810	23.812	0.9375	3.6	0.14	3.2	0.13	78.8	89.3		3191	3120	20.3	0.80	44.0	1.73	38.5	1.52	61.0	2.40	67.0	2.64	0.33	1.80	0.99	23.0	13.1	1.76
	1.1875	76.200	3.0000	30.162	1.1875	29.997	1.1810	23.812	0.9375	3.6	0.14	0.8	0.03	78.8	89.3		3191	3129	20.3	0.80	44.0	1.73	38.5	1.52	65.0	2.56	69.0	2.72	0.33	1.80	0.99	23.0	13.1	1.76
	1.1875	79.375	3.1250	29.370	1.1563	29.771	1.1721	23.812	0.9375	0.8	0.03	3.2	0.13	87.4	105		3474	3420	20.8	0.82	41.0	1.61	40.0	1.57	67.0	2.64	74.0	2.91	0.37	1.64	0.90	25.5	15.9	1.60
	1.1875	80.000	3.1496	21.000	0.8268	22.403	0.8820	17.826	0.7018	0.8	0.03	1.2	0.05	68.0	74.8		334	332	15.1	0.59	39.5	1.56	39.5	1.56	73.0	2.87	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.1875	80.000	3.1496	24.176	0.9518	22.403	0.8820	21.000	0.8268	0.8	0.03	2.4	0.09	68.0	74.8		334	332A	18.3	0.72	39.5	1.56	39.5	1.56	71.0	2.80	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.1875	80.035	3.1510	21.432	0.8438	20.940	0.8244	15.875	0.6250	1.6	0.06	1.6	0.06	57.3	65.9		28118	28317	16.9	0.67	40.0	1.57	37.5	1.48	69.0	2.72	73.0	2.87	0.40	1.49	0.82	16.5	11.3	1.46
30.213	1.1895	62.000	2.4409	19.050	0.7500	20.638	0.8125	14.288	0.5625	3.6	0.14	1.2	0.05	44.6	50.7		15118	15245	13.2	0.52	41.5	1.63	35.5	1.40	55.0	2.17	58.0	2.28	0.35	1.71	0.94	12.9	7.75	1.67
	1.1895	62.000	2.4409	19.050	0.7500	20.638	0.8125	14.288	0.5625	1.6	0.06	1.2	0.05	44.6	50.7		15119	15245	13.2	0.52	37.5	1.48	35.5	1.40	55.0	2.17	58.0	2.28	0.35	1.71	0.94	12.9	7.75	1.67
	1.1895	62.000	2.4409	19.050	0.7500	20.638	0.8125	14.288	0.5625	0.8	0.03	1.2	0.05	44.6	50.7		15120	15245	13.2	0.52	36.0	1.42	35.5	1.40	55.0	2.17	58.0	2.28	0.35	1.71	0.94	12.9	7.75	1.67
30.226	1.1900	69.012	2.7170	19.845	0.7813	19.583	0.7710	15.875	0.6250	0.8	0.03	3.2	0.13	46.1	55.0		14116	14274	15.5	0.61	37.0	1.46	36.5	1.44	59.0	2.32	63.0	2.48	0.38	1.57	0.86	13.4	8.70	1.53
30.955	1.2187	64.292	2.5312	21.432	0.8438	21.432	0.8438	16.670	0.6563	2.4	0.09	1.6	0.06	55.2	70.7		M86648R	M86610	18.0	0.71	41.0	1.61	38.0	1.50	54.0	2.13	61.0	2.40	0.55	1.10	0.60	16.0	14.9	1.07
31.623	1.2450	66.675	2.6250	20.638	0.8125	20.638	0.8125	15.875	0.6250	1.6	0.06	1.6	0.06	46.4	54.5		1674	1620	15.7	0.62	45.0	1.77	38.5	1.52	58.0	2.28	61.0	2.40	0.37	1.62	0.89	13.5	8.55	1.57
31.750	1.2500	58.738	2.3125	14.684	0.5781	15.080	0.5937	10.716	0.4219	1.0	0.04	1.0	0.04	29.5	33.3		08125	08231	13.5	0.53	37.5	1.48	36.0	1.42	52.0	2.05	55.0	2.17	0.48	1.26	0.69	8.45	6.85	1.23
	1.2500	59.131	2.3280	15.875	0.6250	16.764	0.6600	11.811	0.4650	SP ¹⁾	SP ¹⁾	1.2	0.05	35.8	43.1		LM67048	LM67010	13.0	0.51	42.5	1.67	36.0	1.42	52.0	2.05	56.0	2.20	0.41	1.46	0.80	10.3	7.25	1.42
	1.2500	62.000	2.4409	18.161	0.7150	19.050	0.7500	14.288	0.5625	SP ¹⁾	SP ¹⁾	1.2	0.05	44.6	50.7		15123	15245	13.2	0.52	42.5	1.67	36.5	1.44	55.0	2.17	58.0	2.28	0.35	1.71	0.94	12.9	7.75	1.67
	1.2500	62.000	2.4409	19.050	0.7500	20.638	0.8125	14.288	0.5625	3.6	0.14	1.2	0.05	44.6	50.7		15125	15245	13.2	0.52	42.5	1.67	36.5	1.44	55.0	2.17	58.0	2.28	0.35	1.71	0.94	12.9	7.75	1.67
	1.2500	62.000	2.4409	19.050	0.7500	20.638	0.8125	14.288	0.5625	0.8	0.03	1.2	0.05	44.6	50.7		15126	15245	13.2	0.52	37.0	1.46	36.5	1.44	55.0	2.17	58.0	2.28	0.35	1.71	0.94	12.9	7.75	1.67
	1.2500	66.421	2.6150	25.400	1.0000	25.357	0.9983	20.638	0.8125	0.8	0.03	3.2	0.13	71.4	85.1		2580	2520	16.0	0.63	38.5	1.52	37.5	1.48	57.0	2.24	62.5	2.46	0.27	2.19	1.21	20.7	9.65	2.14
	1.2500	66.421	2.6150	25.400	1.0000	25.357	0.9983	20.638	0.8125	3.6	0.14	3.2	0.13	71.4	85.1		2582	2520	16.0	0.63	44.0	1.73	37.5	1.48	57.0	2.24	62.5	2.46	0.27	2.19	1.21	20.7	9.65	2.14
	1.2500	68.262	2.6875	22.225	0.8750	22.225	0.8750	17.462	0.6875	3.6	0.14	1.6	0.06	51.0	61.1		02475	02420	17.1	0.67	44.5	1.75	38.5	1.52	59.0	2.32	63.0	2.48	0.42	1.44	0.79	14.8	10.5	1.41
	1.2500	68.262	2.6875	22.225	0.8750	22.225	0.8750	17.462	0.6875	1.6	0.06	1.6	0.06	51.0	61.1		02475A	02420	17.1	0.67	42.0	1.65	38.0	1.50	59.0	2.32	63.0	2.48	0.42	1.44	0.79	14.8	10.5	1.41
	1.2500	68.262	2.6875	22.225	0.8750	22.225	0.8750	17.462	0.6875	0.8	0.03	1.6	0.06	51.0	61.1		02476	02420	17.1	0.67	39.0	1.54	38.5	1.52	59.0	2.32	63.0	2.48	0.42	1.44	0.79	14.8	10.5	1.41
	1.2500	68.262	2.6875	22.225	0.8750	22.225	0.8750	17.462	0.6875	1.6	0.06	1.6	0.06	56.1	71.1		M88046	M88010	19.2	0.76	43.0	1.69	40.5	1.59	58.0	2.28	65.0	2.56	0.55	1.10	0.60	16.3	15.2	1.07
	1.2500	68.956	2.7148	19.845	0.7813	19.583	0.7710	15.875	0.6250	3.6	0.14	3.2	0.13	46.1	55.0		14125	14274A	15.5	0.61	44.0	1.73	37.5	1.48	59.0	2.32	63.0	2.48	0.38	1.57	0.86	13.4	8.70	1.53
	1.2500	69.012	2.7170	26.982	1.0623	26.721	1.0520	15.875	0.6250	4.3	0.17	3.2	0.13	46.1	55.0		14123A	14274	22.6	0.89	44.0	1.73	40.0	1.57	59.0	2.32	63.0	2.48	0.38	1.57	0.86	13.4	8.70	1.53
	1.2500	71.973	2.8336	27.000	1.0630	25.400	1.0000	21.443	0.8442	1.6	0.06	1.6	0.06	66.9	87.4		HM88644	HM88611	22.3	0.88	45.0	1.77	42.5	1.67	60.0	2.36	69.0	2.72	0.55	1.10	0.60	19.6	18.3	1.07
	1.2500	72.034	2.8360	30.162	1.1875	29.997	1.1810	23.812	0.9375	0.8	0.03	2.8	0.11	78.8	89.3		3188	3126	20.3	0.80	40.0	1.57	39.5	1.56	61.0	2.40	67.0	2.64	0.33	1.80	0.99	23.0	13.1	1.76
	1.2500	72.233	2.8438	25.400	1.0000	25.400	1.0000																											

TS type
d (31.750) ~ 33.338 mm
(1.2500) ~ 1.3125 inch

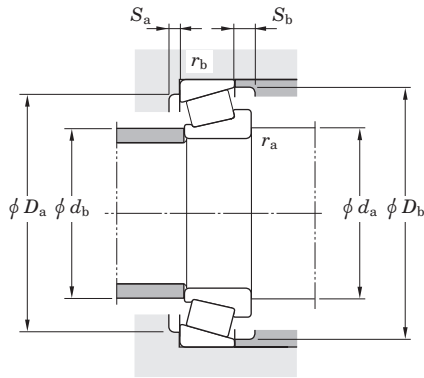
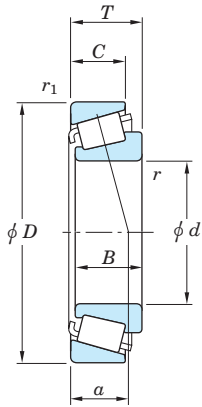


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor			
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	(500 rpm for 3 000 Hrs.)		<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
31.750	1.2500	73.025	2.8750	22.225	0.8750	23.812	0.9375	17.462	0.6875	0.8	0.03	0.8	0.03	64.2	78.1		2879	2821	16.3	0.64	39.0	1.54	39.0	1.54	65.0	2.56	68.0	2.68	0.37	1.63	0.89	18.6	11.7	1.59
	1.2500	73.025	2.8750	26.543	1.0450	25.400	1.0000	0.8268	1.6	0.06	2.4	0.09	66.9	87.4		HM88644	HM88612	21.8	0.86	45.0	1.77	42.5	1.67	60.0	2.36	69.0	2.72	0.55	1.10	0.60	19.6	18.3	1.07	
	1.2500	73.025	2.8750	26.988	1.0625	26.975	1.0620	22.225	0.8750	3.6	0.14	1.6	0.06	77.8	94.1		23685	23620	18.8	0.74	45.0	1.77	40.0	1.57	64.0	2.52	68.0	2.68	0.37	1.62	0.89	22.6	14.2	1.58
	1.2500	73.025	2.8750	29.370	1.1563	27.783	1.0938	23.020	0.9063	1.2	0.05	3.2	0.13	74.3	101		HM88542	HM88510	23.4	0.92	45.5	1.79	42.5	1.67	59.0	2.32	70.0	2.76	0.55	1.10	0.60	21.7	20.3	1.07
	1.2500	73.812	2.9060	29.370	1.1563	27.783	1.0938	23.020	0.9063	1.2	0.05	3.2	0.13	74.3	101		HM88542	HM88512	23.4	0.92	45.5	1.79	42.5	1.67	59.0	2.32	70.0	2.76	0.55	1.10	0.60	21.7	20.3	1.07
	1.2500	76.200	3.0000	29.370	1.1563	28.575	1.1250	23.020	0.9063	0.8	0.03	0.8	0.03	79.5	107		HM89440	HM89411	23.9	0.94	45.5	1.79	44.5	1.75	65.0	2.56	73.0	2.87	0.55	1.10	0.60	23.2	21.7	1.07
	1.2500	79.375	3.1250	29.370	1.1563	29.771	1.1721	23.812	0.9375	1.6	0.06	3.2	0.13	87.4	105		3476X	3420	20.8	0.82	43.0	1.69	41.0	1.61	67.0	2.64	74.0	2.91	0.37	1.64	0.90	25.5	15.9	1.60
	1.2500	80.000	3.1496	21.000	0.8268	22.403	0.8820	17.826	0.7018	0.8	0.03	1.2	0.05	68.0	74.8		346	332	15.1	0.59	40.0	1.57	39.5	1.56	73.0	2.87	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.2500	80.167	3.1562	29.370	1.1563	29.771	1.1721	23.812	0.9375	1.2	0.05	3.2	0.13	87.4	105		3476	3422	20.8	0.82	43.0	1.69	41.0	1.61	68.0	2.68	74.0	2.91	0.37	1.64	0.90	25.5	15.9	1.60
	1.2500	95.250	3.7500	27.783	1.0938	29.901	1.1772	22.225	0.8750	0.8	0.03	0.8	0.03	103	122		443	432A	18.4	0.72	42.0	1.65	41.0	1.61	84.0	3.31	87.0	3.43	0.28	2.11	1.16	30.0	14.6	2.06
31.986	1.2593	72.233	2.8438	25.400	1.0000	25.400	1.0000	19.842	0.7812	3.2	0.13	2.4	0.09	66.9	87.4		HM88638	HM88610	20.7	0.81	48.5	1.91	42.5	1.67	60.0	2.36	69.0	2.72	0.55	1.10	0.60	19.6	18.3	1.07
32.004	1.2600	72.000	2.8346	19.000	0.7480	18.923	0.7450	15.875	0.6250	1.6	0.06	1.6	0.06	47.5	49.6		26126	26283	15.3	0.60	39.5	1.56	37.5	1.48	62.0	2.44	65.0	2.56	0.36	1.67	0.92	13.7	8.40	1.63
32.542	1.2812	72.626	2.8593	30.162	1.1875	29.997	1.1810	23.812	0.9375	0.8	0.03	3.2	0.13	78.8	89.3		3194	3120	20.3	0.80	41.0	1.61	40.0	1.57	61.0	2.40	67.0	2.64	0.33	1.80	0.99	23.0	13.1	1.76
33.338	1.3125	66.421	2.6150	25.400	1.0000	25.357	0.9983	20.638	0.8125	0.8	0.03	3.2	0.13	71.4	85.1		2581	2520	16.0	0.63	39.5	1.56	39.0	1.54	57.0	2.24	62.5	2.46	0.27	2.19	1.21	20.7	9.65	2.14
	1.3125	66.421	2.6150	25.400	1.0000	25.357	0.9983	20.638	0.8125	3.6	0.14	3.2	0.13	71.4	85.1		2585	2520	16.0	0.63	45.0	1.77	39.0	1.54	57.0	2.24	62.5	2.46	0.27	2.19	1.21	20.7	9.65	2.14
	1.3125	66.675	2.6250	20.638	0.8125	20.638	0.8125	15.875	0.6250	3.6	0.14	1.6	0.06	46.4	54.5		1680	1620	15.7	0.62	45.0	1.77	38.5	1.52	58.0	2.28	61.0	2.40	0.37	1.62	0.89	13.5	8.55	1.58
	1.3125	68.262	2.6875	22.225	0.8750	22.225	0.8750	17.462	0.6875	0.8	0.03	1.6	0.06	56.1	71.1		M88048	M88010	19.2	0.76	42.5	1.67	41.0	1.61	58.0	2.28	65.0	2.56	0.55	1.10	0.60	16.3	15.2	1.07
	1.3125	68.956	2.7148	19.845	0.7813	19.583	0.7710	15.875	0.6250	3.6	0.14	3.2	0.13	46.1	55.0		14130	14274A	15.5	0.61	45.0	1.77	38.5	1.52	59.0	2.32	63.0	2.48	0.38	1.57	0.86	13.4	8.70	1.53
	1.3125	68.956	2.7148	19.845	0.7813	19.583	0.7710	15.875	0.6250	0.8	0.03	3.2	0.13	46.1	55.0		14131	14274A	15.5	0.61	39.5	1.56	38.5	1.52	59.0	2.32	63.0	2.48	0.38	1.57	0.86	13.4	8.70	1.53
	1.3125	69.012	2.7170	22.385	0.8813	19.583	0.7710	18.415	0.7250	3.6	0.14	2.4	0.09	46.1	55.0		14130	14277	18.0	0.71	45.0	1.77	38.5	1.52	59.0	2.32	63.0	2.48	0.38	1.57	0.86	13.4	8.70	1.53
	1.3125	69.723	2.7450	19.050	0.7500	18.923	0.7450	19.050	0.7500	3.6	0.14	1.6	0.06	47.5	49.6		26131	26274	17.7	0.70	44.5	1.75	38.5	1.52	62.0	2.44	65.0	2.56	0.36	1.67	0.92	13.7	8.40	1.63
	1.3125	72.000	2.8346	19.000	0.7480	18.923	0.7450	15.875	0.6250	3.6	0.14	1.6	0.06	47.5	49.6		26131	26283	15.3	0.60	44.5	1.75	38.5	1.52	62.0	2.44	65.0	2.56	0.36	1.67	0.92	13.7	8.40	1.63
	1.3125	72.000	2.8346	19.000	0.7480	18.923	0.7450	15.875	0.6250	1.6	0.06	1.6	0.06	47.5	49.6		26132	26283	15.3	0.60	40.5	1.59	38.0	1.50	62.0	2.44	65.0	2.56	0.36	1.67	0.92	13.7	8.40	1.63
	1.3125	72.238	2.8440	20.638	0.8125	20.638	0.8125	15.875	0.6250	3.6	0.14	1.2	0.05	49.7	61.3		16131	16284	16.6	0.65	46.0	1.81	39.5	1.56	63.0	2.48	67.0	2.64	0.40	1.49	0.82	14.4	9.90	1.46
	1.3125	72.626	2.8593	30.162	1.1875	29.997	1.1810	23.812	0.9375	3.6	0.14	1.8	0.07	78.8	89.3		3196	3130	20.3	0.80	47.0	1.85	40.5	1.59	63.0	2.48	67.0	2.64	0.33	1.80	0.99	23.0	13.1	1.76
	1.3125	72.626	2.8593	30.162	1.1875	29.997	1.1810	23.812	0.9375	0.8	0.03	0.8	0.03	78.8	89.3		3197	3130	20.3	0.80	41.5	1.63	40.5	1.59	63.0	2.48	67.0	2.64	0.33	1.80	0.99	23.0	13.1	1.76
	1.3125	73.025	2.8750	22.225	0.8750	23.812	0.9375	17.462	0.6875	3.6	0.14	0.8	0.03	64.2	78.1		2876	2821	16.3	0.64	46.0	1.81	40.0	1.57	65.0	2.56	68.0	2.68	0.37	1.63	0.89	18.6	11.7	1.59
	1.3125	73.025	2.8750	23.812	0.9375	25.654	1.0100	19.050	0.7500	1.6	0.06	0.8	0.03	74.1	92.2		2790R	2735X	15.9	0.63	42.0	1.65	40.0	1.57	66.0	2.60	69.0	2.72	0.30	1.98	1.09	21.5	11.1	1.93
	1.3125	73.025	2.8750	29.370	1.1563	27.783																												

TS type
d 34.925 ~ (34.980) mm
1.3750 ~ (1.3772) inch

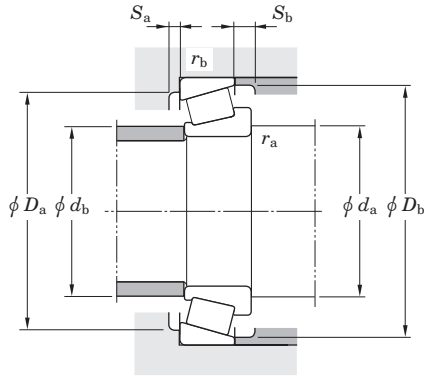
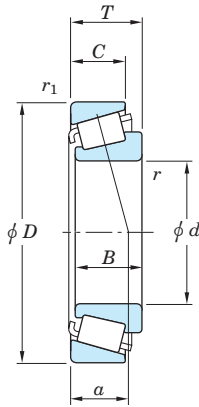


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant e	Axial load factors		Reference rating (kN) (500 rpm for 3 000 Hrs.)		Factor K		
d		D		T		B		C		r (min.)		r ₁ (min.)		C _r	C _{0r}	Inner ring (Cone)	Outer ring (Cup)	a		d _a		d _b		D _a			D _b		Y ₁	Y ₀		Radial	Axial
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch					mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm			inch		
34.925	1.3750	65.088	2.5625	18.034	0.7100	18.288	0.7200	13.970	0.5500	SP ¹⁾	SP ¹⁾	1.2	0.05	48.0	58.5	LM48548	LM48510	14.3	0.56	46.0	1.81	40.0	1.57	58.0	2.28	61.0	2.40	0.38	1.59	0.88	13.8	8.90	1.55
	1.3750	68.956	2.7148	19.845	0.7813	19.583	0.7710	15.875	0.6250	1.6	0.06	3.2	0.13	46.1	55.0	14137A	14274A	15.5	0.61	42.0	1.65	40.0	1.57	59.0	2.32	63.0	2.48	0.38	1.57	0.86	13.4	8.70	1.53
	1.3750	68.956	2.7148	19.845	0.7813	19.583	0.7710	15.875	0.6250	3.6	0.14	3.2	0.13	46.1	55.0	14138A	14274A	15.5	0.61	46.0	1.81	40.0	1.57	59.0	2.32	63.0	2.48	0.38	1.57	0.86	13.4	8.70	1.53
	1.3750	69.012	2.7170	26.982	1.0623	26.721	1.0520	15.875	0.6250	0.8	0.03	1.2	0.05	46.1	55.0	14136A	14276	22.6	0.89	40.0	1.57	38.0	1.50	60.0	2.36	63.0	2.48	0.38	1.57	0.86	13.4	8.70	1.53
	1.3750	72.233	2.8438	25.400	1.0000	25.400	1.0000	19.842	0.7812	2.4	0.09	2.4	0.09	66.9	87.4	HM88649	HM88610	20.7	0.81	48.5	1.91	42.5	1.67	60.0	2.36	69.0	2.72	0.55	1.10	0.60	19.6	18.3	1.07
	1.3750	72.238	2.8440	20.638	0.8125	20.638	0.8125	15.875	0.6250	3.6	0.14	1.2	0.05	49.7	61.3	16137	16284	16.6	0.65	46.5	1.83	40.5	1.59	63.0	2.48	67.0	2.64	0.40	1.49	0.82	14.4	9.90	1.46
	1.3750	73.025	2.8750	22.225	0.8750	22.225	0.8750	17.462	0.6875	3.6	0.14	3.2	0.13	55.0	65.7	02877	02820	18.4	0.72	48.5	1.91	42.0	1.65	62.0	2.44	68.0	2.68	0.45	1.32	0.73	16.0	12.4	1.29
	1.3750	73.025	2.8750	22.225	0.8750	22.225	0.8750	17.462	0.6875	3.6	0.14	0.8	0.03	55.0	65.7	02877	02830	18.4	0.72	48.5	1.91	42.0	1.65	64.0	2.52	69.0	2.72	0.45	1.32	0.73	16.0	12.4	1.29
	1.3750	73.025	2.8750	22.225	0.8750	22.225	0.8750	17.462	0.6875	0.8	0.03	3.2	0.13	55.0	65.7	02878	02820	18.4	0.72	42.5	1.67	42.0	1.65	62.0	2.44	68.0	2.68	0.45	1.32	0.73	16.0	12.4	1.29
	1.3750	73.025	2.8750	22.225	0.8750	23.812	0.9375	17.462	0.6875	3.6	0.14	3.2	0.13	64.2	78.1	2877	2820	16.3	0.64	47.5	1.87	41.0	1.61	62.0	2.44	68.0	2.68	0.37	1.63	0.89	18.6	11.7	1.59
	1.3750	73.025	2.8750	22.225	0.8750	23.812	0.9375	17.462	0.6875	0.8	0.03	0.8	0.03	64.2	78.1	2878	2821	16.3	0.64	42.5	1.67	41.0	1.61	65.0	2.56	68.0	2.68	0.37	1.63	0.89	18.6	11.7	1.59
	1.3750	73.025	2.8750	23.812	0.9375	24.608	0.9688	19.050	0.7500	1.6	0.06	0.8	0.03	72.2	87.3	25877R	25821	15.8	0.62	43.0	1.69	40.5	1.59	65.0	2.56	68.0	2.68	0.29	2.07	1.14	20.9	10.4	2.02
	1.3750	73.025	2.8750	23.812	0.9375	24.608	0.9688	19.050	0.7500	3.6	0.14	2.4	0.09	72.2	87.3	25878R	25820	15.8	0.62	47.0	1.85	40.5	1.59	64.0	2.52	68.0	2.68	0.29	2.07	1.14	20.9	10.4	2.02
	1.3750	73.025	2.8750	23.812	0.9375	25.654	1.0100	19.050	0.7500	5.2	0.20	0.8	0.03	74.1	92.2	2786R	2735X	15.9	0.63	51.0	2.01	41.0	1.61	66.0	2.60	69.0	2.72	0.30	1.98	1.09	21.5	11.1	1.93
	1.3750	73.025	2.8750	26.988	1.0625	26.975	1.0620	22.225	0.8750	3.6	0.14	1.6	0.06	77.8	94.1	23690	23620	18.8	0.74	49.0	1.93	42.0	1.65	64.0	2.52	68.0	2.68	0.37	1.62	0.89	22.6	14.2	1.58
	1.3750	76.200	3.0000	20.638	0.8125	20.940	0.8244	15.507	0.6105	1.6	0.06	1.2	0.05	57.3	65.9	28137	28300	16.5	0.65	43.5	1.71	41.0	1.61	68.0	2.68	71.0	2.80	0.40	1.49	0.82	16.5	11.3	1.46
	1.3750	76.200	3.0000	23.812	0.9375	25.654	1.0100	19.050	0.7500	0.8	0.03	1.6	0.06	74.1	92.2	2793R	2729X	15.9	0.63	42.0	1.65	41.0	1.61	67.0	2.64	70.0	2.76	0.30	1.98	1.09	21.5	11.1	1.93
	1.3750	76.200	3.0000	23.812	0.9375	25.654	1.0100	19.050	0.7500	3.6	0.14	3.2	0.13	74.1	92.2	2796R	2720	15.9	0.63	47.5	1.87	41.0	1.61	66.0	2.60	70.0	2.76	0.30	1.98	1.09	21.5	11.1	1.93
	1.3750	76.200	3.0000	29.370	1.1563	28.575	1.1250	23.020	0.9063	3.6	0.14	0.8	0.03	79.5	107	HM89446	HM89411	23.9	0.94	53.0	2.09	44.5	1.75	65.0	2.56	73.0	2.87	0.55	1.10	0.60	23.2	21.7	1.07
	1.3750	76.200	3.0000	29.370	1.1563	28.575	1.1250	23.812	0.9375	3.6	0.14	1.2	0.05	80.9	97.4	31593	31521	21.6	0.85	50.0	1.97	43.5	1.71	66.0	2.60	72.0	2.83	0.40	1.49	0.82	23.6	16.2	1.46
	1.3750	76.200	3.0000	29.370	1.1563	28.575	1.1250	23.812	0.9375	1.6	0.06	3.2	0.13	80.9	97.4	31594	31520	21.6	0.85	46.0	1.81	43.5	1.71	64.0	2.52	72.0	2.83	0.40	1.49	0.82	23.6	16.2	1.46
	1.3750	79.375	3.1250	29.370	1.1563	29.771	1.1721	23.812	0.9375	3.6	0.14	3.2	0.13	87.4	105	3478	3420	20.8	0.82	50.0	1.97	43.5	1.71	67.0	2.64	74.0	2.91	0.37	1.64	0.90	25.5	15.9	1.60
	1.3750	79.375	3.1250	29.370	1.1563	29.771	1.1721	23.812	0.9375	0.8	0.03	3.2	0.13	87.4	105	3482	3420	20.8	0.82	44.0	1.73	43.5	1.71	67.0	2.64	74.0	2.91	0.37	1.64	0.90	25.5	15.9	1.60
	1.3750	80.000	3.1496	21.000	0.8268	22.403	0.8820	17.826	0.7018	0.8	0.03	1.2	0.05	68.0	74.8	335	332	15.1	0.59	42.5	1.67	41.5	1.63	73.0	2.87	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.3750	80.000	3.1496	21.000	0.8268	22.403	0.8820	17.826	0.7018	1.2	0.05	1.2	0.05	68.0	74.8	340	332	15.1	0.59	43.5	1.71	41.5	1.63	73.0	2.87	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.3750	80.000	3.1496	21.000	0.8268	22.403	0.8820	17.826	0.7018	3.6	0.14	1.2	0.05	68.0	74.8	343	332	15.1	0.59	47.5	1.87	41.5	1.63	73.0	2.87	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.3750	80.000	3.1496	24.176	0.9518	22.403	0.8820	21.000	0.8268	0.8	0.03	2.4	0.09	68.0	74.8	335	332A	18.3	0.72	42.5	1.67	41.5	1.63	71.0	2.80	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.3750	80.000	3.1496	24.176	0.9518	22.403	0.8820	21.000	0.8268	3.6	0.14	2.4	0.09	68.0	74.8	343	332A	18.3	0.72	47.5	1.87	41.5	1.63	71.0	2.80	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.3750	80.000	3.1496	29.370	1.1563	30.391	1.1965	23.812	0.9375	3.6	0.14	3.2	0.13	91.0	106	3379	3325	18.7	0.74	48.0	1.89	41.5	1.63	70.0	2.76	75.0	2.95	0.27	2.20	1.21	26.6	12.4	2.14
	1.3750	80.035	3.1510	24.608	0.9688	23.698	0.9330	18.512	0.7288	0.8	0.03	1.6	0.06	73.2	91.6	27875	27820	22.2	0.87	45.5	1.79	44.5											

TS type
d (34.980) ~ (36.512) mm
(1.3772) ~ (1.4375) inch

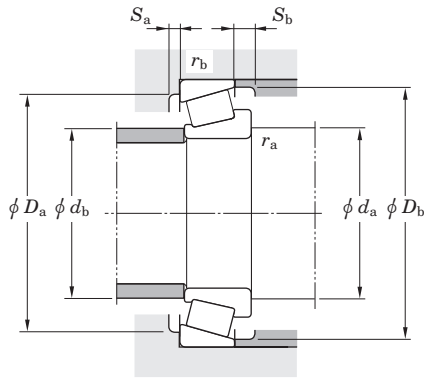
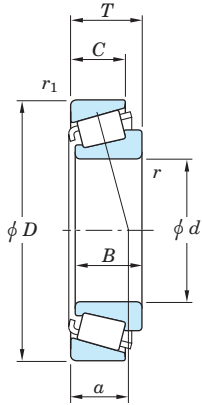


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN) (500 rpm for 3 000 Hrs.)		Factor		
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀			
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				Radial	Axial	<i>K</i>
34.980	1.3772	59.975	2.3612	15.875	0.6250	16.764	0.6600	11.938	0.4700	SP ¹⁾	SP ¹⁾	1.2	0.05	35.7	48.5		L68149	L68111	13.2	0.52	45.5	1.79	39.0	1.54	53.0	2.09	56.0	2.20	0.42	1.44	0.79	10.3	7.35	1.41
34.988	1.3775	61.973	2.4399	16.700	0.6575	17.000	0.6693	13.599	0.5354	SP ¹⁾	SP ¹⁾	1.0	0.04	40.8	52.8		LM78349	LM78310	14.5	0.57	46.0	1.81	40.0	1.57	54.0	2.13	59.0	2.32	0.44	1.35	0.74	11.8	8.95	1.32
	1.3775	65.987	2.5979	20.638	0.8125	20.638	0.8125	16.670	0.6563	3.6	0.14	2.4	0.09	54.1	67.0		M38547	M38511	15.1	0.59	46.0	1.81	39.5	1.56	59.0	2.32	62.0	2.44	0.35	1.70	0.93	15.7	9.50	1.66
35.000	1.3780	73.025	2.8750	26.988	1.0625	26.975	1.0620	22.225	0.8750	3.6	0.14	0.8	0.03	77.8	94.1		23691	23621	18.8	0.74	49.0	1.93	42.0	1.65	63.0	2.48	68.0	2.68	0.37	1.62	0.89	22.6	14.2	1.58
	1.3780	77.788	3.0625	26.988	1.0625	26.975	1.0620	22.225	0.8750	3.6	0.14	0.8	0.03	77.8	94.1		23691	23623	18.8	0.74	49.0	1.93	42.0	1.65	65.0	2.56	71.0	2.80	0.37	1.62	0.89	22.6	14.2	1.58
	1.3780	79.375	3.1250	23.812	0.9375	25.400	1.0000	19.050	0.7500	0.8	0.03	0.8	0.03	81.1	105		26883R	26822	16.4	0.65	42.5	1.67	42.0	1.65	71.0	2.80	74.0	2.91	0.32	1.88	1.04	23.5	12.8	1.83
	1.3780	79.375	3.1250	29.370	1.1563	29.771	1.1721	23.812	0.9375	1.6	0.06	3.2	0.13	87.4	105		3480	3420	20.8	0.82	44.5	1.75	42.5	1.67	67.0	2.64	74.0	2.91	0.37	1.64	0.90	25.5	15.9	1.60
	1.3780	79.375	3.1250	29.370	1.1563	29.771	1.1721	23.812	0.9375	3.6	0.14	3.2	0.13	87.4	105		3492X	3420	20.8	0.82	49.0	1.93	44.0	1.73	67.0	2.64	74.0	2.91	0.37	1.64	0.90	25.5	15.9	1.60
	1.3780	80.000	3.1496	21.000	0.8268	22.403	0.8820	17.826	0.7018	0.8	0.03	1.2	0.05	68.0	74.8		339	332	15.1	0.59	42.5	1.67	41.5	1.63	73.0	2.87	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.3780	80.000	3.1496	21.000	0.8268	22.403	0.8820	17.826	0.7018	2.0	0.08	1.2	0.05	68.0	74.8		339X	332	15.1	0.59	45.5	1.79	41.5	1.63	73.0	2.87	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.3780	80.000	3.1496	24.176	0.9518	22.403	0.8820	21.000	0.8268	0.8	0.03	1.2	0.05	68.0	74.8		339	332A	18.3	0.72	42.5	1.67	41.5	1.63	71.0	2.80	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.3780	80.167	3.1562	25.400	1.0000	25.400	1.0000	20.638	0.8125	0.8	0.03	3.2	0.13	81.1	105		26883R	26820	18.0	0.71	42.5	1.67	42.0	1.65	69.0	2.72	74.0	2.91	0.32	1.88	1.04	23.5	12.8	1.83
	1.3780	88.501	3.4843	26.988	1.0625	29.083	1.1450	22.225	0.8750	0.8	0.03	1.6	0.06	98.2	112		421	414	16.9	0.67	42.5	1.67	42.0	1.65	77.0	3.03	80.0	3.15	0.26	2.28	1.25	28.6	12.9	2.22
	1.3780	88.501	3.4843	26.988	1.0625	29.083	1.1450	22.225	0.8750	0.8	0.03	3.2	0.13	98.2	112		421	414A	16.9	0.67	42.5	1.67	42.0	1.65	76.0	2.99	79.0	3.11	0.26	2.28	1.25	28.6	12.9	2.22
	1.3780	95.250	3.7500	27.783	1.0938	29.901	1.1772	22.225	0.8750	3.6	0.14	2.4	0.09	103	122		441	432	18.4	0.72	49.0	1.93	43.5	1.71	83.0	3.27	87.0	3.43	0.28	2.11	1.16	30.0	14.6	2.06
35.306	1.3900	73.025	2.8750	22.225	0.8750	23.812	0.9375	17.462	0.6875	3.6	0.14	3.2	0.13	64.2	78.1		2880	2820	16.3	0.64	48.0	1.89	42.0	1.65	62.0	2.44	68.0	2.68	0.37	1.63	0.89	18.6	11.7	1.59
35.717	1.4062	72.233	2.8438	25.400	1.0000	25.400	1.0000	19.842	0.7812	3.6	0.14	2.4	0.09	66.9	87.4		HM88648	HM88610	20.7	0.81	52.0	2.05	42.5	1.67	60.0	2.36	69.0	2.72	0.55	1.10	0.60	19.6	18.3	1.07
36.449	1.4350	73.025	2.8750	22.225	0.8750	22.225	0.8750	17.462	0.6875	0.8	0.03	3.2	0.13	55.0	65.7		02884	02820	18.4	0.72	44.5	1.75	42.0	1.65	62.0	2.44	69.0	2.72	0.45	1.32	0.73	16.0	12.4	1.29
36.487	1.4365	73.025	2.8750	23.812	0.9375	24.608	0.9688	19.050	0.7500	1.6	0.06	0.8	0.03	72.2	87.3		25880R	25821	15.8	0.62	44.0	1.73	42.0	1.65	65.0	2.56	68.0	2.68	0.29	2.07	1.14	20.9	10.4	2.02
	1.4365	73.025	2.8750	23.812	0.9375	25.654	1.0100	19.050	0.7500	1.6	0.06	0.8	0.03	74.1	92.2		2780R	2735X	15.9	0.63	44.5	1.75	42.5	1.67	66.0	2.60	69.0	2.72	0.30	1.98	1.09	21.5	11.1	1.93
	1.4365	73.025	2.8750	23.812	0.9375	25.654	1.0100	19.050	0.7500	3.6	0.14	0.8	0.03	74.1	92.2		2794R	2735X	15.9	0.63	49.0	1.93	42.5	1.67	66.0	2.60	69.0	2.72	0.30	1.98	1.09	21.5	11.1	1.93
	1.4365	79.375	3.1250	25.400	1.0000	25.654	1.0100	20.638	0.8125	1.6	0.06	3.2	0.13	74.1	92.2		2780R	2734	17.5	0.69	44.5	1.75	42.5	1.67	68.0	2.68	70.0	2.76	0.30	1.98	1.09	21.5	11.1	1.93
	1.4365	80.167	3.1562	29.370	1.1563	30.391	1.1965	23.812	0.9375	3.6	0.14	3.2	0.13	91.0	106		3378	3320	18.7	0.74	49.0	1.93	44.5	1.75	70.0	2.76	75.0	2.95	0.27	2.20	1.21	26.6	12.4	2.14
	1.4365	81.755	3.2187	29.370	1.1563	30.391	1.1965	23.812	0.9375	3.6	0.14	3.2	0.13	91.0	106		3378	3329	18.7	0.74	49.0	1.93	44.5	1.75	71.0	2.80	75.0	2.95	0.27	2.20	1.21	26.6	12.4	2.14
36.512	1.4375	68.262	2.6875	15.875	0.6250	16.520	0.6504	11.908	0.4688	1.6	0.06	1.6	0.06	46.1	53.8		19143R	19268	14.5	0.57	44.0	1.73	42.0	1.65	61.0	2.40	65.0	2.56	0.44	1.35	0.74	13.2	10.0	1.32
	1.4375	69.012	2.7170	19.050	0.7500	19.050	0.7500	15.083	0.5938	3.6	0.14	0.8	0.03	49.2	62.0		13682	13620	16.1	0.63	48.0	1.89	41.5	1.63	62.0	2.44	65.0	2.56	0.40	1.49	0.82	14.2	9.75	1.46
	1.4375	71.438	2.8125	15.875	0.6250	16.520	0.6504	11.908	0.4688	1.6	0.06	1.0	0.04	46.1	53.8		19143R	19281	14.5	0.57	44.0	1.73	42.0	1.65	63.0	2.48	66.0	2.60	0.44	1.35	0.74	13.2	10.0	1.32
	1.4375	71.996	2.8345	17.018	0.6700	16.520	0.6504	14.288	0.5625	1.6	0.06	1.6	0.06	46.1	53.8		19143R	19283	15.7	0.62	44.0	1.73	42.0	1.65	63.0	2.48								

TS type
d (36.512) ~ (38.100) mm
(1.4375) ~ (1.5000) inch

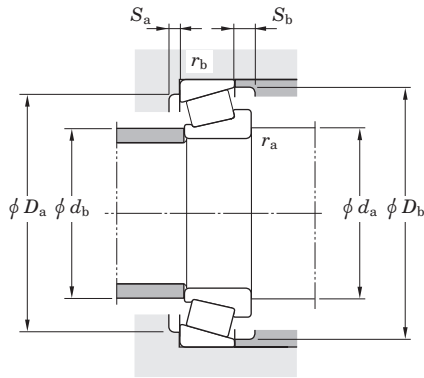
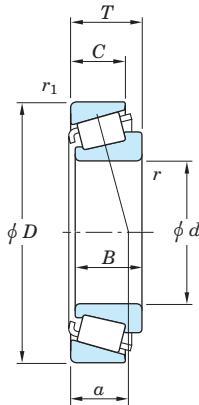


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor			
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>	<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	(500 rpm for 3 000 Hrs.)		<i>K</i>	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch				Radial	Axial			
36.512	1.4375	93.662	3.6875	31.750	1.2500	31.750	1.2500	26.195	1.0313	1.6	0.06	3.2	0.13	105	134		46143	46368	24.0	0.94	49.0	1.93	47.5	1.87	79.0	3.11	87.0	3.43	0.40	1.49	0.82	30.8	21.1	1.46
	1.4375	93.662	3.6875	31.750	1.2500	31.750	1.2500	26.195	1.0313	1.6	0.06	1.2	0.05	105	134		46143	46369	24.0	0.94	49.0	1.93	47.5	1.87	79.0	3.11	87.0	3.43	0.40	1.49	0.82	30.8	21.1	1.46
38.100	1.5000	63.500	2.5000	12.700	0.5000	11.908	0.4688	9.525	0.3750	1.6	0.06	0.8	0.03	25.5	33.1		13889	13830	11.9	0.47	45.0	1.77	42.5	1.67	59.0	2.32	60.0	2.36	0.35	1.73	0.95	7.30	4.30	1.69
	1.5000	65.088	2.5625	12.700	0.5000	11.908	0.4688	9.525	0.3750	1.6	0.06	0.8	0.03	25.5	33.1		13889	13836	11.9	0.47	45.0	1.77	42.5	1.67	59.0	2.32	61.0	2.40	0.35	1.73	0.95	7.30	4.30	1.69
	1.5000	65.088	2.5625	18.034	0.7100	18.288	0.7200	13.970	0.5500	SP ¹⁾	SP ¹⁾	1.2	0.05	42.9	56.5		LM29748	LM29710	13.8	0.54	49.0	1.93	42.5	1.67	59.0	2.32	62.0	2.44	0.33	1.80	0.99	12.4	7.05	1.76
	1.5000	65.088	2.5625	19.812	0.7800	18.288	0.7200	15.748	0.6200	2.4	0.09	1.2	0.05	42.9	56.5		LM29749	LM29711	15.6	0.61	46.0	1.81	42.5	1.67	58.0	2.28	62.0	2.44	0.33	1.80	0.99	12.4	7.05	1.76
	1.5000	68.262	2.6875	19.997	0.7873	16.520	0.6504	16.030	0.6311	1.6	0.06	1.6	0.06	46.1	53.8		19150R	19269	18.6	0.73	45.0	1.77	43.0	1.69	63.0	2.48	66.0	2.60	0.44	1.35	0.74	13.2	10.0	1.32
	1.5000	68.275	2.6880	20.000	0.7874	16.520	0.6504	16.032	0.6312	1.6	0.06	1.6	0.06	46.1	53.8		19150R	19268X	18.7	0.74	45.0	1.77	43.0	1.69	61.0	2.40	65.0	2.56	0.44	1.35	0.74	13.2	10.0	1.32
	1.5000	69.012	2.7170	19.050	0.7500	19.050	0.7500	15.083	0.5938	3.6	0.14	0.8	0.03	49.2	62.0		13685	13620	16.1	0.63	49.5	1.95	43.0	1.69	62.0	2.44	65.0	2.56	0.40	1.49	0.82	14.2	9.75	1.46
	1.5000	69.012	2.7170	19.050	0.7500	19.050	0.7500	15.083	0.5938	2.0	0.08	2.4	0.09	49.2	62.0		13687	13621	16.1	0.63	46.5	1.83	43.0	1.69	61.0	2.40	65.0	2.56	0.40	1.49	0.82	14.2	9.75	1.46
	1.5000	69.012	2.7170	26.195	1.0313	26.187	1.0310	15.083	0.5938	1.6	0.06	2.4	0.09	49.2	62.0		13686	13621	16.1	0.63	46.5	1.83	43.0	1.69	61.0	2.40	65.0	2.56	0.40	1.49	0.82	14.2	9.75	1.46
	1.5000	69.012	2.7170	26.195	1.0313	26.195	1.0313	15.083	0.5938	1.6	0.06	0.8	0.03	49.2	62.0		13686	13620	16.1	0.63	46.5	1.83	43.0	1.69	62.0	2.44	65.0	2.56	0.40	1.49	0.82	14.2	9.75	1.46
	1.5000	69.969	2.7547	21.996	0.8660	19.050	0.7500	18.029	0.7098	3.6	0.14	1.6	0.06	49.2	62.0		13685	13624	16.1	0.63	49.5	1.95	43.0	1.69	61.0	2.40	65.0	2.56	0.40	1.49	0.82	14.2	9.75	1.46
	1.5000	71.438	2.8125	15.875	0.6250	16.520	0.6504	11.908	0.4688	1.6	0.06	1.0	0.04	46.1	53.8		19150R	19281	14.5	0.57	45.0	1.77	43.0	1.69	63.0	2.48	66.0	2.60	0.44	1.35	0.74	13.2	10.0	1.32
	1.5000	71.438	2.8125	17.462	0.6875	16.520	0.6504	15.875	0.6250	1.6	0.06	1.6	0.06	46.1	53.8		19150R	19282	16.1	0.63	45.0	1.77	43.0	1.69	63.0	2.48	66.0	2.60	0.44	1.35	0.74	13.2	10.0	1.32
	1.5000	71.996	2.8346	17.018	0.6700	16.520	0.6504	14.288	0.5625	1.6	0.06	1.6	0.06	46.1	53.8		19150R	19283	15.7	0.62	45.0	1.77	43.0	1.69	63.0	2.48	66.0	2.60	0.44	1.35	0.74	13.2	10.0	1.32
	1.5000	71.996	2.8346	19.000	0.7480	20.638	0.8125	14.237	0.5605	3.6	0.14	1.6	0.06	49.7	61.3		16150	16282	15.0	0.59	49.5	1.95	43.0	1.69	63.0	2.48	67.0	2.64	0.40	1.49	0.82	14.4	9.90	1.46
	1.5000	72.238	2.8440	20.638	0.8125	20.638	0.8125	15.875	0.6250	3.6	0.14	1.2	0.05	49.7	61.3		16150	16284	16.6	0.65	49.5	1.95	43.0	1.69	63.0	2.48	67.0	2.64	0.40	1.49	0.82	14.4	9.90	1.46
	1.5000	72.238	2.8440	20.638	0.8125	20.638	0.8125	15.875	0.6250	2.4	0.09	1.2	0.05	49.7	61.3		16151	16284	16.6	0.65	49.5	1.95	43.0	1.69	63.0	2.48	67.0	2.64	0.40	1.49	0.82	14.4	9.90	1.46
	1.5000	72.238	2.8440	23.812	0.9375	20.638	0.8125	19.050	0.7500	3.6	0.14	2.4	0.09	49.7	61.3		16150	16283	19.8	0.78	49.5	1.95	43.0	1.69	61.0	2.40	67.0	2.64	0.40	1.49	0.82	14.4	9.90	1.46
	1.5000	73.025	2.8750	23.812	0.9375	25.654	1.0100	19.050	0.7500	4.3	0.17	0.8	0.03	74.1	92.2		2776R	2735X	15.9	0.63	52.0	2.05	43.5	1.71	66.0	2.60	69.0	2.72	0.30	1.98	1.09	21.5	11.1	1.93
	1.5000	73.025	2.8750	23.812	0.9375	25.654	1.0100	19.050	0.7500	1.6	0.06	0.8	0.03	74.1	92.2		2788AR	2735X	15.9	0.63	46.0	1.81	43.5	1.71	66.0	2.60	69.0	2.72	0.30	1.98	1.09	21.5	11.1	1.93
	1.5000	73.025	2.8750	23.812	0.9375	25.654	1.0100	19.050	0.7500	3.6	0.14	0.8	0.03	74.1	92.2		2788R	2735X	15.9	0.63	50.0	1.97	43.5	1.71	66.0	2.60	69.0	2.72	0.30	1.98	1.09	21.5	11.1	1.93
	1.5000	76.200	3.0000	23.812	0.9375	25.654	1.0100	19.050	0.7500	3.6	0.14	0.8	0.03	74.1	92.2		2788R	2729	15.9	0.63	50.0	1.97	43.5	1.71	68.0	2.68	70.0	2.76	0.30	1.98	1.09	21.5	11.1	1.93
	1.5000	79.375	3.1250	23.812	0.9375	25.400	1.0000	19.050	0.7500	0.8	0.03	2.4	0.09	81.1	105		26878R	26822A	16.4	0.65	45.0	1.77	44.5	1.75	69.0	2.72	74.0	2.91	0.32	1.88	1.04	23.5	12.8	1.83
	1.5000	79.375	3.1250	29.370	1.1563	29.771	1.1721	23.812	0.9375	3.6	0.14	3.2	0.13	87.4	105		3490	3420	20.8	0.82	52.0	2.05	45.9	1.81	67.0	2.64	74.0	2.91	0.37	1.64	0.90	25.5	15.9	1.60
	1.5000	80.000	3.1496	21.000	0.8268	22.403	0.8820	17.826	0.7018	3.6	0.14	1.2	0.05	68.0	74.8		347	332	15.1	0.59	50.0	1.97	44.0	1.73	73.0	2.87	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.5000	80.000	3.1496	24.176	0.9518	22.403	0.8820	21.000	0.8268	0.8	0.03	2.4	0.09	68.0	74.8		337	332A	18.3	0.72	44.5	1.75	44.0	1.73	71.0	2.80	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.5000	80.035	3.1510	21.432	0.8438	20.940	0.8244	15.875	0.6250	1.6	0.06	1.6	0.06	57.3	65.9		28150	28317	16.9	0.67	45.5	1.79	43.5	1.71	69.0	2.72	73.0	2.87	0.40	1.49	0.82	16.5	11.3	1.46
	1.5000	80.035	3.1510	21.432	0.8438	20.940	0.8244	15.875																										

TS type
d (38.100) ~ (40.000) mm
(1.5000) ~ (1.5748) inch

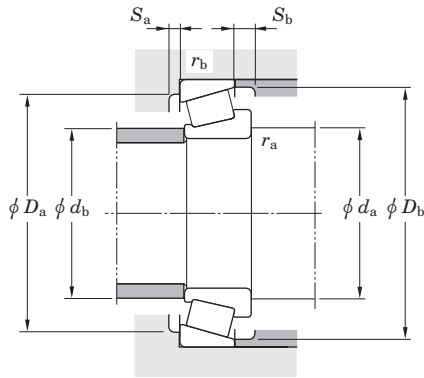
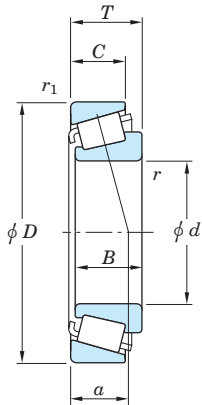


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor			
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	(500 rpm for 3 000 Hrs.)		<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
38.100	1.5000	87.312	3.4375	30.162	1.1875	30.886	1.2160	23.812	0.9375	3.6	0.14	0.8	0.03	95.8	120		3583R	3526	20.5	0.81	52.0	2.05	45.5	1.79	76.0	2.99	80.0	3.15	0.31	1.96	1.08	27.9	14.6	1.91
	1.5000	88.501	3.4843	26.988	1.0625	29.083	1.1450	22.225	0.8750	0.8	0.03	1.6	0.06	98.2	112		415	414	16.9	0.67	45.0	1.77	44.5	1.75	77.0	3.03	80.0	3.15	0.26	2.28	1.25	28.6	12.9	2.22
	1.5000	88.501	3.4843	26.988	1.0625	29.083	1.1450	22.225	0.8750	3.6	0.14	1.6	0.06	98.2	112		418	414	16.9	0.67	51.0	2.01	44.5	1.75	77.0	3.03	80.0	3.15	0.26	2.28	1.25	28.6	12.9	2.22
	1.5000	88.900	3.5000	26.988	1.0625	29.083	1.1450	22.225	0.8750	0.8	0.03	0.8	0.03	98.2	112		415	414X	16.9	0.67	45.0	1.77	44.5	1.75	78.0	3.07	79.0	3.11	0.26	2.28	1.25	28.6	12.9	2.22
	1.5000	90.488	3.5625	39.688	1.5625	40.386	1.5900	33.338	1.3125	1.6	0.06	3.2	0.13	132	169		4375	4335	25.6	1.01	51.0	2.01	48.5	1.91	77.0	3.03	85.0	3.35	0.28	2.11	1.16	38.8	18.9	2.06
	1.5000	93.662	3.6875	31.750	1.2500	31.750	1.2500	25.400	1.0000	3.6	0.14	3.2	0.13	105	123		49150	49368	24.0	0.94	52.0	2.05	46.0	1.81	82.0	3.23	87.0	3.43	0.36	1.67	0.92	30.6	18.8	1.62
	1.5000	93.662	3.6875	31.750	1.2500	31.750	1.2500	26.195	1.0313	0.8	0.03	3.2	0.13	105	134		46150	46368	24.0	0.94	49.0	1.93	47.5	1.87	79.0	3.11	87.0	3.43	0.40	1.49	0.82	30.8	21.1	1.46
	1.5000	93.662	3.6875	31.750	1.2500	31.750	1.2500	26.195	1.0313	3.6	0.14	3.2	0.13	105	134		46151	46368	24.0	0.94	54.0	2.13	47.5	1.87	79.0	3.11	87.0	3.43	0.40	1.49	0.82	30.8	21.1	1.46
	1.5000	95.250	3.7500	27.783	1.0938	28.575	1.1250	22.225	0.8750	3.6	0.14	0.8	0.03	108	141		33880	33822	20.4	0.80	54.0	2.13	48.0	1.89	86.0	3.39	90.0	3.54	0.33	1.82	1.00	31.4	17.7	1.77
	1.5000	95.250	3.7500	27.783	1.0938	29.901	1.1772	22.225	0.8750	0.8	0.03	0.8	0.03	103	122		440	432A	18.4	0.72	46.5	1.83	45.5	1.79	84.0	3.31	87.0	3.43	0.28	2.11	1.16	30.0	14.6	2.06
	1.5000	95.250	3.7500	27.783	1.0938	29.901	1.1772	22.225	0.8750	3.6	0.14	0.8	0.03	103	122		444	432A	18.4	0.72	52.0	2.05	45.5	1.79	84.0	3.31	87.0	3.43	0.28	2.11	1.16	30.0	14.6	2.06
	1.5000	101.600	4.0000	34.925	1.3750	36.068	1.4200	26.988	1.0625	3.6	0.14	3.2	0.13	131	159		525	522	22.2	0.87	54.0	2.13	48.0	1.89	89.0	3.50	95.0	3.74	0.29	2.10	1.16	38.4	18.7	2.05
	1.5000	101.600	4.0000	34.925	1.3750	36.068	1.4200	26.988	1.0625	0.8	0.03	3.2	0.13	131	159		525X	522	22.2	0.87	49.0	1.93	48.0	1.89	89.0	3.50	95.0	3.74	0.29	2.10	1.16	38.4	18.7	2.05
	1.5000	107.950	4.2500	36.512	1.4375	36.957	1.4550	28.575	1.1250	3.6	0.14	3.2	0.13	138	172		542	532X	23.9	0.94	55.0	2.17	49.0	1.93	94.0	3.70	100.0	3.94	0.30	2.03	1.11	40.4	20.5	1.97
38.913	1.5320	122.238	4.8125	51.595	2.0313	51.702	2.0355	36.512	1.4375	3.6	0.14	3.2	0.13	221	318		5561R	5535	39.0	1.54	57.0	2.24	52.0	2.05	106.0	4.17	116.0	4.57	0.36	1.67	0.92	64.5	39.5	1.63
39.624	1.5600	63.500	2.5000	12.700	0.5000	11.908	0.4688	9.525	0.3750	1.6	0.06	0.8	0.03	25.5	33.1		13892	13830	11.9	0.47	45.0	1.77	42.5	1.67	59.0	2.32	60.0	2.36	0.35	1.73	0.95	7.30	4.30	1.69
39.688	1.5625	73.025	2.8750	16.667	0.6562	17.462	0.6875	12.700	0.5000	0.8	0.03	1.6	0.06	45.9	55.8		18587	18520	14.5	0.57	46.0	1.81	46.0	1.81	66.0	2.60	69.0	2.72	0.35	1.71	0.94	13.2	7.90	1.67
	1.5625	73.025	2.8750	23.812	0.9375	25.654	1.0100	19.050	0.7500	3.6	0.14	0.8	0.03	74.1	92.2		2789R	2735X	15.9	0.63	52.0	2.05	45.0	1.77	66.0	2.60	69.0	2.72	0.30	1.98	1.09	21.5	11.1	1.93
	1.5625	80.000	3.1496	23.812	0.9375	25.400	1.0000	19.050	0.7500	1.6	0.06	1.2	0.05	81.1	105		26880R	26824	16.4	0.65	48.0	1.89	45.5	1.79	70.0	2.76	74.0	2.91	0.32	1.88	1.04	23.5	12.8	1.83
	1.5625	80.167	3.1562	25.400	1.0000	25.400	1.0000	20.638	0.8125	3.6	0.14	0.8	0.03	81.1	105		26881R	26830	18.0	0.71	52.0	2.05	45.5	1.79	71.0	2.80	74.0	2.91	0.32	1.88	1.04	23.5	12.8	1.83
	1.5625	80.167	3.1562	29.370	1.1563	30.391	1.1965	23.812	0.9375	0.8	0.03	3.2	0.13	91.0	106		3386	3320	18.7	0.74	46.5	1.83	45.5	1.79	70.0	2.76	75.0	2.95	0.27	2.20	1.21	26.6	12.4	2.14
	1.5625	81.755	3.2187	29.370	1.1563	30.391	1.1965	23.812	0.9375	3.6	0.14	3.2	0.13	91.0	106		3382	3329	18.7	0.74	52.0	2.05	45.5	1.79	71.0	2.80	75.0	2.95	0.27	2.20	1.21	26.6	12.4	2.14
	1.5625	84.138	3.3125	29.370	1.1563	30.391	1.1965	23.812	0.9375	3.6	0.14	3.2	0.13	91.0	106		3382	3328	18.7	0.74	52.0	2.05	45.5	1.79	72.0	2.83	76.0	2.99	0.27	2.20	1.21	26.6	12.4	2.14
	1.5625	88.501	3.4843	26.988	1.0625	29.083	1.1450	22.225	0.8750	3.6	0.14	1.6	0.06	98.2	112		422	414	16.9	0.67	52.0	2.05	46.5	1.83	77.0	3.03	80.0	3.15	0.26	2.28	1.25	28.6	12.9	2.22
	1.5625	88.501	3.4843	26.988	1.0625	29.083	1.1450	22.225	0.8750	3.6	0.14	3.2	0.13	98.2	112		422	414A	16.9	0.67	52.0	2.05	46.5	1.83	76.0	2.99	79.0	3.11	0.26	2.28	1.25	28.6	12.9	2.22
	1.5625	90.488	3.5625	39.688	1.5625	40.386	1.5900	33.338	1.3125	3.6	0.14	3.2	0.13	132	169		4367	4335	25.6	1.01	55.0	2.17	49.0	1.93	77.0	3.03	85.0	3.35	0.28	2.11	1.16	38.8	18.9	2.06
	1.5625	93.264	3.6718	30.162	1.1875	30.302	1.1930	23.812	0.9375	3.6	0.14	3.2	0.13	103	137		3774	3720	22.2	0.87	55.0	2.17	51.0	2.01	82.0	3.23	88.0	3.46	0.34	1.77	0.97	30.1	17.4	1.73
	1.5625	101.600	4.0000	34.925	1.3750	36.068	1.4200	26.988	1.0625	3.6	0.14	3.2	0.13	131	159		525A	522	22.2	0.87	56.0	2.20	49.0	1.93	89.0	3.50	95.0	3.74	0.29	2.10	1.16	38.4	18.7	2.05
	1.5625	120.040	4.7260	41.275	1.6250	41.275	1.6250	31.750	1.2500	0.8	0.03	3.2	0.13	174	217		620	612A	27.3	1.07	52.0	2.05	52.0	2.05	103.0	4.06	109.0	4.29	0.31	1.91	1.05	50.9	27.4	1.86
	1.5625	120.650	4.7500	41.275	1.6250	41.2																												

TS type
d (40.000) ~ (41.275) mm
(1.5748) ~ (1.6250) inch

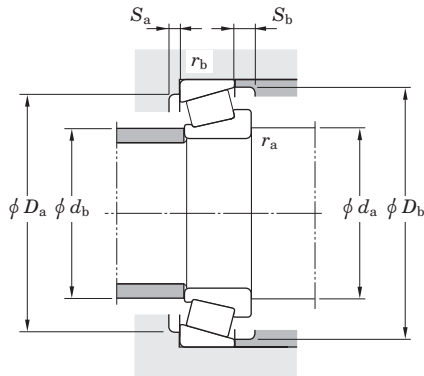
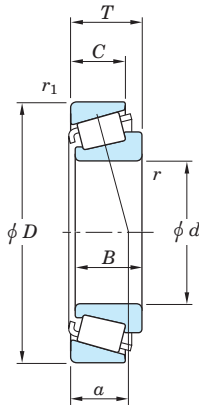


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor			
d		D		T		B		C		r (min.)		r ₁ (min.)		C _r	C _{0r}		Inner ring (Cone)	Outer ring (Cup)	a		d _a		d _b		D _a		D _b		e	Y ₁	Y ₀	(500 rpm for 3 000 Hrs.)		K
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
40.000	1.5748	85.725	3.3750	30.162	1.1875	30.162	1.1875	23.812	0.9375	0.8	0.03	1.2	0.05	108	136		3879	3821	22.9	0.90	51.0	2.01	50.0	1.97	75.0	2.95	81.0	3.19	0.40	1.49	0.82	31.5	21.7	1.46
	1.5748	87.312	3.4375	30.162	1.1875	30.886	1.2160	23.812	0.9375	3.6	0.14	3.2	0.13	95.8	120		3582R	3525	20.5	0.81	53.0	2.09	48.5	1.91	75.0	2.95	81.0	3.19	0.31	1.96	1.08	27.9	14.6	1.91
	1.5748	88.501	3.4843	26.988	1.0625	29.083	1.1450	22.225	0.8750	3.6	0.14	1.6	0.06	98.2	112		420	414	16.9	0.67	52.0	2.05	46.0	1.81	77.0	3.03	80.0	3.15	0.26	2.28	1.25	28.6	12.9	2.22
	1.5748	90.119	3.5480	23.000	0.9055	21.692	0.8540	21.808	0.8586	4.0	0.16	2.4	0.09	71.8	81.7		350	352	17.8	0.70	54.0	2.13	46.5	1.83	78.0	3.07	82.0	3.23	0.31	1.96	1.08	20.7	10.8	1.91
	1.5748	95.250	3.7500	27.783	1.0938	29.901	1.1772	22.225	0.8750	3.6	0.14	2.4	0.09	103	122		442S	432	23.6	0.93	54.0	2.13	49.0	1.93	83.0	3.27	87.0	3.43	0.28	2.11	1.16	30.0	14.6	2.06
	1.5748	107.950	4.2500	36.512	1.4375	36.957	1.4550	28.575	1.1250	3.6	0.14	3.2	0.13	138	172		543	532X	23.9	0.94	57.0	2.24	50.0	1.97	94.0	3.70	100.0	3.94	0.30	2.03	1.11	40.4	20.5	1.97
40.483	1.5938	82.550	3.2500	29.370	1.1563	28.575	1.1250	23.020	0.9063	3.6	0.14	3.2	0.13	87.3	117		HM801349	HM801310	24.4	0.96	58.0	2.28	49.0	1.93	68.0	2.68	78.0	3.07	0.55	1.10	0.60	25.5	23.8	1.07
41.275	1.6250	73.025	2.8750	16.667	0.6562	17.462	0.6875	12.700	0.5000	3.6	0.14	1.6	0.06	45.9	55.8		18590	18520	14.5	0.57	53.0	2.09	46.0	1.81	66.0	2.60	69.0	2.72	0.35	1.71	0.94	13.2	7.90	1.67
	1.6250	73.025	2.8750	16.667	0.6562	17.462	0.6875	12.700	0.5000	1.2	0.05	1.6	0.06	45.9	55.8		18591	18520	14.5	0.57	47.5	1.87	46.0	1.81	66.0	2.60	69.0	2.72	0.35	1.71	0.94	13.2	7.90	1.67
	1.6250	73.431	2.8910	19.558	0.7700	19.812	0.7800	14.732	0.5800	3.6	0.14	0.8	0.03	57.8	73.0		LM501349	LM501310	16.1	0.63	53.0	2.09	46.5	1.83	67.0	2.64	70.0	2.76	0.40	1.50	0.83	16.7	11.4	1.46
	1.6250	73.431	2.8910	21.430	0.8437	19.812	0.7800	16.604	0.6537	3.6	0.14	0.8	0.03	57.8	73.0		LM501349	LM501314	18.0	0.71	53.0	2.09	46.5	1.83	66.0	2.60	70.0	2.76	0.40	1.50	0.83	16.7	11.4	1.46
	1.6250	73.431	2.8910	23.012	0.9060	19.812	0.7800	18.186	0.7160	3.6	0.14	2.4	0.09	57.8	73.0		LM501349	LM501311	16.1	0.63	53.0	2.09	46.5	1.83	64.0	2.52	70.0	2.76	0.40	1.50	0.83	16.7	11.4	1.46
	1.6250	76.200	3.0000	18.009	0.7090	17.384	0.6844	14.288	0.5625	1.6	0.06	1.6	0.06	51.6	63.3		11162R	11300	17.5	0.69	49.0	1.93	46.5	1.83	67.0	2.64	72.0	2.83	0.49	1.23	0.68	14.9	12.4	1.20
	1.6250	76.200	3.0000	18.009	0.7090	17.384	0.6844	14.288	0.5625	1.6	0.06	1.6	0.06	51.6	63.3		11162UR	11300	17.5	0.69	49.0	1.93	46.0	1.81	67.0	2.64	72.0	2.83	0.49	1.23	0.68	14.9	12.4	1.20
	1.6250	76.200	3.0000	18.009	0.7090	17.384	0.6844	14.288	0.5625	0.8	0.03	1.6	0.06	51.6	63.3		11163R	11300	17.5	0.69	47.0	1.85	46.5	1.83	67.0	2.64	72.0	2.83	0.49	1.23	0.68	14.9	12.4	1.20
	1.6250	76.200	3.0000	22.225	0.8750	23.020	0.9063	17.462	0.6875	3.6	0.14	0.8	0.03	66.3	83.3		24780R	24720	17.4	0.69	54.0	2.13	47.0	1.85	68.0	2.68	72.0	2.83	0.39	1.53	0.84	19.2	12.9	1.49
	1.6250	76.200	3.0000	22.225	0.8750	23.020	0.9063	17.462	0.6875	3.6	0.14	3.2	0.13	66.3	83.3		24780R	24722	17.4	0.69	54.0	2.13	47.0	1.85	66.0	2.60	72.0	2.83	0.39	1.53	0.84	19.2	12.9	1.49
	1.6250	76.200	3.0000	22.225	0.8750	23.020	0.9063	17.462	0.6875	0.8	0.03	0.8	0.03	66.3	83.3		24781R	24720	17.4	0.69	47.0	1.85	47.0	1.85	68.0	2.68	72.0	2.83	0.39	1.53	0.84	19.2	12.9	1.49
	1.6250	76.200	3.0000	25.400	1.0000	23.020	0.9063	20.638	0.8125	3.6	0.14	2.4	0.09	66.3	83.3		24780R	24721	20.6	0.81	54.0	2.13	47.0	1.85	66.0	2.60	72.0	2.83	0.39	1.53	0.84	19.2	12.9	1.49
	1.6250	80.000	3.1496	21.000	0.8268	22.403	0.8820	17.826	0.7018	0.8	0.03	1.2	0.05	68.0	74.8		336	332	15.1	0.59	47.0	1.85	46.0	1.81	73.0	2.87	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.6250	80.000	3.1496	21.000	0.8268	22.403	0.8820	17.826	0.7018	3.6	0.14	1.2	0.05	68.0	74.8		342	332	15.1	0.59	53.0	2.09	46.0	1.81	73.0	2.87	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.6250	80.000	3.1496	28.575	1.1250	29.977	1.1802	17.826	0.7018	3.6	0.14	1.2	0.05	68.0	74.8		342A	332	22.7	0.89	53.0	2.09	46.0	1.81	73.0	2.87	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.6250	80.000	3.1496	31.750	1.2500	29.977	1.1802	21.000	0.8268	3.6	0.14	2.4	0.09	68.0	74.8		342A	332A	22.7	0.89	53.0	2.09	46.0	1.81	71.0	2.80	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14
	1.6250	80.167	3.1562	25.400	1.0000	25.400	1.0000	20.638	0.8125	0.8	0.03	3.2	0.13	81.1	105		26885R	26820	17.9	0.70	48.0	1.89	47.0	1.85	69.0	2.72	74.0	2.91	0.32	1.88	1.04	23.5	12.8	1.83
	1.6250	80.167	3.1562	29.370	1.1563	25.400	1.0000	24.608	0.9688	3.6	0.14	3.2	0.13	81.1	105		26882R	26821	17.9	0.70	54.0	2.13	47.0	1.85	68.0	2.68	74.0	2.91	0.32	1.88	1.04	23.5	12.8	1.83
	1.6250	82.550	3.2500	26.543	1.0450	25.654	1.0100	20.193	0.7950	3.6	0.14	3.2	0.13	83.7	105		M802048	M802011	23.3	0.92	57.0	2.24	50.6	1.99	70.0	2.76	79.0	3.11	0.55	1.10	0.60	24.2	22.6	1.07
	1.6250	84.138	3.3125	29.370	1.1563	30.391	1.1965	23.812	0.9375	3.6	0.14	3.2	0.13	91.0	106		3383	3328	18.7	0.74	52.0	2.05	46.0	1.81	72.0	2.83	76.0	2.99	0.27	2.20	1.21	26.6	12.4	2.14
	1.6250	84.138	3.3125	29.370	1.1563	30.391	1.1965	23.812	0.9375	0.8	0.03	3.2	0.13	91.0	106		3384	3328	18.7	0.74	48.0	1.89	41.5	1.63	72.0	2.83	76.0	2.99	0.27	2.20	1.21	26.6	12.4	2.14
	1.6250	84.138	3.3125	30.162	1.1875	30.886	1.2160	23.812	0.9375	3.6	0.14	3.2	0.13	95.8	120																			

TS type
d (41.275) ~ (44.450) mm
(1.6250) ~ (1.7500) inch

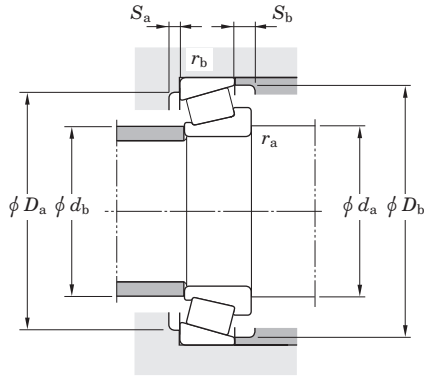
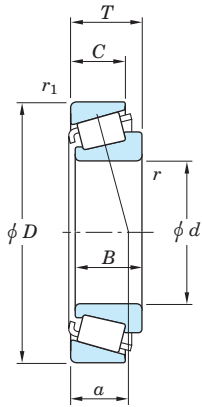


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor			
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>	<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	(500 rpm for 3 000 Hrs.)		<i>K</i>		
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch				Radial	Axial				
41.275	1.6250	93.662	3.6875	31.750	1.2500	31.750	1.2500	25.400	1.0000	3.6	0.14	3.2	0.13	105	123		49162	49368	22.9	0.90	55.0	2.17	49.0	1.93	82.0	3.23	87.0	3.43	0.36	1.67	0.92	30.6	18.8	1.62	
	1.6250	93.662	3.6875	31.750	1.2500	31.750	1.2500	26.195	1.0313	0.8	0.03	3.2	0.13	105	134		46162	46368	24.0	0.94	52.0	2.05	51.0	2.01	79.0	3.11	87.0	3.43	0.40	1.49	0.82	30.8	21.1	1.46	
	1.6250	95.250	3.7500	27.783	1.0938	29.901	1.1772	22.225	0.8750	1.2	0.05	2.4	0.09	103	122		439	432	18.4	0.72	51.0	2.01	48.5	1.91	83.0	3.27	87.0	3.43	0.28	2.11	1.16	30.0	14.6	2.06	
	1.6250	95.250	3.7500	27.783	1.0938	29.901	1.1772	22.225	0.8750	3.6	0.14	0.8	0.03	103	122		447	432A	18.4	0.72	55.0	2.17	48.5	1.91	84.0	3.31	87.0	3.43	0.28	2.11	1.16	30.0	14.6	2.06	
	1.6250	95.250	3.7500	30.162	1.1875	29.370	1.1563	23.020	0.9063	3.6	0.14	3.2	0.13	104	140		HM804840	HM804810	26.5	1.04	61.0	2.40	54.0	2.13	81.0	3.19	91.0	3.58	0.55	1.10	0.60	30.4	28.4	1.07	
	1.6250	101.600	4.0000	34.925	1.3750	36.068	1.4200	26.988	1.0625	3.6	0.14	3.2	0.13	131	159		526	522	22.2	0.87	57.0	2.24	50.0	1.97	89.0	3.50	95.0	3.74	0.29	2.10	1.16	38.4	18.7	2.05	
	1.6250	101.600	4.0000	34.925	1.3750	36.068	1.4200	26.988	1.0625	0.8	0.03	3.2	0.13	131	159		526A	522	22.2	0.87	52.0	2.05	50.0	1.97	89.0	3.50	95.0	3.74	0.29	2.10	1.16	38.4	18.7	2.05	
	1.6250	104.775	4.1250	30.162	1.1875	29.317	1.1542	24.605	0.9687	1.6	0.06	3.2	0.13	109	144		464A	453X	23.6	0.93	54.0	2.13	52.0	2.05	92.0	3.62	98.0	3.86	0.34	1.79	0.98	31.7	18.2	1.74	
	1.6250	104.775	4.1250	36.512	1.4375	36.512	1.4375	28.575	1.1250	1.6	0.06	3.2	0.13	148	187		59162	59412	26.9	1.06	55.0	2.17	54.0	2.13	92.0	3.62	99.0	3.90	0.40	1.49	0.82	43.2	29.6	1.46	
	1.6250	104.775	4.1250	36.512	1.4375	36.512	1.4375	28.575	1.1250	1.6	0.06	3.2	0.13	141	195		HM807035	HM807010	29.3	1.15	60.0	2.36	57.0	2.24	89.0	3.50	100.0	3.94	0.49	1.23	0.68	41.3	34.4	1.20	
	1.6250	107.950	4.2500	27.783	1.0938	29.317	1.1542	22.225	0.8750	2.4	0.09	0.8	0.03	109	144		464	453A	23.6	0.93	56.0	2.20	52.0	2.05	97.0	3.82	100.0	3.94	0.34	1.79	0.98	31.7	18.2	1.74	
	1.6250	107.950	4.2500	36.512	1.4375	36.957	1.4550	28.575	1.1250	3.6	0.14	3.2	0.13	138	172		541	532X	23.9	0.94	58.0	2.28	52.0	2.05	94.0	3.70	100.0	3.94	0.30	2.03	1.11	40.4	20.5	1.97	
	42.000	1.6535	76.200	3.0000	18.009	0.7090	17.384	0.6844	14.288	0.5625	2.0	0.08	1.6	0.06	51.6	63.3		11165XR	11300	17.5	0.69	51.0	2.01	46.0	1.81	67.0	2.64	72.0	2.83	0.49	1.23	0.68	14.9	12.4	1.20
		1.6535	76.200	3.0000	18.009	0.7090	17.384	0.6844	14.288	0.5625	4.3	0.17	3.6	0.14	51.6	63.3		11165XSR	11300	17.5	0.69	53.0	2.09	46.0	1.81	67.0	2.64	72.0	2.83	0.49	1.23	0.68	14.9	12.4	1.20
	42.070	1.6563	90.488	3.5625	39.688	1.5625	40.386	1.5900	33.338	1.3125	3.6	0.14	3.2	0.13	132	169		4395	4335	25.6	1.01	58.0	2.28	51.0	2.01	77.0	3.03	85.0	3.35	0.28	2.11	1.16	38.8	18.9	2.06
	42.850	1.6870	104.775	4.1250	30.162	1.1875	29.317	1.1542	24.605	0.9687	0.8	0.03	3.2	0.13	109	144		461	453X	23.6	0.93	54.5	2.15	54.0	2.13	92.0	3.62	98.0	3.86	0.34	1.79	0.98	31.7	18.2	1.74
42.862	1.6875	76.992	3.0312	17.463	0.6875	17.145	0.6750	11.908	0.4688	1.6	0.06	1.6	0.06	48.4	62.2		12168	12303	17.5	0.69	51.0	2.01	48.5	1.91	68.0	2.68	73.0	2.87	0.51	1.19	0.65	13.0	11.3	1.16	
	1.6875	82.931	3.2650	26.988	1.0625	25.400	1.0000	22.225	0.8750	2.4	0.09	2.4	0.09	77.2	100		25578	25523	20.7	0.81	53.0	2.09	49.5	1.95	72.0	2.83	77.0	3.03	0.33	1.79	0.99	22.5	12.9	1.75	
	1.6875	83.058	3.2700	23.812	0.9375	25.400	1.0000	19.050	0.7500	3.6	0.14	3.2	0.13	77.2	100		25576	25521	17.5	0.69	55.0	2.17	49.0	1.93	72.0	2.83	77.0	3.03	0.33	1.79	0.99	22.5	12.9	1.75	
	1.6875	84.138	3.3125	30.162	1.1875	30.886	1.2160	23.812	0.9375	3.6	0.14	3.2	0.13	95.8	120		3579R	3520	20.5	0.81	56.0	2.20	49.5	1.95	74.0	2.91	79.5	3.13	0.31	1.96	1.08	27.9	14.6	1.91	
	1.6875	85.000	3.3464	25.400	1.0000	25.608	1.0082	20.638	0.8125	3.6	0.14	1.2	0.05	80.0	106		2973	2924	18.9	0.74	55.0	2.17	49.0	1.93	76.0	2.99	80.0	3.15	0.35	1.73	0.95	23.3	13.8	1.69	
	1.6875	114.300	4.5000	44.450	1.7500	44.450	1.7500	34.925	1.3750	2.0	0.08	3.2	0.13	189	230		65383	65320	31.7	1.25	60.0	2.36	56.0	2.20	97.0	3.82	107.0	4.21	0.43	1.40	0.77	55.4	40.7	1.36	
	1.6875	114.300	4.5000	44.450	1.7500	44.450	1.7500	34.925	1.3750	2.0	0.08	3.2	0.13	189	230		65383	65320	31.7	1.25	60.0	2.36	56.0	2.20	97.0	3.82	107.0	4.21	0.43	1.40	0.77	55.4	40.7	1.36	
42.875	1.6880	76.200	3.0000	25.400	1.0000	25.400	1.0000	20.638	0.8125	1.6	0.06	1.6	0.06	81.1	105		26886R	26823	18.0	0.71	51.0	2.01	48.5	1.91	69.0	2.72	73.0	2.87	0.32	1.88	1.04	23.5	12.8	1.83	
	1.6880	79.375	3.1250	23.812	0.9375	25.400	1.0000	19.050	0.7500	3.6	0.14	0.8	0.03	81.1	105		26884R	26822	16.1	0.63	55.0	2.17	48.5	1.91	71.0	2.80	74.0	2.91	0.32	1.88	1.04	23.5	12.8	1.83	
	1.6880	80.000	3.1496	21.000	0.8268	22.403	0.8820	17.826	0.7018	3.6	0.14	1.2	0.05	68.0	74.8		342S	332	15.1	0.59	54.0	2.13	47.5	1.87	73.0	2.87	75.0	2.95	0.27	2.20	1.21	19.6	9.15	2.14	
	1.6880	80.167	3.1562	25.400	1.0000	25.400	1.0000	20.638	0.8125	3.6	0.14	3.2	0.13	81.1	105		26884R	26820	18.0	0.71	55.0	2.17	48.5	1.91	69.0	2.72	74.0	2.91	0.32	1.88	1.04	23.5	12.8	1.83	
	1.6880	82.931	3.2650	23.812	0.9375	25.400	1.0000	19.050	0.7500	3.6	0.14	0.8	0.03	77.2	100		25577	25520	17.5	0.69	55.0	2.17	49.0	1.93	74.0	2.91	77.0	3.03	0.33	1.79	0.99	22.5	12.9	1.75	
	1.6880	83.058	3.2700	23.812	0.9375	25.400	1.0000	19.050	0.7500	3.																									

TS type
d (44.450) mm
(1.7500) inch

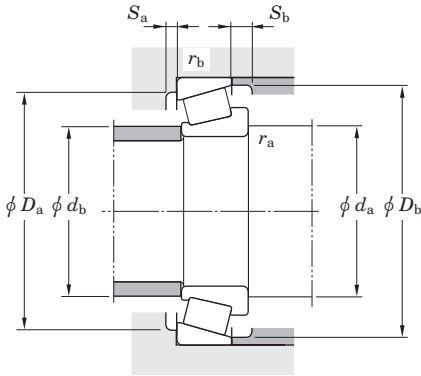
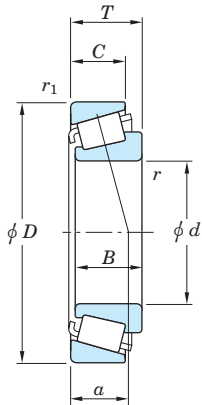


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor			
d		D		T		B		C		r (min.)		r ₁ (min.)		C _r	C _{0r}		Inner ring (Cone)	Outer ring (Cup)	a		d _a		d _b		D _a		D _b		e	Y ₁	Y ₀	(500 rpm for 3 000 Hrs.)		K
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
44.450	1.7500	85.000	3.3465	20.638	0.8125	21.692	0.8540	17.462	0.6875	0.8	0.03	1.2	0.05	71.8	81.7		355A	354A	15.5	0.61	51.0	2.01	50.0	1.97	77.0	3.03	80.0	3.15	0.31	1.96	1.08	20.7	10.8	1.91
	1.7500	85.000	3.3465	20.638	0.8125	21.692	0.8540	17.462	0.6875	3.6	0.14	1.2	0.05	71.8	81.7		355X	354A	15.5	0.61	56.0	2.20	50.0	1.97	77.0	3.03	80.0	3.15	0.31	1.96	1.08	20.7	10.8	1.91
	1.7500	85.000	3.3465	23.812	0.9375	25.400	1.0000	19.050	0.7500	3.6	0.14	2.4	0.09	77.2	100		25580	25526	17.5	0.69	57.0	2.24	50.0	1.97	74.0	2.91	78.0	3.07	0.33	1.79	0.99	22.5	12.9	1.75
	1.7500	85.000	3.3465	25.400	1.0000	25.608	1.0082	20.638	0.8125	3.6	0.14	1.2	0.05	80.0	106		2975	2924	18.9	0.74	54.0	2.13	51.0	2.01	76.0	2.99	80.0	3.15	0.35	1.73	0.95	23.3	13.8	1.69
	1.7500	87.312	3.4375	30.162	1.1875	30.886	1.2160	23.812	0.9375	5.6	0.22	3.2	0.13	95.8	120		3578AR	3525	20.5	0.81	57.0	2.24	51.0	2.01	75.0	2.95	81.0	3.19	0.31	1.96	1.08	27.9	14.6	1.91
	1.7500	88.900	3.5000	30.162	1.1875	29.370	1.1563	23.020	0.9063	3.6	0.14	3.2	0.13	99.6	125		HM803149	HM803110	26.1	1.03	62.0	2.44	53.4	2.10	74.0	2.91	85.0	3.35	0.55	1.10	0.60	28.8	26.9	1.07
	1.7500	90.000	3.5433	23.000	0.9055	21.692	0.8540	23.000	0.9055	2.4	0.09	2.0	0.08	71.8	81.7		355	353	17.8	0.70	54.0	2.13	50.0	1.97	78.0	3.07	81.0	3.19	0.31	1.96	1.08	20.7	10.8	1.91
	1.7500	90.488	3.5625	39.688	1.5625	40.386	1.5900	33.338	1.3125	3.6	0.14	3.2	0.13	132	169		4370	4335	25.6	1.01	57.0	2.24	51.0	2.01	77.0	3.03	85.0	3.35	0.28	2.11	1.16	38.8	18.9	2.06
	1.7500	93.264	3.6718	30.162	1.1875	30.302	1.1930	23.812	0.9375	3.6	0.14	0.8	0.03	103	137		3782	3730	22.2	0.87	58.0	2.28	52.0	2.05	84.0	3.31	88.0	3.46	0.34	1.77	0.97	30.1	17.4	1.73
	1.7500	93.264	3.6718	30.162	1.1875	30.302	1.1930	23.812	0.9375	6.4	0.25	3.2	0.13	103	137		3783	3720	22.2	0.87	64.0	2.52	54.0	2.13	82.0	3.23	88.0	3.46	0.34	1.77	0.97	30.1	17.4	1.73
	1.7500	93.264	3.6718	30.162	1.1875	30.302	1.1930	23.812	0.9375	6.4	0.25	0.8	0.03	103	137		3783	3730	22.2	0.87	64.0	2.52	54.0	2.13	84.0	3.31	88.0	3.46	0.34	1.77	0.97	30.1	17.4	1.73
	1.7500	93.662	3.6875	31.750	1.2500	31.750	1.2500	25.400	1.0000	3.6	0.14	3.2	0.13	105	123		49175	49368	22.9	0.90	59.0	2.32	53.0	2.09	82.0	3.23	87.0	3.43	0.36	1.67	0.92	30.6	18.8	1.62
	1.7500	93.662	3.6875	31.750	1.2500	31.750	1.2500	25.400	1.0000	0.8	0.03	3.2	0.13	105	123		49176	49368	22.9	0.90	54.0	2.13	53.0	2.09	82.0	3.23	87.0	3.43	0.36	1.67	0.92	30.6	18.8	1.62
	1.7500	93.662	3.6875	31.750	1.2500	31.750	1.2500	26.195	1.0313	0.8	0.03	3.2	0.13	105	134		46175	46368	24.0	0.94	55.0	2.17	54.0	2.13	79.0	3.11	87.0	3.43	0.40	1.49	0.82	30.8	21.1	1.46
	1.7500	93.662	3.6875	31.750	1.2500	31.750	1.2500	26.195	1.0313	3.6	0.14	3.2	0.13	105	134		46176	46368	24.0	0.94	60.0	2.36	54.0	2.13	79.0	3.11	87.0	3.43	0.40	1.49	0.82	30.8	21.1	1.46
	1.7500	93.662	3.6875	31.750	1.2500	31.750	1.2500	26.195	1.0313	3.6	0.14	1.2	0.05	105	134		46176	46369	24.0	0.94	60.0	2.36	54.0	2.13	79.0	3.11	87.0	3.43	0.40	1.49	0.82	30.8	21.1	1.46
	1.7500	95.250	3.7500	27.783	1.0938	28.575	1.1250	22.225	0.8750	0.8	0.03	2.4	0.09	108	141		33885	33821	20.4	0.80	53.0	2.09	53.0	2.09	85.0	3.35	90.0	3.54	0.33	1.82	1.00	31.4	17.7	1.77
	1.7500	95.250	3.7500	27.783	1.0938	29.901	1.1772	22.225	0.8750	0.8	0.03	2.4	0.09	103	122		435	432	18.4	0.72	52.0	2.05	51.0	2.01	83.0	3.27	87.0	3.43	0.28	2.11	1.16	30.0	14.6	2.06
	1.7500	95.250	3.7500	27.783	1.0938	29.901	1.1772	22.225	0.8750	3.6	0.14	0.8	0.03	103	122		438	432A	18.4	0.72	57.0	2.24	51.0	2.01	84.0	3.31	87.0	3.43	0.28	2.11	1.16	30.0	14.6	2.06
	1.7500	95.250	3.7500	30.162	1.1875	29.370	1.1563	23.020	0.9063	0.8	0.03	2.4	0.09	104	140		HM804842	HM804810	26.5	1.04	57.0	2.24	57.0	2.24	81.0	3.19	91.0	3.58	0.55	1.10	0.60	30.4	28.4	1.07
	1.7500	95.250	3.7500	30.162	1.1875	29.370	1.1563	23.020	0.9063	3.6	0.14	2.4	0.09	104	140		HM804843	HM804810	26.5	1.04	63.0	2.48	57.0	2.24	81.0	3.19	91.0	3.58	0.55	1.10	0.60	30.4	28.4	1.07
	1.7500	95.250	3.7500	30.162	1.1875	29.370	1.1563	23.020	0.9063	3.6	0.14	0.8	0.03	104	140		HM804843	HM804811	26.5	1.04	63.0	2.48	57.0	2.24	83.0	3.27	91.0	3.58	0.55	1.10	0.60	30.4	28.4	1.07
	1.7500	98.425	3.8750	30.162	1.1875	30.302	1.1930	23.812	0.9375	6.4	0.25	3.2	0.13	103	137		3783	3732	22.2	0.87	64.0	2.52	54.0	2.13	84.0	3.31	90.0	3.54	0.34	1.77	0.97	30.1	17.4	1.73
	1.7500	98.425	3.8750	30.162	1.1875	31.750	1.2500	25.400	1.0000	0.8	0.03	3.2	0.13	114	143		49576	49520	24.1	0.95	55.0	2.17	54.0	2.13	88.0	3.46	96.0	3.78	0.40	1.50	0.82	33.4	22.8	1.46
	1.7500	101.600	4.0000	31.750	1.2500	31.750	1.2500	25.400	1.0000	0.8	0.03	0.8	0.03	114	143		49576	49522	24.1	0.95	55.0	2.17	54.0	2.13	90.0	3.54	96.0	3.78	0.40	1.50	0.82	33.4	22.8	1.46
	1.7500	101.600	4.0000	31.750	1.2500	31.750	1.2500	25.400	1.0000	3.6	0.14	3.2	0.13	114	143		49577	49520	24.1	0.95	60.0	2.36	54.0	2.13	88.0	3.46	96.0	3.78	0.40	1.50	0.82	33.4	22.8	1.46
	1.7500	101.600	4.0000	34.925	1.3750	36.068	1.4200	26.988	1.0625	3.6	0.14	3.2	0.13	131	159		527	522	22.2	0.87	59.0	2.32	53.0	2.09	89.0	3.50	95.0	3.74	0.29	2.10	1.16	38.4	18.7	2.05
	1.7500	104.775	4.1250	30.162	1.1875	30.958	1.2188	23.812	0.9375	0.8	0.03	0.8	0.03	126	165		45280																	

TS type
d 44.869 ~ (47.625) mm
1.7665 ~ (1.8750) inch

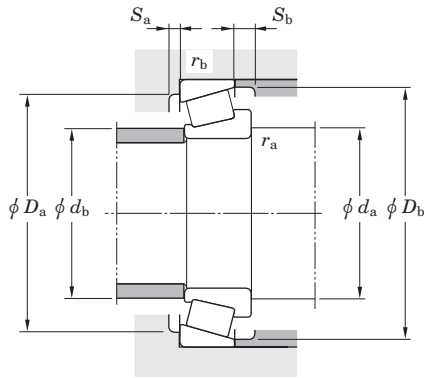
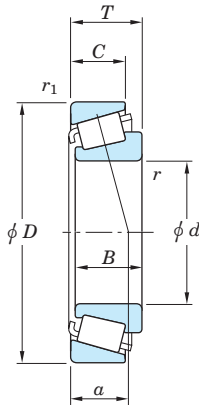


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN) (500 rpm for 3 000 Hrs.)		Factor		
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	(500 rpm for 3 000 Hrs.) Radial	Axial	<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						
44.869	1.7665	92.075	3.6250	24.608	0.9688	25.400	1.0000	19.845	0.7813	3.6	0.14	0.8	0.03	84.8	119		28576R	28521	19.9	0.78	59.0	2.32	53.0	2.09	83.0	3.27	87.0	3.43	0.38	1.59	0.87	24.7	15.9	1.55
44.983	1.7710	85.000	3.3465	26.988	1.0625	25.400	1.0000	22.225	0.8750	1.6	0.06	2.4	0.09	77.2	100		25584	25527	20.7	0.81	53.0	2.09	51.0	2.01	73.0	2.87	78.0	3.07	0.33	1.79	0.99	22.5	12.9	1.75
	1.7710	93.264	3.6718	30.162	1.1875	30.302	1.1930	23.812	0.9375	3.6	0.14	3.2	0.13	103	137		3776	3720	22.2	0.87	59.0	2.32	53.0	2.09	82.0	3.23	88.0	3.46	0.34	1.77	0.97	30.1	17.4	1.73
	1.7710	101.600	4.0000	34.925	1.3750	36.068	1.4200	26.988	1.0625	4.3	0.17	3.2	0.13	131	159		527S	522	22.2	0.87	61.0	2.40	53.0	2.09	89.0	3.50	95.0	3.74	0.29	2.10	1.16	38.4	18.7	2.05
45.000	1.7717	85.000	3.3465	20.638	0.8125	21.692	0.8540	17.462	0.6875	1.6	0.06	1.2	0.05	71.8	81.7		358	354A	15.5	0.61	52.5	2.07	50.0	1.97	77.0	3.03	80.0	3.15	0.31	1.96	1.08	20.7	10.8	1.91
	1.7717	85.000	3.3465	20.638	0.8125	21.692	0.8540	17.462	0.6875	3.6	0.14	1.2	0.05	71.8	81.7		358A	354A	15.5	0.61	56.5	2.22	50.0	1.97	77.0	3.03	80.0	3.15	0.31	1.96	1.08	20.7	10.8	1.91
	1.7717	90.000	3.5433	20.000	0.7874	22.225	0.8750	15.875	0.6250	2.0	0.08	2.0	0.08	74.3	87.3		367	362	15.4	0.61	55.0	2.17	51.0	2.01	81.0	3.19	84.0	3.31	0.32	1.88	1.03	21.4	11.7	1.83
	1.7717	90.119	3.5480	23.000	0.9055	21.692	0.8540	21.808	0.8586	1.6	0.06	2.4	0.09	71.8	81.7		358	352	17.8	0.70	52.5	2.07	50.0	1.97	78.0	3.07	82.0	3.23	0.31	1.96	1.08	20.7	10.8	1.91
	1.7717	100.000	3.9370	25.000	0.9842	22.225	0.8750	21.824	0.8592	0.8	0.03	2.0	0.08	84.4	98.5		376	372	21.5	0.85	57.0	2.24	54.0	2.13	86.0	3.39	90.0	3.54	0.34	1.77	0.97	24.1	14.0	1.73
	1.7717	100.000	3.9370	25.000	0.9842	22.225	0.8750	21.824	0.8592	2.4	0.09	2.0	0.08	84.4	98.5		376A	372	21.5	0.85	57.0	2.24	54.0	2.13	86.0	3.39	90.0	3.54	0.34	1.77	0.97	24.1	14.0	1.73
	1.7717	104.775	4.1250	30.162	1.1875	29.317	1.1542	24.605	0.9687	2.4	0.09	3.2	0.13	109	144		458S	453X	23.6	0.93	59.0	2.32	55.0	2.17	92.0	3.62	98.0	3.86	0.34	1.79	0.98	31.7	18.2	1.74
	1.7717	104.775	4.1250	39.688	1.5625	40.157	1.5810	33.338	1.3125	3.6	0.14	3.2	0.13	151	211		4559	4535	27.3	1.07	62.0	2.44	59.0	2.32	90.0	3.54	99.0	3.90	0.34	1.79	0.98	44.4	25.4	1.74
45.230	1.7807	79.985	3.1490	19.842	0.7812	20.638	0.8125	15.080	0.5937	2.0	0.08	1.2	0.05	55.1	70.8		17887	17831	15.9	0.63	52.0	2.05	49.5	1.95	72.0	2.83	76.0	2.99	0.37	1.64	0.90	15.9	9.95	1.60
45.237	1.7810	84.138	3.3125	30.162	1.1875	30.886	1.2160	23.812	0.9375	3.6	0.14	3.2	0.13	95.8	120		3586R	3520	20.5	0.81	58.0	2.28	52.0	2.05	74.0	2.91	79.5	3.13	0.31	1.96	1.08	27.9	14.6	1.91
45.242	1.7812	73.431	2.8910	19.558	0.7700	19.812	0.7800	15.748	0.6200	3.6	0.14	0.8	0.03	55.6	78.1		LM102949	LM102910	14.7	0.58	56.0	2.20	50.0	1.97	68.0	2.68	70.0	2.76	0.31	1.97	1.08	16.1	8.40	1.92
	1.7812	77.788	3.0625	19.842	0.7812	19.842	0.7812	15.080	0.5937	3.6	0.14	0.8	0.03	57.1	73.5		LM603049	LM603011	17.5	0.69	57.0	2.24	50.0	1.97	71.0	2.80	74.0	2.91	0.43	1.41	0.77	16.5	12.1	1.37
	1.7812	77.788	3.0625	21.430	0.8437	19.842	0.7812	16.667	0.6562	3.6	0.14	0.8	0.03	57.1	73.5		LM603049	LM603012	19.1	0.75	57.0	2.24	50.0	1.97	71.0	2.80	74.0	2.91	0.43	1.41	0.77	16.5	12.1	1.37
	1.7812	79.974	3.1486	19.842	0.7812	19.842	0.7812	15.080	0.5937	3.6	0.14	0.8	0.03	57.1	73.5		LM603049	LM603014	17.5	0.69	57.0	2.24	50.0	1.97	71.0	2.80	74.0	2.91	0.43	1.41	0.77	16.5	12.1	1.37
	1.7812	79.974	3.1486	21.430	0.8437	19.842	0.7812	16.667	0.6562	3.6	0.14	0.8	0.03	57.1	73.5		LM603049	LM603015	19.1	0.75	57.0	2.24	50.0	1.97	71.0	2.80	74.0	2.91	0.43	1.41	0.77	16.5	12.1	1.37
45.618	1.7960	85.000	3.3465	23.812	0.9375	25.400	1.0000	19.050	0.7500	3.6	0.14	2.4	0.09	77.2	100		25590	25526	17.5	0.69	58.0	2.28	51.0	2.01	74.0	2.91	78.0	3.07	0.33	1.79	0.99	22.5	12.9	1.75
45.987	1.8105	74.976	2.9518	18.000	0.7087	18.000	0.7087	14.000	0.5512	2.4	0.09	1.6	0.06	52.6	74.6		LM503349R	LM503310	16.0	0.63	53.0	2.09	51.0	2.01	67.0	2.64	72.0	2.83	0.40	1.49	0.82	15.2	10.4	1.46
46.038	1.8125	79.375	3.1250	17.462	0.6875	17.462	0.6875	13.495	0.5313	2.8	0.11	1.6	0.06	47.1	59.1		18690	18620	16.0	0.63	56.0	2.20	51.0	2.01	71.0	2.80	74.0	2.91	0.37	1.60	0.88	13.6	8.70	1.56
	1.8125	85.000	3.3465	17.462	0.6875	17.462	0.6875	13.495	0.5313	2.4	0.09	1.6	0.06	49.7	65.5		18780	18720	17.4	0.69	56.0	2.20	52.0	2.05	77.0	3.03	80.0	3.15	0.41	1.48	0.81	14.4	9.95	1.44
	1.8125	85.000	3.3465	20.638	0.8125	21.692	0.8540	17.462	0.6875	3.6	0.14	1.2	0.05	71.8	81.7		359A	354A	15.5	0.61	57.0	2.24	51.0	2.01	77.0	3.03	80.0	3.15	0.31	1.96	1.08	20.7	10.8	1.91
	1.8125	85.000	3.3465	20.638	0.8125	21.692	0.8540	17.462	0.6875	2.4	0.09	1.2	0.05	71.8	81.7		359S	354A	15.5	0.61	55.0	2.17	51.0	2.01	77.0	3.03	80.0	3.15	0.31	1.96	1.08	20.7	10.8	1.91
	1.8125	85.000	3.3465	25.400	1.0000	25.608	1.0082	20.638	0.8125	3.6	0.14	1.2	0.05	80.0	106		2984	2924	18.9	0.74	58.0	2.28	52.0	2.05	76.0	2.99	80.0	3.15	0.35	1.73	0.95	23.3	13.8	1.69
	1.8125	87.312	3.4375	26.988	1.0625	25.608	1.0082	22.225	0.8750	3.6	0.14	2.4	0.09	80.0	106		2984	2925	18.6	0.73	58.0	2.28	52.0	2.05	76.0	2.99	80.0	3.15	0.35	1.73	0.95	23.3	13.8	1.69
	1.8125	95.250	3.7500	27.783	1.0938	29.901	1.1772	22.225	0.8750	3.6	0.14	0.8	0.03	103	122		436	432A	18.4	0.72	59.0	2.32	52.0	2.05	84.0	3.31	87.0	3.43	0.28	2.11	1.16	30.0	14.6	2.06

TS type
d (47.625) ~ (50.800) mm
(1.8750) ~ (2.0000) inch

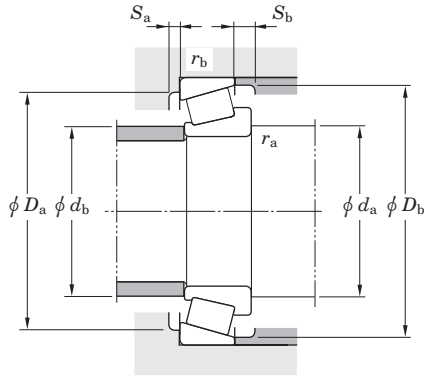
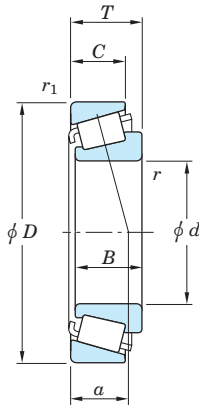


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y ₁

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor		
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	(500 rpm for 3 000 Hrs.)		<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
47.625	1.8750	101.600	4.0000	31.750	1.2500	29.370	1.1563	23.020	0.9063	3.6	0.14	3.2	0.13	114	143		49580	49520	24.1	0.95	62.0	2.44	59.0	2.32	88.0	3.46	96.0	3.78	0.40	1.50	0.82	33.4	22.8	1.46
	1.8750	101.600	4.0000	31.750	1.2500	31.750	1.2500	25.400	1.0000	6.4	0.25	3.2	0.13	114	143		49581	49520	24.1	0.95	68.0	2.68	59.0	2.32	88.0	3.46	96.0	3.78	0.40	1.50	0.82	33.4	22.8	1.46
	1.8750	101.600	4.0000	34.925	1.3750	36.068	1.4200	26.988	1.0625	3.6	0.14	3.2	0.13	131	159		528	522	22.2	0.87	62.0	2.44	55.0	2.17	89.0	3.50	95.0	3.74	0.29	2.10	1.16	38.4	18.7	2.05
	1.8750	101.600	4.0000	34.925	1.3750	36.068	1.4200	26.988	1.0625	1.6	0.06	3.2	0.13	131	159		528A	522	22.2	0.87	58.0	2.28	55.0	2.17	89.0	3.50	95.0	3.74	0.29	2.10	1.16	38.4	18.7	2.05
	1.8750	104.775	4.1250	30.162	1.1875	29.317	1.1542	24.605	0.9687	4.8	0.19	3.2	0.13	109	144		463	453X	23.6	0.93	65.0	2.56	56.0	2.20	92.0	3.62	98.0	3.86	0.34	1.79	0.98	31.7	18.2	1.74
	1.8750	104.775	4.1250	30.162	1.1875	29.317	1.1542	24.605	0.9687	0.8	0.03	3.2	0.13	109	144		467	453X	23.6	0.93	57.0	2.24	56.0	2.20	92.0	3.62	98.0	3.86	0.34	1.79	0.98	31.7	18.2	1.74
	1.8750	104.775	4.1250	30.162	1.1875	30.958	1.2188	23.812	0.9375	3.6	0.14	3.2	0.13	126	165		45282	45220	22.2	0.87	64.0	2.52	59.0	2.32	93.0	3.66	99.0	3.90	0.33	1.80	0.99	36.6	20.8	1.76
	1.8750	104.775	4.1250	36.512	1.4375	36.512	1.4375	28.575	1.1250	3.6	0.14	3.2	0.13	148	187		59187	59412	26.9	1.06	65.0	2.56	59.0	2.32	92.0	3.62	99.0	3.90	0.40	1.49	0.82	43.2	29.6	1.46
	1.8750	104.775	4.1250	36.512	1.4375	36.512	1.4375	28.575	1.1250	1.6	0.06	3.2	0.13	148	187		59188	59412	26.9	1.06	60.0	2.36	58.0	2.28	92.0	3.62	99.0	3.90	0.40	1.49	0.82	43.2	29.6	1.46
	1.8750	107.950	4.2500	27.783	1.0938	29.317	1.1542	22.225	0.8750	4.8	0.19	0.8	0.03	109	144		463	453A	23.6	0.93	65.0	2.56	56.0	2.20	97.0	3.82	100.0	3.94	0.34	1.79	0.98	31.7	18.2	1.74
	1.8750	107.950	4.2500	27.783	1.0938	29.317	1.1542	22.225	0.8750	0.8	0.03	0.8	0.03	109	144		467	453A	21.2	0.83	57.0	2.24	56.0	2.20	97.0	3.82	100.0	3.94	0.34	1.79	0.98	31.7	18.2	1.74
	1.8750	107.950	4.2500	36.512	1.4375	36.957	1.4550	28.575	1.1250	3.6	0.14	3.2	0.13	138	172		536	532X	23.9	0.94	62.0	2.44	56.0	2.20	94.0	3.70	100.0	3.94	0.30	2.03	1.11	40.4	20.5	1.97
	1.8750	117.475	4.6250	33.338	1.3125	31.750	1.2500	23.812	0.9375	3.6	0.14	0.8	0.03	129	152		66187R	66461	33.2	1.31	67.0	2.64	64.0	2.52	102.0	4.02	111.0	4.37	0.63	0.96	0.53	37.5	40.1	0.93
	1.8750	117.475	4.6250	33.338	1.3125	31.750	1.2500	23.812	0.9375	3.6	0.14	3.2	0.13	129	152		66187R	66462	33.2	1.31	67.0	2.64	64.0	2.52	100.0	3.94	111.0	4.37	0.63	0.96	0.53	37.5	40.1	0.93
	1.8750	120.040	4.7260	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	174	217		617	612A	27.3	1.07	65.0	2.56	59.0	2.32	103.0	4.06	109.0	4.29	0.31	1.91	1.05	50.9	27.4	1.86
	1.8750	120.650	4.7500	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	174	217		617	612	27.3	1.07	65.0	2.56	59.0	2.32	105.0	4.13	110.0	4.33	0.31	1.91	1.05	50.9	27.4	1.86
48.412	1.9060	93.264	3.6718	30.162	1.1875	30.302	1.1930	23.812	0.9375	3.6	0.14	3.2	0.13	103	137		3781A	3720	22.2	0.87	62.0	2.44	56.0	2.20	82.0	3.23	88.0	3.46	0.34	1.77	0.97	30.1	17.4	1.73
	1.9060	95.250	3.7500	30.162	1.1875	29.370	1.1563	23.020	0.9063	2.4	0.09	3.2	0.13	104	140		HM804848	HM804810	26.5	1.04	63.0	2.48	57.5	2.26	81.0	3.19	91.0	3.58	0.55	1.10	0.60	30.4	28.4	1.07
	1.9060	95.250	3.7500	30.162	1.1875	29.370	1.1563	23.020	0.9063	3.6	0.14	3.2	0.13	104	140		HM804849	HM804810	26.5	1.04	66.0	2.60	57.5	2.26	81.0	3.19	91.0	3.58	0.55	1.10	0.60	30.4	28.4	1.07
49.212	1.9375	88.900	3.5000	20.638	0.8125	22.225	0.8750	16.513	0.6501	0.8	0.03	1.2	0.05	74.3	87.3		365S	362A	16.1	0.63	55.0	2.17	54.0	2.13	81.0	3.19	84.0	3.31	0.32	1.88	1.03	21.4	11.7	1.83
	1.9375	93.264	3.6718	30.162	1.1875	30.302	1.1930	23.812	0.9375	3.6	0.14	0.8	0.03	103	137		3781	3730	22.2	0.87	62.0	2.44	56.0	2.20	84.0	3.31	88.0	3.46	0.34	1.77	0.97	30.1	17.4	1.73
	1.9375	104.775	4.1250	36.512	1.4375	36.512	1.4375	28.575	1.1250	3.6	0.14	3.2	0.13	141	195		HM807044	HM807010	29.3	1.15	69.0	2.72	63.0	2.48	89.0	3.50	100.0	3.94	0.49	1.23	0.68	41.3	34.4	1.20
	1.9375	111.125	4.3750	38.100	1.5000	36.957	1.4550	33.338	1.3125	3.6	0.14	3.2	0.13	138	172		545	532	25.5	1.00	65.0	2.56	59.0	2.32	95.0	3.74	100.0	3.94	0.30	2.03	1.11	40.4	20.5	1.97
	1.9375	114.300	4.5000	44.450	1.7500	44.450	1.7500	34.925	1.3750	3.6	0.14	3.2	0.13	189	230		65390	65320	31.7	1.25	70.0	2.76	60.0	2.36	97.0	3.82	107.0	4.21	0.43	1.40	0.77	55.4	40.7	1.36
	1.9375	114.300	4.5000	44.450	1.7500	44.450	1.7500	36.068	1.4200	3.6	0.14	3.2	0.13	212	263		HH506348	HH506310	30.6	1.20	71.0	2.80	61.0	2.40	97.0	3.82	107.0	4.21	0.40	1.49	0.82	62.0	42.6	1.46
	1.9375	122.238	4.8125	43.658	1.7188	43.764	1.7230	36.512	1.4375	1.2	0.05	3.2	0.13	221	318		5562R	5535	31.1	1.22	63.0	2.48	60.0	2.36	106.0	4.17	116.0	4.57	0.36	1.67	0.92	64.5	39.5	1.63
49.982	1.9678	107.950	4.2500	36.512	1.4375	36.957	1.4550	28.575	1.1250	3.6	0.14	3.2	0.13	138	172		546	532X	23.9	0.94	65.0	2.56	59.0	2.32	94.0	3.70	100.0	3.94	0.30	2.03	1.11	40.4	20.5	1.97
49.987	1.9680	92.075	3.6250	24.608	0.9688	25.400	1.0000	19.845	0.7813	2.4	0.09	0.8	0.03	84.8	119		28579R	28521	19.9	0.78	60.0	2.36	56.0	2.20	83.0	3.27	87.0	3.43	0.38	1.59	0.87	24.7	15.9	1.55
	1.9680	100.000	3.9370	25.000	0.9842	22.225	0.8750	21.824	0.8592	2.4	0.09	2.0	0.08	84.4	98.5		378A	372	21.5	0.85	60.0	2.36	56.0	2.20	86.0	3.39	90.0	3.54	0.34	1.77	0.97	24.1	14.0	1.73

TS type
d (50.800) mm
(2.0000) inch

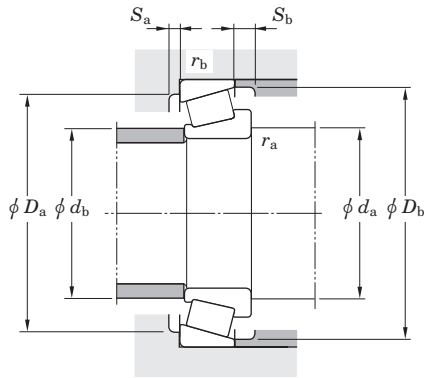
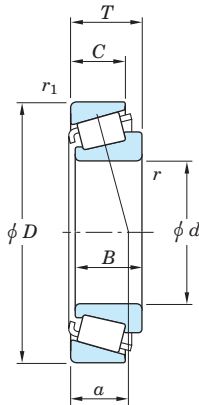


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y ₁

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor			
d		D		T		B		C		r (min.)		r ₁ (min.)		C _r	C _{0r}		Inner ring (Cone)	Outer ring (Cup)	a		d _a		d _b		D _a		D _b		e	Y ₁	Y ₀	(500 rpm for 3 000 Hrs.)		K
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
50.800	2.0000	83.312	3.2800	17.462	0.6875	17.462	0.6875	13.495	0.5313	3.6	0.14	0.8	0.03	49.7	65.5		18790	18721	17.4	0.69	62.0	2.44	56.0	2.20	73.0	2.87	78.0	3.07	0.41	1.48	0.81	14.4	9.95	1.44
	2.0000	85.725	3.3750	19.050	0.7500	18.263	0.7190	12.700	0.5000	1.6	0.06	1.6	0.06	50.7	66.4		18200	18337	22.7	0.89	59.0	2.32	56.0	2.20	76.0	2.99	81.0	3.19	0.57	1.06	0.58	14.6	14.2	1.03
	2.0000	88.900	3.5000	17.462	0.6875	17.462	0.6875	13.495	0.5313	3.6	0.14	1.2	0.05	49.7	65.5		18790	18724	17.4	0.69	62.0	2.44	56.0	2.20	78.0	3.07	82.0	3.23	0.41	1.48	0.81	14.4	9.95	1.44
	2.0000	88.900	3.5000	20.638	0.8125	17.462	0.6875	16.670	0.6563	3.6	0.14	1.2	0.05	49.7	65.5		18790	18723	22.7	0.89	62.0	2.44	56.0	2.20	78.0	3.07	82.0	3.23	0.41	1.48	0.81	14.4	9.95	1.44
	2.0000	88.900	3.5000	20.638	0.8125	22.225	0.8750	16.513	0.6501	1.6	0.06	1.2	0.05	74.3	87.3		368	362A	16.1	0.63	58.0	2.28	56.0	2.20	81.0	3.19	84.0	3.31	0.32	1.88	1.03	21.4	11.7	1.83
	2.0000	88.900	3.5000	20.638	0.8125	22.225	0.8750	16.513	0.6501	3.6	0.14	1.2	0.05	74.3	87.3		368A	362A	16.1	0.63	62.0	2.44	56.0	2.20	81.0	3.19	84.0	3.31	0.32	1.88	1.03	21.4	11.7	1.83
	2.0000	88.900	3.5000	20.638	0.8125	22.225	0.8750	16.513	0.6501	5.2	0.20	1.2	0.05	74.3	87.3		370A	362A	16.1	0.63	65.0	2.56	56.0	2.20	81.0	3.19	84.0	3.31	0.32	1.88	1.03	21.4	11.7	1.83
	2.0000	89.980	3.5425	24.750	0.9744	25.400	1.0000	19.987	0.7869	3.6	0.14	2.4	0.09	84.8	119		28580R	28520	20.0	0.79	63.0	2.48	57.0	2.24	81.0	3.19	86.0	3.39	0.38	1.59	0.87	24.7	15.9	1.55
	2.0000	92.075	3.6250	24.608	0.9688	25.400	1.0000	19.845	0.7813	3.6	0.14	0.8	0.03	84.8	119		28580R	28521	19.9	0.78	63.0	2.48	57.0	2.24	83.0	3.27	87.0	3.43	0.38	1.59	0.87	24.7	15.9	1.55
	2.0000	92.075	3.6250	27.780	1.0937	25.400	1.0000	23.017	0.9062	3.6	0.14	2.4	0.09	84.8	119		28580R	28523	23.1	0.91	63.0	2.48	57.0	2.24	81.0	3.19	86.0	3.39	0.38	1.59	0.87	24.7	15.9	1.55
	2.0000	93.264	3.6718	20.638	0.8125	22.225	0.8750	15.083	0.5938	2.4	0.09	1.2	0.05	84.4	98.5		375	374	17.1	0.67	60.0	2.36	57.0	2.24	85.0	3.35	88.0	3.46	0.34	1.77	0.97	24.2	14.0	1.73
	2.0000	93.264	3.6718	30.162	1.1875	30.302	1.1930	23.812	0.9375	0.8	0.03	0.8	0.03	103	137		3775	3730	22.2	0.87	58.0	2.28	58.0	2.28	84.0	3.31	88.0	3.46	0.34	1.77	0.97	30.1	17.4	1.73
	2.0000	93.264	3.6718	30.162	1.1875	30.302	1.1930	23.812	0.9375	3.6	0.14	3.2	0.13	103	137		3780	3720	22.2	0.87	64.0	2.52	58.0	2.28	82.0	3.23	88.0	3.46	0.34	1.77	0.97	30.1	17.4	1.73
	2.0000	93.264	3.6718	30.162	1.1875	30.302	1.1930	23.812	0.9375	3.6	0.14	0.8	0.03	103	137		3780	3730	22.2	0.87	64.0	2.52	58.0	2.28	84.0	3.31	88.0	3.46	0.34	1.77	0.97	30.1	17.4	1.73
	2.0000	93.264	3.6718	30.162	1.1875	30.302	1.1930	23.812	0.9375	6.4	0.25	0.8	0.03	103	137		3784	3730	22.2	0.87	70.0	2.76	58.0	2.28	84.0	3.31	88.0	3.46	0.34	1.77	0.97	30.1	17.4	1.73
	2.0000	95.250	3.7500	27.783	1.0938	28.575	1.1250	22.225	0.8750	3.6	0.14	0.8	0.03	108	141		33889	33822	20.4	0.80	64.0	2.52	58.0	2.28	86.0	3.39	90.0	3.54	0.33	1.82	1.00	31.4	17.7	1.77
	2.0000	96.838	3.8125	21.000	0.8268	21.946	0.8640	15.875	0.6250	1.6	0.06	0.8	0.03	80.4	101		385AS	382A	17.4	0.69	60.0	2.36	58.0	2.28	89.0	3.50	92.0	3.62	0.35	1.69	0.93	23.2	14.1	1.65
	2.0000	96.838	3.8125	21.000	0.8268	21.946	0.8640	15.875	0.6250	0.8	0.03	0.8	0.03	80.4	101		385AX	382A	17.4	0.69	59.0	2.32	58.0	2.28	89.0	3.50	92.0	3.62	0.35	1.69	0.93	23.2	14.1	1.65
	2.0000	96.838	3.8125	22.225	0.8750	22.225	0.8750	19.050	0.7500	3.6	0.14	1.6	0.06	84.4	98.5		375S	372A	21.5	0.85	63.0	2.48	57.0	2.24	86.0	3.39	90.0	3.54	0.34	1.77	0.97	24.1	14.0	1.73
	2.0000	96.838	3.8125	25.400	1.0000	21.946	0.8640	20.274	0.7982	2.4	0.09	2.4	0.09	80.4	101		385A	382S	21.8	0.86	61.0	2.40	60.0	2.36	87.0	3.43	91.0	3.58	0.35	1.69	0.93	23.2	14.1	1.65
	2.0000	97.630	3.8437	24.608	0.9688	24.608	0.9688	19.446	0.7656	3.6	0.14	0.8	0.03	89.6	131		28678	28622	21.2	0.83	65.0	2.56	58.0	2.28	88.0	3.46	92.0	3.62	0.40	1.49	0.82	26.1	17.9	1.45
	2.0000	98.425	3.8750	30.162	1.1875	30.302	1.1930	23.812	0.9375	3.6	0.14	3.2	0.13	103	137		3780	3732	22.2	0.87	64.0	2.52	58.0	2.28	84.0	3.31	90.0	3.54	0.34	1.77	0.97	30.1	17.4	1.73
	2.0000	101.600	4.0000	31.750	1.2500	31.750	1.2500	25.400	1.0000	3.6	0.14	3.2	0.13	114	143		49585	49520	24.1	0.95	66.0	2.60	59.0	2.32	88.0	3.46	96.0	3.78	0.40	1.50	0.82	33.4	22.8	1.46
	2.0000	101.600	4.0000	34.925	1.3750	31.750	1.2500	28.575	1.1250	3.6	0.14	3.2	0.13	114	143		49585	49521	27.3	1.07	66.0	2.60	59.0	2.32	88.0	3.46	96.0	3.78	0.40	1.50	0.82	33.4	22.8	1.46
	2.0000	101.600	4.0000	34.925	1.3750	36.068	1.4200	26.988	1.0625	0.8	0.03	3.2	0.13	131	159		529	522	22.2	0.87	59.0	2.32	58.0	2.28	89.0	3.50	95.0	3.74	0.29	2.10	1.16	38.4	18.7	2.05
	2.0000	101.600	4.0000	34.925	1.3750	36.068	1.4200	26.988	1.0625	3.6	0.14	3.2	0.13	131	159		529X	522	22.2	0.87	65.0	2.56	58.0	2.28	89.0	3.50	95.0	3.74	0.29	2.10	1.16	38.4	18.7	2.05
	2.0000	104.775	4.1250	30.162	1.1875	30.958	1.2188	23.812	0.9375	6.4	0.25	3.2	0.13	126	165		45284	45220	22.2	0.87	71.0	2.80	59.0	2.32	93.0	3.66	99.0	3.90	0.33	1.80	0.99	36.6	20.8	1.76
	2.0000	104.775	4.1250	30.162	1.1875	30.958	1.2188	23.812	0.9375	6.4	0.25	0.8	0.03	126	165		45284	45221	22.2	0.87	71.0	2.80	59.0	2.32	95.0	3.74	99.0	3.90	0.33	1.80	0.99	36.6	20.8	1.76
	2.0000	104.775	4.1250	30.162	1.1875	30.958	1.2188	23.812	0.9375	2.4	0.09	0.8	0.03	126	165		45285	45221	22.2	0.87	63.0	2.48	59.0	2.32	95.0	3.74	99.0	3.90	0.33	1.80	0.99	36.6	20.8	1.76
	2.0000	104.775	4.																															

TS type
d (50.800) ~ (53.975) mm
(2.0000) ~ (2.1250) inch

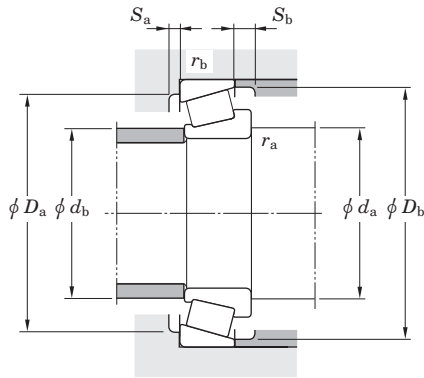
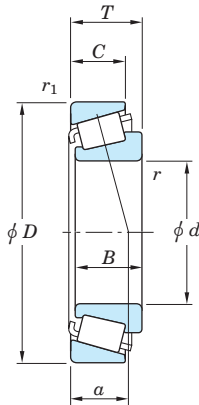


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y ₁

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor			
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	(500 rpm for 3 000 Hrs.)		<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
50.800	2.0000	120.000	4.7244	40.023	1.5757	41.275	1.6250	30.988	1.2200	3.6	0.14	3.0	0.12	174	217		619	613X	27.3	1.07	67.0	2.64	61.0	2.40	104.0	4.09	110.0	4.33	0.31	1.91	1.05	50.9	27.4	1.86
	2.0000	120.040	4.7260	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	1.6	0.06	174	217		619	612A	27.3	1.07	67.0	2.64	61.0	2.40	103.0	4.06	109.0	4.29	0.31	1.91	1.05	50.9	27.4	1.86
	2.0000	120.251	4.7343	44.450	1.7500	43.764	1.7230	36.512	1.4375	1.2	0.05	3.2	0.13	221	318		5565R	5520	31.9	1.26	67.0	2.64	65.0	2.56	110.0	4.33	116.0	4.57	0.36	1.67	0.92	64.5	39.5	1.63
	2.0000	120.650	4.7500	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	174	217		619	612	27.3	1.07	67.0	2.64	61.0	2.40	105.0	4.13	110.0	4.33	0.31	1.91	1.05	50.9	27.4	1.86
	2.0000	122.238	4.8125	38.100	1.5000	36.678	1.4440	30.162	1.1875	2.4	0.09	3.2	0.13	162	223		555	553X	28.7	1.13	66.0	2.60	62.0	2.44	108.0	4.25	115.0	4.53	0.35	1.73	0.95	47.1	27.9	1.69
	2.0000	122.238	4.8125	43.658	1.7188	43.764	1.7230	36.512	1.4375	1.2	0.05	3.2	0.13	221	318		5565R	5535	31.1	1.22	67.0	2.64	65.0	2.56	106.0	4.17	116.0	4.57	0.36	1.67	0.92	64.5	39.5	1.63
	2.0000	127.000	5.0000	36.512	1.4375	36.512	1.4375	26.988	1.0625	3.6	0.14	1.6	0.06	166	235		HM813836	HM813811	32.9	1.30	72.0	2.83	66.0	2.60	113.0	4.45	121.0	4.76	0.50	1.20	0.66	48.6	41.7	1.17
	2.0000	127.000	5.0000	44.450	1.7500	44.450	1.7500	34.925	1.3750	3.6	0.14	3.2	0.13	208	269		65200	65500	35.2	1.39	75.0	2.95	69.0	2.72	107.0	4.21	119.0	4.69	0.49	1.23	0.68	60.6	50.5	1.20
	2.0000	127.000	5.0000	44.450	1.7500	44.450	1.7500	34.925	1.3750	3.6	0.14	1.2	0.05	208	269		65200	65501	35.2	1.39	75.0	2.95	69.0	2.72	110.0	4.33	120.0	4.72	0.49	1.23	0.68	60.6	50.5	1.20
	2.0000	136.525	5.3750	46.038	1.8125	44.450	1.7500	36.512	1.4375	3.6	0.14	3.2	0.13	208	269		65200	65537	36.7	1.44	75.0	2.95	69.0	2.72	110.0	4.33	120.0	4.72	0.49	1.23	0.68	60.6	50.5	1.20
51.592	2.0312	88.900	3.5000	20.638	0.8125	22.225	0.8750	16.513	0.6501	2.0	0.08	1.2	0.05	74.3	87.3		368S	362A	16.1	0.63	59.0	2.32	56.0	2.20	81.0	3.19	84.0	3.31	0.32	1.88	1.03	21.4	11.7	1.83
	2.0312	100.000	3.9370	25.000	0.9842	22.225	0.8750	21.824	0.8592	1.6	0.06	2.0	0.08	84.4	98.5		377S	372	21.5	0.85	60.0	2.36	58.0	2.28	86.0	3.39	90.0	3.54	0.34	1.77	0.97	24.1	14.0	1.73
52.388	2.0625	92.075	3.6250	24.608	0.9688	25.400	1.0000	19.845	0.7813	3.6	0.14	0.8	0.03	84.8	119		28584R	28521	19.9	0.78	65.0	2.56	58.0	2.28	83.0	3.27	87.0	3.43	0.38	1.59	0.87	24.7	15.9	1.55
	2.0625	93.264	3.6718	30.162	1.1875	30.302	1.1930	23.812	0.9375	2.4	0.09	0.8	0.03	103	137		3767	3730	22.2	0.87	63.0	2.48	59.0	2.32	84.0	3.31	88.0	3.46	0.34	1.77	0.97	30.1	17.4	1.73
	2.0625	95.250	3.7500	27.783	1.0938	28.575	1.1250	22.225	0.8750	1.6	0.06	0.8	0.03	108	141		33890	33822	20.4	0.80	61.0	2.40	59.0	2.32	86.0	3.39	90.0	3.54	0.33	1.82	1.00	31.4	17.7	1.77
	2.0625	95.250	3.7500	27.783	1.0938	28.575	1.1250	22.225	0.8750	3.6	0.14	0.8	0.03	108	141		33891	33822	20.4	0.80	66.0	2.60	59.0	2.32	86.0	3.39	90.0	3.54	0.33	1.82	1.00	31.4	17.7	1.77
	2.0625	100.000	3.9370	25.000	0.9842	22.225	0.8750	21.824	0.8592	2.4	0.09	2.0	0.08	84.4	98.5		377	372	21.5	0.85	62.0	2.44	58.0	2.28	86.0	3.39	90.0	3.54	0.34	1.77	0.97	24.1	14.0	1.73
	2.0625	100.000	3.9370	25.000	0.9842	22.225	0.8750	21.824	0.8592	4.8	0.19	2.0	0.08	84.4	98.5		377A	372	21.5	0.85	67.0	2.64	58.0	2.28	86.0	3.39	90.0	3.54	0.34	1.77	0.97	24.1	14.0	1.73
	2.0625	103.188	4.0625	38.100	1.5000	36.957	1.4550	30.162	1.1875	3.6	0.14	3.2	0.13	138	172		540	533A	23.9	0.94	71.0	2.80	60.0	2.36	95.0	3.74	100.0	3.94	0.30	2.03	1.11	40.4	20.5	1.97
	2.0625	104.775	4.1250	30.162	1.1875	29.317	1.1542	24.605	0.9687	1.6	0.06	3.2	0.13	109	144		468	453X	23.6	0.93	62.0	2.44	60.0	2.36	92.0	3.62	98.0	3.86	0.34	1.79	0.98	31.7	18.2	1.74
	2.0625	107.950	4.2500	36.512	1.4375	36.957	1.4550	28.575	1.1250	3.6	0.14	1.6	0.06	138	172		540	532X	23.9	0.94	71.0	2.80	60.0	2.36	94.0	3.70	100.0	3.94	0.30	2.03	1.11	40.4	20.5	1.97
	53.975	2.1250	88.900	3.5000	19.050	0.7500	19.050	0.7500	13.492	0.5312	2.4	0.09	2.0	0.08	62.9	86.8		LM806649	LM806610	21.5	0.85	63.0	2.48	60.0	2.36	80.0	3.15	85.0	3.35	0.55	1.10	0.60	18.1	16.9
2.1250		95.250	3.7500	27.783	1.0938	28.575	1.1250	22.225	0.8750	1.6	0.06	0.8	0.03	108	141		33895	33822	20.4	0.80	63.0	2.48	60.0	2.36	86.0	3.39	90.0	3.54	0.33	1.82	1.00	31.4	17.7	1.77
2.1250		100.000	3.9370	21.000	0.8268	21.946	0.8640	17.826	0.7018	1.6	0.06	2.0	0.08	80.4	101		389AS	383A	17.4	0.69	62.0	2.44	60.0	2.36	89.0	3.50	93.0	3.66	0.35	1.69	0.93	23.2	14.1	1.65
2.1250		104.775	4.1250	30.162	1.1875	29.317	1.1542	24.605	0.9687	3.6	0.14	3.2	0.13	109	144		456	453X	23.6	0.93	68.0	2.68	61.0	2.40	92.0	3.62	98.0	3.86	0.34	1.79	0.98	31.7	18.2	1.74
2.1250		104.775	4.1250	30.162	1.1875	30.958	1.2188	23.812	0.9375	0.8	0.03	0.8	0.03	126	165		45287	45221	22.2	0.87	62.0	2.44	62.0	2.44	95.0	3.74	99.0	3.90	0.33	1.80	0.99	36.6	20.8	1.76
2.1250		104.775	4.1250	36.512	1.4375	36.512	1.4375	28.575	1.1250	3.6	0.14	3.2	0.13	141	195		HM807049	HM807010	29.3	1.15	73.0	2.87	63.0	2.48	89.0	3.50	100.0	3.94	0.49	1.23	0.68	41.3	34.4	1.20
2.1250		104.775	4.1250	39.688	1.5625	40.157	1.5810	33.338	1.3125	3.6	0.14	3.2	0.13	151	211		4595	4535	27.3	1.07	70.0	2.76	63.0	2.48	90.0	3.54	99.0	3.90	0.34	1.79	0.98	44.4	25.4	1.74
2.1250		107.950	4.2500	27.795	1.0943	29.317	1.1542	27.000	1.0630	3.6	0.14	0.8	0.03	109	144		456	453	23.6	0.93	68.0	2.68	61.0	2.40	99.0	3.90	100.0	3.94	0.34	1.79	0.98	31.7	18.2	1.74
2.1250		107.950	4.2500	36.512	1.4375	36.957	1.4550	28.575	1.1250	3.6	0.14																							

TS type
d (53.975) ~ (57.150) mm
(2.1250) ~ (2.2500) inch



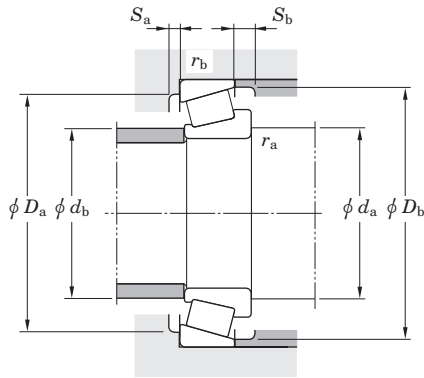
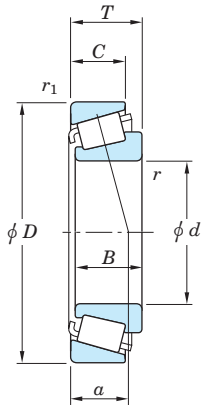
$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y ₁

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN) (500 rpm for 3 000 Hrs.)		Factor			
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀			<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						
53.975	2.1250	127.000	5.0000	44.450	1.7500	44.450	1.7500	34.925	1.3750	3.6	0.14	3.2	0.13	208	269		65212	65500	35.2	1.39	77.0	3.03	71.0	2.80	107.0	4.21	119.0	4.69	0.49	1.23	0.68	60.6	50.5	1.20
	2.1250	130.175	5.1250	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	197	267		636	633	30.3	1.19	73.0	2.87	67.0	2.64	116.0	4.57	124.0	4.88	0.36	1.66	0.91	57.4	35.5	1.62
54.813	2.1580	135.755	5.3447	53.975	2.1250	56.007	2.2050	44.450	1.7500	0.8	0.03	3.2	0.13	266	357		6380	6320	34.8	1.37	70.0	2.76	68.0	2.68	117.0	4.61	126.0	4.96	0.32	1.85	1.02	78.4	43.5	1.80
54.986	2.1648	97.630	3.8437	24.608	0.9688	24.608	0.9688	19.446	0.7656	2.4	0.09	0.8	0.03	89.6	131		28680X	28622	21.2	0.83	65.0	2.56	58.0	2.28	88.0	3.46	92.0	3.62	0.40	1.49	0.82	26.1	17.9	1.45
54.988	2.1649	104.775	4.1250	30.162	1.1875	29.317	1.1542	24.605	0.9687	2.4	0.09	3.2	0.13	109	144		466	453X	23.6	0.93	67.0	2.64	61.0	2.40	92.0	3.62	98.0	3.86	0.34	1.79	0.98	31.7	18.2	1.74
	2.1649	107.950	4.2500	27.783	1.0938	29.317	1.1542	22.225	0.8750	2.4	0.09	0.8	0.03	109	144		466	453A	23.6	0.93	67.0	2.64	61.0	2.40	97.0	3.82	100.0	3.94	0.34	1.79	0.98	31.7	18.2	1.74
	2.1649	110.000	4.3307	27.795	1.0943	29.317	1.1542	27.000	1.0630	2.4	0.09	2.0	0.08	109	144		466	454	25.7	1.01	67.0	2.64	61.0	2.40	96.0	3.78	100.0	3.94	0.34	1.79	0.98	31.7	18.2	1.74
54.991	2.1650	135.755	5.3447	53.975	2.1250	56.007	2.2050	44.450	1.7500	3.6	0.14	3.2	0.13	266	357		6381	6320	34.8	1.37	76.0	2.99	70.0	2.76	117.0	4.61	126.0	4.96	0.32	1.85	1.02	78.4	43.5	1.80
55.000	2.1654	96.838	3.8125	21.000	0.8268	21.946	0.8640	15.875	0.6250	2.4	0.09	0.8	0.03	80.4	101		385	382A	17.4	0.69	65.0	2.56	61.0	2.40	89.0	3.50	92.0	3.62	0.35	1.69	0.93	23.2	14.1	1.65
	2.1654	96.838	3.8125	21.000	0.8268	21.946	0.8640	15.875	0.6250	3.6	0.14	0.8	0.03	80.4	101		385X	382A	17.4	0.69	67.0	2.64	61.0	2.40	89.0	3.50	92.0	3.62	0.35	1.69	0.93	23.2	14.1	1.65
	2.1654	98.425	3.8750	21.000	0.8268	21.946	0.8640	17.826	0.7018	2.4	0.09	0.8	0.03	80.4	101		385	382	17.4	0.69	65.0	2.56	61.0	2.40	89.0	3.50	92.0	3.62	0.35	1.69	0.93	23.2	14.1	1.65
	2.1654	100.000	3.9370	25.400	1.0000	21.946	0.8640	22.225	0.8750	2.4	0.09	1.2	0.05	80.4	101		385	383X	21.8	0.86	65.0	2.56	61.0	2.40	87.0	3.43	93.0	3.66	0.35	1.69	0.93	23.2	14.1	1.65
	2.1654	120.000	4.7244	29.002	1.1418	29.007	1.1420	23.444	0.9230	0.8	0.03	3.2	0.13	118	161		475	472A	24.9	0.98	67.0	2.64	66.0	2.60	106.0	4.17	114.0	4.49	0.38	1.56	0.86	34.5	22.7	1.52
	2.1654	120.000	4.7244	29.002	1.1418	29.007	1.1420	23.444	0.9230	2.0	0.08	3.2	0.13	118	161		475X	472A	24.9	0.98	69.0	2.72	66.0	2.60	106.0	4.17	114.0	4.49	0.38	1.56	0.86	34.5	22.7	1.52
	2.1654	120.650	4.7500	41.275	1.6250	41.275	1.6250	31.750	1.2500	0.8	0.03	3.2	0.13	174	217		622X	612	27.3	1.07	66.0	2.60	64.0	2.52	105.0	4.13	110.0	4.33	0.31	1.91	1.05	50.9	27.4	1.86
55.006	2.1656	120.650	4.7500	41.275	1.6250	41.275	1.6250	31.750	1.2500	0.8	0.03	3.2	0.13	174	217		622A	612	27.3	1.07	66.0	2.60	64.0	2.52	105.0	4.13	110.0	4.33	0.31	1.91	1.05	50.9	27.4	1.86
55.474	2.1840	96.838	3.8125	21.000	0.8268	21.946	0.8640	15.875	0.6250	2.4	0.09	0.8	0.03	80.4	101		386	382A	17.4	0.69	65.0	2.56	61.0	2.40	89.0	3.50	92.0	3.62	0.35	1.69	0.93	23.2	14.1	1.65
55.562	2.1875	97.630	3.8437	24.608	0.9688	24.608	0.9688	19.446	0.7656	3.6	0.14	0.8	0.03	89.6	131		28680	28622	21.2	0.83	68.0	2.68	62.0	2.44	88.0	3.46	92.0	3.62	0.40	1.49	0.82	26.1	17.9	1.45
	2.1875	104.775	4.1250	30.162	1.1875	29.317	1.1542	24.605	0.9687	2.4	0.09	3.2	0.13	109	144		466S	453X	23.6	0.93	67.0	2.64	61.0	2.40	92.0	3.62	98.0	3.86	0.34	1.79	0.98	31.7	18.2	1.74
	2.1875	122.238	4.8125	43.658	1.7188	43.764	1.7230	36.512	1.4375	1.2	0.05	3.2	0.13	221	318		5566R	5535	31.1	1.22	70.0	2.76	68.0	2.68	106.0	4.17	116.0	4.57	0.36	1.67	0.92	64.5	39.5	1.63
	2.1875	127.000	5.0000	36.512	1.4375	36.512	1.4375	26.988	1.0625	3.6	0.14	3.2	0.13	166	235		HM813840	HM813810	32.9	1.30	76.0	2.99	70.0	2.76	111.0	4.37	121.0	4.76	0.50	1.20	0.66	48.6	41.7	1.17
55.575	2.1880	96.838	3.8125	21.000	0.8268	21.946	0.8640	15.875	0.6250	2.4	0.09	0.8	0.03	80.4	101		389	382A	17.4	0.69	65.0	2.56	61.0	2.40	89.0	3.50	92.0	3.62	0.35	1.69	0.93	23.2	14.1	1.65
	2.1880	96.838	3.8125	21.000	0.8268	26.256	1.0337	15.875	0.6250	2.4	0.09	0.8	0.03	80.4	101		389S	382A	17.4	0.69	65.0	2.56	61.0	2.40	89.0	3.50	92.0	3.62	0.35	1.69	0.93	23.2	14.1	1.65
55.753	2.1950	122.238	4.8125	33.338	1.3125	31.750	1.2500	23.812	0.9375	SP ¹⁾	SP ¹⁾	3.2	0.13	128	153		66583	66520	35.4	1.39	70.0	2.76	63.0	2.48	105.0	4.13	116.0	4.57	0.67	0.90	0.50	37.1	42.2	0.88
57.150	2.2500	96.838	3.8125	21.000	0.8268	21.946	0.8640	15.875	0.6250	2.4	0.09	0.8	0.03	80.4	101		387	382A	17.4	0.69	66.0	2.60	62.0	2.44	89.0	3.50	92.0	3.62	0.35	1.69	0.93	23.2	14.1	1.65
	2.2500	96.838	3.8125	21.000	0.8268	21.946	0.8640	15.875	0.6250	3.6	0.14	0.8	0.03	80.4	101		387A	382A	17.4	0.69	69.0	2.72	62.0	2.44	89.0	3.50	92.0	3.62	0.35	1.69	0.93	23.2	14.1	1.65
	2.2500	96.838	3.8125	21.000	0.8268	21.946	0.8640	15.875	0.6250	5.2	0.20	0.8	0.03	80.4	101		387AS	382A	17.4	0.69	72.0	2.83	62.0	2.44	89.0	3.50	92.0	3.62	0.35	1.69	0.93	23.2	14.1	1.65
	2.2500	96.838	3.8125	21.000	0.8268	21.946	0.8640	15.875	0.6250	0.8	0.03	0.8	0.03	80.4	101		387S	382A	17.4	0.69	63.0	2.48	62.0	2.44	89.0	3.50	92.0	3.62	0.35	1.69	0.93	23.2	14.1	1.65
	2.2500	98.425	3.8750	21.000	0.8268	21.946	0.8640	17.826	0.7018	2.4	0.09	0.8	0.03	80.4	101		387	382	17.4	0.69	66.0	2.60	62.0	2.44	89.0	3.50	92.0	3.62	0.35	1.69	0.93	23.2	14.1	1.65
	2.2500	98.425	3.8750	24.608	0.9688	24.608	0.9688	19.446	0.7656	3.6	0.14	0.8	0.03	89.6	131		28682	28623	21.2	0.83	70.0	2.76	63.0	2.48	88.0	3.46	93.0	3.66	0.40	1.49	0.82	26.1	17.9	1.45
	2.2500	104.775	4.1250	30.162	1.1875	29.317	1.1542	24.605	0.9687	2.4	0.09	3.2	0.13	109	144		462	453X	23.6	0.93	67.0	2.64	63.0	2.48	92.0	3.62	98.0	3.86	0.34	1.79	0.98	31.7	18.2	1.74
	2.2500	104.775	4.1250	30.162	1.1875	29.317	1.1542	24.605	0.9687	3.6	0.14	3.2	0.13	109	144		469	453X	23.6	0.93	70.0	2.76	63.0	2.48	92.0	3.62	98.0	3.86	0.34	1.79	0.98	31.7	18.2	1.74
	2.2500	104.775	4.1250	30.162	1.1875	30.958	1.2188	23.812	0.9375	0.8	0.03	0.8	0.03	126	165		45289	45221	22.2	0.87	65.0	2.56	65.0	2.56	95.0	3.74	99.0	3.90	0.33	1.80	0.99	36.6	20.8	1.76
	2.2500	104.775	4.1250	30.162	1.1875	30.958	1.2188	23.812	0.9375	2.4	0.09	0.8	0.03	126	165		45290	45221	22.2	0.87	68.0	2.68	65.0	2.56	95.0	3.74	99.0	3.90	0.33	1.80	0.99	36.6	20.8	1.76
	2.2500	104.775	4.1250	30.162	1.1875	30.958	1.2188	23.812	0.9375	6.4	0.25	0.8	0.03	126	165		45291	45221	22.2	0.87	76.0	2.99	65.0	2.56	95.0	3.74	99.0	3.90	0.33	1.80	0.99	36.6	20.8	1.76

Note 1) SP indicates the specially chamfered from.

TS type
d (57.150) ~ (60.000) mm
(2.2500) ~ (2.3622) inch

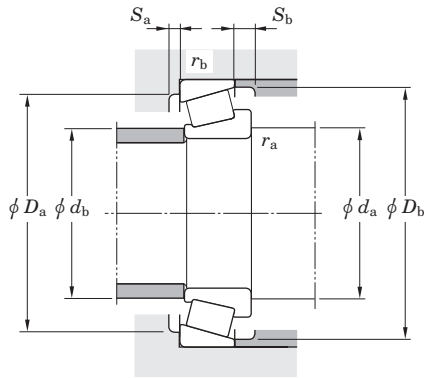
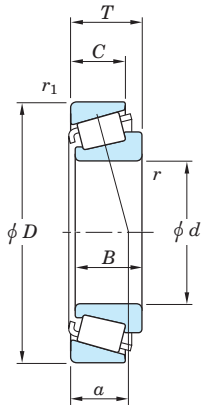


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y ₁

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor			
d		D		T		B		C		r (min.)		r ₁ (min.)		C _r	C _{0r}		Inner ring (Cone)	Outer ring (Cup)	a		d _a		d _b		D _a		D _b		e	Y ₁	Y ₀	(500 rpm for 3 000 Hrs.)		K
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
57.150	2.2500	110.000	4.3307	22.000	0.8661	21.996	0.8660	22.000	0.8661	2.4	0.09	0.8	0.03	86.4	116		390	394	21.3	0.84	70.0	2.76	66.0	2.60	102.0	4.02	104.5	4.11	0.40	1.49	0.82	25.0	17.2	1.46
	2.2500	111.125	4.3750	22.000	0.8661	21.996	0.8660	18.824	0.7411	2.4	0.09	1.2	0.05	86.4	116		390	393AS	21.3	0.84	70.0	2.76	66.0	2.60	101.0	3.98	105.0	4.13	0.40	1.49	0.82	25.0	17.2	1.46
	2.2500	112.712	4.4375	22.225	0.8750	21.996	0.8660	15.875	0.6250	2.4	0.09	3.2	0.13	86.4	116		390	393A	21.5	0.85	70.0	2.76	66.0	2.60	100.0	3.94	105.0	4.13	0.40	1.49	0.82	25.0	17.2	1.46
	2.2500	112.712	4.4375	30.162	1.1875	30.048	1.1830	23.812	0.9375	3.6	0.14	3.2	0.13	111	164		3979	3920	25.9	1.02	72.0	2.83	66.0	2.60	99.0	3.90	106.0	4.17	0.40	1.49	0.82	32.4	22.3	1.46
	2.2500	112.712	4.4375	30.162	1.1875	30.162	1.1875	23.812	0.9375	3.6	0.14	3.2	0.13	147	207		39580	39520	23.3	0.92	72.0	2.83	66.0	2.60	101.0	3.98	107.0	4.21	0.34	1.77	0.97	42.6	24.7	1.72
	2.2500	112.712	4.4375	30.162	1.1875	30.162	1.1875	23.812	0.9375	7.9	0.31	3.2	0.13	147	207		39581	39520	23.3	0.92	81.0	3.19	66.0	2.60	101.0	3.98	107.0	4.21	0.34	1.77	0.97	42.6	24.7	1.72
	2.2500	112.712	4.4375	36.512	1.4375	30.162	1.1875	30.162	1.1875	3.6	0.14	3.2	0.13	147	207		39580	39522	29.7	1.17	72.0	2.83	66.0	2.60	101.0	3.98	107.0	4.21	0.34	1.77	0.97	42.6	24.7	1.72
	2.2500	117.475	4.6250	30.162	1.1875	30.162	1.1875	23.812	0.9375	3.6	0.14	0.8	0.03	118	179		33225	33461	27.8	1.09	74.0	2.91	68.0	2.68	106.0	4.17	112.0	4.41	0.44	1.38	0.76	34.4	25.6	1.34
	2.2500	117.475	4.6250	30.162	1.1875	30.162	1.1875	23.812	0.9375	3.6	0.14	3.2	0.13	118	179		33225	33462	27.8	1.09	74.0	2.91	68.0	2.68	104.0	4.09	112.0	4.41	0.44	1.38	0.76	34.4	25.6	1.34
	2.2500	117.475	4.6250	33.338	1.3125	31.750	1.2500	23.812	0.9375	3.6	0.14	0.8	0.03	129	152		66225R	66461	33.2	1.31	76.0	2.99	69.0	2.72	102.0	4.02	111.0	4.37	0.63	0.96	0.53	37.5	40.1	0.93
	2.2500	120.040	4.7260	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	174	217		623	612A	27.3	1.07	72.0	2.83	66.0	2.60	103.0	4.06	109.0	4.29	0.31	1.91	1.05	50.9	27.4	1.86
	2.2500	120.650	4.7500	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	174	217		623	612	27.3	1.07	72.0	2.83	66.0	2.60	105.0	4.13	110.0	4.33	0.31	1.91	1.05	50.9	27.4	1.86
	2.2500	120.650	4.7500	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	174	217		623A	612	27.3	1.07	78.0	3.07	66.0	2.60	105.0	4.13	110.0	4.33	0.31	1.91	1.05	50.9	27.4	1.86
	2.2500	122.238	4.8125	33.338	1.3125	31.750	1.2500	23.812	0.9375	3.6	0.14	3.2	0.13	128	153		66587	66520	35.4	1.39	77.0	3.03	71.0	2.80	105.0	4.13	116.0	4.57	0.67	0.90	0.50	37.1	42.2	0.88
	2.2500	122.238	4.8125	38.100	1.5000	36.678	1.4440	30.162	1.1875	3.6	0.14	3.2	0.13	162	223		555S	553X	28.7	1.13	73.0	2.87	67.0	2.64	108.0	4.25	115.0	4.53	0.35	1.73	0.95	47.1	27.9	1.69
	2.2500	123.825	4.8750	38.100	1.5000	36.678	1.4440	30.162	1.1875	7.9	0.31	3.2	0.13	162	223		555SA	552A	28.7	1.13	82.0	3.23	67.0	2.64	109.0	4.29	116.0	4.57	0.35	1.73	0.95	47.1	27.9	1.69
	2.2500	127.000	5.0000	44.450	1.7500	44.450	1.7500	34.925	1.3750	3.6	0.14	3.2	0.13	208	269		65225	65500	35.2	1.39	80.0	3.15	71.0	2.80	107.0	4.21	119.0	4.69	0.49	1.23	0.68	60.6	50.5	1.20
	2.2500	135.755	5.3447	53.975	2.1250	56.007	2.2050	44.450	1.7500	4.3	0.17	3.2	0.13	266	357		6375	6320	34.8	1.37	78.0	3.07	70.0	2.76	117.0	4.61	126.0	4.96	0.32	1.85	1.02	78.4	43.5	1.80
	2.2500	135.755	5.3447	53.975	2.1250	56.007	2.2050	44.450	1.7500	0.8	0.03	3.2	0.13	266	357		6387	6320	34.8	1.37	71.0	2.80	70.0	2.76	117.0	4.61	126.0	4.96	0.32	1.85	1.02	78.4	43.5	1.80
	2.2500	136.525	5.3750	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	197	267		635	632	30.3	1.19	75.0	2.95	69.0	2.72	118.0	4.65	125.0	4.92	0.36	1.66	0.91	57.4	35.5	1.62
	2.2500	149.225	5.8750	53.975	2.1250	41.275	1.6250	31.750	1.2500	6.4	0.25	3.2	0.13	285	404		6465	6420	39.3	1.55	86.0	3.39	81.0	3.19	129.0	5.08	141.0	5.55	0.36	1.66	0.91	83.9	51.9	1.62
	2.2500	149.225	5.8750	53.975	2.1250	54.229	2.1350	44.450	1.7500	3.6	0.14	3.2	0.13	285	404		6455	6420	39.3	1.55	81.0	3.19	75.0	2.95	129.0	5.08	141.0	5.55	0.36	1.66	0.91	83.9	51.9	1.62
57.531	2.2650	96.838	3.8125	21.000	0.8268	21.946	0.8640	15.875	0.6250	3.6	0.14	0.8	0.03	80.4	101		388A	382A	17.4	0.69	69.0	2.72	63.0	2.48	89.0	3.50	92.0	3.62	0.35	1.69	0.93	23.2	14.1	1.65
58.738	2.3125	112.712	4.4375	33.338	1.3125	30.048	1.1830	26.988	1.0625	3.6	0.14	3.2	0.13	111	164		3981	3926	29.1	1.15	73.0	2.87	67.0	2.64	98.0	3.86	106.0	4.17	0.40	1.49	0.82	32.4	22.3	1.46
	2.3125	122.238	4.8125	51.595	2.0313	51.702	2.0355	36.512	1.4375	3.6	0.14	3.2	0.13	221	318		5558R	5535	39.0	1.54	77.0	3.03	72.0	2.83	106.0	4.17	116.0	4.57	0.36	1.67	0.92	64.5	39.5	1.63
	2.3125	127.000	5.0000	44.450	1.7500	44.450	1.7500	34.925	1.3750	3.6	0.14	3.2	0.13	208	269		65231	65500	35.2	1.39	81.0	3.19	71.0	2.80	107.0	4.21	119.0	4.69	0.49	1.23	0.68	60.6	50.5	1.20
59.530	2.3437	112.712	4.4375	30.162	1.1875	30.048	1.1830	23.812	0.9375	1.6	0.06	3.2	0.13	111	164		3978	3920	25.9	1.02	70.0	2.76	68.0	2.68	99.0	3.90	106.0	4.17	0.40	1.49	0.82	32.4	22.3	1.46
59.880	2.3575	127.000	5.0000	44.450	1.7500	44.450	1.7500	34.925	1.3750	3.6	0.14	3.2	0.13	208	269		65235	65500	35.2	1.39	82.0	3.23	71.0	2.80	107.0	4.21	119.0	4.69	0.49	1.23	0.68	60.6	50.5	1.20
59.972	2.3611	122.238	4.8125	33.338	1.3125	31.750	1.2500	23.812	0.9375	0.8</																								

TS type
d (60.000) ~ (63.500) mm
(2.3622) ~ (2.5000) inch

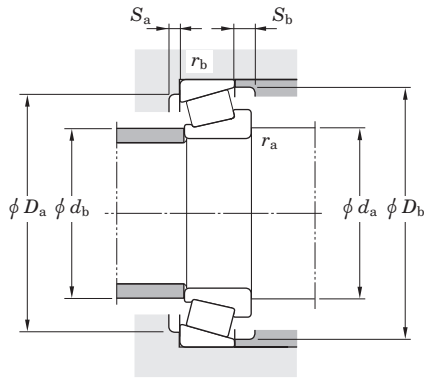
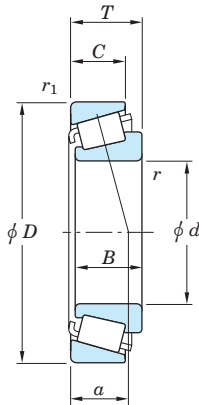


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor		
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	(500 rpm for 3 000 Hrs.)		<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
60.000	2.3622	112.712	4.4375	30.162	1.1875	30.048	1.1830	23.812	0.9375	3.6	0.14	0.8	0.03	111	164		3977	3925	25.9	1.02	74.0	2.91	68.0	2.68	101.0	3.98	106.0	4.17	0.40	1.49	0.82	32.4	22.3	1.46
	2.3622	120.000	4.7244	29.002	1.1418	29.007	1.1420	23.444	0.9230	2.0	0.08	3.2	0.13	118	161		476	472A	24.9	0.98	73.0	2.87	69.0	2.72	106.0	4.17	114.0	4.49	0.38	1.56	0.86	34.5	22.7	1.52
	2.3622	120.000	4.7244	29.794	1.1730	29.007	1.1420	24.237	0.9542	1.6	0.06	2.0	0.08	118	161		476A	472	25.7	1.01	72.0	2.83	69.0	2.72	107.0	4.21	114.0	4.49	0.38	1.56	0.86	34.5	22.7	1.52
	2.3622	122.238	4.8125	33.338	1.3125	31.750	1.2500	23.812	0.9375	3.6	0.14	3.2	0.13	128	153		66585	66520	35.4	1.39	79.0	3.11	73.0	2.87	105.0	4.13	116.0	4.57	0.67	0.90	0.50	37.1	42.2	0.88
	2.3622	122.238	4.8125	33.338	1.3125	31.750	1.2500	23.812	0.9375	0.8	0.03	3.2	0.13	128	153		66588	66520	35.4	1.39	72.0	2.83	65.0	2.56	105.0	4.13	116.0	4.57	0.67	0.90	0.50	37.1	42.2	0.88
60.325	2.3750	100.000	3.9370	25.400	1.0000	25.400	1.0000	19.845	0.7813	3.6	0.14	3.2	0.13	91.4	137		28985	28921	22.8	0.90	73.0	2.87	67.0	2.64	89.0	3.50	96.0	3.78	0.43	1.41	0.78	26.6	19.3	1.38
	2.3750	100.000	3.9370	25.400	1.0000	25.400	1.0000	19.845	0.7813	3.6	0.14	0.8	0.03	91.4	137		28985	28921A	22.8	0.90	73.0	2.87	67.0	2.64	92.0	3.62	96.0	3.78	0.43	1.41	0.78	26.6	19.3	1.38
	2.3750	101.600	4.0000	25.400	1.0000	25.400	1.0000	19.845	0.7813	3.6	0.14	3.2	0.13	91.4	137		28985	28920	22.8	0.90	73.0	2.87	67.0	2.64	89.0	3.50	96.0	3.78	0.43	1.41	0.78	26.6	19.3	1.38
	2.3750	112.712	4.4375	30.162	1.1875	30.048	1.1830	23.812	0.9375	3.6	0.14	0.8	0.03	111	164		3980	3925	25.9	1.02	75.0	2.95	68.0	2.68	101.0	3.98	106.0	4.17	0.40	1.49	0.82	32.4	22.3	1.46
	2.3750	122.238	4.8125	38.100	1.5000	36.678	1.4440	30.162	1.1875	7.9	0.31	3.2	0.13	162	223		557A	553X	28.7	1.13	84.0	3.31	69.0	2.72	108.0	4.25	115.0	4.53	0.35	1.73	0.95	47.1	27.9	1.69
	2.3750	122.238	4.8125	38.100	1.5000	36.678	1.4440	30.162	1.1875	2.4	0.09	3.2	0.13	162	223		558	553X	28.7	1.13	73.0	2.87	69.0	2.72	108.0	4.25	115.0	4.53	0.35	1.73	0.95	47.1	27.9	1.69
	2.3750	122.238	4.8125	38.100	1.5000	36.678	1.4440	30.162	1.1875	3.6	0.14	3.2	0.13	162	223		558A	553X	28.7	1.13	76.0	2.99	69.0	2.72	108.0	4.25	115.0	4.53	0.35	1.73	0.95	47.1	27.9	1.69
	2.3750	122.238	4.8125	38.100	1.5000	38.354	1.5100	29.718	1.1700	7.9	0.31	1.6	0.06	191	249		HM212044	HM212010	27.3	1.07	85.0	3.35	70.0	2.76	110.0	4.33	116.0	4.57	0.34	1.78	0.98	55.5	32.0	1.73
	2.3750	122.238	4.8125	43.658	1.7188	43.764	1.7230	36.512	1.4375	0.8	0.03	3.2	0.13	221	318		5582R	5535	31.1	1.22	73.0	2.87	72.0	2.83	106.0	4.17	116.0	4.57	0.36	1.67	0.92	64.5	39.5	1.63
	2.3750	122.238	4.8125	43.658	1.7188	43.764	1.7230	36.512	1.4375	3.6	0.14	3.2	0.13	221	318		5583R	5535	31.1	1.22	78.0	3.07	72.0	2.83	106.0	4.17	116.0	4.57	0.36	1.67	0.92	64.5	39.5	1.63
	2.3750	127.000	5.0000	36.512	1.4375	36.512	1.4375	26.988	1.0625	3.6	0.14	1.6	0.06	166	235		HM813841	HM813811	32.9	1.30	80.0	3.15	73.0	2.87	113.0	4.45	121.0	4.76	0.50	1.20	0.66	48.6	41.7	1.17
	2.3750	127.000	5.0000	36.512	1.4375	36.512	1.4375	26.988	1.0625	1.6	0.06	3.2	0.13	166	235		HM813841A	HM813810	32.9	1.30	74.0	2.91	71.0	2.80	110.0	4.33	121.0	4.76	0.50	1.20	0.66	48.6	41.7	1.17
	2.3750	127.000	5.0000	44.450	1.7500	44.450	1.7500	34.925	1.3750	3.6	0.14	3.2	0.13	208	269		65237	65500	35.2	1.39	82.0	3.23	71.0	2.80	107.0	4.21	119.0	4.69	0.49	1.23	0.68	60.6	50.5	1.20
	2.3750	127.000	5.0000	44.450	1.7500	44.450	1.7500	34.925	1.3750	1.6	0.06	3.2	0.13	208	269		65237A	65500	35.2	1.39	78.0	3.07	71.0	2.80	107.0	4.21	119.0	4.69	0.49	1.23	0.68	60.6	50.5	1.20
	2.3750	130.175	5.1250	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	197	267		637	633	30.3	1.19	78.0	3.07	72.0	2.83	116.0	4.57	124.0	4.88	0.36	1.66	0.91	57.4	35.5	1.62
	2.3750	135.755	5.3447	53.975	2.1250	56.007	2.2050	44.450	1.7500	3.6	0.14	3.2	0.13	266	357		6376	6320	34.8	1.37	81.0	3.19	74.0	2.91	117.0	4.61	126.0	4.96	0.32	1.85	1.02	78.4	43.5	1.80
	2.3750	136.525	5.3750	46.038	1.8125	46.038	1.8125	36.512	1.4375	3.6	0.14	3.2	0.13	231	369		H715332	H715311	37.0	1.46	84.0	3.31	78.0	3.07	118.0	4.65	132.0	5.20	0.47	1.27	0.70	67.8	54.8	1.24
	61.912	2.4375	110.000	4.3307	22.000	0.8661	21.996	0.8660	18.824	0.7411	0.8	0.03	1.2	0.05	86.4	116		392	394A	21.3	0.84	70.0	2.76	69.0	2.72	101.0	3.98	104.5	4.11	0.40	1.49	0.82	25.0	17.2
2.4375		122.238	4.8125	38.100	1.5000	36.678	1.4440	30.162	1.1875	3.6	0.14	3.2	0.13	162	223		554	553X	28.7	1.13	77.0	3.03	71.0	2.80	108.0	4.25	115.0	4.53	0.35	1.73	0.95	47.1	27.9	1.69
2.4375		123.825	4.8750	38.100	1.5000	36.678	1.4440	33.338	1.3125	3.6	0.14	3.2	0.13	162	223		554	552	28.7	1.13	77.0	3.03	71.0	2.80	109.0	4.29	116.0	4.57	0.35	1.73	0.95	47.1	27.9	1.69
2.4375		125.000	4.9213	38.100	1.5000	36.678	1.4440	30.162	1.1875	3.6	0.14	3.2	0.13	162	223		554	553	28.7	1.13	77.0	3.03	71.0	2.80	109.0	4.29	116.0	4.57	0.35	1.73	0.95	47.1	27.9	1.69
2.4375		127.000	5.0000	36.512	1.4375	36.512	1.4375	26.988	1.0625	3.6	0.14	1.6	0.06	166	235		HM813843	HM813811	32.9	1.30	81.0	3.19	75.0	2.95	113.0	4.45	121.0	4.76	0.50	1.20	0.66	48.6	41.7	1.17
2.4375		139.700	5.5000	46.038	1.8125	46.038	1.8125	36.512	1.4375	3.6	0.14	3.2	0.13	231	369		H715334	H715310	37.0	1.46	86.0	3.39	79.0	3.11	120.0	4.72	133.0	5.24	0.47	1.27	0.70	67.8	54.8	1.24
2.4375		152.400	6.0000	47.625	1.8750	46.038	1.8125	31.750	1.2500	3.6	0.14	3.2	0.13	244	278		9180	9121	44.5	1.75	90.0	3.54	81.0	3.19	130.0	5.12	145.0	5.71	0.66	0.91	0.50	71.3	79.9	0.89
2.4375		158.750	6.250																															

TS type
d (63.500) ~ (66.675) mm
(2.5000) ~ (2.6250) inch

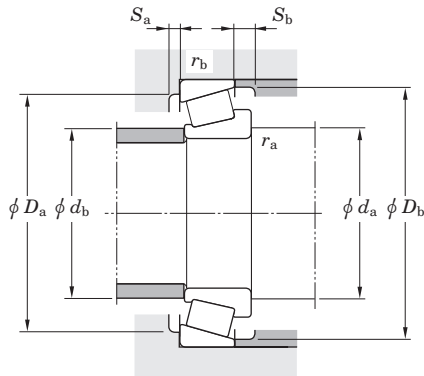
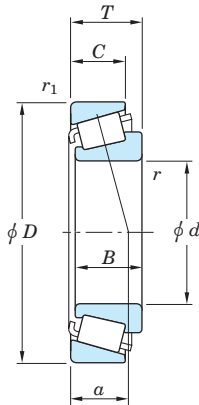


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y ₁

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor			
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	(500 rpm for 3 000 Hrs.)		<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
63.500	2.5000	112.712	4.4375	30.162	1.1875	30.048	1.1830	23.812	0.9375	3.6	0.14	0.8	0.03	111	164		3982	3925	25.9	1.02	77.0	3.03	71.0	2.80	101.0	3.98	106.0	4.17	0.40	1.49	0.82	32.4	22.3	1.46
	2.5000	112.712	4.4375	30.162	1.1875	30.162	1.1875	23.812	0.9375	3.6	0.14	3.2	0.13	147	207		39585	39520	23.3	0.92	77.0	3.03	71.0	2.80	101.0	3.98	107.0	4.21	0.34	1.77	0.97	42.6	24.7	1.72
	2.5000	120.000	4.7244	29.002	1.1418	29.007	1.1420	23.444	0.9230	0.8	0.03	3.2	0.13	118	161		477	472A	24.9	0.98	73.0	2.87	72.0	2.83	106.0	4.17	114.0	4.49	0.38	1.56	0.86	34.5	22.7	1.52
	2.5000	120.000	4.7244	29.002	1.1418	29.007	1.1420	23.444	0.9230	3.6	0.14	3.2	0.13	118	161		483	472A	24.9	0.98	78.0	3.07	72.0	2.83	106.0	4.17	114.0	4.49	0.38	1.56	0.86	34.5	22.7	1.52
	2.5000	120.000	4.7244	29.794	1.1730	29.007	1.1420	24.237	0.9542	0.8	0.03	2.0	0.08	118	161		477	472	25.7	1.01	73.0	2.87	72.0	2.83	108.0	4.25	113.0	4.45	0.38	1.56	0.86	34.5	22.7	1.52
	2.5000	120.000	4.7244	29.794	1.1730	30.162	1.1875	23.444	0.9230	0.8	0.03	0.8	0.03	118	179		33251	33472	27.4	1.08	73.0	2.87	72.0	2.83	107.0	4.21	113.0	4.45	0.44	1.38	0.76	34.4	25.6	1.34
	2.5000	122.238	4.8125	38.100	1.5000	36.678	1.4440	30.162	1.1875	3.6	0.14	3.2	0.13	162	223		559	553X	28.7	1.13	78.0	3.07	72.0	2.83	108.0	4.25	115.0	4.53	0.35	1.73	0.95	47.1	27.9	1.69
	2.5000	122.238	4.8125	38.354	1.5100	38.100	1.5000	29.718	1.1700	3.6	0.14	3.2	0.13	191	249		HM212046	HM212011	27.6	1.09	80.0	3.15	73.0	2.87	108.0	4.25	116.0	4.57	0.34	1.78	0.98	55.5	32.0	1.73
	2.5000	122.238	4.8125	38.354	1.5100	38.100	1.5000	29.718	1.1700	7.1	0.28	1.6	0.06	191	249		HM212047	HM212010	27.6	1.09	87.0	3.43	73.0	2.87	110.0	4.33	116.0	4.57	0.34	1.78	0.98	55.5	32.0	1.73
	2.5000	122.238	4.8125	43.658	1.7188	43.764	1.7230	36.512	1.4375	5.2	0.20	3.2	0.13	221	318		5564R	5535	31.1	1.22	79.0	3.11	72.0	2.83	106.0	4.17	116.0	4.57	0.36	1.67	0.92	64.5	39.5	1.63
	2.5000	122.238	4.8125	43.658	1.7188	43.764	1.7230	36.512	1.4375	3.6	0.14	3.2	0.13	221	318		5584R	5535	31.1	1.22	81.0	3.19	75.0	2.95	106.0	4.17	116.0	4.57	0.36	1.67	0.92	64.5	39.5	1.63
	2.5000	122.238	4.8125	51.595	2.0313	51.702	2.0355	36.512	1.4375	3.6	0.14	3.2	0.13	221	318		5552R	5535	39.0	1.54	81.0	3.19	72.0	2.83	106.0	4.17	116.0	4.57	0.36	1.67	0.92	64.5	39.5	1.63
	2.5000	123.825	4.8750	30.162	1.1875	29.007	1.1420	24.605	0.9687	0.8	0.03	3.2	0.13	118	161		477	472X	26.0	1.02	73.0	2.87	72.0	2.83	109.0	4.29	114.0	4.49	0.38	1.56	0.86	34.5	22.7	1.52
	2.5000	127.000	5.0000	36.512	1.4375	36.170	1.4240	28.575	1.1250	3.6	0.14	3.2	0.13	156	226		565	563	28.6	1.13	80.0	3.15	73.0	2.87	112.0	4.41	120.0	4.72	0.36	1.65	0.91	45.8	28.5	1.61
	2.5000	127.000	5.0000	36.512	1.4375	36.170	1.4240	28.575	1.1250	6.4	0.25	3.2	0.13	156	226		565S	563	28.6	1.13	86.0	3.39	73.0	2.87	112.0	4.41	120.0	4.72	0.36	1.65	0.91	45.8	28.5	1.61
	2.5000	127.000	5.0000	36.512	1.4375	36.512	1.4375	26.988	1.0625	3.6	0.14	1.6	0.06	166	235		HM813842	HM813811	32.9	1.30	82.0	3.23	76.0	2.99	113.0	4.45	121.0	4.76	0.50	1.20	0.66	48.6	41.7	1.17
	2.5000	130.175	5.1250	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	197	267		639	633	30.3	1.19	81.0	3.19	74.0	2.91	116.0	4.57	124.0	4.88	0.36	1.66	0.91	57.4	35.5	1.62
	2.5000	135.755	5.3447	53.975	2.1250	56.007	2.2050	44.450	1.7500	4.3	0.17	3.2	0.13	266	357		6382	6320	34.8	1.37	84.0	3.31	77.0	3.03	117.0	4.61	126.0	4.96	0.32	1.85	1.02	78.4	43.5	1.80
	2.5000	136.525	5.3750	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	241	308		H414235	H414210	30.3	1.19	82.0	3.23	78.0	3.07	121.0	4.76	129.0	5.08	0.36	1.67	0.92	70.0	43.1	1.62
	2.5000	136.525	5.3750	46.038	1.8125	46.038	1.8125	36.512	1.4375	3.6	0.14	3.2	0.13	231	369		H715336	H715311	37.0	1.46	87.0	3.43	80.0	3.15	118.0	4.65	132.0	5.20	0.47	1.27	0.70	67.8	54.8	1.24
	2.5000	149.225	5.8750	53.975	2.1250	54.229	2.1350	44.450	1.7500	3.6	0.14	3.2	0.13	285	404		6475	6420	39.3	1.55	86.0	3.39	81.0	3.19	129.0	5.08	141.0	5.55	0.36	1.66	0.91	83.9	51.9	1.62
	2.5000	150.089	5.9090	44.450	1.7500	46.672	1.8375	36.512	1.4375	3.6	0.14	3.2	0.13	264	368		745SR	742	32.4	1.28	84.0	3.31	77.0	3.03	134.0	5.28	142.0	5.59	0.33	1.84	1.01	77.3	43.0	1.80
64.960	2.5575	146.050	5.7500	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	208	301		656	653	33.4	1.31	86.0	3.39	79.0	3.11	131.0	5.16	139.0	5.47	0.41	1.47	0.81	60.9	42.6	1.43
	2.5575	149.225	5.8750	53.975	2.1250	54.229	2.1350	44.450	1.7500	3.6	0.14	3.2	0.13	285	404		6464	6420	39.3	1.55	87.0	3.43	81.0	3.19	129.0	5.08	141.0	5.55	0.36	1.66	0.91	83.9	51.9	1.62
	2.5575	150.089	5.9090	44.450	1.7500	46.672	1.8375	36.512	1.4375	3.6	0.14	3.2	0.13	264	368		747SR	742	32.4	1.28	86.0	3.39	81.0	3.19	134.0	5.28	142.0	5.59	0.33	1.84	1.01	77.3	43.0	1.80
64.963	2.5576	127.000	5.0000	36.512	1.4375	36.170	1.4240	28.575	1.1250	3.6	0.14	3.2	0.13	156	226		569	563	28.6	1.13	81.0	3.19	74.0	2.91	112.0	4.41	120.0	4.72	0.36	1.65	0.91	45.8	28.5	1.61
64.986	2.5585	112.712	4.4375	30.162	1.1875	30.924	1.2175	23.812	0.9375	2.4	0.09	3.2	0.13	147	207		39586	39520	23.3	0.92	76.0	2.99	72.0	2.83	101.0	3.98	107.0	4.21	0.34	1.77	0.97	42.6	24.7	1.72
64.988	2.5586	107.950	4.2500	25.400	1.0000	25.400	1.0000	19.050	0.7500	3.6	0.14	0.8	0.03	92.8	143		29588	29522	24.7	0.97	78.0	3.07	72.0	2.83	98.0	3.86	103.0	4.06	0.46	1.31	0.72	26.9	21.1	1.28
65.000	2.5591	110.000	4.3307	22.000	0.8661	21.996	0.8660	18.824	0.7411	2.0	0.08	1.2	0.05	86.4	116		399	394A	21.3	0.84	76.0	2.99	73.0	2.87	101.0	3.98	104.5	4.11	0.40					

TS type
d (66.675) ~ (69.850) mm
(2.6250) ~ (2.7500) inch

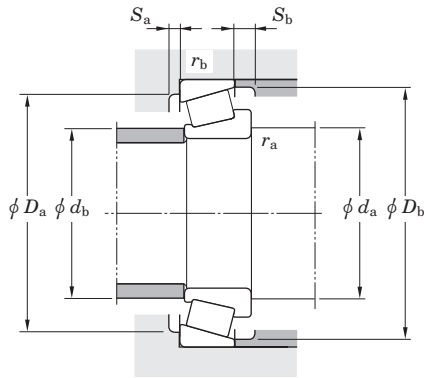
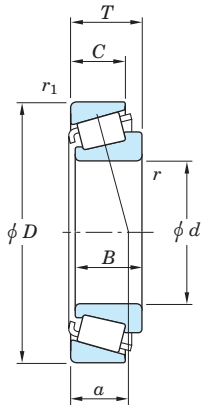


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor		
d		D		T		B		C		r (min.)		r ₁ (min.)		C _r	C _{0r}		Inner ring (Cone)	Outer ring (Cup)	a		d _a		d _b		D _a		D _b		e	Y ₁	Y ₀	(500 rpm for 3 000 Hrs.)		K
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
66.675	2.6250	112.712	4.4375	30.162	1.1875	30.048	1.1830	23.812	0.9375	3.6	0.14	0.8	0.03	111	164		3984	3925	25.9	1.02	80.0	3.15	74.0	2.91	101.0	3.98	106.0	4.17	0.40	1.49	0.82	32.4	22.3	1.46
	2.6250	112.712	4.4375	30.162	1.1875	30.048	1.1830	23.812	0.9375	5.6	0.22	0.8	0.03	111	164		3994	3925	25.9	1.02	84.0	3.31	74.0	2.91	101.0	3.98	106.0	4.17	0.40	1.49	0.82	32.4	22.3	1.46
	2.6250	112.712	4.4375	30.162	1.1875	30.162	1.1875	23.812	0.9375	3.6	0.14	3.2	0.13	147	207		39590	39520	23.3	0.92	80.0	3.15	74.0	2.91	101.0	3.98	107.0	4.21	0.34	1.77	0.97	42.6	24.7	1.72
	2.6250	112.712	4.4375	30.162	1.1875	30.162	1.1875	23.812	0.9375	3.6	0.14	0.8	0.03	147	207		39590	39521	23.3	0.92	80.0	3.15	74.0	2.91	103.0	4.06	107.0	4.21	0.34	1.77	0.97	42.6	24.7	1.72
	2.6250	117.475	4.6250	30.162	1.1875	30.162	1.1875	23.812	0.9375	5.6	0.22	3.2	0.13	118	179		33261	33462	27.8	1.09	86.0	3.39	76.0	2.99	104.0	4.09	112.0	4.41	0.44	1.38	0.76	34.4	25.6	1.34
	2.6250	117.475	4.6250	30.162	1.1875	30.162	1.1875	23.812	0.9375	3.6	0.14	3.2	0.13	118	179		33262	33462	27.8	1.09	81.0	3.19	75.0	2.95	104.0	4.09	112.0	4.41	0.44	1.38	0.76	34.4	25.6	1.34
	2.6250	120.000	4.7244	29.002	1.1418	29.007	1.1420	23.444	0.9230	2.0	0.08	3.2	0.13	118	161		478S	472A	24.9	0.98	78.0	3.07	74.0	2.91	106.0	4.17	114.0	4.49	0.38	1.56	0.86	34.5	22.7	1.52
	2.6250	120.000	4.7244	29.002	1.1418	29.007	1.1420	23.444	0.9230	2.4	0.09	3.2	0.13	118	161		479	472A	24.9	0.98	78.0	3.07	74.0	2.91	106.0	4.17	114.0	4.49	0.38	1.56	0.86	34.5	22.7	1.52
	2.6250	122.238	4.8125	38.100	1.5000	36.678	1.4440	30.162	1.1875	3.6	0.14	3.2	0.13	162	223		560	553X	28.7	1.13	81.0	3.19	75.0	2.95	108.0	4.25	115.0	4.53	0.35	1.73	0.95	47.1	27.9	1.69
	2.6250	122.238	4.8125	38.100	1.5000	38.354	1.5100	29.718	1.1700	3.6	0.14	1.6	0.06	191	249		HM212049	HM212010	27.3	1.07	82.0	3.23	75.5	2.97	110.0	4.33	116.0	4.57	0.34	1.78	0.98	55.5	32.0	1.73
	2.6250	127.000	5.0000	36.512	1.4375	36.512	1.4375	26.988	1.0625	3.6	0.14	1.6	0.06	166	235		HM813844	HM813811	32.9	1.30	85.0	3.35	78.0	3.07	113.0	4.45	121.0	4.76	0.50	1.20	0.66	48.6	41.7	1.17
	2.6250	130.175	5.1250	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	197	267		641	633	30.3	1.19	83.0	3.27	77.0	3.03	116.0	4.57	124.0	4.88	0.36	1.66	0.91	57.4	35.5	1.62
	2.6250	135.755	5.3447	53.975	2.1250	56.007	2.2050	44.450	1.7500	4.3	0.17	3.2	0.13	266	357		6386	6320	34.8	1.37	87.0	3.43	77.5	3.05	117.0	4.61	126.0	4.96	0.32	1.85	1.02	78.4	43.5	1.80
	2.6250	135.755	5.3447	53.975	2.1250	56.007	2.2050	44.450	1.7500	8.6	0.34	3.2	0.13	266	357		6386A	6320	34.8	1.37	92.0	3.62	77.0	3.03	117.0	4.61	126.0	4.96	0.32	1.85	1.02	78.4	43.5	1.80
	2.6250	135.755	5.3447	53.975	2.1250	56.007	2.2050	44.450	1.7500	6.4	0.25	3.2	0.13	266	357		6389	6320	34.8	1.37	91.0	3.58	77.5	3.05	117.0	4.61	126.0	4.96	0.32	1.85	1.02	78.4	43.5	1.80
	2.6250	136.525	5.3750	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	241	308		H414242	H414210	30.3	1.19	85.0	3.35	81.0	3.19	121.0	4.76	129.0	5.08	0.36	1.67	0.92	70.0	43.1	1.62
	2.6250	136.525	5.3750	46.038	1.8125	46.038	1.8125	36.512	1.4375	3.6	0.14	3.2	0.13	231	369		H715341	H715311	37.0	1.46	89.0	3.50	83.0	3.27	118.0	4.65	132.0	5.20	0.47	1.27	0.70	67.8	54.8	1.24
68.262	2.6875	103.188	4.0625	43.658	1.7188	51.702	2.0355	36.512	1.4375	3.6	0.14	3.2	0.13	221	318		5557R	5535	31.1	1.22	86.0	3.39	72.0	2.83	106.0	4.17	116.0	4.57	0.36	1.67	0.92	64.5	39.5	1.63
	2.6875	110.000	4.3307	22.000	0.8661	21.996	0.8660	18.824	0.7411	2.4	0.09	1.2	0.05	86.4	116		399A	394A	21.3	0.84	78.0	3.07	74.0	2.91	101.0	3.98	104.5	4.11	0.40	1.49	0.82	25.0	17.2	1.46
	2.6875	110.000	4.3307	22.000	0.8661	21.996	0.8660	18.824	0.7411	5.2	0.20	1.2	0.05	86.4	116		399AS	394A	21.3	0.84	83.0	3.27	74.0	2.91	101.0	3.98	104.5	4.11	0.40	1.49	0.82	25.0	17.2	1.46
	2.6875	117.475	4.6250	30.162	1.1875	30.162	1.1875	23.812	0.9375	3.6	0.14	3.2	0.13	118	179		33269	33462	27.8	1.09	82.0	3.23	76.0	2.99	104.0	4.09	112.0	4.41	0.44	1.38	0.76	34.4	25.6	1.34
	2.6875	120.000	4.7244	29.002	1.1418	29.007	1.1420	23.444	0.9230	3.6	0.14	3.2	0.13	118	161		480	472A	24.9	0.98	82.0	3.23	75.0	2.95	106.0	4.17	114.0	4.49	0.38	1.56	0.86	34.5	22.7	1.52
	2.6875	122.238	4.8125	38.100	1.5000	36.678	1.4440	30.162	1.1875	3.6	0.14	3.2	0.13	162	223		560S	553X	28.7	1.13	83.0	3.27	76.0	2.99	108.0	4.25	115.0	4.53	0.35	1.73	0.95	47.1	27.9	1.69
	2.6875	127.000	5.0000	36.512	1.4375	36.170	1.4240	28.575	1.1250	3.6	0.14	3.2	0.13	156	226		570	563	28.6	1.13	83.0	3.27	77.0	3.03	112.0	4.41	120.0	4.72	0.36	1.65	0.91	45.8	28.5	1.61
	2.6875	130.175	5.1250	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	197	267		642	633	30.3	1.19	84.0	3.31	79.0	3.11	116.0	4.57	124.0	4.88	0.36	1.66	0.91	57.4	35.5	1.62
	2.6875	136.525	5.3750	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	197	267		642	632	30.3	1.19	84.0	3.31	79.0	3.11	118.0	4.65	125.0	4.92	0.36	1.66	0.91	57.4	35.5	1.62
	2.6875	136.525	5.3750	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	241	308		H414245	H414210	30.3	1.19	86.0	3.39	82.0	3.23	121.0	4.76	129.0	5.08	0.36	1.67	0.92	70.0	43.1	1.62
	2.6875	136.525	5.3750	41.275	1.6250	41.275	1.6250	31.750	1.2500	7.1	0.28	3.2	0.13	241	308		H414245A	H414210	30.3	1.19	89.0	3.50	83.0	3.27	121.0	4.76	129.0	5.08	0.36	1.67	0.92	70.0	43.1	1.62
	2.6875	136.525	5.3750	46.038	1.8125	46.038	1.8125	36.512	1.4375	3.6	0.14	3.2	0.13	231	369		H715343	H715311	37.0	1.46	90.0	3.54	84.0	3.31	118.0	4.65	132.0	5.20	0.47	1.27	0.70	67.8	5	

TS type
d (69.850) ~ (73.025) mm
(2.7500) ~ (2.8750) inch

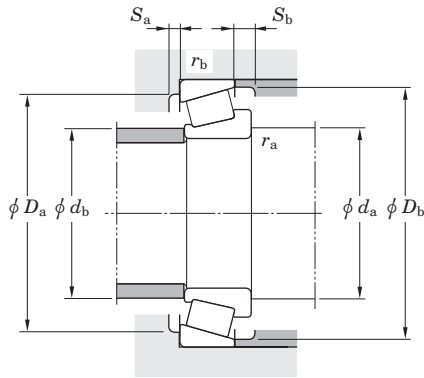
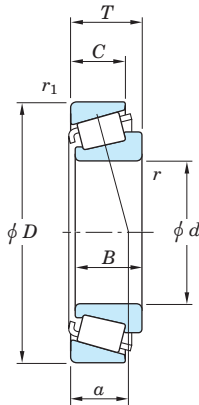


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor		
d		D		T		B		C		r (min.)		r ₁ (min.)		C _r	C _{0r}		Inner ring (Cone)	Outer ring (Cup)	a		d _a		d _b		D _a		D _b		e	Y ₁	Y ₀	(500 rpm for 3 000 Hrs.)		K
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
69.850	2.7500	123.825	4.8750	30.162	1.1875	29.007	1.1420	24.605	0.9687	3.6	0.14	3.2	0.13	118	161		482	472X	26.0	1.02	83.0	3.27	77.0	3.03	109.0	4.29	114.0	4.49	0.38	1.56	0.86	34.5	22.7	1.52
	2.7500	127.000	5.0000	36.512	1.4375	36.170	1.4240	28.575	1.1250	3.6	0.14	3.2	0.13	156	226		566	563	28.6	1.13	85.0	3.35	78.0	3.07	112.0	4.41	120.0	4.72	0.36	1.65	0.91	45.8	28.5	1.61
	2.7500	127.000	5.0000	36.512	1.4375	36.170	1.4240	28.575	1.1250	0.8	0.03	3.2	0.13	156	226		566S	563	28.6	1.13	79.0	3.11	78.0	3.07	112.0	4.41	120.0	4.72	0.36	1.65	0.91	45.8	28.5	1.61
	2.7500	127.000	5.0000	36.512	1.4375	36.512	1.4375	26.988	1.0625	3.6	0.14	1.6	0.06	166	235		HM813846	HM813811	32.9	1.30	88.0	3.46	81.0	3.19	113.0	4.45	121.0	4.76	0.50	1.20	0.66	48.6	41.7	1.17
	2.7500	130.175	5.1250	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	197	267		643	633	30.3	1.19	86.0	3.39	80.0	3.15	116.0	4.57	124.0	4.88	0.36	1.66	0.91	57.4	35.5	1.62
	2.7500	136.525	5.3750	46.038	1.8125	46.038	1.8125	36.512	1.4375	3.6	0.14	3.2	0.13	231	369		H715344	H715311	37.0	1.46	92.0	3.62	85.0	3.35	118.0	4.65	132.0	5.20	0.47	1.27	0.70	67.8	54.8	1.24
	2.7500	146.050	5.7500	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	208	301		655	653	33.4	1.31	88.0	3.46	82.0	3.23	131.0	5.16	139.0	5.47	0.41	1.47	0.81	60.9	42.6	1.43
	2.7500	149.225	5.8750	53.975	2.1250	54.229	2.1350	44.450	1.7500	5.2	0.20	3.2	0.13	285	404		6454	6420	39.3	1.55	94.0	3.70	85.0	3.35	129.0	5.08	141.0	5.55	0.36	1.66	0.91	83.9	51.9	1.62
	2.7500	149.225	5.8750	53.975	2.1250	54.229	2.1350	44.450	1.7500	6.4	0.25	3.2	0.13	285	404		6484	6420	39.3	1.55	95.0	3.74	85.0	3.35	129.0	5.08	141.0	5.55	0.36	1.66	0.91	83.9	51.9	1.62
	2.7500	150.089	5.9090	44.450	1.7500	46.672	1.8375	36.512	1.4375	5.2	0.20	3.2	0.13	264	368		744AR	742	32.4	1.28	92.0	3.62	82.0	3.23	134.0	5.28	142.0	5.59	0.33	1.84	1.01	77.3	43.0	1.80
	2.7500	150.089	5.9090	44.450	1.7500	46.672	1.8375	36.512	1.4375	3.6	0.14	3.2	0.13	264	368		745AR	742	32.4	1.28	88.0	3.46	82.0	3.23	134.0	5.28	142.0	5.59	0.33	1.84	1.01	77.3	43.0	1.80
	2.7500	168.275	6.6250	53.975	2.1250	56.363	2.2190	41.275	1.6250	3.6	0.14	3.2	0.13	344	467		835R	832	35.0	1.38	91.0	3.58	84.0	3.31	149.0	5.87	155.0	6.10	0.30	2.00	1.10	101	51.6	1.95
69.952	2.7540	121.442	4.7812	24.608	0.9688	23.012	0.9060	17.462	0.6875	2.0	0.08	2.0	0.08	90.0	127		34274	34478	26.8	1.06	81.0	3.19	78.0	3.07	110.0	4.33	116.0	4.57	0.45	1.33	0.73	26.0	20.0	1.30
70.000	2.7559	120.000	4.7244	29.002	1.1418	29.007	1.1420	23.444	0.9230	2.0	0.08	3.2	0.13	118	161		484	472A	24.9	0.98	80.0	3.15	77.0	3.03	106.0	4.17	114.0	4.49	0.38	1.56	0.86	34.5	22.7	1.52
	2.7559	125.052	4.9233	23.731	0.9343	23.012	0.9060	16.401	0.6457	2.0	0.08	2.0	0.08	90.0	127		34275	34492A	25.9	1.02	82.0	3.23	78.0	3.07	112.0	4.41	118.0	4.65	0.45	1.33	0.73	26.0	20.0	1.30
70.637	2.7810	112.712	4.4375	25.400	1.0000	25.400	1.0000	19.050	0.7500	3.6	0.14	3.2	0.13	97.0	155		29681	29620	26.2	1.03	84.0	3.31	79.0	3.11	101.0	3.98	109.0	4.29	0.49	1.23	0.68	28.1	23.4	1.20
	2.7810	120.650	4.7500	25.400	1.0000	25.400	1.0000	19.050	0.7500	1.2	0.05	3.2	0.13	97.0	155		29680	29630	26.2	1.03	80.0	3.15	78.0	3.07	104.0	4.09	113.0	4.45	0.49	1.23	0.68	28.1	23.4	1.20
71.438	2.8125	117.475	4.6250	30.162	1.1875	30.162	1.1875	23.812	0.9375	3.6	0.14	3.2	0.13	118	179		33281	33462	27.8	1.09	85.0	3.35	79.0	3.11	104.0	4.09	112.0	4.41	0.44	1.38	0.76	34.4	25.6	1.34
	2.8125	120.000	4.7244	32.545	1.2813	32.545	1.2813	26.195	1.0313	3.6	0.14	3.2	0.13	150	218		47490R	47420	26.6	1.05	86.0	3.39	79.0	3.11	107.0	4.21	114.0	4.49	0.36	1.67	0.92	43.7	26.9	1.62
	2.8125	127.000	5.0000	36.512	1.4375	36.170	1.4240	28.575	1.1250	3.6	0.14	3.2	0.13	156	226		567A	563	28.6	1.13	86.0	3.39	80.0	3.15	112.0	4.41	120.0	4.72	0.36	1.65	0.91	45.8	28.5	1.61
	2.8125	127.000	5.0000	36.512	1.4375	36.170	1.4240	28.575	1.1250	6.4	0.25	3.2	0.13	156	226		567S	563	28.6	1.13	92.0	3.62	80.0	3.15	112.0	4.41	120.0	4.72	0.36	1.65	0.91	45.8	28.5	1.61
	2.8125	127.000	5.0000	36.512	1.4375	36.512	1.4375	26.988	1.0625	3.6	0.14	1.6	0.06	166	235		HM813849	HM813811	32.9	1.30	89.0	3.50	81.9	3.22	113.0	4.45	121.0	4.76	0.50	1.20	0.66	48.6	41.7	1.17
	2.8125	130.175	5.1250	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	197	267		644	633	30.3	1.19	87.0	3.43	81.0	3.19	116.0	4.57	124.0	4.88	0.36	1.66	0.91	57.4	35.5	1.62
	2.8125	130.175	5.1250	41.275	1.6250	41.275	1.6250	31.750	1.2500	6.4	0.25	3.2	0.13	197	267		645	633	30.3	1.19	93.0	3.66	81.0	3.19	116.0	4.57	124.0	4.88	0.36	1.66	0.91	57.4	35.5	1.62
	2.8125	133.350	5.2500	30.162	1.1875	29.769	1.1720	22.225	0.8750	3.6	0.14	3.2	0.13	133	198		495S	492A	29.8	1.17	88.0	3.46	82.0	3.23	120.0	4.72	128.0	5.04	0.44	1.35	0.74	38.8	29.4	1.32
	2.8125	133.350	5.2500	33.338	1.3125	33.338	1.3125	26.195	1.0313	3.6	0.14	0.8	0.03	154	245		47675R	47620A	29.2	1.15	88.0	3.46	82.0	3.23	121.0	4.76	128.0	5.04	0.40	1.48	0.82	44.7	30.9	1.45
	2.8125	136.525	5.3750	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	241	308		H414249	H414210	30.3	1.19	89.0	3.50	83.3	3.28	121.0	4.76	129.0	5.08	0.36	1.67	0.92	70.0	43.1	1.62
2.8125	136.525	5.3750	46.038	1.8125	46.038	1.8125	36.512	1.4375	3.6	0.14	3.2	0.13	231	369		H715345	H715311	37.0	1.46	93.0	3.66	87.0	3.43	118.0	4.65	132.0	5.20	0.47	1.27	0.70	67.8	54.8	1.24	
73.000	2.8740	120.000	4.7244	29.002	1.1418	29.007	1.1420	23.																										

TS type
d (73.025) ~ (76.200) mm
(2.8750) ~ (3.0000) inch

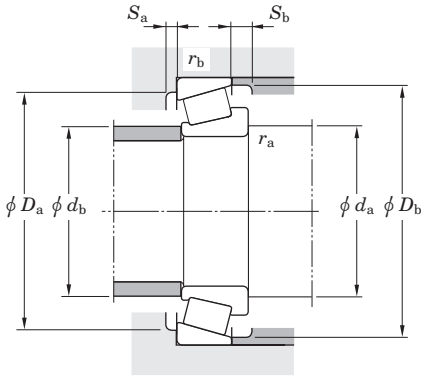
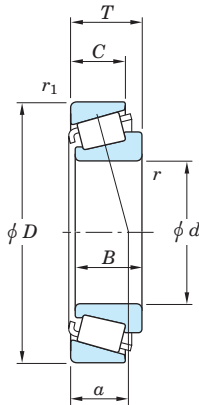


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions								Constant	Axial load factors		Reference rating (kN)		Factor
d		D		T		B		C		r (min.)		r ₁ (min.)		C _r	C _{0r}		Inner ring (Cone)	Outer ring (Cup)	a		d _a		d _b		D _a		D _b		e	Y ₁	Y ₀	(500 rpm for 3 000 Hrs.)		K
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch			mm			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm				inch	mm	
73.025	2.8750	149.225	5.8750	53.975	2.1250	54.229	2.1350	44.450	1.7500	3.6	0.14	3.2	0.13	285	404		6460	6420	39.3	1.55	93.0	3.66	87.0	3.43	129.0	5.08	141.0	5.55	0.36	1.66	0.91	83.9	51.9	1.62
	2.8750	150.089	5.9090	44.450	1.7500	46.672	1.8375	36.512	1.4375	3.6	0.14	3.2	0.13	264	368		744R	742	32.4	1.28	91.0	3.58	85.0	3.35	134.0	5.28	142.0	5.59	0.33	1.84	1.01	77.3	43.0	1.80
	2.8750	152.400	6.0000	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	208	301		657	652	33.4	1.31	90.0	3.54	85.0	3.35	134.0	5.28	141.0	5.55	0.41	1.47	0.81	60.9	42.6	1.43
	2.8750	159.995	6.2990	47.625	1.8750	48.260	1.9000	38.100	1.5000	3.6	0.14	0.8	0.03	273	391		762	752A	35.5	1.40	92.0	3.62	97.0	3.82	146.0	5.75	149.0	5.87	0.34	1.76	0.97	80.0	46.6	1.72
	2.8750	161.925	6.3750	47.625	1.8750	48.260	1.9000	38.100	1.5000	3.6	0.14	3.2	0.13	273	391		762	752	35.5	1.40	92.0	3.62	97.0	3.82	144.0	5.67	150.0	5.91	0.34	1.76	0.97	80.0	46.6	1.72
73.817	2.9062	112.712	4.4375	25.400	1.0000	25.400	1.0000	19.050	0.7500	1.6	0.06	3.2	0.13	97.0	155		29688	29620	26.2	1.03	83.0	3.27	81.0	3.19	101.0	3.98	109.0	4.29	0.49	1.23	0.68	28.1	23.4	1.20
	2.9062	127.000	5.0000	36.512	1.4375	36.170	1.4240	28.575	1.1250	0.8	0.03	3.2	0.13	156	226		568	563	28.6	1.13	83.0	3.27	82.0	3.23	112.0	4.41	120.0	4.72	0.36	1.65	0.91	45.8	28.5	1.61
74.612	2.9375	139.992	5.5115	36.512	1.4375	36.098	1.4212	28.575	1.1250	3.6	0.14	3.2	0.13	175	262		577R	572	31.0	1.22	91.0	3.58	85.0	3.35	125.0	4.92	133.0	5.24	0.40	1.49	0.82	51.2	35.3	1.45
	2.9375	146.050	5.7500	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	208	301		658	653	33.4	1.31	92.0	3.62	86.0	3.39	131.0	5.16	139.0	5.47	0.41	1.47	0.81	60.9	42.6	1.43
	2.9375	150.000	5.9055	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.0	0.12	208	301		658	653X	33.4	1.31	92.0	3.62	86.0	3.39	133.0	5.24	141.0	5.55	0.41	1.47	0.81	60.9	42.6	1.43
74.976	2.9518	121.442	4.7812	24.608	0.9688	23.012	0.9060	17.462	0.6875	2.0	0.08	2.0	0.08	90.0	127		34294	34478	26.8	1.06	85.0	3.35	83.0	3.27	110.0	4.33	116.0	4.57	0.45	1.33	0.73	26.0	20.0	1.30
74.986	2.9522	127.000	5.0000	30.162	1.1875	31.000	1.2205	22.225	0.8750	2.4	0.09	3.2	0.13	143	225		42686X	42620	27.1	1.07	85.0	3.35	81.0	3.19	114.0	4.49	121.0	4.76	0.42	1.43	0.79	41.4	29.6	1.40
74.988	2.9523	127.000	5.0000	30.162	1.1875	31.000	1.2205	22.225	0.8750	6.4	0.25	3.2	0.13	143	225		42686	42620	27.1	1.07	95.0	3.74	84.0	3.31	114.0	4.49	121.0	4.76	0.42	1.43	0.79	41.4	29.6	1.40
75.000	2.9528	121.442	4.7812	24.608	0.9688	23.012	0.9060	17.462	0.6875	2.4	0.09	2.0	0.08	90.0	127		34295	34478	26.8	1.06	86.0	3.39	83.0	3.27	110.0	4.33	116.0	4.57	0.45	1.33	0.73	26.0	20.0	1.30
	2.9528	161.925	6.3750	53.975	2.1250	55.100	2.1693	42.862	1.6875	3.0	0.12	3.2	0.13	316	471		6555R	6535	41.0	1.61	95.0	3.74	85.0	3.35	141.0	5.55	154.0	6.06	0.40	1.50	0.82	92.9	63.5	1.46
76.200	3.0000	121.442	4.7812	24.608	0.9688	23.012	0.9060	17.462	0.6875	3.6	0.14	2.0	0.08	90.0	127		34301	34478	26.8	1.06	89.0	3.50	83.0	3.27	110.0	4.33	116.0	4.57	0.45	1.33	0.73	26.0	20.0	1.30
	3.0000	125.412	4.9375	25.400	1.0000	25.400	1.0000	19.845	0.7813	3.6	0.14	1.6	0.06	101	162		27684	27620	24.7	0.97	91.0	3.58	84.0	3.31	115.0	4.53	120.0	4.72	0.42	1.44	0.79	29.2	20.8	1.41
	3.0000	127.000	5.0000	26.988	1.0625	23.012	0.9060	19.842	0.7812	2.0	0.08	3.2	0.13	90.0	127		34300	34500	29.2	1.15	86.0	3.39	83.0	3.27	112.0	4.41	118.0	4.65	0.45	1.33	0.73	26.0	20.0	1.30
	3.0000	127.000	5.0000	30.162	1.1875	31.000	1.2205	22.225	0.8750	3.6	0.14	3.2	0.13	143	225		42687	42620	27.1	1.07	90.0	3.54	84.0	3.31	114.0	4.49	121.0	4.76	0.42	1.43	0.79	41.4	29.6	1.40
	3.0000	127.000	5.0000	30.162	1.1875	31.000	1.2205	22.225	0.8750	6.4	0.25	3.2	0.13	143	225		42688	42620	27.1	1.07	96.0	3.78	84.0	3.31	114.0	4.49	121.0	4.76	0.42	1.43	0.79	41.4	29.6	1.40
	3.0000	129.975	5.1171	33.249	1.3090	31.000	1.2205	27.000	1.0630	3.6	0.14	2.4	0.09	143	225		42687	42624	30.1	1.19	90.0	3.54	84.0	3.31	114.0	4.49	121.0	4.76	0.42	1.43	0.79	41.4	29.6	1.40
	3.0000	133.350	5.2500	30.162	1.1875	29.769	1.1720	22.225	0.8750	6.4	0.25	3.2	0.13	133	198		495AX	492A	29.8	1.17	98.0	3.86	86.0	3.39	120.0	4.72	128.0	5.04	0.44	1.35	0.74	38.8	29.4	1.32
	3.0000	133.350	5.2500	33.338	1.3125	33.338	1.3125	26.195	1.0313	6.4	0.25	3.2	0.13	154	245		47678R	47620	29.2	1.15	97.0	3.82	90.0	3.54	119.0	4.69	128.0	5.04	0.40	1.48	0.82	44.7	30.9	1.45
	3.0000	133.350	5.2500	33.338	1.3125	33.338	1.3125	26.195	1.0313	3.6	0.14	0.8	0.03	154	245		47679R	47620A	29.2	1.15	91.0	3.58	85.0	3.35	121.0	4.76	128.0	5.04	0.40	1.48	0.82	44.7	30.9	1.45
	3.0000	133.350	5.2500	33.338	1.3125	33.338	1.3125	26.195	1.0313	0.8	0.03	3.2	0.13	154	245		47680R	47620	29.2	1.15	86.0	3.39	85.0	3.35	119.0	4.69	128.0	5.04	0.40	1.48	0.82	44.7	30.9	1.45
	3.0000	135.733	5.3438	44.450	1.7500	46.101	1.8150	34.925	1.3750	3.6	0.14	3.2	0.13	213	337		5760	5735	33.0	1.30	94.0	3.70	88.0	3.46	119.0	4.69	130.0	5.12	0.41	1.48	0.81	62.5	43.4	1.44
	3.0000	136.525	5.3750	30.162	1.1875	29.769	1.1720	22.225	0.8750	3.6	0.14	3.2	0.13	133	198		495A	493	29.8	1.17	92.0	3.62	86.0	3.39	122.0	4.80	130.0	5.12	0.44	1.35	0.74	38.8	29.4	1.32
	3.0000	139.992	5.5115	36.512	1.4375	36.098	1.4212	28.575	1.1250	3.6	0.14	3.2	0.13	175	262		575R	572	31.0	1.22	92.0	3.62	86.0	3.39	125.0	4.92	133.0	5.24	0.40	1.49	0.82	51.2	35.3	1.45
	3.0000	139.992	5.5115	36.512	1.4375	36.098	1.4212	2																										

TS type
d (76.200) ~ (82.550) mm
(3.0000) ~ (3.2500) inch

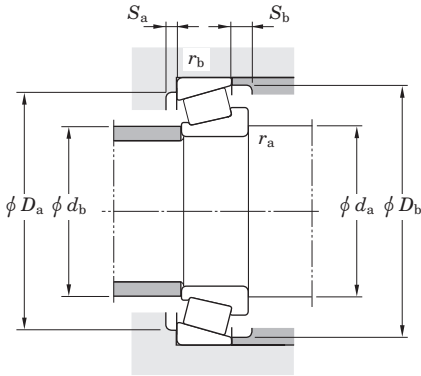
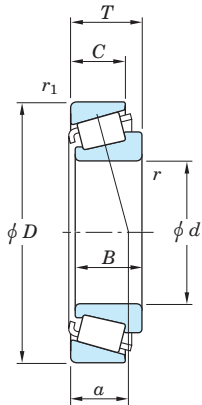


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y ₁

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor			
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	(500 rpm for 3 000 Hrs.)		<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
76.200	3.0000	161.925	6.3750	53.975	2.1250	55.100	2.1693	42.862	1.6875	3.6	0.14	3.2	0.13	316	471		6576R	6535	41.0	1.61	99.0	3.90	89.0	3.50	141.0	5.55	154.0	6.06	0.40	1.50	0.82	92.9	63.5	1.46
	3.0000	168.275	6.6250	47.625	1.8750	48.260	1.9000	38.100	1.5000	3.6	0.14	3.2	0.13	273	391		755	753	35.5	1.40	95.0	3.74	88.0	3.46	147.0	5.79	150.0	5.91	0.34	1.76	0.97	80.0	46.6	1.72
	3.0000	169.850	6.6870	62.705	2.4687	63.830	2.5130	44.450	1.7500	3.6	0.14	3.2	0.13	316	471		6554R	6520	41.0	1.61	99.0	3.90	89.0	3.50	147.0	5.79	162.0	6.38	0.40	1.50	0.82	92.9	63.5	1.46
	3.0000	190.500	7.5000	57.150	2.2500	57.531	2.2650	46.038	1.8125	3.6	0.14	3.2	0.13	440	602		HH221430	HH221410	42.5	1.67	101.0	3.98	95.0	3.74	171.0	6.73	179.0	7.05	0.33	1.79	0.99	129	73.6	1.75
77.356	3.0455	121.442	4.7812	24.608	0.9688	23.012	0.9060	17.462	0.6875	3.6	0.14	2.0	0.08	90.0	127		34304	34478	26.8	1.06	90.0	3.54	85.0	3.35	110.0	4.33	116.0	4.57	0.45	1.33	0.73	26.0	20.0	1.30
77.788	3.0625	117.475	4.6250	25.400	1.0000	25.400	1.0000	19.050	0.7500	3.6	0.14	3.2	0.13	101	166		LM814849	LM814810	27.6	1.09	91.0	3.58	85.0	3.35	105.0	4.13	113.0	4.45	0.51	1.18	0.65	29.2	25.4	1.15
	3.0625	121.442	4.7812	24.608	0.9688	23.012	0.9060	17.462	0.6875	3.6	0.14	2.0	0.08	90.0	127		34306	34478	26.8	1.06	90.0	3.54	84.0	3.31	110.0	4.33	116.0	4.57	0.45	1.33	0.73	26.0	20.0	1.30
	3.0625	121.442	4.7812	24.608	0.9688	23.012	0.9060	17.462	0.6875	6.4	0.25	2.0	0.08	90.0	127		34307	34478	26.8	1.06	96.0	3.78	84.0	3.31	110.0	4.33	116.0	4.57	0.45	1.33	0.73	26.0	20.0	1.30
	3.0625	127.000	5.0000	30.162	1.1875	31.000	1.2205	22.225	0.8750	3.6	0.14	3.2	0.13	143	225		42690	42620	27.1	1.07	91.0	3.58	85.0	3.35	114.0	4.49	121.0	4.76	0.42	1.43	0.79	41.4	29.6	1.40
	3.0625	133.350	5.2500	30.162	1.1875	29.769	1.1720	22.225	0.8750	3.6	0.14	3.2	0.13	133	198		495AS	492A	29.8	1.17	93.0	3.66	87.0	3.43	120.0	4.72	128.0	5.04	0.44	1.35	0.74	38.8	29.4	1.32
	3.0625	135.733	5.3438	44.450	1.7500	46.101	1.8150	34.925	1.3750	3.6	0.14	3.2	0.13	213	337		5795	5735	33.0	1.30	96.0	3.78	89.0	3.50	119.0	4.69	130.0	5.12	0.41	1.48	0.81	62.5	43.4	1.44
	3.0625	146.050	5.7500	33.338	1.3125	34.925	1.3750	26.195	1.0313	3.6	0.14	3.2	0.13	178	293		47880R	47820	32.6	1.28	93.0	3.66	87.0	3.43	131.0	5.16	140.0	5.51	0.45	1.34	0.74	51.6	39.5	1.31
79.375	3.1250	146.050	5.7500	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	208	301		661	653	33.4	1.31	96.0	3.78	90.0	3.54	131.0	5.16	139.0	5.47	0.41	1.47	0.81	60.9	42.6	1.43
	3.1250	147.638	5.8125	35.717	1.4062	36.322	1.4300	26.192	1.0312	3.6	0.14	3.2	0.13	183	287		595A	592XS	33.4	1.31	98.0	3.86	91.0	3.58	133.0	5.24	142.0	5.59	0.44	1.36	0.75	53.5	40.4	1.32
	3.1250	150.089	5.9090	44.450	1.7500	46.672	1.8375	36.512	1.4375	3.6	0.14	3.2	0.13	264	368		750R	742	32.4	1.28	96.0	3.78	90.0	3.54	134.0	5.28	142.0	5.59	0.33	1.84	1.01	77.3	43.0	1.80
	3.1250	161.925	6.3750	47.625	1.8750	48.260	1.9000	38.100	1.5000	7.9	0.31	3.2	0.13	273	391		756A	752	35.5	1.40	106.0	4.17	91.0	3.58	144.0	5.67	150.0	5.91	0.34	1.76	0.97	80.0	46.6	1.72
	3.1250	190.500	7.5000	57.150	2.2500	57.531	2.2650	46.038	1.8125	3.6	0.14	3.2	0.13	440	602		HH221431	HH221410	42.5	1.67	103.0	4.06	97.0	3.82	171.0	6.73	179.0	7.05	0.33	1.79	0.99	129	73.6	1.75
79.985	3.1490	136.525	5.3750	30.162	1.1875	29.769	1.1720	22.225	0.8750	3.6	0.14	3.2	0.13	133	198		496X	493	29.8	1.17	94.0	3.70	88.0	3.46	122.0	4.80	130.0	5.12	0.44	1.35	0.74	38.8	29.4	1.32
	3.1490	139.992	5.5115	36.512	1.4375	36.098	1.4212	28.575	1.1250	3.6	0.14	3.2	0.13	175	262		578R	572	31.0	1.22	95.0	3.74	89.0	3.50	125.0	4.92	133.0	5.24	0.40	1.49	0.82	51.2	35.3	1.45
	3.1490	152.400	6.0000	39.688	1.5625	36.322	1.4300	30.162	1.1875	3.6	0.14	3.2	0.13	183	287		590	592A	37.1	1.46	98.0	3.86	92.0	3.62	135.0	5.31	144.0	5.67	0.44	1.36	0.75	53.5	40.4	1.32
80.000	3.1496	150.089	5.9090	44.450	1.7500	46.672	1.8375	36.512	1.4375	3.0	0.12	3.2	0.13	264	368		748R	742	32.4	1.28	95.0	3.74	91.0	3.58	134.0	5.28	142.0	5.59	0.33	1.84	1.01	77.3	43.0	1.80
	3.1496	161.925	6.3750	53.975	2.1250	55.100	2.1693	42.862	1.6875	3.0	0.12	3.2	0.13	316	471		6556R	6535	41.0	1.61	99.0	3.90	89.0	3.50	141.0	5.55	154.0	6.06	0.40	1.50	0.82	92.9	63.5	1.46
	3.1496	168.275	6.6250	53.975	2.1250	56.363	2.2190	41.275	1.6250	3.0	0.12	3.2	0.13	344	467		838XR	832	35.0	1.38	93.0	3.66	92.0	3.62	149.0	5.87	155.0	6.10	0.30	2.00	1.10	101	51.6	1.95
	3.1496	190.500	7.5000	57.150	2.2500	57.531	2.2650	44.450	1.7500	3.0	0.12	3.2	0.13	385	565		864XR	854	39.9	1.57	100.0	3.94	95.0	3.74	170.0	6.69	174.0	6.85	0.33	1.79	0.99	113	64.6	1.75
	3.1496	200.000	7.8740	52.761	2.0772	49.212	1.9375	34.925	1.3750	3.6	0.14	3.2	0.13	347	471		98316	98788	54.5	2.15	111.0	4.37	105.0	4.13	174.0	6.85	188.0	7.40	0.63	0.95	0.52	101	109	0.93
80.962	3.1875	133.350	5.2500	30.162	1.1875	29.769	1.1720	22.225	0.8750	3.6	0.14	3.2	0.13	133	198		496	492A	29.8	1.17	95.0	3.74	89.0	3.50	120.0	4.72	128.0	5.04	0.44	1.35	0.74	38.8	29.4	1.32
	3.1875	133.350	5.2500	33.338	1.3125	33.338	1.3125	26.195	1.0313	3.6	0.14	3.2	0.13	154	245		47681R	47620	29.2	1.15	95.0	3.74	89.0	3.50	119.0	4.69	128.0	5.04	0.40	1.48	0.82	44.7	30.9	1.45
	3.1875	133.350	5.2500	33.338	1.3125	33.338	1.3125	26.195	1.0313	3.6	0.14	0.8	0.03	154	245		47681R	47620A	29.2	1.15	95.0	3.74	89.0	3.50	121.0	4.76	128.0	5.04	0.40	1.48	0.82	44.7	30.9	1.45
	3.1875</																																	

TS type
d (82.550) ~ (85.725) mm
(3.2500) ~ (3.3750) inch

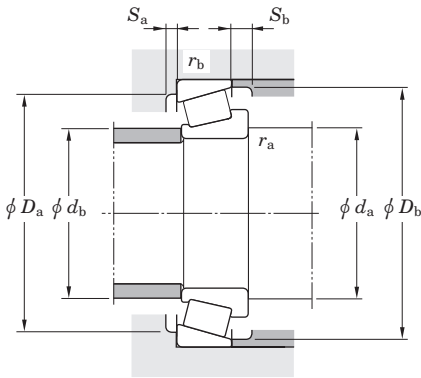
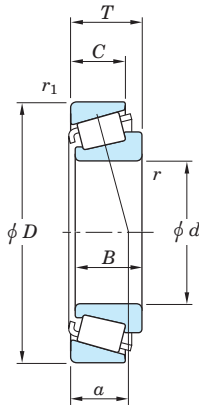


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor		
d		D		T		B		C		r (min.)		r ₁ (min.)		C _r	C _{0r}		Inner ring (Cone)	Outer ring (Cup)	a		d _a		d _b		D _a		D _b		e	Y ₁	Y ₀	(500 rpm for 3 000 Hrs.)		K
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
82.550	3.2500	133.350	5.2500	33.338	1.3125	33.338	1.3125	26.195	1.0313	3.6	0.14	0.8	0.03	154	245		47686R	47620A	29.2	1.15	97.0	3.82	90.0	3.54	121.0	4.76	128.0	5.04	0.40	1.48	0.82	44.7	30.9	1.45
	3.2500	133.350	5.2500	33.338	1.3125	33.338	1.3125	26.195	1.0313	6.7	0.26	0.8	0.03	154	245		47687R	47620A	29.2	1.15	103.0	4.06	90.0	3.54	121.0	4.76	128.0	5.04	0.40	1.48	0.82	44.7	30.9	1.45
	3.2500	133.350	5.2500	39.688	1.5625	39.688	1.5625	32.545	1.2813	6.7	0.26	3.2	0.13	177	306		HM516448	HM516410	32.2	1.27	105.0	4.13	92.0	3.62	118.0	4.65	128.0	5.04	0.40	1.49	0.82	51.8	35.6	1.46
	3.2500	133.350	5.2500	39.688	1.5625	39.688	1.5625	32.545	1.2813	3.6	0.14	3.2	0.13	177	306		HM516449	HM516410	32.2	1.27	99.0	3.90	92.0	3.62	118.0	4.65	128.0	5.04	0.40	1.49	0.82	51.8	35.6	1.46
	3.2500	139.700	5.5000	36.512	1.4375	36.098	1.4212	28.575	1.1250	3.6	0.14	3.2	0.13	175	262		580R	572X	31.0	1.22	98.0	3.86	91.0	3.58	125.0	4.92	133.0	5.24	0.40	1.49	0.82	51.2	35.3	1.45
	3.2500	139.700	5.5000	36.512	1.4375	36.098	1.4212	28.575	1.1250	6.7	0.26	3.2	0.13	175	262		582R	572X	31.0	1.22	104.0	4.09	91.0	3.58	125.0	4.92	133.0	5.24	0.40	1.49	0.82	51.2	35.3	1.45
	3.2500	139.992	5.5115	36.512	1.4375	36.098	1.4212	28.575	1.1250	3.6	0.14	3.2	0.13	175	262		580R	572	31.0	1.22	98.0	3.86	91.0	3.58	125.0	4.92	133.0	5.24	0.40	1.49	0.82	51.2	35.3	1.45
	3.2500	139.992	5.5115	36.512	1.4375	36.098	1.4212	28.575	1.1250	6.7	0.26	3.2	0.13	175	262		582R	572	31.0	1.22	104.0	4.09	91.0	3.58	125.0	4.92	133.0	5.24	0.40	1.49	0.82	51.2	35.3	1.45
	3.2500	142.138	5.5960	42.862	1.6875	42.862	1.6875	34.133	1.3438	3.6	0.14	3.2	0.13	219	351		HM617045	HM617010	35.2	1.39	100.0	3.94	93.0	3.66	125.0	4.92	137.0	5.39	0.43	1.39	0.76	64.4	47.5	1.35
	3.2500	146.050	5.7500	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	208	301		663	653	33.4	1.31	99.0	3.90	92.0	3.62	131.0	5.16	139.0	5.47	0.41	1.47	0.81	60.9	42.6	1.43
	3.2500	146.050	5.7500	41.275	1.6250	41.275	1.6250	31.750	1.2500	6.7	0.26	3.2	0.13	208	301		663A	653	33.4	1.31	105.0	4.13	92.0	3.62	131.0	5.16	139.0	5.47	0.41	1.47	0.81	60.9	42.6	1.43
	3.2500	150.000	5.9055	35.992	1.4170	36.322	1.4300	27.000	1.0630	3.6	0.14	3.0	0.12	183	287		595	593X	33.4	1.31	100.0	3.94	93.0	3.66	134.0	5.28	142.0	5.59	0.44	1.36	0.75	53.5	40.4	1.32
	3.2500	150.089	5.9090	44.450	1.7500	46.672	1.8375	36.512	1.4375	3.6	0.14	3.2	0.13	264	368		749AR	742	32.4	1.28	99.0	3.90	93.0	3.66	134.0	5.28	142.0	5.59	0.33	1.84	1.01	77.3	43.0	1.80
	3.2500	150.089	5.9090	44.450	1.7500	46.672	1.8375	36.512	1.4375	6.7	0.26	3.2	0.13	264	368		750AR	742	32.4	1.28	106.0	4.17	93.0	3.66	134.0	5.28	142.0	5.59	0.33	1.84	1.01	77.3	43.0	1.80
	3.2500	161.925	6.3750	47.625	1.8750	48.260	1.9000	38.100	1.5000	3.6	0.14	3.2	0.13	273	391		757	752	35.5	1.40	100.0	3.94	94.0	3.70	144.0	5.67	150.0	5.91	0.34	1.76	0.97	80.0	46.6	1.72
	3.2500	161.925	6.3750	53.975	2.1250	55.100	2.1693	42.862	1.6875	3.6	0.14	3.2	0.13	316	471		6559R	6535	41.0	1.61	104.0	4.09	98.0	3.86	141.0	5.55	154.0	6.06	0.40	1.50	0.82	92.9	63.5	1.46
	3.2500	168.275	6.6250	53.975	2.1250	56.363	2.2190	41.275	1.6250	0.8	0.03	3.2	0.13	344	467		839R	832	35.0	1.38	95.0	3.74	94.0	3.70	149.0	5.87	155.0	6.10	0.30	2.00	1.10	101	51.6	1.95
	3.2500	190.500	7.5000	57.150	2.2500	57.531	2.2650	44.450	1.7500	3.2	0.13	3.2	0.13	385	565		867XR	854	39.9	1.57	103.0	4.06	98.0	3.86	170.0	6.69	174.0	6.85	0.33	1.79	0.99	113	64.6	1.75
83.345	3.2813	125.412	4.9375	25.400	1.0000	25.400	1.0000	19.845	0.7813	0.8	0.03	1.6	0.06	101	162		27689	27620	24.7	0.97	90.0	3.54	90.0	3.54	115.0	4.53	120.0	4.72	0.42	1.44	0.79	29.2	20.8	1.41
	3.2813	125.412	4.9375	25.400	1.0000	25.400	1.0000	19.845	0.7813	3.6	0.14	1.6	0.06	101	162		27690	27620	24.7	0.97	96.0	3.78	90.0	3.54	115.0	4.53	120.0	4.72	0.42	1.44	0.79	29.2	20.8	1.41
	3.2813	125.412	4.9375	25.400	1.0000	25.400	1.0000	19.845	0.7813	6.4	0.25	1.6	0.06	101	162		27691	27620	24.7	0.97	102.0	4.02	90.0	3.54	115.0	4.53	120.0	4.72	0.42	1.44	0.79	29.2	20.8	1.41
	3.2813	133.350	5.2500	33.338	1.3125	33.338	1.3125	26.195	1.0313	3.6	0.14	3.2	0.13	154	245		47688R	47620	29.2	1.15	97.0	3.82	90.0	3.54	119.0	4.69	128.0	5.04	0.40	1.48	0.82	44.7	30.9	1.45
84.138	3.3125	133.350	5.2500	30.162	1.1875	29.769	1.1720	22.225	0.8750	3.6	0.14	3.2	0.13	133	198		498	492A	29.8	1.17	98.0	3.86	91.0	3.58	120.0	4.72	128.0	5.04	0.44	1.35	0.74	38.8	29.4	1.32
	3.3125	149.225	5.8750	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	208	301		664	652A	33.4	1.31	100.0	3.94	95.0	3.74	132.0	5.20	141.0	5.55	0.41	1.47	0.81	60.9	42.6	1.43
	3.3125	152.400	6.0000	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	208	301		664	652	33.4	1.31	100.0	3.94	95.0	3.74	134.0	5.28	141.0	5.55	0.41	1.47	0.81	60.9	42.6	1.43
84.963	3.3450	161.925	6.3750	53.975	2.1250	55.100	2.1693	42.862	1.6875	3.6	0.14	3.2	0.13	316	471		6578R	6535	41.0	1.61	109.0	4.29	98.0	3.86	141.0	5.55	154.0	6.06	0.40	1.50	0.82	92.9	63.5	1.46
84.976	3.3455	136.525	5.3750	30.162	1.1875	29.769	1.1720	22.225	0.8750	3.6	0.14	3.2	0.13	133	198		499A	493	29.8	1.17	98.0	3.86	92.0	3.62	122.0	4.80	130.0	5.12	0.44	1.35	0.74	38.8	29.4	1.32
85.000	3.3465	152.400	6.0000	39.688	1.5625	36.322	1.4300	30.162	1.1875	3.2	0.13	3.2	0.13	183	287		596X	592A	37.1	1.46	101.0	3.98	96.0	3.78	135.0	5.31	144.0	5.67	0.44	1.36	0.75	53.5	40.4	

TS type
d (85.725) ~ 89.992 mm
(3.3750) ~ 3.5430 inch

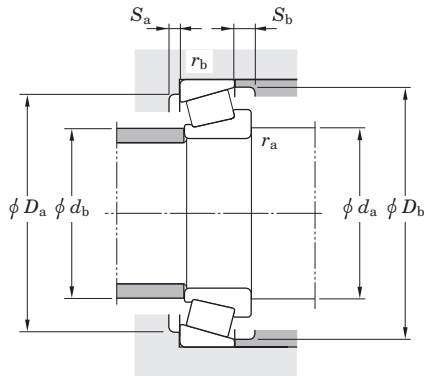
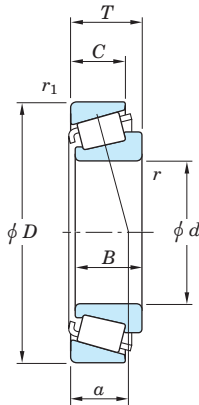


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y ₁

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor			
d		D		T		B		C		r (min.)		r ₁ (min.)		C _r	C _{0r}		Inner ring (Cone)	Outer ring (Cup)	a		d _a		d _b		D _a		D _b		e	Y ₁	Y ₀	(500 rpm for 3 000 Hrs.)		K
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
85.725	3.3750	146.050	5.7500	41.275	1.6250	41.275	1.6250	31.750	1.2500	3.6	0.14	3.2	0.13	208	301		665	653	33.4	1.31	102.0	4.02	95.0	3.74	131.0	5.16	139.0	5.47	0.41	1.47	0.81	60.9	42.6	1.43
	3.3750	146.050	5.7500	41.275	1.6250	41.275	1.6250	31.750	1.2500	6.4	0.25	3.2	0.13	208	301		665A	653	33.4	1.31	107.0	4.21	95.0	3.74	131.0	5.16	139.0	5.47	0.41	1.47	0.81	60.9	42.6	1.43
	3.3750	152.400	6.0000	39.688	1.5625	36.322	1.4300	30.162	1.1875	3.6	0.14	3.2	0.13	183	287		596	592A	37.1	1.46	102.0	4.02	96.0	3.78	135.0	5.31	144.0	5.67	0.44	1.36	0.75	53.5	40.4	1.32
	3.3750	161.925	6.3750	47.625	1.8750	48.260	1.9000	38.100	1.5000	3.6	0.14	3.2	0.13	273	391		758	752	35.5	1.40	103.0	4.06	97.0	3.82	144.0	5.67	150.0	5.91	0.34	1.76	0.97	80.0	46.6	1.72
	3.3750	161.925	6.3750	62.705	2.4687	63.830	2.5130	42.862	1.6875	6.7	0.26	3.2	0.13	316	471		6553R	6535	49.8	1.96	113.0	4.45	98.0	3.86	141.0	5.55	154.0	6.06	0.40	1.50	0.82	92.9	63.5	1.46
	3.3750	168.275	6.6250	41.275	1.6250	41.275	1.6250	30.162	1.1875	3.6	0.14	3.2	0.13	224	349		677	672	38.6	1.52	105.0	4.13	99.0	3.90	149.0	5.87	160.0	6.30	0.47	1.28	0.70	65.8	52.9	1.24
	3.3750	168.275	6.6250	53.975	2.1250	56.363	2.2190	41.275	1.6250	3.6	0.14	3.2	0.13	344	467		841R	832	35.0	1.38	104.0	4.09	97.0	3.82	149.0	5.87	155.0	6.10	0.30	2.00	1.10	101	51.6	1.95
	3.3750	170.045	6.6947	41.275	1.6250	41.275	1.6250	30.162	1.1875	3.6	0.14	2.4	0.09	224	349		677	673SA	38.6	1.52	105.0	4.13	99.0	3.90	151.0	5.94	160.0	6.30	0.47	1.28	0.70	65.8	52.9	1.24
87.312	3.4375	123.825	4.8750	20.638	0.8125	20.638	0.8125	16.670	0.6563	1.6	0.06	1.6	0.06	81.8	145		L217847	L217810	20.7	0.81	96.0	3.78	93.0	3.66	116.0	4.57	119.0	4.69	0.33	1.82	1.00	23.5	13.2	1.77
	3.4375	136.525	5.3750	30.162	1.1875	29.769	1.1720	22.225	0.8750	3.6	0.14	3.2	0.13	133	198		495X	493	29.8	1.17	100.0	3.94	94.0	3.70	122.0	4.80	130.0	5.12	0.44	1.35	0.74	38.8	29.4	1.32
	3.4375	152.400	6.0000	39.688	1.5625	36.322	1.4300	30.162	1.1875	3.6	0.14	3.2	0.13	183	287		596S	592A	37.1	1.46	103.0	4.06	97.0	3.82	135.0	5.31	144.0	5.67	0.44	1.36	0.75	53.5	40.4	1.32
	3.4375	190.500	7.5000	57.150	2.2500	57.531	2.2650	44.450	1.7500	7.9	0.31	3.2	0.13	385	565		869R	854	39.9	1.57	117.0	4.61	102.0	4.02	170.0	6.69	174.0	6.85	0.33	1.79	0.99	113	64.6	1.75
	3.4375	190.500	7.5000	57.150	2.2500	57.531	2.2650	46.038	1.8125	7.9	0.31	3.2	0.13	440	602		HH221432	HH221410	42.5	1.67	118.0	4.65	103.0	4.06	171.0	6.73	179.0	7.05	0.33	1.79	0.99	129	73.6	1.75
88.824	3.4970	161.925	6.3750	62.705	2.4687	63.830	2.5130	42.862	1.6875	3.6	0.14	3.2	0.13	316	471		6552XR	6535	49.8	1.96	109.0	4.29	98.0	3.86	141.0	5.55	154.0	6.06	0.40	1.50	0.82	92.9	63.5	1.46
88.900	3.5000	123.825	4.8750	20.638	0.8125	20.638	0.8125	16.670	0.6563	1.6	0.06	1.6	0.06	81.8	145		L217849	L217810	20.7	0.81	97.0	3.82	94.0	3.70	116.0	4.57	119.0	4.69	0.33	1.82	1.00	23.5	13.2	1.77
	3.5000	146.050	5.7500	33.338	1.3125	34.925	1.3750	26.195	1.0313	3.6	0.14	3.2	0.13	178	293		47885R	47820	32.6	1.28	104.0	4.09	98.0	3.86	131.0	5.16	140.0	5.51	0.45	1.34	0.74	51.6	39.5	1.31
	3.5000	147.638	5.8125	35.717	1.4062	36.322	1.4300	26.192	1.0312	3.6	0.14	0.8	0.03	183	287		593	592XE	33.4	1.31	104.0	4.09	98.0	3.86	135.0	5.31	142.0	5.59	0.44	1.36	0.75	53.5	40.4	1.32
	3.5000	147.638	5.8125	35.717	1.4062	36.322	1.4300	26.192	1.0312	6.4	0.25	0.8	0.03	183	287		593A	592XE	33.4	1.31	110.0	4.33	98.0	3.86	135.0	5.31	142.0	5.59	0.44	1.36	0.75	53.5	40.4	1.32
	3.5000	152.400	6.0000	39.688	1.5625	36.322	1.4300	33.338	1.3125	3.6	0.14	3.2	0.13	183	287		593	592	37.1	1.46	104.0	4.09	98.0	3.86	135.0	5.31	144.0	5.67	0.44	1.36	0.75	53.5	40.4	1.32
	3.5000	152.400	6.0000	39.688	1.5625	39.688	1.5625	30.162	1.1875	6.4	0.25	3.2	0.13	248	359		HM518445	HM518410	33.1	1.30	110.0	4.33	98.0	3.86	135.0	5.31	114.0	4.49	0.40	1.49	0.82	72.3	49.6	1.46
	3.5000	159.995	6.2990	47.625	1.8750	48.260	1.9000	38.100	1.5000	7.1	0.28	0.8	0.03	273	391		766	752A	35.5	1.40	113.0	4.45	99.0	3.90	146.0	5.75	149.0	5.87	0.34	1.76	0.97	80.0	46.6	1.72
	3.5000	160.096	6.3030	30.124	1.1860	30.162	1.1875	22.301	0.8780	2.4	0.09	3.2	0.13	165	221		69350X	69630	30.6	1.20	103.0	4.06	97.0	3.82	143.0	5.63	149.0	5.87	0.42	1.42	0.78	47.7	34.5	1.38
	3.5000	161.925	6.3750	47.625	1.8750	48.260	1.9000	38.100	1.5000	3.6	0.14	3.2	0.13	273	391		759	752	35.5	1.40	106.0	4.17	99.0	3.90	144.0	5.67	150.0	5.91	0.34	1.76	0.97	80.0	46.6	1.72
	3.5000	161.925	6.3750	47.625	1.8750	48.260	1.9000	38.100	1.5000	7.1	0.28	3.2	0.13	273	391		766	752	35.5	1.40	113.0	4.45	99.0	3.90	144.0	5.67	150.0	5.91	0.34	1.76	0.97	80.0	46.6	1.72
	3.5000	161.925	6.3750	53.975	2.4687	55.100	2.1693	42.862	1.6875	3.6	0.14	3.2	0.13	316	471		6580R	6535	49.8	1.96	109.0	4.29	98.0	3.86	141.0	5.55	154.0	6.06	0.40	1.50	0.82	92.9	63.5	1.46
	3.5000	161.925	6.3750	62.705	2.4687	63.830	2.5130	42.862	1.6875	3.6	0.14	3.2	0.13	316	471		6552R	6535	49.8	1.96	109.0	4.29	98.0	3.86	141.0	5.55	154.0	6.06	0.40	1.50	0.82	92.9	63.5	1.46
	3.5000	168.275	6.6250	41.275	1.6250	41.275	1.6250	30.162	1.1875	3.6	0.14	3.2	0.13	224	349		679	672	38.6	1.52	107.0	4.21	101.0	3.98	149.0	5.87	160.0	6.30	0.47	1.28	0.70	65.8	52.9	1.24
	3.5000	180.975	7.1250	47.625	1.8750	48.006	1.8900	38.100	1.5000	4.8	0.19	3.2	0.13	288	438		775	772	39.5	1.56	111.0	4.37	103.0	4.06	161.0	6.34	168.0	6.61	0.39	1.56	0.86	84.5	55.7	1.52
	3.5000	190.500	7.5000	57.150	2.2500	57.531	2.2650	44.450	1.7500	7.9	0.3.																							

TS type
d 90.000 ~ 98.425 mm
3.5433 ~ 3.8750 inch

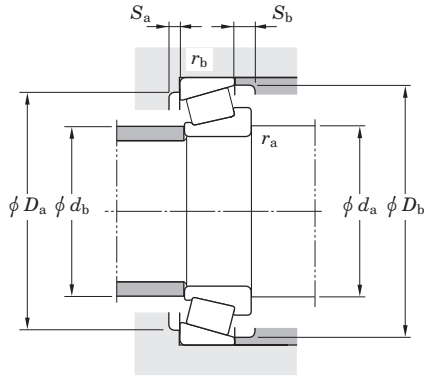
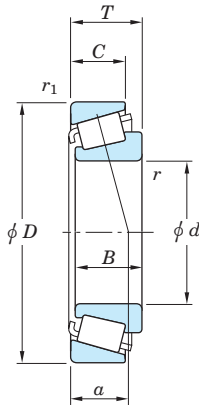


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y ₁

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Con- stant	Axial load factors		Reference rating (kN)		Factor			
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	(500 rpm for 3 000 Hrs.)		<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
90.000	3.5433	147.638	5.8125	35.717	1.4062	36.322	1.4300	26.192	1.0312	3.0	0.12	0.8	0.03	183	287		597X	592XE	33.4	1.31	104.0	4.09	99.0	3.90	135.0	5.31	142.0	5.59	0.44	1.36	0.75	53.5	40.4	1.32
	3.5433	160.000	6.2992	53.975	2.1250	55.100	2.1693	44.450	1.7500	3.0	0.12	3.0	0.12	316	471		6581XR	6525X	41.0	1.61	102.0	4.02	98.0	3.86	141.0	5.55	153.5	6.04	0.40	1.50	0.82	92.9	63.5	1.46
	3.5433	161.925	6.3750	53.975	2.1250	55.100	2.1693	42.862	1.6875	3.0	0.12	3.2	0.13	316	471		6581XR	6535	41.0	1.61	102.0	4.02	98.0	3.86	141.0	5.55	154.0	6.06	0.40	1.50	0.82	92.9	63.5	1.46
90.488	3.5625	161.925	6.3750	47.625	1.8750	48.260	1.9000	38.100	1.5000	3.6	0.14	3.2	0.13	273	391		760	752	35.5	1.40	107.0	4.21	101.0	3.98	144.0	5.67	150.0	5.91	0.34	1.76	0.97	80.0	46.6	1.72
92.075	3.6250	130.175	5.1250	20.638	0.8125	21.432	0.8438	16.670	0.6563	3.6	0.14	1.6	0.06	97.0	167		L319245	L319210	22.2	0.87	107.0	4.21	101.0	3.98	122.0	4.80	125.0	4.92	0.35	1.72	0.95	27.7	16.5	1.68
	3.6250	146.050	5.7500	33.338	1.3125	34.925	1.3750	26.195	1.0313	3.6	0.14	3.2	0.13	178	293		47890R	47820	32.6	1.28	107.0	4.21	101.0	3.98	131.0	5.16	140.0	5.51	0.45	1.34	0.74	51.6	39.5	1.31
	3.6250	147.638	5.8125	35.717	1.4062	36.322	1.4300	26.192	1.0312	3.6	0.14	0.8	0.03	183	287		598	592XE	33.4	1.31	107.0	4.21	101.0	3.98	135.0	5.31	142.0	5.59	0.44	1.36	0.75	53.5	40.4	1.32
	3.6250	147.638	5.8125	35.717	1.4062	36.322	1.4300	26.192	1.0312	6.4	0.25	0.8	0.03	183	287		598A	592XE	33.4	1.31	113.0	4.45	101.0	3.98	135.0	5.31	142.0	5.59	0.44	1.36	0.75	53.5	40.4	1.32
	3.6250	168.275	6.6250	41.275	1.6250	41.275	1.6250	30.162	1.1875	3.6	0.14	3.2	0.13	224	349		681	672	38.6	1.52	110.0	4.33	104.0	4.09	149.0	5.87	160.0	6.30	0.47	1.28	0.70	65.8	52.9	1.24
	3.6250	168.275	6.6250	41.275	1.6250	41.275	1.6250	30.162	1.1875	6.4	0.25	3.2	0.13	224	349		681A	672	38.6	1.52	116.0	4.57	104.0	4.09	149.0	5.87	160.0	6.30	0.47	1.28	0.70	65.8	52.9	1.24
	3.6250	180.975	7.1250	47.625	1.8750	48.006	1.8900	38.100	1.5000	3.6	0.14	3.2	0.13	288	438		778	772	39.5	1.56	111.0	4.37	105.0	4.13	161.0	6.34	168.0	6.61	0.39	1.56	0.86	84.5	55.7	1.52
	3.6250	190.500	7.5000	57.150	2.2500	57.531	2.2650	44.450	1.7500	7.9	0.31	3.2	0.13	385	565		857R	854	39.9	1.57	121.0	4.76	106.0	4.17	170.0	6.69	174.0	6.85	0.33	1.79	0.99	113	64.6	1.75
	3.6250	190.500	7.5000	57.150	2.2500	57.531	2.2650	46.038	1.8125	7.9	0.31	3.2	0.13	440	602		HH221438	HH221410	42.5	1.67	121.0	4.76	106.0	4.17	171.0	6.73	179.0	7.05	0.33	1.79	0.99	129	73.6	1.75
93.662	3.6875	147.638	5.8125	35.717	1.4062	36.322	1.4300	26.192	1.0312	3.6	0.14	0.8	0.03	183	287		597	592XE	33.4	1.31	109.0	4.29	102.0	4.02	135.0	5.31	142.0	5.59	0.44	1.36	0.75	53.5	40.4	1.32
94.976	3.7392	190.500	7.5000	57.150	2.2500	57.531	2.2650	44.450	1.7500	3.6	0.14	3.2	0.13	385	565		867AR	854	39.9	1.57	114.0	4.49	108.0	4.25	170.0	6.69	174.0	6.85	0.33	1.79	0.99	113	64.6	1.75
95.000	3.7402	190.500	7.5000	57.150	2.2500	57.531	2.2650	44.450	1.7500	6.4	0.25	3.2	0.13	385	565		862R	854	39.9	1.57	120.0	4.72	108.0	4.25	170.0	6.69	174.0	6.85	0.33	1.79	0.99	113	64.6	1.75
95.250	3.7500	128.588	5.0625	15.875	0.6250	15.083	0.5938	11.908	0.4688	1.6	0.06	1.6	0.06	58.0	93.0		LL319349	LL319310	20.3	0.80	103.0	4.06	100.0	3.94	122.0	4.80	124.0	4.88	0.35	1.71	0.94	16.4	9.85	1.67
	3.7500	130.175	5.1250	20.638	0.8125	21.432	0.8438	16.670	0.6563	1.6	0.06	1.6	0.06	97.0	167		L319249	L319210	22.2	0.87	107.0	4.21	101.0	3.98	122.0	4.80	125.0	4.92	0.35	1.72	0.95	27.7	16.5	1.68
	3.7500	146.050	5.7500	33.338	1.3125	34.925	1.3750	26.195	1.0313	3.6	0.14	3.2	0.13	178	293		47896R	47820	32.6	1.28	110.0	4.33	103.0	4.06	131.0	5.16	140.0	5.51	0.45	1.34	0.74	51.6	39.5	1.31
	3.7500	147.638	5.8125	35.717	1.4062	36.322	1.4300	26.192	1.0312	3.6	0.14	0.8	0.03	183	287		594	592XE	33.4	1.31	110.0	4.33	104.0	4.09	135.0	5.31	142.0	5.59	0.44	1.36	0.75	53.5	40.4	1.32
	3.7500	147.638	5.8125	35.717	1.4062	36.322	1.4300	26.192	1.0312	5.2	0.20	0.8	0.03	183	287		594A	592XE	33.4	1.31	113.0	4.45	104.0	4.09	135.0	5.31	142.0	5.59	0.44	1.36	0.75	53.5	40.4	1.32
	3.7500	157.162	6.1875	36.512	1.4375	36.116	1.4219	26.195	1.0313	3.6	0.14	3.2	0.13	180	288		52375	52618	36.0	1.42	112.0	4.41	105.0	4.13	142.0	5.59	152.0	5.98	0.47	1.26	0.69	52.7	42.8	1.23
	3.7500	168.275	6.6250	41.275	1.6250	41.275	1.6250	30.162	1.1875	3.6	0.14	3.2	0.13	224	349		683	672	38.6	1.52	113.0	4.45	106.0	4.17	149.0	5.87	160.0	6.30	0.47	1.28	0.70	65.8	52.9	1.24
	3.7500	180.975	7.1250	47.625	1.8750	48.006	1.8900	38.100	1.5000	3.6	0.14	3.2	0.13	288	438		776	772	39.5	1.56	114.0	4.49	107.0	4.21	161.0	6.34	168.0	6.61	0.39	1.56	0.86	84.5	55.7	1.52
	3.7500	190.500	7.5000	57.150	2.2500	57.531	2.2650	44.450	1.7500	7.9	0.31	3.2	0.13	385	565		864R	854	39.9	1.57	123.0	4.84	108.0	4.25	170.0	6.69	174.0	6.85	0.33	1.79	0.99	113	64.6	1.75
3.7500	190.500	7.5000	57.150	2.2500	57.531	2.2650	46.038	1.8125	7.9	0.31	3.2	0.13	440	602		HH221440	HH221410	42.5	1.67	125.0	4.92	110.0	4.33	171.0	6.73	179.0	7.05	0.33	1.79	0.99	129	73.6	1.75	
96.838	3.8125	148.430	5.8437	28.575	1.1250	28.971	1.1406	21.433	0.8438	3.6	0.14	3	0.12	143	225		42381	42584	31.9	1.26	110.0	4.33	104.0	4.09	134.0	5.28	142.0	5.59	0.49	1.22	0.67	41.4	34.8	1.19
98.425	3.8750	160.000	6.2992	36.512	1.4375	36.116	1.4219	26.195	1.0313	3.6	0.14	3.0	0.12	180	288		52387	52630X	36.0	1.42	114.0	4.49	108.0	4.25	144.0	5.67	154.0	6.06	0.47	1.26	0.69	52.7	42.8	1.23
	3.8750	161.925	6.3750	36.512	1.4375	36.116	1.4219	26.195	1.0313	3.6	0.14	3.2	0.13	180	288		52387	52637	36.0	1.42	114.0	4.49	108.0	4.25	144.0									

TS type
d 99.975 ~ 107.950 mm
3.9360 ~ 4.2500 inch

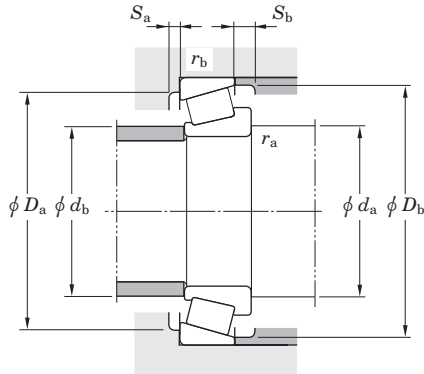
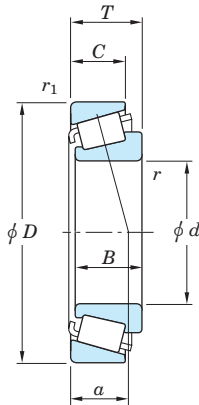


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y ₁

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions													Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor				
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _R	<i>C</i> _{0R}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	(500 rpm for 3 000 Hrs.)		<i>K</i>	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch							mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				Radial	Axial	
99.975	3.9360	156.975	6.1801	42.000	1.6535	42.000	1.6535	34.000	1.3386	7.9	0.31	3.6	0.14	245	396		HM220149	HM220110	32.4	1.28	123.0	4.84	108.0	4.25	142.0	5.59	151.0	5.94	0.33	1.80	0.99	71.8	40.8	1.76	
	3.9360	212.725	8.3750	66.675	2.6250	66.675	2.6250	53.975	2.1250	3.6	0.14	3.2	0.13	513	699		HH224334	HH224310	47.6	1.87	122.0	4.80	117.0	4.61	192.0	7.56	202.0	7.95	0.33	1.84	1.01	151	84.2	1.80	
99.982	3.9363	190.500	7.5000	57.150	2.2500	57.531	2.2650	44.450	1.7500	6.4	0.25	3.2	0.13	385	565		863R	854	39.9	1.57	125.0	4.92	103.0	4.06	170.0	6.69	174.0	6.85	0.33	1.79	0.99	113	64.6	1.75	
	3.9363	190.500	7.5000	57.150	2.2500	57.531	2.2650	46.038	1.8125	6.4	0.25	3.2	0.13	440	602		HH221447	HH221410	42.5	1.67	126.0	4.96	114.0	4.49	171.0	6.73	179.0	7.05	0.33	1.79	0.99	129	73.6	1.75	
100.000	3.9370	180.975	7.1250	47.625	1.8750	48.006	1.8900	38.100	1.5000	3.6	0.14	3.2	0.13	288	438		783	772	39.5	1.56	118.0	4.65	111.0	4.37	161.0	6.34	168.0	6.61	0.39	1.56	0.86	84.5	55.7	1.52	
	3.9370	190.500	7.5000	57.150	2.2500	57.531	2.2650	44.450	1.7500	6.0	0.24	3.2	0.13	385	565		863XR	854	39.9	1.57	122.0	4.80	117.0	4.61	170.0	6.69	174.0	6.85	0.33	1.79	0.99	113	64.6	1.75	
	3.9370	200.000	7.8740	52.761	2.0772	49.213	1.9375	34.925	1.3750	3.6	0.14	3.2	0.13	347	471		98394X	98788	54.7	2.15	126.0	4.96	120.5	4.75	174.0	6.85	188.0	7.40	0.63	0.95	0.52	101	109	0.93	
100.012	3.9375	157.162	6.1875	36.512	1.4375	36.116	1.4219	26.195	1.0313	3.6	0.14	3.2	0.13	180	288		52393	52618	36.0	1.42	113.0	4.45	115.0	4.53	142.0	5.59	150.0	5.91	0.47	1.26	0.69	52.7	42.8	1.23	
101.600	4.0000	157.162	6.1875	36.512	1.4375	36.116	1.4219	26.195	1.0313	3.6	0.14	3.2	0.13	180	288		52400	52618	36.0	1.42	114.0	4.49	115.0	4.53	142.0	5.59	150.0	5.91	0.47	1.26	0.69	52.7	42.8	1.23	
	4.0000	157.162	6.1875	36.512	1.4375	36.116	1.4219	26.195	1.0313	7.9	0.31	3.2	0.13	180	288		52401	52618	36.0	1.42	126.0	4.96	111.0	4.37	142.0	5.59	152.0	5.98	0.47	1.26	0.69	52.7	42.8	1.23	
	4.0000	161.925	6.3750	36.513	1.4375	36.116	1.4219	26.195	1.0313	3.6	0.14	3.2	0.13	180	288		52400	52637	36.0	1.42	117.0	4.61	111.0	4.37	144.0	5.67	154.0	6.06	0.47	1.26	0.69	52.7	42.8	1.23	
	4.0000	168.275	6.6250	41.275	1.6250	41.275	1.6250	30.162	1.1875	3.6	0.14	3.2	0.13	224	349		687	672	38.6	1.52	114.0	4.49	115.0	4.53	146.0	5.75	156.0	6.14	0.47	1.28	0.70	65.8	52.9	1.24	
	4.0000	180.975	7.1250	47.625	1.8750	48.006	1.8900	38.100	1.5000	3.6	0.14	3.2	0.13	288	438		780	772	39.5	1.56	114.0	4.49	120.0	4.72	156.0	6.14	165.0	6.50	0.39	1.56	0.86	84.5	55.7	1.52	
	4.0000	190.500	7.5000	57.150	2.2500	57.531	2.2650	44.450	1.7500	9.5	0.37	3.2	0.13	385	565		860R	854	39.9	1.57	126.0	4.96	114.0	4.49	170.0	6.69	174.0	6.85	0.33	1.79	0.99	113	64.6	1.75	
	4.0000	190.500	7.5000	57.150	2.2500	57.531	2.2650	44.450	1.7500	7.9	0.31	3.2	0.13	385	565		861R	854	39.9	1.57	129.0	5.08	114.0	4.49	170.0	6.69	174.0	6.85	0.33	1.79	0.99	113	64.6	1.75	
	4.0000	190.500	7.5000	57.150	2.2500	57.531	2.2650	46.038	1.8125	7.9	0.31	3.2	0.13	440	602		HH221449	HH221410	42.5	1.67	123.0	4.84	119.0	4.69	168.0	6.61	178.0	7.01	0.33	1.79	0.99	129	73.6	1.75	
	4.0000	200.000	7.8740	52.761	2.0772	49.212	1.9375	34.925	1.3750	3.6	0.14	3.2	0.13	347	471		98400	98788	54.5	2.15	114.0	4.49	123.0	4.84	170.0	6.69	185.0	7.28	0.63	0.95	0.52	101	109	0.93	
	4.0000	212.725	8.3750	66.675	2.6250	66.675	2.6250	53.975	2.1250	7.1	0.28	3.2	0.13	450	674		941	932	47.6	1.87	121.0	4.76	135.0	5.31	181.0	7.13	192.0	7.56	0.33	1.84	1.01	133	73.9	1.80	
	4.0000	212.725	8.3750	66.675	2.6250	66.675	2.6250	53.975	2.1250	7.1	0.28	3.2	0.13	513	699		HH224335	HH224310	47.6	1.87	121.0	4.76	134.0	5.28	189.0	7.44	201.0	7.91	0.33	1.84	1.01	151	84.2	1.80	
104.775	4.1250	180.975	7.1250	47.625	1.8750	48.006	1.8900	38.100	1.5000	3.6	0.14	3.2	0.13	288	438		782	772	39.5	1.56	117.0	4.61	120.0	4.72	156.0	6.14	165.0	6.50	0.39	1.56	0.86	84.5	55.7	1.52	
	4.1250	180.975	7.1250	47.625	1.8750	48.006	1.8900	38.100	1.5000	6.4	0.25	3.2	0.13	288	438		786	772	39.5	1.56	123.0	4.84	120.0	4.72	156.0	6.14	165.0	6.50	0.39	1.56	0.86	84.5	55.7	1.52	
	4.1250	180.975	7.1250	47.625	1.8750	48.006	1.8900	38.100	1.5000	7.1	0.28	3.2	0.13	288	438		787	772	39.5	1.56	129.0	5.08	116.0	4.57	161.0	6.34	168.0	6.61	0.39	1.56	0.86	84.5	55.7	1.52	
	4.1250	190.500	7.5000	47.625	1.8750	49.212	1.9375	34.925	1.3750	3.6	0.14	3.2	0.13	303	483		71412	71750	40.9	1.61	117.0	4.61	131.0	5.16	167.0	6.57	177.0	6.97	0.42	1.44	0.79	89.0	63.3	1.41	
106.362	4.1875	165.100	6.5000	36.512	1.4375	36.512	1.4375	26.988	1.0625	3.6	0.14	3.2	0.13	195	325		56418R	56650	38.6	1.52	122.0	4.80	116.0	4.57	149.0	5.87	159.0	6.26	0.50	1.21	0.66	56.7	48.2	1.18	
	4.1875	165.100	6.5000	36.513	1.4375	36.513	1.4375	26.988	1.0625	3.6	0.14	3.2	0.13	184	300		56418	56650	38.5	1.52	122.0	4.80	116.0	4.57	149.0	5.87	159.0	6.26	0.50	1.21	0.66	53.7	45.7	1.18	
107.950	4.2500	146.050	5.7500	21.432	0.8438	21.432	0.8438	16.670	0.6563	1.6	0.06	1.6	0.06	86.4	167		L521949R	L521910	26.2	1.03	116.0	4.57	114.0	4.49	136.0	5.35	141.0	5.55	0.39	1.53	0.84	24.8	16.7	1.49	
	4.2500	158.750	6.2500	23.020	0.9063	21.438	0.8440	15.875	0.6250	3.6	0.14	3.2	0.13	104	169		37425	37625	36.5	1.44	121.0	4.76	121.0	4.76	141.0	5.55	148.0	5.83	0.61	0.99	0.54	29.7	30.8	1.97	
	4.2500	159.987	6.2987	34.925	1.3750	34.925	1.3750	26																											

TS type
d 109.538 ~ 123.825 mm
4.3125 ~ 4.8750 inch

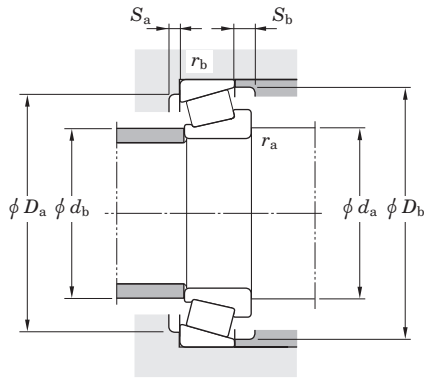
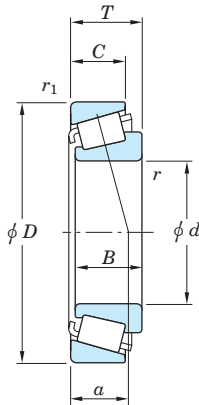


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN) (500 rpm for 3 000 Hrs.)		Factor		
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀			<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				Radial	Axial	
109.538	4.3125	158.750	6.2500	23.020	0.9063	21.438	0.8440	15.875	0.6250	6.4	0.25	6.4	0.25	104	169		37431	37625	36.5	1.44	123.0	4.84	116.0	4.57	143.0	5.63	152.0	5.98	0.61	0.99	0.54	29.7	30.8	0.97
109.952	4.3288	190.500	7.5000	47.625	1.8750	49.212	1.9375	34.925	1.3750	3.6	0.14	3.2	0.13	303	483		71432	71750	40.9	1.61	129.0	5.08	123.0	4.84	171.0	6.73	181.0	7.13	0.42	1.44	0.79	89.0	63.3	1.41
109.987	4.3302	159.987	6.2987	34.925	1.3750	34.925	1.3750	26.988	1.0625	7.9	0.31	3.2	0.13	184	319		LM522548	LM522510	32.9	1.30	131.0	5.16	121.0	4.76	146.0	5.75	153.0	6.02	0.40	1.50	0.82	53.4	36.5	1.46
	4.3302	159.987	6.2987	34.925	1.3750	34.925	1.3750	26.988	1.0625	3.6	0.14	3.2	0.13	184	319		LM522549	LM522510	32.9	1.30	123.0	4.84	121.0	4.76	146.0	5.75	153.0	6.02	0.40	1.50	0.82	53.4	36.5	1.46
109.992	4.3304	177.800	7.0000	41.275	1.6250	41.275	1.6250	30.162	1.1875	3.6	0.14	3.2	0.13	234	380		64433R	64700	42.8	1.69	128.0	5.04	121.0	4.76	160.0	6.30	172.6	6.80	0.52	1.16	0.64	68.4	60.3	1.13
110.000	4.3307	212.725	8.3750	66.675	2.6250	66.675	2.6250	53.975	2.1250	6.4	0.25	3.2	0.13	450	674		942	932	47.6	1.87	136.0	5.35	124.0	4.88	187.0	7.36	193.0	7.60	0.33	1.84	1.01	133	73.9	1.80
111.125	4.3750	190.500	7.5000	47.625	1.8750	49.212	1.9375	34.925	1.3750	3.6	0.14	3.2	0.13	303	483		71437	71750	40.9	1.61	129.0	5.08	123.0	4.84	171.0	6.73	181.0	7.13	0.42	1.44	0.79	89.0	63.3	1.41
111.917	4.4062	212.725	8.3750	66.675	2.6250	66.675	2.6250	53.975	2.1250	13.5	0.53	3.2	0.13	450	674		947	932	47.6	1.87	151.0	5.94	125.0	4.92	187.0	7.36	193.0	7.60	0.33	1.84	1.01	133	73.9	1.80
114.046	4.4900	212.725	8.3750	66.675	2.6250	66.675	2.6250	53.975	2.1250	7.1	0.28	3.2	0.13	450	674		938S	932	47.6	1.87	141.0	5.55	128.0	5.04	187.0	7.36	193.0	7.60	0.33	1.84	1.01	133	73.9	1.80
114.300	4.5000	152.400	6.0000	21.433	0.8438	21.433	0.8438	16.670	0.6563	1.6	0.06	1.6	0.06	96.4	197		L623149	L623110	27.7	1.09	130.0	5.12	120.0	4.72	143.0	5.63	148.0	5.83	0.41	1.45	0.80	27.5	19.4	1.42
	4.5000	155.575	6.1250	21.433	0.8438	21.433	0.8438	21.433	0.8438	1.6	0.06	1.6	0.06	96.4	197		L623149	L623114	27.7	1.09	130.0	5.12	120.0	4.72	143.0	5.63	149.0	5.87	0.41	1.45	0.80	27.5	19.4	1.42
	4.5000	177.800	7.0000	41.275	1.6250	41.275	1.6250	30.162	1.1875	3.6	0.14	3.2	0.13	234	380		64450R	64700	42.8	1.69	131.0	5.16	125.0	4.92	160.0	6.30	172.0	6.77	0.52	1.16	0.64	68.4	60.3	1.13
	4.5000	180.975	7.1250	34.925	1.3750	31.750	1.2500	25.400	1.0000	3.6	0.14	3.2	0.13	171	247		68450	68712	40.6	1.60	127.0	5.00	131.0	5.16	161.0	6.34	169.0	6.65	0.50	1.21	0.66	49.7	42.2	1.18
	4.5000	190.500	7.5000	47.625	1.8750	49.212	1.9375	34.925	1.3750	3.6	0.14	3.2	0.13	303	483		71450	71750	40.9	1.61	127.0	5.00	131.0	5.16	167.0	6.57	177.0	6.97	0.42	1.44	0.79	89.0	63.3	1.41
	4.5000	206.375	8.1250	66.675	2.6250	66.675	2.6250	53.975	2.1250	7.1	0.28	3.2	0.13	450	674		938	930	47.6	1.87	141.0	5.55	128.0	5.04	184.0	7.24	193.0	7.60	0.33	1.84	1.01	133	73.9	1.79
	4.5000	212.725	8.3750	66.675	2.6250	66.675	2.6250	53.975	2.1250	7.1	0.28	3.2	0.13	450	674		938	932	47.6	1.87	141.0	5.55	128.0	5.04	187.0	7.36	193.0	7.60	0.33	1.84	1.01	133	73.9	1.80
	4.5000	212.725	8.3750	66.675	2.6250	66.675	2.6250	53.975	2.1250	13.5	0.53	3.2	0.13	450	674		939	932	47.6	1.87	153.0	6.02	127.0	5.00	187.0	7.36	193.0	7.60	0.33	1.84	1.01	133	73.9	1.80
	4.5000	212.725	8.3750	66.675	2.6250	66.675	2.6250	53.975	2.1250	7.1	0.28	3.2	0.13	513	699		HH224346	HH224310	47.6	1.87	134.0	5.28	134.0	5.28	189.0	7.44	201.0	7.91	0.33	1.84	1.01	151	84.2	1.80
4.5000	273.050	10.7500	82.550	3.2500	82.550	3.2500	53.975	2.1250	6.4	0.25	6.4	0.25	707	898		HH926744	HH926710	76.1	3.00	133.0	5.24	151.0	5.94	230.0	9.06	252.0	9.92	0.63	0.95	0.52	208	225	0.93	
114.976	4.5266	212.725	8.3750	66.675	2.6250	66.675	2.6250	53.975	2.1250	7.1	0.28	3.2	0.13	513	699		HH224349	HH224310	47.6	1.87	135.0	5.31	134.0	5.28	189.0	7.44	201.0	7.91	0.33	1.84	1.01	151	84.2	1.80
115.087	4.5310	190.500	7.5000	47.625	1.8750	49.212	1.9375	34.925	1.3750	3.6	0.14	3.2	0.13	303	483		71453	71750	40.9	1.61	133.0	5.24	126.0	4.96	171.0	6.73	181.0	7.13	0.42	1.44	0.79	89.0	63.3	1.41
	4.5310	190.500	7.5000	47.625	1.8750	49.212	1.9375	34.925	1.3750	7.9	0.31	3.2	0.13	303	483		71455	71750	40.9	1.61	136.0	5.35	131.0	5.16	167.0	6.57	177.0	6.97	0.42	1.44	0.79	89.0	63.3	1.41
117.475	4.6250	179.975	7.0856	34.925	1.3750	31.750	1.2500	25.400	1.0000	3.6	0.14	0.8	0.03	171	247		68462	68709	40.7	1.60	132.0	5.20	125.0	4.90	165.0	6.50	172.0	6.77	0.50	1.21	0.66	49.7	42.2	1.18
	4.6250	180.975	7.1250	34.925	1.3750	31.750	1.2500	25.400	1.0000	3.6	0.14	3.2	0.13	171	247		68462	68712	40.6	1.60	130.0	5.12	131.0	5.16	161.0	6.34	169.0	6.65	0.50	1.21	0.66	49.7	42.2	1.18
	4.6250	180.975	7.1250	34.925	1.3750	31.750	1.2500	25.400	1.0000	7.9	0.31	3.2	0.13	171	247		68463	68712	40.6	1.60	141.0	5.55	125.0	4.92	163.0	6.42	172.0	6.77	0.50	1.21	0.66	49.7	42.2	1.18
120.650	4.7500	174.625	6.8750	35.720	1.4063	36.513	1.4375	27.783	1.0938	3.6	0.14	1.6	0.06	208	362		M224749	M224710	32.1	1.26	135.0	5.31	129.0	5.08	162.0	6.38	168.0	6.61	0.33	1.80	0.99	60.1	34.2	1.76
	4.7500	190.500	7.5000	46.038	1.8125	46.038	1.8125	34.925	1.3750	3.6	0.14	1.6	0.06	313	512		HM624749	HM624710	41.6	1.64	146.0	5.75	132.0	5.20	174.0	6.85	184.0	7.24	0.43	1.41	0.77	91.4	66.7	1.37
	4.7500	199.974	7.8730	46.038	1.8125	46.038	1.8125	34.925	1.3750	3.6	0.14	1.6	0.06	313	512		HM62474																	

TS type
d 127.000 ~ 255.600 mm
5.0000 ~ 10.0630 inch

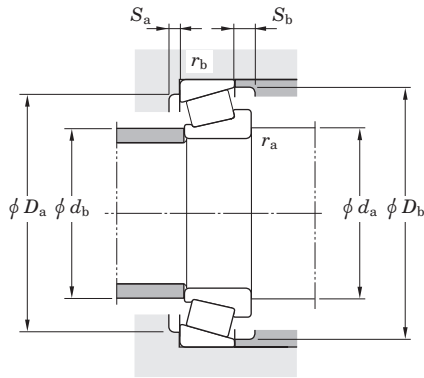
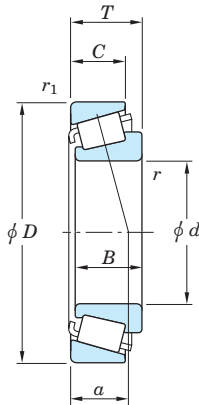


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN)		Factor		
d		D		T		B		C		r (min.)		r ₁ (min.)		C _r	C _{0r}		Inner ring (Cone)	Outer ring (Cup)	a		d _a		d _b		D _a		D _b		e	Y ₁	Y ₀	(500 rpm for 3 000 Hrs.)		K
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				mm	inch	
127.000	5.0000	165.895	6.5313	18.258	0.7188	17.463	0.6875	13.495	0.5313	1.6	0.06	1.6	0.06	91.1	166		LL225749	LL225710	24.3	0.96	135.0	5.31	133.0	5.24	156.0	6.14	160.0	6.30	0.33	1.80	0.99	25.9	14.7	1.76
	5.0000	169.863	6.6875	25.400	1.0000	26.195	1.0313	20.638	0.8125	1.6	0.06	1.6	0.06	131	250		L225849	L225810	27.6	1.09	136.0	5.35	134.0	5.28	160.0	6.30	164.0	6.46	0.33	1.80	0.99	37.9	21.6	1.76
	5.0000	180.975	7.1250	25.400	1.0000	26.195	1.0313	20.638	0.8125	1.6	0.06	1.6	0.06	131	250		L225849	L225818	27.6	1.09	136.0	5.35	134.0	5.28	164.0	6.46	166.0	6.54	0.33	1.80	0.99	37.9	21.6	1.76
	5.0000	182.563	7.1875	39.688	1.5625	38.100	1.5000	33.338	1.3125	3.6	0.14	3.2	0.13	227	429		48290	48220	34.1	1.34	141.0	5.55	135.0	5.31	168.0	6.61	176.0	6.93	0.31	1.97	1.08	65.8	34.3	1.92
	5.0000	196.850	7.7500	46.038	1.8125	46.038	1.8125	38.100	1.5000	3.6	0.14	3.2	0.13	311	561		67388	67322	39.7	1.56	144.0	5.67	138.0	5.43	180.0	7.09	189.0	7.44	0.34	1.74	0.96	90.6	53.3	1.70
	5.0000	203.200	8.0000	46.038	1.8125	46.038	1.8125	38.100	1.5000	3.6	0.14	3.2	0.13	311	561		67388	67320	39.7	1.56	144.0	5.67	138.0	5.43	183.0	7.20	191.0	7.52	0.34	1.74	0.96	90.6	53.3	1.70
	5.0000	215.900	8.5000	47.625	1.8750	47.625	1.8750	34.925	1.3750	3.6	0.14	3.2	0.13	322	549		74500	74850	49.7	1.96	148.0	5.83	141.0	5.55	196.0	7.72	208.0	8.19	0.49	1.23	0.68	94.0	78.3	1.20
	5.0000	234.950	9.2500	63.500	2.5000	63.500	2.5000	49.213	1.9375	6.4	0.25	3.2	0.13	523	826		95500	95925	49.9	1.96	154.0	6.06	142.0	5.59	209.0	8.23	217.0	8.54	0.37	1.62	0.89	154	97.1	1.58
	5.0000	254.000	10.0000	77.788	3.0625	82.550	3.2500	61.912	2.4375	9.5	0.37	6.4	0.25	717	1 050		HH228349	HH228310	54.3	2.14	164.0	6.46	148.0	5.83	223.0	8.78	234.0	9.21	0.32	1.87	1.03	211	116	1.82
128.588	5.0625	206.375	8.1250	47.625	1.8750	47.625	1.8750	34.925	1.3750	3.2	0.13	3.2	0.13	326	548		799	792	45.7	1.80	146.0	5.75	140.0	5.51	186.0	7.32	198.0	7.80	0.46	1.31	0.72	95.2	74.6	1.27
130.000	5.1181	206.375	8.1250	47.625	1.8750	47.625	1.8750	34.925	1.3750	3.6	0.14	3.2	0.13	326	548		797	792	45.7	1.80	148.0	5.83	141.0	5.55	186.0	7.32	198.0	7.80	0.46	1.31	0.72	95.2	74.6	1.27
133.350	5.2500	177.008	6.9688	25.400	1.0000	26.195	1.0313	20.638	0.8125	1.6	0.06	1.6	0.06	141	278		L327249	L327210	29.1	1.15	142.0	5.59	145.0	5.71	164.0	6.46	169.0	6.65	0.35	1.72	0.95	40.4	24.1	1.68
142.875	5.6250	200.025	7.8750	41.275	1.6250	39.688	1.5625	34.130	1.3437	7.9	0.31	3.3	0.13	246	491		48684	48620	38.4	1.51	166.0	6.54	151.0	5.94	185.0	7.28	193.0	7.60	0.34	1.78	0.98	71.3	41.0	1.74
	5.6250	200.025	7.8750	41.275	1.6250	39.688	1.5625	34.130	1.3437	3.6	0.14	3.3	0.13	246	491		48685	48620	38.4	1.51	156.0	6.14	157.0	6.18	182.0	7.17	190.0	7.48	0.34	1.78	0.98	71.3	41.0	1.74
158.750	6.4800	225.425	8.8750	41.275	1.6250	39.688	1.5625	33.338	1.3125	3.6	0.14	3.2	0.13	258	568		46780R	46720	44.0	1.73	176.0	6.93	169.0	6.65	209.0	8.23	218.0	8.58	0.38	1.57	0.86	74.6	48.9	1.53
165.100	6.5000	225.425	8.8750	41.275	1.6250	39.688	1.5625	33.338	1.3125	7.9	0.31	3.2	0.13	258	568		46790AR	46720	44.0	1.73	181.0	7.13	174.0	6.85	209.0	8.23	218.0	8.58	0.38	1.57	0.86	74.6	48.9	1.53
	6.5000	225.425	8.8750	41.275	1.6250	39.688	1.5625	33.338	1.3125	3.6	0.14	3.2	0.13	258	568		46790R	46720	44.0	1.73	181.0	7.13	174.0	6.85	209.0	8.23	218.0	8.58	0.38	1.57	0.86	74.6	48.9	1.53
166.688	6.5625	225.425	8.8750	41.275	1.6250	39.688	1.5625	33.338	1.3125	3.6	0.14	3.2	0.13	258	568		46792R	46720	44.0	1.73	182.0	7.17	175.0	6.89	209.0	8.23	218.0	8.58	0.38	1.57	0.86	74.6	48.9	1.53
171.450	6.7500	222.250	8.7500	25.400	1.0000	24.608	0.9688	19.050	0.7500	1.6	0.06	1.6	0.06	157	299		L435049	L435010	36.0	1.42	181.0	7.13	179.0	7.05	211.0	8.31	215.0	8.46	0.38	1.60	0.88	44.9	28.8	1.56
196.850	7.7500	254.000	10.0000	28.575	1.1250	27.783	1.0938	21.433	0.8438	1.6	0.06	1.6	0.06	188	387		L540049	L540010	43.1	1.70	206.0	8.11	214.0	8.43	238.0	9.37	243.0	9.57	0.40	1.51	0.83	53.5	36.3	1.47
212.725	8.3750	336.550	13.2500	65.088	2.5625	65.088	2.5625	50.800	2.0000	6.4	0.25	3.2	0.13	708	1 380		M246932	M246910	59.9	2.36	238.0	9.37	229.0	9.02	313.0	12.32	322.0	12.68	0.33	1.80	0.99	206	117	1.76
220.878	8.6960	317.500	12.5000	47.625	1.8750	52.388	2.0625	36.513	1.4375	3.2	0.13	3.2	0.13	488	928		LM245833	LM245810	50.5	1.99	234.0	9.21	253.0	9.96	296.0	11.65	304.0	11.97	0.33	1.80	0.99	141	80.0	1.76
228.600	9.0000	358.775	14.1250	71.438	2.8125	71.438	2.8125	53.975	2.1250	3.6	0.14	3.2	0.13	773	1 590		M249732	M249710	64.4	2.54	242.0	9.53	279.0	10.98	330.0	12.99	342.0	13.46	0.33	1.80	0.99	225	128	1.76
230.188	9.0625	317.500	12.5000	47.625	1.8750	52.388	2.0625	36.513	1.4375	3.2	0.13	3.2	0.13	488	928		LM245846	LM245810	50.5	1.99	242.0	9.53	238.0	9.37	309.0	12.17	312.0	12.28	0.33	1.80	0.99	141	80.0	1.76
231.775	9.1250	317.500	12.5000	47.625	1.8750	52.388	2.0625	36.513	1.4375	3.2	0.13	3.2	0.13	488	928		LM245848	LM245810	50.5	1.99	244.0	9.61	240.0	9.45	309.0	12.17	312.0	12.28	0.33	1.80	0.99	141	80.0	1.76
	9.1250	336.550	13.2500	65.088	2.5625	65.088	2.5625	50.800	2.0000	6.4	0.25	3.2	0.13	708	1 380		M246942	M246910	59.9	2.36	258.0	10.16	249.0	9.80	313.0	12.32	322.0	12.68	0.33	1.80	0.99	206	117	1.76
	9.1250	336.550	13.2500	65.088	2.5625	69.850	2.7500	50.800	2.0000	6.4	0.25	3.2	0.13	708	1 380		M246943	M246910	59.9	2.36	258.0	10.16	249.0	9.80	313.0	12.32	322.0	12.68	0.33	1.80	0.99	206	117	1.76
	9.1250	358.775	14.1250	71.438	2.8125	71.438	2.8125	53.975	2.1250	6.4	0.25	3.2	0.13	773	1 590		M249734	M249710	64.4	2.														

TS type
d 257.175~ 1 092.200 mm
10.1250 ~ 43.0000 inch



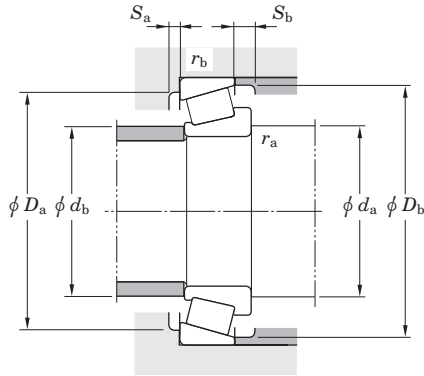
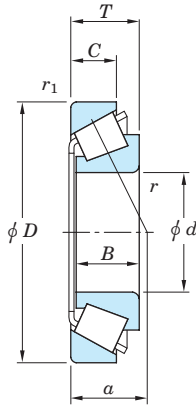
$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions								Constant	Axial load factors		Reference rating (kN) (500 rpm for 3 000 Hrs.)		Factor
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀			<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				Radial	Axial	
257.175	10.1250	342.900	13.5000	57.150	2.2500	57.150	2.2500	44.450	1.7500	6.4	0.25	3.2	0.13	612	1 280		M349549	M349510	60.1	2.37	276.0	10.87	276.0	10.87	320.0	12.60	330.0	12.99	0.35	1.73	0.95	177	105	1.68
	10.1250	358.775	14.1250	71.438	2.8125	76.200	3.0000	53.975	2.1250	1.6	0.06	3.2	0.13	773	1 590		M249747	M249710	64.4	2.54	276.0	10.87	272.0	10.71	335.0	13.19	343.0	13.50	0.33	1.80	0.99	225	128	1.76
292.100	11.5000	374.650	14.7500	47.625	1.8750	47.625	1.8750	34.925	1.3750	3.6	0.14	3.2	0.13	468	971		L555249	L555210	64.7	2.55	306.0	12.05	309.0	12.17	351.0	13.82	360.0	14.17	0.40	1.49	0.82	136	93.2	1.46
431.800	17.0000	533.400	21.0000	46.038	1.8125	46.038	1.8125	34.925	1.3750	3.2	0.13	3.2	0.13	557	1 380		80385	80325	69.1	2.72	450.0	17.72	446.0	17.56	510.0	20.08	510.0	20.08	0.31	1.96	1.08	160	83.3	1.91
450.850	17.7500	603.250	23.7500	85.725	3.3750	84.138	3.3125	60.325	2.3750	6.4	0.25	3.2	0.13	1 380	3 170		LM770945	LM770910	116.0	4.57	484.0	19.06	474.0	18.66	570.0	22.44	584.0	22.99	0.45	1.32	0.73	401	311	1.29
457.200	18.0000	573.088	22.5625	74.613	2.9375	74.613	2.9375	57.150	2.2500	6.4	0.25	6.4	0.25	1 100	2 930		L570649	L570610	100.4	3.95	485.0	19.09	475.0	18.70	543.0	21.38	558.0	21.97	0.40	1.49	0.82	319	219	1.45
	18.0000	596.900	23.5000	76.200	3.0000	73.025	2.8750	53.975	2.1250	9.5	0.37	3.2	0.13	1 120	2 620		EE244180	244235	103.1	4.06	494.0	19.45	478.0	18.82	567.0	22.32	570.5	22.47	0.40	1.48	0.82	325	225	1.44
479.425	18.8750	679.450	26.7500	128.588	5.0625	128.588	5.0625	101.600	4.0000	6.4	0.25	6.4	0.25	2 470	5 550		M272749	M272710	122.2	4.81	516.0	20.31	507.0	19.96	633.0	24.92	649.5	25.57	0.33	1.80	0.99	726	413	1.76
482.600	19.0000	634.873	24.9950	80.963	3.1875	80.963	3.1875	63.500	2.5000	6.4	0.25	3.2	0.13	1 320	3 290		EE243190	243250	100.0	3.94	516.0	20.31	510.0	20.08	603.0	23.74	609.5	24.00	0.34	1.75	0.96	382	224	1.70
488.950	19.2500	634.873	24.9950	84.138	3.3125	84.138	3.3125	61.913	2.4375	6.4	0.25	3.2	0.13	1 440	3 420		LM772748	LM772710	124.5	4.90	522.0	20.55	510.0	20.08	600.0	23.62	613.5	24.15	0.47	1.27	0.70	418	338	1.24
	19.2500	660.400	26.0000	93.663	3.6875	94.458	3.7188	69.850	2.7500	6.4	0.25	6.4	0.25	1 810	3 960		EE640192	640260	98.4	3.87	522.0	20.55	513.0	20.20	624.0	24.57	630.5	24.82	0.31	1.95	1.07	524	275	1.91
498.475	19.6250	634.873	24.9950	80.963	3.1875	80.963	3.1875	63.500	2.5000	6.4	0.25	3.2	0.13	1 320	3 290		EE243196	243250	100.0	3.94	528.0	20.79	522.0	20.55	603.0	23.74	609.5	24.00	0.34	1.75	0.96	382	224	1.70
536.575	21.1250	761.873	29.9950	146.050	5.7500	146.050	5.7500	114.300	4.5000	6.4	0.25	6.4	0.25	3 290	7 190		M276449	M276410	135.7	5.34	576.0	22.68	570.0	22.44	711.0	27.99	725.5	28.57	0.33	1.80	0.99	966	549	1.76
539.750	21.2500	635.000	25.0000	50.800	2.0000	50.800	2.0000	38.100	1.5000	6.4	0.25	6.4	0.25	752	1 970		LL575349	LL575310	101.4	3.99	564.0	22.20	555.0	21.85	612.0	24.09	621.0	24.45	0.41	1.48	0.81	215	149	1.44
549.097	21.6180	692.150	27.2500	80.963	3.1875	80.962	3.1875	61.913	2.4375	6.4	0.25	6.4	0.25	1 410	3 700		L476548	L476510	113.6	4.47	579.0	22.80	570.0	22.44	657.0	25.87	666.0	26.22	0.38	1.59	0.88	407	262	1.55
549.275	21.6250	692.150	27.2500	80.963	3.1875	80.963	3.1875	61.913	2.4375	6.4	0.25	6.4	0.25	1 410	3 700		L476549	L476510	113.6	4.47	579.0	22.80	570.0	22.44	657.0	25.87	666.0	26.22	0.38	1.59	0.88	407	262	1.55
584.200	23.0000	685.800	27.0000	49.213	1.9375	49.213	1.9375	34.925	1.3750	3.6	0.14	3.2	0.13	723	1 930		LL778149	LL778110	113.8	4.48	603.0	23.74	600.0	23.62	663.0	26.10	669.0	26.34	0.44	1.36	0.75	206	155	1.33
609.600	24.0000	762.000	30.0000	95.250	3.7500	92.075	3.6250	71.438	2.8125	6.4	0.25	6.4	0.25	1 700	4 510		L879947	L879910	153.0	6.02	642.0	25.28	633.0	24.92	720.0	28.35	743.0	29.25	0.49	1.23	0.67	496	416	1.19
	24.0000	787.400	31.0000	93.663	3.6875	93.663	3.6875	69.850	2.7500	6.4	0.25	6.4	0.25	1 980	4 970		EE649240	649310	126.9	5.00	642.0	25.28	633.0	24.92	747.0	29.41	756.0	29.76	0.37	1.61	0.89	574	365	1.57
759.924	29.9183	889.000	35.0000	88.900	3.5000	88.900	3.5000	71.999	2.8346	3.2	0.13	3.2	0.13	1 860	5 630		L183448	L183410	123.1	4.85	783.0	30.83	780.0	30.71	864.0	34.02	872.0	34.33	0.31	1.97	1.08	537	280	1.91
1 092.200	43.0000	1 320.800	52.0000	95.250	3.7500	88.900	3.5000	69.850	2.7500	6.4	0.25	6.4	0.25	2 660	7 140		EE776430	776520	170.5	6.71	1 135.0	44.69	1 130.0	44.49	1 260.0	49.61	1 280.5	50.41	0.57	1.05	0.58	761	746	1.02

Note 1) SP indicates the specially chamfered from.

TSS type
d 15.875 ~ (44.450) mm
0.6250 ~ (1.7500) inch

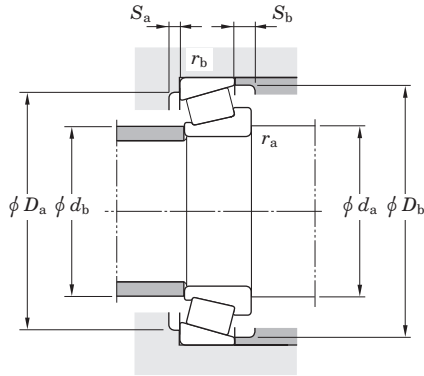
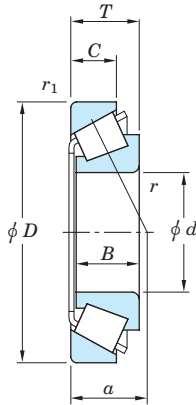


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN) (500 rpm for 3 000 Hrs.)		Factor		
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>	<i>a</i>	<i>d</i> _a	<i>d</i> _b	<i>D</i> _a	<i>D</i> _b	<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	<i>K</i> _{Radial}	<i>K</i> _{Axial}	<i>K</i>				
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch								
15.875	0.6250	42.862	1.6875	14.288	0.5625	14.288	0.5625	9.525	0.3750	1.6	0.06	1.6	0.06	17.8	17.7		11590	11520	13.1	0.52	24.5	0.96	22.5	0.89	34.5	1.36	39.5	1.56	0.70	0.85	0.47	5.15	6.15	0.83
23.812	0.9375	65.088	2.5625	22.225	0.8750	21.463	0.8450	15.875	0.6250	1.6	0.06	1.6	0.06	47.8	51.7		23092	23256	20.1	0.79	38.5	1.52	34.5	1.36	53.0	2.09	61.0	2.40	0.73	0.82	0.45	13.8	17.3	0.80
24.384	0.9600	79.375	3.1250	25.400	1.0000	24.074	0.9478	17.462	0.6875	0.8	0.03	1.6	0.06	69.4	72.5		43096	43312	23.7	0.93	40.5	1.59	39.5	1.56	62.0	2.44	68.0	2.68	0.67	0.90	0.49	20.1	23.0	0.88
25.000	0.9842	65.088	2.5625	22.225	0.8750	21.463	0.8450	15.875	0.6250	1.6	0.06	1.6	0.06	47.8	51.7		23098	23256	20.1	0.79	39.0	1.54	34.5	1.36	53.0	2.09	61.0	2.40	0.73	0.82	0.45	13.8	17.3	0.80
25.400	1.0000	65.088	2.5625	22.225	0.8750	21.463	0.8450	15.875	0.6250	1.6	0.06	1.6	0.06	47.8	51.7		23100	23256	20.1	0.79	39.0	1.54	34.5	1.36	53.0	2.09	61.0	2.40	0.73	0.82	0.45	13.8	17.3	0.80
28.575	1.1250	79.375	3.1250	25.400	1.0000	24.074	0.9478	17.462	0.6875	0.8	0.03	1.6	0.06	69.4	72.5		43112	43312	23.7	0.93	42.5	1.67	41.5	1.63	67.0	2.64	74.0	2.91	0.67	0.90	0.49	20.1	23.0	0.88
29.987	1.1806	79.375	3.1250	25.400	1.0000	24.074	0.9478	17.462	0.6875	1.6	0.06	1.6	0.06	69.4	72.5		43117	43312	23.7	0.93	45.0	1.77	42.0	1.65	62.0	2.44	68.0	2.68	0.67	0.90	0.49	20.1	23.0	0.88
30.162	1.1875	79.375	3.1250	25.400	1.0000	24.074	0.9478	17.462	0.6875	1.6	0.06	1.6	0.06	69.4	72.5		43118	43312	23.7	0.93	45.0	1.77	42.0	1.65	62.0	2.44	68.0	2.68	0.67	0.90	0.49	20.1	23.0	0.88
31.750	1.2500	79.375	3.1250	25.400	1.0000	24.074	0.9478	17.462	0.6875	1.6	0.06	1.6	0.06	69.4	72.5		43125	43312	23.7	0.93	44.0	1.73	41.5	1.63	62.0	2.44	68.0	2.68	0.67	0.90	0.49	20.1	23.0	0.88
	1.2500	88.501	3.4843	25.400	1.0000	23.698	0.9330	17.462	0.6875	1.6	0.06	1.6	0.06	75.3	84.4		44126	44348	28.0	1.10	49.0	1.93	46.0	1.81	75.0	2.95	84.0	3.31	0.78	0.77	0.42	21.8	29.1	0.75
33.338	1.3125	79.375	3.1250	25.400	1.0000	24.074	0.9478	17.462	0.6875	3.6	0.14	1.6	0.06	69.4	72.5		43131	43312	23.7	0.93	51.0	2.01	48.0	1.89	62.0	2.44	68.0	2.68	0.67	0.90	0.49	20.1	23.0	0.88
	1.3125	79.375	3.1250	25.400	1.0000	24.074	0.9478	17.462	0.6875	2.0	0.08	1.6	0.06	69.4	72.5		43132	43312	23.7	0.93	48.0	1.89	42.0	1.65	62.0	2.44	68.0	2.68	0.67	0.90	0.49	20.1	23.0	0.88
	1.3125	88.501	3.4843	25.400	1.0000	23.698	0.9330	17.462	0.6875	2.0	0.08	1.6	0.06	75.3	84.4		44131	44348	28.0	1.10	51.0	2.01	48.0	1.89	75.0	2.95	84.0	3.31	0.78	0.77	0.42	21.8	29.1	0.75
36.512	1.4375	88.501	3.4843	25.400	1.0000	23.698	0.9330	17.462	0.6875	2.4	0.09	1.6	0.06	75.3	84.4		44143	44348	30.0	1.18	54.0	2.13	50.0	1.97	75.0	2.95	84.0	3.31	0.78	0.77	0.42	21.8	29.1	0.75
38.100	1.5000	88.501	3.4843	25.400	1.0000	23.698	0.9330	17.462	0.6875	2.4	0.09	1.6	0.06	75.3	84.4		44150	44348	28.0	1.10	55.0	2.17	51.0	2.01	75.0	2.95	84.0	3.31	0.78	0.77	0.42	21.8	29.1	0.75
	1.5000	95.250	3.7500	30.958	1.2188	28.301	1.1142	20.638	0.8125	1.6	0.06	0.8	0.03	88.7	98.4		53150	53375	30.0	1.18	55.0	2.17	52.5	2.07	81.0	3.19	89.0	3.50	0.74	0.81	0.45	25.7	32.6	0.79
	1.5000	95.250	3.7500	30.958	1.2188	28.575	1.1250	22.225	0.8750	3.6	0.14	0.8	0.03	99.7	120		HM903241	HM903210	30.8	1.21	61.0	2.40	54.0	2.13	81.0	3.19	91.0	3.58	0.74	0.81	0.45	29.0	36.6	0.79
	1.5000	98.425	3.8750	30.958	1.2188	28.301	1.1142	20.638	0.8125	1.6	0.06	0.8	0.03	88.7	98.4		53150	53387	30.0	1.18	55.0	2.17	53.0	2.09	82.0	3.23	91.0	3.58	0.74	0.81	0.45	25.7	32.6	0.79
39.688	1.5625	88.501	3.4843	25.400	1.0000	23.698	0.9330	17.462	0.6875	2.4	0.09	1.6	0.06	75.3	84.4		44156	44348	28.0	1.10	56.0	2.20	51.0	2.01	75.0	2.95	84.0	3.31	0.78	0.77	0.42	21.8	29.1	0.75
	1.5625	88.501	3.4843	25.400	1.0000	23.698	0.9330	17.462	0.6875	3.6	0.14	1.6	0.06	75.3	84.4		44158	44348	28.0	1.10	58.0	2.28	51.0	2.01	75.0	2.95	84.0	3.31	0.78	0.77	0.42	21.8	29.1	0.75
40.000	1.5748	88.501	3.4843	25.400	1.0000	23.698	0.9330	17.462	0.6875	2.4	0.09	1.6	0.06	75.3	84.4		44157	44348	28.0	1.10	56.0	2.20	51.0	2.01	75.0	2.95	84.0	3.31	0.78	0.77	0.42	21.8	29.1	0.75
41.275	1.6250	88.501	3.4843	25.400	1.0000	23.698	0.9330	17.462	0.6875	2.4	0.09	1.6	0.06	75.3	84.4		44162	44348	28.0	1.10	57.0	2.24	51.0	2.01	75.0	2.95	84.0	3.31	0.78	0.77	0.42	21.8	29.1	0.75
	1.6250	92.075	3.6250	26.195	1.0313	23.812	0.9375	16.670	0.6563	3.6	0.14	1.6	0.06	77.7	89.9		M903345	M903310	30.1	1.19	60.0	2.36	54.0	2.13	78.0	3.07	88.0	3.46	0.83	0.72	0.40	22.5	32.0	0.70
	1.6250	95.250	3.7500	30.958	1.2188	28.575	1.1250	22.225	0.8750	3.6	0.14	0.8	0.03	99.7	120		HM903245	HM903210	30.8	1.21	63.0	2.48	54.0	2.13	81.0	3.19	91.0	3.58	0.74	0.81	0.45	29.0	36.6	0.79
	1.6250	98.425	3.8750	30.958	1.2188	28.301	1.1142	20.638	0.8125	1.6	0.06	0.8	0.03	88.7	98.4		53162	53387	30.0	1.18	57.0	2.24	52.5	2.07	82.0	3.23	91.0	3.58	0.74	0.81	0.45	25.7	32.6	0.79
44.450	1.7500	95.250	3.7500	30.958	1.2188	28.301	1.1142	20.638	0.8125	3.6	0.14	0.8	0.03	88.7	98.4		53177	53375	30.0	1.18	63.0	2.48	52.5	2.07	81.0	3.19	89.0	3.50	0.74	0.81	0.45	25.7	32.6	0.79
	1.7500	95.250	3.7500	30.958	1.2188	28.301	1.1142	20.638	0.8125	2.0	0.08	0.8	0.03	88.7	98.4		53178	53375	30.0	1.18	60.0	2.36	52.5	2.07	81.0	3.19	89.0	3.50	0.74	0.81	0.45	25.7	32.6	0.79
	1.7500	95.250	3.7500	30.958	1.2188	28.575	1.1250	22.225	0.8750	3.6	0.14	0.8	0.03	99.7	120		HM903249	HM903210	30.8	1.21														

TSS type
d (44.450) ~ 68.262 mm
(1.7500) ~ 2.6875 inch

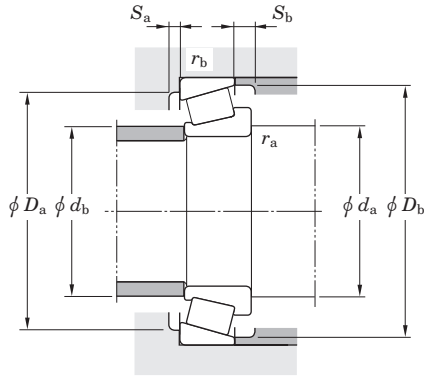
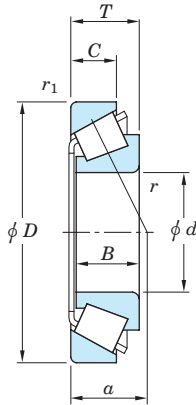


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN) (500 rpm for 3 000 Hrs.)		Factor		
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀			<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				Radial	Axial	
44.450	1.7500	112.712	4.4375	30.162	1.1875	26.909	1.0594	20.638	0.8125	3.6	0.14	3.2	0.13	97.7	119		55175	55443	36.6	1.44	67.0	2.64	60.0	2.36	92.0	3.62	106.0	4.17	0.88	0.68	0.37	28.5	43.0	0.66
44.988	1.7712	95.250	3.7500	30.958	1.2188	28.575	1.1250	22.225	0.8750	3.6	0.14	0.8	0.03	99.7	120		HM903248	HM903210	30.8	1.21	65.0	2.56	54.0	2.13	81.0	3.19	91.0	3.58	0.74	0.81	0.45	29.0	36.6	0.79
47.625	1.8750	111.125	4.3750	30.162	1.1875	26.909	1.0594	20.638	0.8125	3.6	0.14	3.2	0.13	97.7	119		55187	55437	36.6	1.44	69.0	2.72	62.0	2.44	92.0	3.62	105.0	4.13	0.88	0.68	0.37	28.5	43.0	0.66
	1.8750	111.125	4.3750	30.162	1.1875	26.909	1.0594	20.638	0.8125	3.6	0.14	3.2	0.13	111	150		55187CR	55437	36.6	1.44	69.0	2.72	62.0	2.44	92.0	3.62	105.0	4.13	0.88	0.68	0.37	32.3	48.8	0.66
	1.8750	111.125	4.3750	30.162	1.1875	28.575	1.1250	20.638	0.8125	3.6	0.14	3.2	0.13	107	142		HM907639	HM907614	37.2	1.46	72.0	2.83	65.0	2.56	91.0	3.58	105.0	4.13	0.88	0.68	0.37	31.2	47.1	0.66
	1.8750	123.825	4.8750	36.512	1.4375	32.791	1.2910	25.400	1.0000	3.6	0.14	3.2	0.13	141	166		72187	72487	38.0	1.50	72.0	2.83	66.0	2.60	102.0	4.02	116.0	4.57	0.74	0.81	0.45	41.2	51.9	0.79
49.974	1.9675	111.125	4.3750	30.162	1.1875	26.909	1.0594	20.638	0.8125	3.6	0.14	3.2	0.13	97.7	119		55196	55437	36.6	1.44	71.0	2.80	64.0	2.52	92.0	3.62	105.0	4.13	0.88	0.68	0.37	28.5	43.0	0.66
	1.9675	111.125	4.3750	30.162	1.1875	26.909	1.0594	20.638	0.8125	2.0	0.08	3.2	0.13	97.7	119		55197	55437	36.6	1.44	68.0	2.68	64.0	2.52	92.0	3.62	105.0	4.13	0.88	0.68	0.37	28.5	43.0	0.66
50.800	2.0000	111.125	4.3750	30.162	1.1875	26.909	1.0594	20.638	0.8125	3.6	0.14	3.2	0.13	97.7	119		55200	55437	36.6	1.44	71.0	2.80	64.0	2.52	92.0	3.62	105.0	4.13	0.88	0.68	0.37	28.5	43.0	0.66
	2.0000	111.125	4.3750	30.162	1.1875	26.909	1.0594	20.638	0.8125	3.6	0.14	3.2	0.13	111	150		55200CR	55437	36.6	1.44	71.0	2.80	64.0	2.52	92.0	3.62	105.0	4.13	0.88	0.68	0.37	32.3	48.8	0.66
	2.0000	111.125	4.3750	30.162	1.1875	28.575	1.1250	20.638	0.8125	3.6	0.14	3.2	0.13	107	142		HM907643	HM907614	37.2	1.46	74.0	2.91	65.5	2.58	91.0	3.58	105.0	4.13	0.88	0.68	0.37	31.2	47.1	0.66
	2.0000	123.825	4.8750	36.512	1.4375	32.791	1.2910	25.400	1.0000	3.6	0.14	3.2	0.13	141	166		72200	72487	38.0	1.50	74.0	2.91	66.0	2.60	102.0	4.02	116.0	4.57	0.74	0.81	0.45	41.2	51.9	0.79
	2.0000	123.825	4.8750	36.512	1.4375	32.791	1.2910	25.400	1.0000	3.6	0.14	3.2	0.13	156	190		72200C	72487	38.0	1.50	74.0	2.91	66.0	2.60	102.0	4.02	116.0	4.57	0.74	0.81	0.45	45.2	57.0	0.79
52.388	2.0625	111.125	4.3750	30.162	1.1875	26.909	1.0594	20.638	0.8125	3.6	0.14	3.2	0.13	97.7	119		55206	55437	36.6	1.44	72.0	2.83	64.0	2.52	92.0	3.62	105.0	4.13	0.88	0.68	0.37	28.5	43.0	0.66
53.975	2.1250	123.825	4.8750	36.512	1.4375	32.791	1.2910	25.400	1.0000	3.6	0.14	3.2	0.13	141	166		72212	72487	38.0	1.50	77.0	3.03	66.0	2.60	102.0	4.02	116.0	4.57	0.74	0.81	0.45	41.2	51.9	0.79
	2.1250	123.825	4.8750	36.512	1.4375	32.791	1.2910	25.400	1.0000	3.6	0.14	3.2	0.13	156	190		72212C	72487	38.0	1.50	77.0	3.03	66.0	2.60	102.0	4.02	116.0	4.57	0.74	0.81	0.45	45.2	57.0	0.79
	2.1250	127.000	5.0000	36.512	1.4375	32.791	1.2910	25.400	1.0000	3.6	0.14	3.2	0.13	141	166		72212	72500	38.0	1.50	77.0	3.03	66.0	2.60	102.0	4.02	116.0	4.57	0.74	0.81	0.45	41.2	51.9	0.79
	2.1250	130.175	5.1250	36.512	1.4375	33.338	1.3125	23.812	0.9375	3.6	0.14	3.2	0.13	153	181		HM911242R	HM911210	41.8	1.65	79.0	3.11	74.0	2.91	109.0	4.29	124.0	4.88	0.82	0.73	0.40	44.3	62.1	0.71
	2.1250	136.525	5.3750	36.512	1.4375	33.236	1.3085	23.520	0.9260	0.8	0.03	3.2	0.13	150	177		78214	78537	46.2	1.82	75.0	2.95	77.0	3.03	115.0	4.53	130.0	5.12	0.87	0.69	0.38	43.6	64.6	0.68
	2.1250	140.030	5.5130	36.512	1.4375	33.236	1.3085	23.520	0.9260	3.6	0.14	2.4	0.09	150	177		78215	78551	46.2	1.82	81.0	3.19	75.0	2.95	117.0	4.61	132.0	5.20	0.87	0.69	0.38	43.6	64.6	0.68
55.562	2.1875	123.825	4.8750	36.512	1.4375	32.791	1.2910	25.400	1.0000	3.6	0.14	3.2	0.13	141	166		72218	72487	38.0	1.50	78.0	3.07	66.0	2.60	102.0	4.02	116.0	4.57	0.74	0.81	0.45	41.2	51.9	0.79
57.150	2.2500	123.825	4.8750	36.512	1.4375	32.791	1.2910	25.400	1.0000	3.6	0.14	3.2	0.13	141	166		72225	72487	38.0	1.50	80.0	3.15	66.0	2.60	102.0	4.02	116.0	4.57	0.74	0.81	0.45	41.2	51.9	0.79
	2.2500	123.825	4.8750	36.512	1.4375	32.791	1.2910	25.400	1.0000	3.6	0.14	3.2	0.13	156	190		72225C	72487	38.0	1.50	80.0	3.15	66.0	2.60	102.0	4.02	116.0	4.57	0.74	0.81	0.45	45.2	57.0	0.79
	2.2500	136.525	5.3750	36.512	1.4375	33.236	1.3085	23.520	0.9260	3.6	0.14	3.2	0.13	150	177		78225	78537	46.2	1.82	83.0	3.27	77.0	3.03	115.0	4.53	130.0	5.12	0.87	0.69	0.38	43.6	64.6	0.68
	2.2500	140.030	5.5130	36.512	1.4375	33.236	1.3085	23.520	0.9260	3.6	0.14	2.4	0.09	150	177		78225	78551	46.2	1.82	83.0	3.27	77.0	3.03	117.0	4.61	132.0	5.20	0.87	0.69	0.38	43.6	64.6	0.68
60.325	2.3750	130.175	5.1250	36.512	1.4375	33.338	1.3125	23.812	0.9375	5.2	0.20	3.2	0.13	153	181		HM911245R	HM911210	41.8	1.65	87.0	3.43	74.5	2.93	109.0	4.29	124.0	4.88	0.82	0.73	0.40	44.3	62.1	0.71
	2.3750	136.525	5.3750	36.512	1.4375	33.236	1.3085	23.520	0.9260	5.2	0.20	3.2	0.13	150	177		78238	78537	46.2	1.82	83.0	3.27	75.0	2.95	115.0	4.53	130.0	5.12	0.87	0.69	0.38	43.6	64.6	0.68
	2.3750	140.030	5.5130	36.512	1.4375	33.236	1.3085	23.520	0.9260	5.2	0.20	2.4	0.09	150	177		78238	78551	46.2	1.82	83.0	3.27	75.0	2.95	117.0	4.61	132.0							

TSS type
d 69.850 ~ 342.900 mm
2.7500 ~ 13.5000 inch

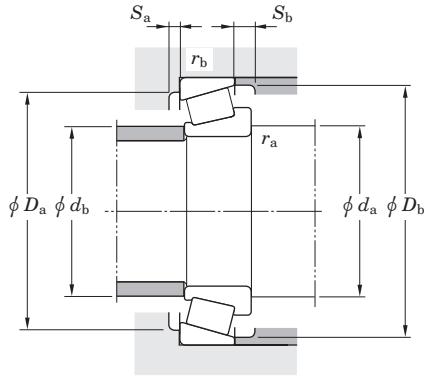
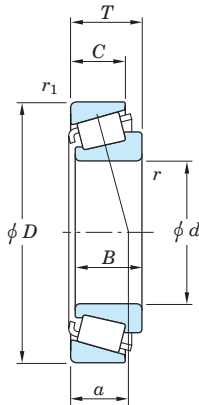


$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Con- stant	Axial load factors		Reference rating (kN) (500 rpm for 3 000 Hrs.)		Factor		
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀			<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				Radial	Axial	
69.850	2.7500	146.050	5.7500	41.275	1.6250	39.688	1.5625	25.400	1.0000	3.6	0.14	3.2	0.13	202	237		H913849R	H913810	45.6	1.80	95.0	3.74	82.5	3.25	124.0	4.88	138.0	5.43	0.78	0.77	0.42	58.7	78.5	0.75
69.914	2.7525	171.450	6.7500	49.212	1.9375	46.038	1.8125	31.750	1.2500	3.6	0.14	3.2	0.13	264	320		9382R	9321	55.1	2.17	105.0	4.13	98.0	3.86	147.0	5.79	164.0	6.46	0.76	0.79	0.43	76.9	100	0.77
76.200	3.0000	161.925	6.3750	49.212	1.9375	46.038	1.8125	31.750	1.2500	3.6	0.14	3.2	0.13	246	286		9285R	9220	50.2	1.98	103.0	4.06	90.5	3.56	138.0	5.43	153.0	6.02	0.71	0.85	0.47	71.6	86.8	0.83
	3.0000	177.800	7.0000	52.388	2.0625	46.038	1.8125	34.925	1.3750	3.6	0.14	3.2	0.13	264	320		9380R	9320	55.1	2.17	117.0	4.61	98.2	3.87	148.0	5.83	164.0	6.46	0.76	0.79	0.43	76.9	100	0.77
	3.0000	177.800	7.0000	52.388	2.0625	50.800	2.0000	34.925	1.3750	3.6	0.14	3.2	0.13	264	320		9378R	9320	55.1	2.17	117.0	4.61	98.2	3.87	148.0	5.83	164.0	6.46	0.76	0.79	0.43	76.9	100	0.77
84.138	3.3125	171.450	6.7500	49.212	1.9375	46.038	1.8125	31.750	1.2500	3.6	0.14	3.2	0.13	264	320		9385R	9321	55.1	2.17	111.0	4.37	98.0	3.86	147.0	5.79	164.0	6.46	0.76	0.79	0.43	76.9	100	0.77
96.838	3.8125	188.913	7.4375	50.800	2.0000	46.038	1.8125	31.750	1.2500	3.6	0.14	3.2	0.13	276	357		90381	90744	63.0	2.48	125.0	4.92	113.0	4.44	161.0	6.34	179.5	7.06	0.87	0.69	0.38	77	115	0.67
101.600	4.0000	250.825	9.8750	76.200	3.0000	73.025	2.8750	50.800	2.0000	6.4	0.25	6.4	0.25	548	691		HH923649	HH923610	74.0	2.91	149.0	5.87	131.0	5.16	207.0	8.15	229.0	9.02	0.71	0.85	0.47	162	196	0.83
	4.0000	250.825	9.8750	76.200	3.0000	73.025	2.8750	50.800	2.0000	6.4	0.25	3.2	0.13	548	691		HH923649	HH923611	74.0	2.91	149.0	5.87	131.0	5.16	210.0	8.27	229.0	9.02	0.71	0.85	0.47	162	196	0.83
111.125	4.3750	214.313	8.4375	55.563	2.1875	52.388	2.0625	39.688	1.5625	3.6	0.14	3.2	0.13	404	578		H924045	H924010	62.3	2.45	139.0	5.47	131.0	5.16	186.0	7.32	205.0	8.07	0.67	0.89	0.49	118	137	0.87
114.300	4.5000	228.600	9.0000	53.975	2.1250	49.428	1.9460	38.100	1.5000	3.6	0.14	3.2	0.13	430	651		HM926740	HM926710	67.9	2.67	146.0	5.75	142.0	5.59	200.0	7.87	219.0	8.62	0.74	0.81	0.45	126	159	0.79
127.000	5.0000	228.600	9.0000	53.975	2.1250	49.428	1.9460	38.100	1.5000	3.6	0.14	3.2	0.13	430	651		HM926747	HM926710	68.1	2.68	156.0	6.14	143.0	5.63	200.0	7.87	219.0	8.63	0.74	0.81	0.45	126	159	0.79
	5.0000	304.800	12.0000	88.900	3.5000	82.550	3.2500	57.150	2.2500	6.4	0.25	6.4	0.25	791	1 060		HH932132	HH932110	92.1	3.63	182.0	7.17	172.0	6.77	260.0	10.24	288.0	11.34	0.73	0.82	0.45	233	290	0.80
127.792	5.0312	228.600	9.0000	53.975	2.1250	49.428	1.9460	38.100	1.5000	3.6	0.14	3.2	0.13	430	651		HM926749	HM926710	68.1	2.68	156.0	6.14	143.0	5.63	200.0	7.87	219.0	8.63	0.74	0.81	0.45	126	159	0.79
146.050	5.7500	304.800	12.0000	88.900	3.5000	82.550	3.2500	57.150	2.2500	6.4	0.25	6.4	0.25	791	1 060		HH932145	HH932110	92.1	3.63	195.0	7.68	174.5	6.87	260.0	10.24	288.0	11.34	0.73	0.82	0.45	233	290	0.80
155.575	6.1250	330.200	13.0000	85.725	3.3750	79.375	3.1250	53.975	2.1250	6.4	0.25	6.4	0.25	868	1 210		H936340	H936310	103.8	4.09	209.0	8.23	192.5	7.58	282.0	11.10	311.5	12.26	0.81	0.74	0.41	255	352	0.72
168.275	6.6250	330.200	13.0000	85.725	3.3750	79.375	3.1250	53.975	2.1250	6.4	0.25	6.4	0.25	868	1 210		H936349	H936310	103.8	4.09	218.0	8.58	192.5	7.58	282.0	11.10	311.5	12.26	0.81	0.74	0.41	255	352	0.72
	6.6250	342.900	13.5000	85.725	3.3750	79.375	3.1250	53.975	2.1250	6.4	0.25	6.4	0.25	868	1 210		H936349	H936316	103.8	4.09	218.0	8.58	192.5	7.58	287.0	11.30	311.5	12.26	0.81	0.74	0.41	255	352	0.72
177.800	7.0000	428.625	16.8750	106.362	4.1875	95.250	3.7500	61.912	2.4375	6.4	0.25	6.4	0.25	1 070	1 390		EE350701	351687	118.7	4.67	230.0	9.06	221.0	8.70	365.0	14.37	383.0	15.08	0.76	0.79	0.44	318	411	0.77
190.500	7.5000	428.625	16.8750	106.363	4.1875	95.250	3.7500	61.913	2.4375	6.4	0.25	6.4	0.25	1 070	1 390		EE350750	351687	118.7	4.67	240.0	9.45	237.0	9.33	365.0	14.37	383.0	15.08	0.76	0.79	0.44	318	411	0.77
203.200	8.0000	482.600	19.0000	117.475	4.6250	95.250	3.7500	73.025	2.8750	6.4	0.25	6.4	0.25	1 450	2 060		EE380080	380190	152.8	6.02	280.0	11.02	260.0	10.24	402.0	15.83	428.5	16.87	0.87	0.69	0.38	426	631	0.67
241.300	9.5000	508.000	20.0000	117.475	4.6250	95.250	3.7500	73.025	2.8750	6.4	0.25	6.4	0.25	1 230	1 800		EE390095	390200	168.1	6.62	297.0	11.69	288.0	11.34	423.0	16.65	456.0	17.96	0.94	0.64	0.35	366	587	0.62
254.000	10.0000	533.400	21.0000	133.350	5.2500	120.650	4.7500	77.788	3.0625	6.4	0.25	6.4	0.25	1 780	2 800		HH953749	HH953710	180.8	7.12	328.0	12.91	306.5	12.06	455.0	17.91	495.5	19.51	0.94	0.64	0.35	528	846	0.62
317.500	12.5000	622.300	24.5000	147.638	5.8125	131.763	5.1875	82.550	3.2500	14.3	0.56	12.7	0.50	2 220	3 490		H961649	H961610	210.5	8.29	410.0	16.14	373.0	14.69	531.0	20.91	581.5	22.90	0.94	0.64	0.35	659	1 060	0.62
342.900	13.5000	457.098	17.9960	66.675	2.6250	63.500	2.5000	46.038	1.8125	3.2	0.13	3.2	0.13	729	1 670		LM961548	LM961510	122.3	4.81	367.0	14.45	363.0	14.29	423.0	16.65	443.0	17.44	0.71	0.84	0.46	212	258	0.82

TS type
Metric "J" series
d 38.000 ~ 200.000 mm
1.4961 ~ 7.8740 inch



$P = XF_r + YF_a$ $P_0 = 0.5 F_r + Y_0 F_a$ or $P_0 = F_r$			
$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Note) The Values of “e” “Y₁” and “Y₀” are given in the table below.

Boundary dimensions														Basic load ratings (kN)			Bearing No.		Load center		Mounting dimensions						Constant	Axial load factors		Reference rating (kN) (500 rpm for 3 000 Hrs.)		Factor		
<i>d</i>		<i>D</i>		<i>T</i>		<i>B</i>		<i>C</i>		<i>r</i> (min.)		<i>r</i> ₁ (min.)		<i>C</i> _r	<i>C</i> _{0r}		Inner ring (Cone)	Outer ring (Cup)	<i>a</i>		<i>d</i> _a		<i>d</i> _b		<i>D</i> _a		<i>D</i> _b		<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₀	Radial	Axial	<i>K</i>
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						
38.000	1.4961	63.000	2.4803	17.000	0.6693	17.000	0.6693	13.500	0.5315	SP ¹⁾	SP ¹⁾	SP ¹⁾	SP ¹⁾	43.5	58.2		JL69349	JL69310	14.6	0.57	49.0	1.93	41.0	1.61	60.0	2.36	56.5	2.22	0.42	1.44	0.79	12.6	8.95	1.41
50.000	1.9685	82.000	3.2283	21.501	0.8465	21.501	0.8465	17.000	0.6693	3.0	0.12	0.5	0.02	71.7	97.9		JLM104948	JLM104910	16.2	0.64	60.0	2.36	55.0	2.17	76.0	2.99	78.0	3.07	0.31	1.97	1.08	20.8	10.8	1.92
	1.9685	90.000	3.5433	28.000	1.1024	28.000	1.1024	23.000	0.9055	3.0	0.12	2.5	0.10	105	138		JM205149	JM205110	20.2	0.80	62.0	2.44	57.0	2.24	80.0	3.15	85.0	3.35	0.33	1.82	1.00	30.6	17.2	1.78
	1.9685	105.000	4.1339	37.000	1.4567	36.000	1.4173	29.000	1.1417	3.0	0.12	2.8	0.11	149	205		JHM807045	JHM807012	29.4	1.16	69.0	2.72	63.0	2.48	90.0	3.54	100.0	3.94	0.49	1.23	0.68	43.5	36.3	1.20
55.000	2.1654	90.000	3.5433	23.000	0.9055	23.000	0.9055	18.500	0.7283	1.6	0.06	0.5	0.02	81.4	115		JLM506849	JLM506810	20.1	0.79	63.0	2.48	61.0	2.40	82.0	3.23	86.0	3.39	0.40	1.49	0.82	23.6	16.2	1.46
	2.1654	95.000	3.7402	29.000	1.1417	29.000	1.1417	23.500	0.9252	1.6	0.06	2.8	0.11	110	150		JM207049	JM207010	21.3	0.84	64.0	2.52	62.0	2.44	85.0	3.35	91.0	3.58	0.33	1.79	0.99	32.0	18.3	1.75
	2.1654	110.000	4.3307	39.000	1.5354	39.000	1.5354	32.000	1.2598	3.0	0.12	2.5	0.10	176	224		JH307749	JH307710	26.8	1.06	71.0	2.80	64.0	2.52	97.0	3.82	104.0	4.09	0.35	1.73	0.95	51.5	30.5	1.69
60.000	2.3622	95.000	3.7402	24.000	0.9449	24.000	0.9449	19.000	0.7480	5.0	0.20	2.5	0.10	86.1	125		JLM508748	JLM508710	21.2	0.83	75.0	2.95	66.0	2.60	85.0	3.35	91.0	3.58	0.40	1.49	0.82	25.0	17.2	1.46
65.000	2.5591	105.000	4.1339	24.000	0.9449	23.000	0.9055	18.500	0.7283	3.0	0.12	1.0	0.04	95.3	129		JLM710949	JLM710910	23.8	0.94	77.0	3.03	71.0	2.80	96.0	3.78	100.5	3.96	0.45	1.32	0.73	27.7	21.4	1.29
	2.5591	110.000	4.3307	28.000	1.1024	28.000	1.1024	22.500	0.8858	3.0	0.12	2.8	0.11	136	191		JM511946	JM511910	24.5	0.96	78.0	3.07	72.0	2.83	99.0	3.90	105.0	4.13	0.40	1.49	0.82	39.3	27.0	1.46
	2.5591	120.000	4.7244	39.000	1.5354	38.500	1.5157	32.000	1.2598	3.0	0.12	2.8	0.11	189	255		JH211749	JH211710	27.9	1.10	80.0	3.15	74.0	2.91	107.0	4.21	114.0	4.49	0.34	1.78	0.98	55.2	31.8	1.74
	2.5591	120.000	4.7244	39.000	1.5354	38.500	1.5157	32.000	1.2598	7.1	0.28	2.8	0.11	189	255		JH211749A	JH211710	27.9	1.10	88.0	3.46	74.0	2.91	107.0	4.21	114.0	4.49	0.34	1.78	0.98	55.2	31.8	1.74
70.000	2.7559	110.000	4.3307	26.000	1.0236	25.000	0.9843	20.500	0.8071	1.0	0.04	2.5	0.10	103	158		JLM813049	JLM813010	26.1	1.03	78.0	3.07	77.0	3.03	98.0	3.86	105.0	4.13	0.49	1.23	0.68	29.8	24.8	1.20
	2.7559	115.000	4.5276	29.000	1.1417	29.000	1.1417	23.000	0.9055	3.0	0.12	2.5	0.10	123	173		JM612949	JM612910	26.2	1.03	83.0	3.27	77.0	3.03	103.0	4.06	110.0	4.33	0.43	1.39	0.77	36.0	26.5	1.36
75.000	2.9528	115.000	4.5276	25.000	0.9843	25.000	0.9843	19.000	0.7480	3.0	0.12	2.8	0.11	101	151		JLM714149	JLM714110	25.5	1.00	87.0	3.43	81.0	3.19	104.0	4.09	110.0	4.33	0.46	1.31	0.72	29.4	23.0	1.28
	2.9528	120.000	4.7244	31.000	1.2205	29.500	1.1614	25.000	0.9843	3.0	0.12	2.8	0.11	145	216		JM714249	JM714210	30.0	1.18	88.0	3.46	82.9	3.26	108.0	4.25	115.0	4.53	0.44	1.35	0.74	42.2	32.1	1.32
	2.9528	145.000	5.7087	51.000	2.0079	51.000	2.0079	42.000	1.6535	3.0	0.12	2.5	0.10	290	412		JH415647	JH415610	36.6	1.44	94.0	3.70	89.0	3.50	129.0	5.08	139.0	5.47	0.36	1.66	0.91	85.1	52.7	1.62
80.000	3.1496	130.000	5.1181	35.000	1.3780	34.000	1.3386	28.500	1.1220	3.2	0.13	2.5	0.10	168	256		JM515649	JM515610	29.6	1.17	94.0	3.70	88.0	3.46	117.0	4.61	125.0	4.92	0.39	1.54	0.85	49.2	32.6	1.51
85.000	3.3465	130.000	5.1181	30.000	1.1811	29.000	1.1417	24.000	0.9449	3.0	0.12	2.5	0.10	142	228		JM716649	JM716610	29.1	1.15	98.0	3.86	92.0	3.62	117.0	4.61	125.0	4.92	0.44	1.35	0.74	41.3	31.4	1.32
	3.3465	140.000	5.5118	39.000	1.5354	38.000	1.4961	31.500	1.2402	3.0	0.12	2.5	0.10	203	308		JHM516849	JHM516810	32.8	1.29	100.0	3.94	93.9	3.70	125.0	4.92	134.0	5.28	0.41	1.47	0.81	59.5	41.4	1.44
	3.3465	150.000	5.9055	46.000	1.8110	46.000	1.8110	38.000	1.4961	3.0	0.12	2.5	0.10	274	390		JH217249	JH217210	33.6	1.32	101.0	3.98	95.2	3.75	134.0	5.28	142.0	5.59	0.33	1.80	0.99	80.3	45.6	1.76
90.000	3.5433	145.000	5.7087	35.000	1.3780	34.000	1.3386	27.000	1.0630	3.0	0.12	2.5	0.10	194	291		JM718149	JM718110	32.7	1.29	105.0	4.13	99.0	3.90	131.0	5.16	139.0	5.47	0.44	1.35	0.74	56.8	43.1	1.32
	3.5433	155.000	6.1024	44.000	1.7323	44.000	1.7323	35.500	1.3976	3.0	0.12	2.5	0.10	290	407		JHM318448	JHM318410	34.5	1.36	106.0	4.17	100.0	3.94	140.0	5.51	148.0	5.83	0.34	1.76	0.97	84.5	49.3	1.72
95.000	3.7402	150.000	5.9055	35.000	1.3780	34.000	1.3386	27.000	1.0630	3.0	0.12	2.5	0.10	187	294		JM719149	JM719113	33.5	1.32	109.0	4.29	104.0	4.09	135.0	5.31	143.0	5.63	0.44	1.36	0.75	54.5	41.2	1.32
100.000	3.9370	155.000	6.1024	36.000	1.4173	35.000	1.3780	28.000	1.1024	3.0	0.12	2.5	0.10	204	328		JM720249	JM720210	35.6	1.40	110.0	4.33	110.0	4.33	139.0	5.47	148.0	5.83	0.47	1.27	0.70	59.5	48.1	1.24
	3.9370	160.000	6.2992	41.000	1.6142	40.000	1.5748	32.000	1.2598	3.0	0.12	2.5	0.10	237	378		JHM720249	JHM720210	38.3	1.51	110.0	4.33	111.0	4.37	143.0	5.63	153.0	6.02	0.47	1.28	0.70	69.6	56.0	1.24
110.000	4.3307	165.000	6.4961	35.000	1.3780	35.000	1.3780	26.500	1.0433	3.0	0.12	2.5	0.10	195	325		JM822049	JM822010	38.1	1.50	121.0	4.76	121.0	4.76	148.0	5.83	157.0	6.18	0.50	1.21	0.66	56.7	48.2	1.18
	4.3307	180.000	7.0866	47.000	1.8504	46.000	1.8110	38.000	1.4961	3.0	0.12	2.5	0.10	306	487		JHM522649	JHM522610	40.6	1.60														

Supplementary tables

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Supplementary table 1 Shaft tolerances (deviation from nominal dimensions)

Nominal shaft dia. (mm)		Deviation classes of shaft dia.																				Nominal shaft dia. (mm)		$\Delta_{dmp}^{1)}$ of bearing (class 0)										
		over	up to	d 6	e 6	f 6	g 5	g 6	h 5	h 6	h 7	h 8	h 9	h 10	js 5	js 6	js 7	j 5	j 6		k 5	k 6	k 7		m 5	m 6	m 7	n 5	n 6	p 6	r 6	r 7	over	up to
3	6	- 30 - 38	- 20 - 28	- 10 - 18	- 4 - 9	- 4 - 12	- 0 - 5	- 0 - 8	0 - 12	0 - 18	0 - 30	0 - 48	± 2.5	± 4	± 6	+ 3 - 2	+ 6 - 2			+ 6 + 1	+ 9 + 1	+ 13 + 1	+ 9 + 4	+ 12 + 4	+ 16 + 4	+ 13 + 8	+ 16 + 8	+ 20 + 12	+ 23 + 15	+ 27 + 15	3	6	0 - 8	
6	10	- 40 - 49	- 25 - 34	- 13 - 22	- 5 - 11	- 5 - 14	- 0 - 6	- 0 - 9	0 - 15	0 - 22	0 - 36	0 - 58	± 3	± 4.5	± 7.5	+ 4 - 2	+ 7 - 2			+ 7 + 1	+ 10 + 1	+ 16 + 1	+ 12 + 6	+ 15 + 6	+ 21 + 6	+ 16 + 10	+ 19 + 10	+ 24 + 15	+ 28 + 19	+ 34 + 19	6	10	0 - 8	
10	18	- 50 - 61	- 32 - 43	- 16 - 27	- 6 - 14	- 6 - 17	- 0 - 8	0 - 11	0 - 18	0 - 27	0 - 43	0 - 70	± 4	± 5.5	± 9	+ 5 - 3	+ 8 - 3			+ 9 + 1	+ 12 + 1	+ 19 + 1	+ 15 + 7	+ 18 + 7	+ 25 + 7	+ 20 + 12	+ 23 + 12	+ 29 + 18	+ 34 + 23	+ 41 + 23	10	18	0 - 8	
18	30	- 65 - 78	- 40 - 53	- 20 - 33	- 7 - 16	- 7 - 20	- 0 - 9	0 - 13	0 - 21	0 - 33	0 - 52	0 - 84	± 4.5	± 6.5	± 10.5	+ 5 - 4	+ 9 - 4			+ 11 + 2	+ 15 + 2	+ 23 + 2	+ 17 + 8	+ 21 + 8	+ 29 + 8	+ 24 + 15	+ 28 + 15	+ 35 + 22	+ 41 + 28	+ 49 + 28	18	30	0 - 10	
30	50	- 80 - 96	- 50 - 66	- 25 - 41	- 9 - 20	- 9 - 25	0 - 11	0 - 16	0 - 25	0 - 39	0 - 62	0 - 100	± 5.5	± 8	± 12.5	+ 6 - 5	+ 11 - 5			+ 13 + 2	+ 18 + 2	+ 27 + 2	+ 20 + 9	+ 25 + 9	+ 34 + 9	+ 28 + 17	+ 33 + 17	+ 42 + 26	+ 50 + 34	+ 59 + 34	30	50	0 - 12	
50	80	- 100 - 119	- 60 - 79	- 30 - 49	- 10 - 23	- 10 - 29	0 - 13	0 - 19	0 - 30	0 - 46	0 - 74	0 - 120	± 6.5	± 9.5	± 15	+ 6 - 7	+ 12 - 7			+ 15 + 2	+ 21 + 2	+ 32 + 2	+ 24 + 11	+ 30 + 11	+ 41 + 11	+ 33 + 20	+ 39 + 20	+ 51 + 32	+ 60 + 41	+ 71 + 41	50	65	0 - 15	
																														+ 62 + 43	+ 73 + 43	65	80	
80	120	- 120 - 142	- 72 - 94	- 36 - 58	- 12 - 27	- 12 - 34	0 - 15	0 - 22	0 - 35	0 - 54	0 - 87	0 - 140	± 7.5	± 11	± 17.5	+ 6 - 9	+ 13 - 9			+ 18 + 3	+ 25 + 3	+ 38 + 3	+ 28 + 13	+ 35 + 13	+ 48 + 13	+ 38 + 23	+ 45 + 23	+ 59 + 37	+ 73 + 51	+ 86 + 51	80	100	0 - 20	
																														+ 76 + 54	+ 89 + 54	100	120	
120	180	- 145 - 170	- 85 - 110	- 43 - 68	- 14 - 32	- 14 - 39	0 - 18	0 - 25	0 - 40	0 - 63	0 - 100	0 - 160	± 9	± 12.5	± 20	+ 7 - 11	+ 14 - 11			+ 21 + 3	+ 28 + 3	+ 43 + 3	+ 33 + 15	+ 40 + 15	+ 55 + 15	+ 45 + 27	+ 52 + 27	+ 68 + 43	+ 88 + 63	+ 103 + 63	120	140	0 - 25	
																														+ 90 + 65	+ 105 + 65	140	160	
																														+ 93 + 68	+ 108 + 68	160	180	
180	250	- 170 - 199	- 100 - 129	- 50 - 79	- 15 - 35	- 15 - 44	0 - 20	0 - 29	0 - 46	0 - 72	0 - 115	0 - 185	± 10	± 14.5	± 23	+ 7 - 13	+ 16 - 13			+ 24 + 4	+ 33 + 4	+ 50 + 4	+ 37 + 17	+ 46 + 17	+ 63 + 17	+ 51 + 31	+ 60 + 31	+ 79 + 50	+ 106 + 77	+ 123 + 77	180	200	0 - 30	
																														+ 109 + 80	+ 126 + 80	200	225	
																														+ 113 + 84	+ 130 + 84	225	250	
250	315	- 190 - 222	- 110 - 142	- 56 - 88	- 17 - 40	- 17 - 49	0 - 23	0 - 32	0 - 52	0 - 81	0 - 130	0 - 210	± 11.5	± 16	± 26	+ 7 - 16	± 16			+ 27 + 4	+ 36 + 4	+ 56 + 4	+ 43 + 20	+ 52 + 20	+ 72 + 20	+ 57 + 34	+ 66 + 34	+ 88 + 56	+ 126 + 94	+ 146 + 94	250	280	0 - 35	
																														+ 130 + 98	+ 150 + 98	280	315	
315	400	- 210 - 246	- 125 - 161	- 62 - 98	- 18 - 43	- 18 - 54	0 - 25	0 - 36	0 - 57	0 - 89	0 - 140	0 - 230	± 12.5	± 18	± 28.5	+ 7 - 18	± 18			+ 29 + 4	+ 40 + 4	+ 61 + 4	+ 46 + 21	+ 57 + 21	+ 78 + 21	+ 62 + 37	+ 73 + 37	+ 98 + 62	+ 144 + 108	+ 165 + 108	315	355	0 - 40	
																														+ 150 + 114	+ 171 + 114	355	400	
400	500	- 230 - 270	- 135 - 175	- 68 - 108	- 20 - 47	- 20 - 60	0 - 27	0 - 40	0 - 63	0 - 97	0 - 155	0 - 250	± 13.5	± 20	± 31.5	+ 7 - 20	± 20			+ 32 + 5	+ 45 + 5	+ 68 + 5	+ 50 + 23	+ 63 + 23	+ 86 + 23	+ 67 + 40	+ 80 + 40	+ 108 + 68	+ 166 + 126	+ 189 + 126	400	450	0 - 45	
																														+ 172 + 132	+ 195 + 132	450	500	
500	630	- 260 - 304	- 145 - 189	- 76 - 120	-	- 22 - 66	-	0 - 44	0 - 70	0 - 110	0 - 175	0 - 280	-	± 22	± 35	-	-			-	+ 44 0	+ 70 0	-	+ 70 + 26	+ 96 + 26	-	+ 88 + 44	+ 122 + 78	+ 194 + 150	+ 220 + 150	500	560	0 - 50	
																														+ 199 + 155	+ 225 + 155	560	630	
630	800	- 290 - 340	- 160 - 210	- 80 - 130	-	- 24 - 74	-	0 - 50	0 - 80	0 - 125	0 - 200	0 - 320	-	± 25	± 40	-	-			-	+ 50 0	+ 80 0	-	+ 80 + 30	+ 110 + 30	-	+ 100 + 50	+ 138 + 88	+ 225 + 175	+ 255 + 175	630	710	0 - 75	
																														+ 235 + 185	+ 265 + 185	710	800	
800	1 000	- 320 - 376	- 170 - 226	- 86 - 142	-	- 26 - 82	-	0 - 56	0 - 90	0 - 140	0 - 230	0 - 360	-	± 28	± 45	-	-			-	+ 56 0	+ 90 0	-	+ 90 + 34	+ 124 + 34	-	+ 112 + 56	+ 156 + 100	+ 266 + 210	+ 300 + 210	800	900	0 - 100	
																														+ 276 + 220	+ 310 + 220	900	1 000	

[Note] 1) Δ_{dmp} : single plane mean bore diameter deviation

Supplementary table 2 Housing bore tolerances (deviation from nominal dimensions)

Nominal bore dia. (mm)		Deviation classes of housing bore																										Nominal bore dia. (mm)		ΔD _{mp} ¹⁾ of bearing (class 0)			
		over	up to	E 6	F 6	F 7	G 6	G 7	H 6	H 7	H 8	H 9	H 10	JS 5	JS 6	JS 7	J 6	J 7		K 5	K 6	K 7	M 5	M 6	M 7	N 5	N 6	N 7	P 6		P 7	R 7	over
10	18	+ 43 + 32	+ 27 + 16	+ 34 + 16	+17 + 6	+ 24 + 6	+11 0	+ 18 0	+ 27 0	± 43 0	± 70 0	± 4	± 5.5	± 9	+ 6 − 5	+10 − 8			+ 2 − 6	+ 2 − 9	+ 6 − 12	− 4 −12	− 4 − 15	0 − 18	− 9 −17	− 9 − 20	− 5 − 23	− 15 − 26	− 11 − 29	− 16 − 34	10	18	0 − 8
18	30	+ 53 + 40	+ 33 + 20	+ 41 + 20	+20 + 7	+ 28 + 7	+13 0	+ 21 0	+ 33 0	± 52 0	± 84 0	± 4.5	± 6.5	±10.5	+ 8 − 5	+12 − 9			+ 1 − 8	+ 2 −11	+ 6 − 15	− 5 −14	− 4 − 17	0 − 21	−12 −21	− 11 − 24	− 7 − 28	− 18 − 31	− 14 − 35	− 20 − 41	18	30	0 − 9
30	50	+ 66 + 50	+ 41 + 25	+ 50 + 25	+25 + 9	+ 34 + 9	+16 0	+ 25 0	+ 39 0	± 62 0	+100 0	± 5.5	± 8	±12.5	+10 − 6	+14 −11			+ 2 − 9	+ 3 −13	+ 7 − 18	− 5 −16	− 4 − 20	0 − 25	−13 −24	− 12 − 28	− 8 − 33	− 21 − 37	− 17 − 42	− 25 − 50	30	50	0 − 11
50	80	+ 79 + 60	+ 49 + 30	+ 60 + 30	+29 +10	+ 40 + 10	+19 0	+ 30 0	+ 46 0	± 74 0	+120 0	± 6.5	± 9.5	±15	+13 − 6	+18 −12			+ 3 −10	+ 4 −15	+ 9 − 21	− 6 −19	− 5 − 24	0 − 30	−15 −28	− 14 − 33	− 9 − 39	− 26 − 45	− 21 − 51	− 30 − 60	50	65	0 − 13
																	− 32 − 62	65												80			
80	120	+ 94 + 72	+ 58 + 36	+ 71 + 36	+34 +12	+ 47 + 12	+22 0	+ 35 0	+ 54 0	± 87 0	+140 0	± 7.5	±11	±17.5	+16 − 6	+22 −13			+ 2 −13	+ 4 −18	+ 10 − 25	− 8 −23	− 6 − 28	0 − 35	−18 −33	− 16 − 38	− 10 − 45	− 30 − 52	− 24 − 59	− 38 − 73	80	100	0 − 15
																	− 41 − 76	100												120			
120	180	+110 + 85	+ 68 + 43	+ 83 + 43	+39 +14	+ 54 + 14	+25 0	+ 40 0	+ 63 0	+100 0	+160 0	± 9	±12.5	±20	+18 − 7	+26 −14			+ 3 −15	+ 4 −21	+ 12 − 28	− 9 −27	− 8 − 33	0 − 40	−21 −39	− 20 − 45	− 12 − 52	− 36 − 61	− 28 − 68	− 48 − 88	120	140	(up to 150) 0 − 18 (over to 150) 0 − 25
																	− 50 − 90	140												160			
																	− 53 − 93	160												180			
180	250	+129 +100	+ 79 + 50	+ 96 + 50	+44 +15	+ 61 + 15	+29 0	+ 46 0	+ 72 0	+115 0	+185 0	±10	±14.5	±23	+22 − 7	+30 −16			+ 2 −18	+ 5 −24	+ 13 − 33	−11 −31	− 8 − 37	0 − 46	−25 −45	− 22 − 51	− 14 − 60	− 41 − 70	− 33 − 79	− 60 −106	180	200	0 − 30
																	− 63 −109	200												225			
																	− 67 −113	225												250			
250	315	+142 +110	+ 88 + 56	+ 108 + 56	+49 +17	+ 69 + 17	+32 0	+ 52 0	+ 81 0	+130 0	+210 0	±11.5	±16	±26	+25 − 7	+36 −16			+ 3 −20	+ 5 −27	+ 16 − 36	−13 −36	− 9 − 41	0 − 52	−27 −50	− 25 − 57	− 14 − 66	− 47 − 79	− 36 − 88	− 74 −126	250	280	0 − 35
																	− 78 −130	280												315			
315	400	+161 +125	+ 98 + 62	+119 + 62	+54 +18	+ 75 + 18	+36 0	+ 57 0	+ 89 0	+140 0	+230 0	±12.5	±18	±28.5	+29 − 7	+39 −18			+ 3 −22	+ 7 −29	+ 17 − 40	−14 −39	− 10 − 46	0 − 57	−30 −55	− 26 − 62	− 16 − 73	− 51 − 87	− 41 − 98	− 87 −144	315	355	0 − 40
																	− 93 −150	355												400			
400	500	+175 +135	+108 + 68	+131 + 68	+60 +20	+ 83 + 20	+40 0	+ 63 0	+ 97 0	+155 0	+250 0	±13.5	±20	±31.5	+33 − 7	+43 −20			+ 2 −25	+ 8 −32	+ 18 − 45	−16 −43	− 10 − 50	0 − 63	−33 −60	− 27 − 67	− 17 − 80	− 55 − 95	− 45 −108	−103 −166	400	450	0 − 45
																	−109 −172	450												500			
500	630	+189 +145	+120 + 76	+146 + 76	+66 +22	+ 92 + 22	+44 0	+ 70 0	+110 0	+175 0	+280 0	−	±22	±35	−	−			−	0 −44	0 − 70	−	− 26 − 70	− 26 − 96	−	− 44 − 88	− 44 −114	− 78 −122	− 78 −148	−150 −220	500	560	0 − 50
																	−155 −225	560												630			
630	800	+210 +160	+130 + 80	+160 + 80	+74 +24	+104 + 24	+50 0	+ 80 0	+125 0	+200 0	+320 0	−	±25	±40	−	−			−	0 −50	0 − 80	−	− 30 − 80	− 30 −110	−	− 50 −100	− 50 −130	− 88 −138	− 88 −168	−175 −255	630	710	0 − 75
																	−185 −265	710												800			
800	1 000	+226 +170	+142 + 86	+176 + 86	+82 +26	+116 + 26	+56 0	+ 90 0	+140 0	+230 0	+360 0	−	±28	±45	−	−			−	0 −56	0 − 90	−	− 34 − 90	− 34 −124	−	− 56 −112	− 56 −146	−100 −156	−100 −190	−210 −300	800	900	0 −100
																	−220 −310	900												1 000			
1 000	1 250	+261 +195	+164 + 98	+203 + 98	+94 +28	+133 + 28	+66 0	+105 0	+165 0	+260 0	+420 0	−	±33	±52.5	−	−			−	0 −66	0 −105	−	− 40 −106	− 40 −145	−	− 66 −132	− 66 −171	−120 −186	−120 −225	−250 −355	1 000	1 120	0 −125
																	−260 −365	1 120												1 250			

[Note] 1) Δ_{Dmp} : single plane mean outside diameter deviation

Supplementary table 3 (1) SI units and conversion factors

Mass	SI units	Other units ¹⁾	Conversion into SI units	Conversion from SI units
Angle	rad [radian(s)]	° [degree(s)] * ' [minute(s)] * " [second(s)] *	1° = $\pi / 180$ rad 1' = $\pi / 10\,800$ rad 1" = $\pi / 648\,000$ rad	1 rad = 57.295 78°
Length	m [meter(s)]	Å [Angstrom unit] μ [micron(s)] in [inch(es)] ft [foot (feet)] yd [yard(s)] mile [mile(s)]	1 Å = 10 ⁻¹⁰ m = 0.1 nm = 100 pm 1 μ = 1 μm 1 in = 25.4 mm 1 ft = 12 in = 0.304 8 m 1 yd = 3 ft = 0.914 4 m 1 mile = 5 280 ft = 1 609.344 m	1 m = 10 ¹⁰ Å 1 m = 39.37 in 1 m = 3.280 8 ft 1 m = 1.093 6 yd 1 km = 0.621 4 mile
Area	m ²	a [are(s)] ha [hectare(s)] acre [acre(s)]	1 a = 100 m ² 1 ha = 10 ⁴ m ² 1 acre = 4 840 yd ² = 4 046.86 m ²	1 km ² = 247.1 acre
Volume	m ³	ℓ, L [liter(s)] * cc [cubic centimeters] gal (US) [gallon(s)] floz (US) [fluid ounce(s)] barrel (US) [barrels (US)]	1 ℓ = 1 dm ³ = 10 ⁻³ m ³ 1 cc = 1 cm ³ = 10 ⁻⁶ m ³ 1 gal (US) = 231 in ³ = 3.785 41 dm ³ 1 floz (US) = 29.573 5 cm ³ 1 barrel (US) = 158.987 dm ³	1 m ³ = 10 ³ ℓ 1 m ³ = 10 ⁶ cc 1 m ³ = 264.17 gal 1 m ³ = 33 814 floz 1 m ³ = 6.289 8 barrel
Time	s [second(s)]	min [minute(s)] * h [hour(s)] * d [day(s)] *		
Angular velocity	rad / s			
Velocity	m / s	kn [knot(s)] m / h *	1 kn = 1 852 m / h	1 km / h = 0.539 96 kn
Acceleration	m / s ²	G	1 G = 9.806 65 m / s ²	1 m / s ² = 0.101 97 G
Frequency	Hz [hertz]	c / s [cycle(s) / second]	1 c / s = 1 s ⁻¹ = 1 Hz	
Rotational frequency	s ⁻¹	rpm [revolutions per minute] min ⁻¹ * r / min	1 rpm = 1 / 60 s ⁻¹	1 s ⁻¹ = 60 rpm
Mass	kg [kilogram(s)]	t [ton(s)] * lb [pound(s)] gr [grain(s)] oz [ounce(s)] ton (UK) [ton(s) (UK)] ton (US) [ton(s) (US)] car [carat(s)]	1 t = 10 ³ kg 1 lb = 0.453 592 37 kg 1 gr = 64.798 91 mg 1 oz = 1 / 16 lb = 28.349 5 g 1 ton (UK) = 1 016.05 kg 1 ton (US) = 907.185 kg 1 car = 200 mg	1 kg = 2.204 6 lb 1 g = 15.432 4 gr 1 kg = 35.274 0 oz 1 t = 0.984 2 ton (UK) 1 t = 1.102 3 ton (US) 1 g = 5 car

[Note] 1) * : Unit can be used as an SI unit.
No asterisk : Unit cannot be used.

Supplementary table 3 (2) SI units and conversion factors

Mass	SI units	Other units ¹⁾	Conversion into SI units	Conversion from SI units
Density	kg/m ³			
Linear density	kg/m			
Momentum	kg·m/s			
Moment of momentum, Angular momentum	kg·m ² /s			
Moment of inertia	kg·m ²			
Force	N [newton(s)]	dyn [dyne(s)] kgf [kilogram-force] gf [gram-force] tf [ton-force] lbf [pound-force]	1 dyn = 10 ⁻⁵ N 1 kgf = 9.806 65 N 1 gf = 9.806 65 × 10 ⁻³ N 1 tf = 9.806 65 × 10 ³ N 1 lbf = 4.448 22 N	1 N = 10 ⁵ dyn 1 N = 0.101 97 kgf 1 N = 0.224 809 lbf
Moment of force	N·m [newton meter(s)]	gf·cm kgf·cm kgf·m tf·m lbf·ft	1 gf·cm = 9.806 65 × 10 ⁻⁵ N·m 1 kgf·cm = 9.806 65 × 10 ⁻² N·m 1 kgf·m = 9.806 65 N·m 1 tf·m = 9.806 65 × 10 ³ N·m 1 lbf·ft = 1.355 82 N·m	 1 N·m = 0.101 97 kgf·m 1 N·m = 0.737 56 lbf·ft
Pressure, Normal stress	Pa [pascal(s)] or N/m ² {1 Pa = 1 N/m ² }	gf/cm ² kgf/mm ² kgf/m ² lbf/in ² bar [bar(s)] at [engineering air pressure] mH ₂ O, mAq [meter water column] atm [atmosphere] mHg [meter mercury column] Torr [torr]	1 gf/cm ² = 9.806 65 × 10 Pa 1 kgf/mm ² = 9.806 65 × 10 ⁶ Pa 1 kgf/m ² = 9.806 65 Pa 1 lbf/in ² = 6 894.76 Pa 1 bar = 10 ⁵ Pa 1 at = 1 kgf/cm ² = 9.806 65 × 10 ⁴ Pa 1 mH ₂ O = 9.806 65 × 10 ³ Pa 1 atm = 101 325 Pa 1 mHg = $\frac{101\,325}{0.76}$ Pa 1 Torr = 1 mmHg = 133.322 Pa	1 MPa = 0.101 97 kgf/mm ² 1 Pa = 0.101 97 kgf/m ² 1 Pa = 0.145 × 10 ⁻³ lbf/in ² 1 Pa = 10 ⁻² mbar 1 Pa = 7.500 6 × 10 ⁻³ Torr
Viscosity	Pa·s [pascal second]	P [poise] kgf·s/m ²	10 ⁻² P = 1 cP = 1 mPa·s 1 kgf·s/m ² = 9.806 65 Pa·s	1 Pa·s = 0.101 97 kgf·s/m ²
Kinematic viscosity	m ² /s	St [stokes]	10 ⁻² St = 1 cSt = 1 mm ² /s	
Surface tension	N/m			

Supplementary table 3 (3) SI units and conversion factors

Mass	SI units	Other units ¹⁾	Conversion into SI units	Conversion from SI units
Work, energy	J [joule(s)] {1 J = 1 N·m}	eV [electron volt(s)] * erg [erg(s)] kgf·m lbf·ft	1 eV = (1.602 189 2 ± 0.000 004 6) × 10 ⁻¹⁹ J 1 erg = 10 ⁻⁷ J 1 kgf·m = 9.806 65 J 1 lbf·ft = 1.355 82 J	1 J = 10 ⁷ erg 1 J = 0.101 97 kgf·m 1 J = 0.737 56 lbf·ft
Power	W [watt(s)]	erg/s [ergs per second] kgf·m/s PS [French horse-power] HP [horse-power (British)] lbf·ft/s	1 erg/s = 10 ⁻⁷ W 1 kgf·m/s = 9.806 65 W 1 PS = 75 kgf·m/s = 735.5 W 1 HP = 550 lbf·ft/s = 745.7 W 1 lbf·ft/s = 1.355 82 W	1 W = 0.101 97 kgf·m/s 1 W = 0.001 36 PS 1 W = 0.001 34 HP
Thermo-dynamic temperature	K [kelvin(s)]			
Celsius temperature	°C [celsius(s)] {t °C = (t + 273.15) K}	°F [degree(s) Fahrenheit]	t °F = $\frac{5}{9}$ (t - 32) °C	t °C = ($\frac{9}{5}$ t + 32) °F
Linear expansion coefficient	K ⁻¹	°C ⁻¹ [per degree]		
Heat	J [joule(s)] {1 J = 1 N·m}	erg [erg(s)] kgf·m cal _{IT} [I. T. calories]	1 erg = 10 ⁻⁷ J 1 cal _{IT} = 4.186 8 J 1 Mcal _{IT} = 1.163 kW·h	1 J = 10 ⁷ erg 1 J = 0.238 85 cal _{IT} 1 kW·h = 0.86 × 10 ⁶ cal _{IT}
Thermal conductivity	W/(m·K)	W/(m·°C) cal/(s·m·°C)	1 W/(m·°C) = 1 W/(m·K) 1 cal/(s·m·°C) = 4.186 05 W/(m·K)	
Coefficient of heat transfer	W/(m ² ·K)	W/(m ² ·°C) cal/(s·m ² ·°C)	1 W/(m ² ·°C) = 1 W/(m ² ·K) 1 cal/(s·m ² ·°C) = 4.186 05 W/(m ² ·K)	
Heat capacity	J/K	J/°C	1 J/°C = 1 J/K	
Massic heat capacity	J/(kg·K)	J/(kg·°C)		

[Note] 1) * : Unit can be used as an SI unit.
No asterisk : Unit cannot be used.

Supplementary table 3 (4) SI units and conversion factors

Mass	SI units	Other units ¹⁾	Conversion into SI units	Conversion from SI units
Electric current	A [ampere(s)]			
Electric charge, quantity of electricity	C [coulomb(s)] {1 C = 1 A·s}	A·h * 1 A·h = 3.6 kC		
Tension, electric potential	V [volt(s)] {1 V = 1 W / A}			
Capacitance	F [farad(s)] {1 F = 1 C / V}			
Magnetic field strength	A / m	Oe [oersted(s)]	$1 \text{ Oe} = \frac{10^3}{4\pi} \text{ A/m}$	$1 \text{ A/m} = 4\pi \times 10^{-3} \text{ Oe}$
Magnetic flux density	T [tesla(s)] $\left\{ \begin{array}{l} 1 \text{ T} = 1 \text{ N} / (\text{A} \cdot \text{m}) \\ = 1 \text{ Wb} / \text{m}^2 \\ = 1 \text{ V} \cdot \text{s} / \text{m}^2 \end{array} \right\}$	Gs [gauss(es)] γ [gamma(s)]	$1 \text{ Gs} = 10^{-4} \text{ T}$ $1 \gamma = 10^{-9} \text{ T}$	$1 \text{ T} = 10^4 \text{ Gs}$ $1 \text{ T} = 10^9 \gamma$
Magnetic flux	Wb [weber(s)] {1 Wb = 1 V·s}	Mx [maxwell(s)]	$1 \text{ Mx} = 10^{-8} \text{ Wb}$	$1 \text{ Wb} = 10^8 \text{ Mx}$
Self inductance	H [henry (-ries)] {1 H = 1 Wb / A}			
Resistance (to direct current)	Ω [ohm(s)] {1 Ω = 1 V / A}			
Conductance (to direct current)	S [siemens] {1 S = 1 A / V}			
Active power	W $\left\{ \begin{array}{l} 1 \text{ W} = 1 \text{ J} / \text{s} \\ = 1 \text{ A} \cdot \text{V} \end{array} \right\}$			

Supplementary table 4 Greek alphabet list

Name	Roman type	Italic type		Name	Roman type	Italic type	
	Capital	Capital	Lowercase		Capital	Capital	Lowercase
alpha	A	<i>A</i>	α	nu	N	<i>N</i>	ν
beta	B	<i>B</i>	β	xi	Ξ	Ξ	ξ
gamma	Γ	Γ	γ	omicron	O	<i>O</i>	o
delta	Δ	Δ	δ	pi	Π	Π	π
epsilon	E	<i>E</i>	ϵ	rho	P	<i>P</i>	ρ
zeta	Z	<i>Z</i>	ζ	sigma	Σ	Σ	σ
eta	H	<i>H</i>	η	tau	T	<i>T</i>	τ
theta	Θ	Θ	θ	upsilon	Y	<i>Y</i>	υ
iota	I	<i>I</i>	ι	phi	Φ	Φ	ϕ
kappa	K	<i>K</i>	κ	chi	X	<i>X</i>	χ
lambda	Λ	Λ	λ	psi	Ψ	Ψ	ψ
mu	M	<i>M</i>	μ	omega	Ω	Ω	ω

Supplementary table 5 Prefixes used with SI units

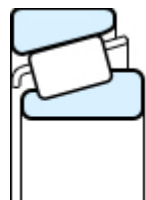
Factor	Prefix		Factor	Prefix	
	Name	Symbol		Name	Symbol
10^{18}	exa	E	10^{-1}	deci	d
10^{15}	peta	P	10^{-2}	centi	c
10^{12}	tera	T	10^{-3}	milli	m
10^9	giga	G	10^{-6}	micro	μ
10^6	mega	M	10^{-9}	nano	n
10^3	kilo	k	10^{-12}	pico	p
10^2	hecto	h	10^{-15}	femto	f
10	deka	da	10^{-18}	atto	a

Tapered Roller Bearing



This bearing is designed so that the apex of the tapered face on the raceway face of the cone cup intersects with a single point on the bearing center line. Suitable for applications with heavy load and impact load.

Single-row



(Normal
gradient)

32900JR 30200JR
32000JR 32200JR
33000JR 33200JR
33100JR 30300JR
32300JR

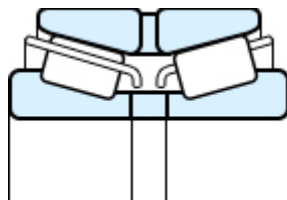
(Medium
gradient)

30200CR
32200CR
30300CR
32300CR

(Steep
gradient)

30300DJ
30300DJR
31300JR

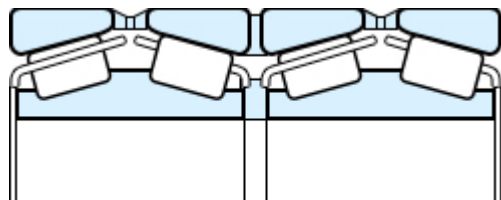
Double-row



Double-row
(TDO type)

46200
46200A
46300
46300A
(46T)

Four-row



Primarily for use in the roll necks of rolling mills

37200
47200
47300
(47T)

Bearing No.	Classification[1]	Classification[2]	Classification[3]
30202R	Tapered roller bearings	Single-row	Metric series
30302JR	Tapered roller bearings	Single-row	Metric series
30203JR	Tapered roller bearings	Single-row	Metric series
32203JR	Tapered roller bearings	Single-row	Metric series
30303JR	Tapered roller bearings	Single-row	Metric series
30303R	Tapered roller bearings	Single-row	Metric series
32303	Tapered roller bearings	Single-row	Metric series
32303JR	Tapered roller bearings	Single-row	Metric series
32004JR	Tapered roller bearings	Single-row	Metric series
57008R	Tapered roller bearings	Single-row	Metric series
30204JR	Tapered roller bearings	Single-row	Metric series
32204JR	Tapered roller bearings	Single-row	Metric series
32204XR	Tapered roller bearings	Single-row	Metric series
30304AC	Tapered roller bearings	Single-row	Metric series
30304AJR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
32304CR	Tapered roller bearings	Single-row	Metric series
32304JR	Tapered roller bearings	Single-row	Metric series
320/22JR	Tapered roller bearings	Single-row	Metric series
T2CC022	Tapered roller bearings	Single-row	Metric series
302/22CR	Tapered roller bearings	Single-row	Metric series
302/22R	Tapered roller bearings	Single-row	Metric series
322/22CR	Tapered roller bearings	Single-row	Metric series
322/22R	Tapered roller bearings	Single-row	Metric series
303/22XR	Tapered roller bearings	Single-row	Metric series
303/22R	Tapered roller bearings	Single-row	Metric series
323/22CR	Tapered roller bearings	Single-row	Metric series
323/22R	Tapered roller bearings	Single-row	Metric series
32005JR	Tapered roller bearings	Single-row	Metric series
33005JR	Tapered roller bearings	Single-row	Metric series
30205XR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
30205JR	Tapered roller bearings	Single-row	Metric series
32205XR	Tapered roller bearings	Single-row	Metric series
32205JR	Tapered roller bearings	Single-row	Metric series
33205JR	Tapered roller bearings	Single-row	Metric series
30305DJR	Tapered roller bearings	Single-row	Metric series
TR0506R	Tapered roller bearings	Single-row	Metric series
30305JR	Tapered roller bearings	Single-row	Metric series
32305XR	Tapered roller bearings	Single-row	Metric series
32305JR	Tapered roller bearings	Single-row	Metric series
320/28JR	Tapered roller bearings	Single-row	Metric series
302/28CR	Tapered roller bearings	Single-row	Metric series
302/28R	Tapered roller bearings	Single-row	Metric series
322/28CR	Tapered roller bearings	Single-row	Metric series
322/28R	Tapered roller bearings	Single-row	Metric series
332/28JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
303/28CR	Tapered roller bearings	Single-row	Metric series
303/28R	Tapered roller bearings	Single-row	Metric series
323/28CR	Tapered roller bearings	Single-row	Metric series
323/28R	Tapered roller bearings	Single-row	Metric series
32006JR	Tapered roller bearings	Single-row	Metric series
33006JR	Tapered roller bearings	Single-row	Metric series
30206CR	Tapered roller bearings	Single-row	Metric series
30206JR	Tapered roller bearings	Single-row	Metric series
32206XR	Tapered roller bearings	Single-row	Metric series
32206JR	Tapered roller bearings	Single-row	Metric series
33206JR	Tapered roller bearings	Single-row	Metric series
30306DJR	Tapered roller bearings	Single-row	Metric series
TRA0607R	Tapered roller bearings	Single-row	Metric series
30306JR	Tapered roller bearings	Single-row	Metric series
32306CR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
32306JR	Tapered roller bearings	Single-row	Metric series
320/32JR	Tapered roller bearings	Single-row	Metric series
302/32CR	Tapered roller bearings	Single-row	Metric series
302/32R	Tapered roller bearings	Single-row	Metric series
322/32CR	Tapered roller bearings	Single-row	Metric series
322/32	Tapered roller bearings	Single-row	Metric series
332/32JR	Tapered roller bearings	Single-row	Metric series
303/32CR	Tapered roller bearings	Single-row	Metric series
303/32R	Tapered roller bearings	Single-row	Metric series
TR0608A	Tapered roller bearings	Single-row	Metric series
323/32R	Tapered roller bearings	Single-row	Metric series
32907JR-2	Tapered roller bearings	Single-row	Metric series
32007JR	Tapered roller bearings	Single-row	Metric series
33007	Tapered roller bearings	Single-row	Metric series
33007JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
30207CR	Tapered roller bearings	Single-row	Metric series
30207JR	Tapered roller bearings	Single-row	Metric series
32207-1R	Tapered roller bearings	Single-row	Metric series
32207JR	Tapered roller bearings	Single-row	Metric series
33207JR	Tapered roller bearings	Single-row	Metric series
30307DJR	Tapered roller bearings	Single-row	Metric series
30307XR	Tapered roller bearings	Single-row	Metric series
30307JR-1	Tapered roller bearings	Single-row	Metric series
TR0708-1R	Tapered roller bearings	Single-row	Metric series
32307JR	Tapered roller bearings	Single-row	Metric series
32908JR	Tapered roller bearings	Single-row	Metric series
32008JR	Tapered roller bearings	Single-row	Metric series
33008JR	Tapered roller bearings	Single-row	Metric series
33108JR	Tapered roller bearings	Single-row	Metric series
30208CR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
30208JR	Tapered roller bearings	Single-row	Metric series
32208CR	Tapered roller bearings	Single-row	Metric series
32208JR	Tapered roller bearings	Single-row	Metric series
33208JR	Tapered roller bearings	Single-row	Metric series
T2EE040	Tapered roller bearings	Single-row	Metric series
30308DJR	Tapered roller bearings	Single-row	Metric series
30308XR	Tapered roller bearings	Single-row	Metric series
30308JR	Tapered roller bearings	Single-row	Metric series
TR0809AR	Tapered roller bearings	Single-row	Metric series
32308JR	Tapered roller bearings	Single-row	Metric series
32909JR	Tapered roller bearings	Single-row	Metric series
32009JR	Tapered roller bearings	Single-row	Metric series
33009JR	Tapered roller bearings	Single-row	Metric series
33109JR	Tapered roller bearings	Single-row	Metric series
30209XR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
30209JR	Tapered roller bearings	Single-row	Metric series
32209CR	Tapered roller bearings	Single-row	Metric series
32209JR-1	Tapered roller bearings	Single-row	Metric series
33209JR	Tapered roller bearings	Single-row	Metric series
T7FC045	Tapered roller bearings	Single-row	Metric series
T2ED045	Tapered roller bearings	Single-row	Metric series
30309DJR	Tapered roller bearings	Single-row	Metric series
30309CR	Tapered roller bearings	Single-row	Metric series
30309JR	Tapered roller bearings	Single-row	Metric series
32309CR	Tapered roller bearings	Single-row	Metric series
32309JR	Tapered roller bearings	Single-row	Metric series
32910JR	Tapered roller bearings	Single-row	Metric series
32010JR	Tapered roller bearings	Single-row	Metric series
33010JR	Tapered roller bearings	Single-row	Metric series
33110JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
30210CR	Tapered roller bearings	Single-row	Metric series
30210JR	Tapered roller bearings	Single-row	Metric series
32210CR	Tapered roller bearings	Single-row	Metric series
32210JR	Tapered roller bearings	Single-row	Metric series
33210JR	Tapered roller bearings	Single-row	Metric series
T2ED050	Tapered roller bearings	Single-row	Metric series
T7FC050	Tapered roller bearings	Single-row	Metric series
30310DJR	Tapered roller bearings	Single-row	Metric series
30310CR	Tapered roller bearings	Single-row	Metric series
30310JR	Tapered roller bearings	Single-row	Metric series
32310CR	Tapered roller bearings	Single-row	Metric series
32310JR	Tapered roller bearings	Single-row	Metric series
32911JR	Tapered roller bearings	Single-row	Metric series
32011JR	Tapered roller bearings	Single-row	Metric series
33011JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
33111JR	Tapered roller bearings	Single-row	Metric series
30211CR	Tapered roller bearings	Single-row	Metric series
30211JR	Tapered roller bearings	Single-row	Metric series
32211CR	Tapered roller bearings	Single-row	Metric series
32211JR-1	Tapered roller bearings	Single-row	Metric series
33211JR	Tapered roller bearings	Single-row	Metric series
T7FC055	Tapered roller bearings	Single-row	Metric series
30311DJR	Tapered roller bearings	Single-row	Metric series
30311CR	Tapered roller bearings	Single-row	Metric series
30311JR	Tapered roller bearings	Single-row	Metric series
32311C	Tapered roller bearings	Single-row	Metric series
32311J	Tapered roller bearings	Single-row	Metric series
32311JR	Tapered roller bearings	Single-row	Metric series
32912JR	Tapered roller bearings	Single-row	Metric series
32012JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
33012JR	Tapered roller bearings	Single-row	Metric series
33112JR	Tapered roller bearings	Single-row	Metric series
30212CR	Tapered roller bearings	Single-row	Metric series
30212JR	Tapered roller bearings	Single-row	Metric series
32212CR	Tapered roller bearings	Single-row	Metric series
32212JR	Tapered roller bearings	Single-row	Metric series
33212JR	Tapered roller bearings	Single-row	Metric series
T5ED060	Tapered roller bearings	Single-row	Metric series
T2EE060	Tapered roller bearings	Single-row	Metric series
T7FC060	Tapered roller bearings	Single-row	Metric series
30312DJR	Tapered roller bearings	Single-row	Metric series
30312CR	Tapered roller bearings	Single-row	Metric series
30312JR	Tapered roller bearings	Single-row	Metric series
32312CR	Tapered roller bearings	Single-row	Metric series
32312J	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
32312JR	Tapered roller bearings	Single-row	Metric series
32913JR	Tapered roller bearings	Single-row	Metric series
32013JR	Tapered roller bearings	Single-row	Metric series
33013JR	Tapered roller bearings	Single-row	Metric series
33113JR	Tapered roller bearings	Single-row	Metric series
30213CR	Tapered roller bearings	Single-row	Metric series
30213JR	Tapered roller bearings	Single-row	Metric series
32213CR	Tapered roller bearings	Single-row	Metric series
32213JR	Tapered roller bearings	Single-row	Metric series
T5ED065	Tapered roller bearings	Single-row	Metric series
33213JR	Tapered roller bearings	Single-row	Metric series
T7FC065	Tapered roller bearings	Single-row	Metric series
30313DJR	Tapered roller bearings	Single-row	Metric series
30313CR	Tapered roller bearings	Single-row	Metric series
30313JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
32313CR	Tapered roller bearings	Single-row	Metric series
32313J	Tapered roller bearings	Single-row	Metric series
32313JR	Tapered roller bearings	Single-row	Metric series
32914JR	Tapered roller bearings	Single-row	Metric series
32014JR	Tapered roller bearings	Single-row	Metric series
33014JR	Tapered roller bearings	Single-row	Metric series
33114JR	Tapered roller bearings	Single-row	Metric series
30214CR	Tapered roller bearings	Single-row	Metric series
30214JR	Tapered roller bearings	Single-row	Metric series
32214CR	Tapered roller bearings	Single-row	Metric series
32214JR	Tapered roller bearings	Single-row	Metric series
33214JR	Tapered roller bearings	Single-row	Metric series
T2ED070	Tapered roller bearings	Single-row	Metric series
T7FC070	Tapered roller bearings	Single-row	Metric series
T4FE070	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
30314DJR	Tapered roller bearings	Single-row	Metric series
30314CR	Tapered roller bearings	Single-row	Metric series
30314JR	Tapered roller bearings	Single-row	Metric series
32314	Tapered roller bearings	Single-row	Metric series
32314C	Tapered roller bearings	Single-row	Metric series
32314JR	Tapered roller bearings	Single-row	Metric series
32915JR	Tapered roller bearings	Single-row	Metric series
32015JR	Tapered roller bearings	Single-row	Metric series
33015JR	Tapered roller bearings	Single-row	Metric series
33115JR	Tapered roller bearings	Single-row	Metric series
30215CR	Tapered roller bearings	Single-row	Metric series
30215JR	Tapered roller bearings	Single-row	Metric series
32215CR	Tapered roller bearings	Single-row	Metric series
32215JR	Tapered roller bearings	Single-row	Metric series
33215JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
T7FC075	Tapered roller bearings	Single-row	Metric series
30315DJR	Tapered roller bearings	Single-row	Metric series
30315DR	Tapered roller bearings	Single-row	Metric series
30315CR	Tapered roller bearings	Single-row	Metric series
30315JR	Tapered roller bearings	Single-row	Metric series
30315R	Tapered roller bearings	Single-row	Metric series
32315CR	Tapered roller bearings	Single-row	Metric series
32315JR	Tapered roller bearings	Single-row	Metric series
32315R	Tapered roller bearings	Single-row	Metric series
32916JR	Tapered roller bearings	Single-row	Metric series
32016JR	Tapered roller bearings	Single-row	Metric series
33016JR	Tapered roller bearings	Single-row	Metric series
33116JR	Tapered roller bearings	Single-row	Metric series
30216JR	Tapered roller bearings	Single-row	Metric series
32216JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
33216JR	Tapered roller bearings	Single-row	Metric series
T2ED080	Tapered roller bearings	Single-row	Metric series
30316DJR	Tapered roller bearings	Single-row	Metric series
30316JR	Tapered roller bearings	Single-row	Metric series
30316R	Tapered roller bearings	Single-row	Metric series
32316J	Tapered roller bearings	Single-row	Metric series
32316JR	Tapered roller bearings	Single-row	Metric series
32917JR	Tapered roller bearings	Single-row	Metric series
32017JR	Tapered roller bearings	Single-row	Metric series
33017JR	Tapered roller bearings	Single-row	Metric series
33117JR	Tapered roller bearings	Single-row	Metric series
30217JR	Tapered roller bearings	Single-row	Metric series
32217JR	Tapered roller bearings	Single-row	Metric series
33217JR	Tapered roller bearings	Single-row	Metric series
30317D	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
30317DJR	Tapered roller bearings	Single-row	Metric series
30317JR	Tapered roller bearings	Single-row	Metric series
30317R	Tapered roller bearings	Single-row	Metric series
32317JR	Tapered roller bearings	Single-row	Metric series
32918JR	Tapered roller bearings	Single-row	Metric series
32018JR	Tapered roller bearings	Single-row	Metric series
33018JR	Tapered roller bearings	Single-row	Metric series
33118JR	Tapered roller bearings	Single-row	Metric series
T2ED090	Tapered roller bearings	Single-row	Metric series
30218JR	Tapered roller bearings	Single-row	Metric series
32218JR	Tapered roller bearings	Single-row	Metric series
33218JR	Tapered roller bearings	Single-row	Metric series
30318DJR	Tapered roller bearings	Single-row	Metric series
30318DR	Tapered roller bearings	Single-row	Metric series
30318JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
30318R	Tapered roller bearings	Single-row	Metric series
32318JR	Tapered roller bearings	Single-row	Metric series
32919JR	Tapered roller bearings	Single-row	Metric series
32019JR	Tapered roller bearings	Single-row	Metric series
33019JR	Tapered roller bearings	Single-row	Metric series
T2ED095	Tapered roller bearings	Single-row	Metric series
33119JR	Tapered roller bearings	Single-row	Metric series
30219JR	Tapered roller bearings	Single-row	Metric series
32219JR	Tapered roller bearings	Single-row	Metric series
33219JR	Tapered roller bearings	Single-row	Metric series
30319DJR	Tapered roller bearings	Single-row	Metric series
30319	Tapered roller bearings	Single-row	Metric series
30319JR	Tapered roller bearings	Single-row	Metric series
32319	Tapered roller bearings	Single-row	Metric series
32319JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
32920JR	Tapered roller bearings	Single-row	Metric series
T4CB100	Tapered roller bearings	Single-row	Metric series
32020JR	Tapered roller bearings	Single-row	Metric series
33020JR	Tapered roller bearings	Single-row	Metric series
T2EE100	Tapered roller bearings	Single-row	Metric series
33120JR	Tapered roller bearings	Single-row	Metric series
30220JR	Tapered roller bearings	Single-row	Metric series
32220JR	Tapered roller bearings	Single-row	Metric series
33220JR	Tapered roller bearings	Single-row	Metric series
30320D	Tapered roller bearings	Single-row	Metric series
30320	Tapered roller bearings	Single-row	Metric series
30320JR	Tapered roller bearings	Single-row	Metric series
31320JR	Tapered roller bearings	Single-row	Metric series
32320	Tapered roller bearings	Single-row	Metric series
32320JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
32921JR	Tapered roller bearings	Single-row	Metric series
32021JR	Tapered roller bearings	Single-row	Metric series
33021JR	Tapered roller bearings	Single-row	Metric series
33121JR	Tapered roller bearings	Single-row	Metric series
30221JR	Tapered roller bearings	Single-row	Metric series
32221JR	Tapered roller bearings	Single-row	Metric series
33221JR	Tapered roller bearings	Single-row	Metric series
30321D	Tapered roller bearings	Single-row	Metric series
30321	Tapered roller bearings	Single-row	Metric series
30321JR	Tapered roller bearings	Single-row	Metric series
31321JR	Tapered roller bearings	Single-row	Metric series
32321	Tapered roller bearings	Single-row	Metric series
32321JR	Tapered roller bearings	Single-row	Metric series
32922JR	Tapered roller bearings	Single-row	Metric series
T4CB110	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
32022JR	Tapered roller bearings	Single-row	Metric series
33022JR	Tapered roller bearings	Single-row	Metric series
33122JR	Tapered roller bearings	Single-row	Metric series
30222JR	Tapered roller bearings	Single-row	Metric series
32222JR	Tapered roller bearings	Single-row	Metric series
30322D	Tapered roller bearings	Single-row	Metric series
30322	Tapered roller bearings	Single-row	Metric series
30322JR	Tapered roller bearings	Single-row	Metric series
31322JR	Tapered roller bearings	Single-row	Metric series
32322	Tapered roller bearings	Single-row	Metric series
32322JR	Tapered roller bearings	Single-row	Metric series
32924JR	Tapered roller bearings	Single-row	Metric series
T4CB120	Tapered roller bearings	Single-row	Metric series
32024JR	Tapered roller bearings	Single-row	Metric series
33024JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
33124JR	Tapered roller bearings	Single-row	Metric series
30224JR	Tapered roller bearings	Single-row	Metric series
32224JR	Tapered roller bearings	Single-row	Metric series
30324D	Tapered roller bearings	Single-row	Metric series
30324	Tapered roller bearings	Single-row	Metric series
30324JR	Tapered roller bearings	Single-row	Metric series
31324JR	Tapered roller bearings	Single-row	Metric series
32324JR	Tapered roller bearings	Single-row	Metric series
32324R	Tapered roller bearings	Single-row	Metric series
32926JR	Tapered roller bearings	Single-row	Metric series
T4CB130	Tapered roller bearings	Single-row	Metric series
32026JR	Tapered roller bearings	Single-row	Metric series
33026JR	Tapered roller bearings	Single-row	Metric series
30226JR	Tapered roller bearings	Single-row	Metric series
32226JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
30326D	Tapered roller bearings	Single-row	Metric series
30326JR	Tapered roller bearings	Single-row	Metric series
31326JR	Tapered roller bearings	Single-row	Metric series
32326	Tapered roller bearings	Single-row	Metric series
32928JR	Tapered roller bearings	Single-row	Metric series
T4CB140	Tapered roller bearings	Single-row	Metric series
32028JR	Tapered roller bearings	Single-row	Metric series
33028JR	Tapered roller bearings	Single-row	Metric series
30228JR	Tapered roller bearings	Single-row	Metric series
32228JR	Tapered roller bearings	Single-row	Metric series
30328D	Tapered roller bearings	Single-row	Metric series
30328JR	Tapered roller bearings	Single-row	Metric series
31328JR	Tapered roller bearings	Single-row	Metric series
32328R	Tapered roller bearings	Single-row	Metric series
32930JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
32030JR	Tapered roller bearings	Single-row	Metric series
33030JR	Tapered roller bearings	Single-row	Metric series
30230JR	Tapered roller bearings	Single-row	Metric series
32230JR	Tapered roller bearings	Single-row	Metric series
30330D	Tapered roller bearings	Single-row	Metric series
30330JR	Tapered roller bearings	Single-row	Metric series
31330JR	Tapered roller bearings	Single-row	Metric series
32330R	Tapered roller bearings	Single-row	Metric series
T4DB160	Tapered roller bearings	Single-row	Metric series
32932JR	Tapered roller bearings	Single-row	Metric series
32032JR	Tapered roller bearings	Single-row	Metric series
30232JR	Tapered roller bearings	Single-row	Metric series
32232JR	Tapered roller bearings	Single-row	Metric series
30332D	Tapered roller bearings	Single-row	Metric series
30332JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
32332	Tapered roller bearings	Single-row	Metric series
32934JR	Tapered roller bearings	Single-row	Metric series
32034JR	Tapered roller bearings	Single-row	Metric series
30234JR	Tapered roller bearings	Single-row	Metric series
32234JR	Tapered roller bearings	Single-row	Metric series
30334D	Tapered roller bearings	Single-row	Metric series
30334JR	Tapered roller bearings	Single-row	Metric series
32334	Tapered roller bearings	Single-row	Metric series
32936JR	Tapered roller bearings	Single-row	Metric series
32036JR	Tapered roller bearings	Single-row	Metric series
30236JR	Tapered roller bearings	Single-row	Metric series
32236JR	Tapered roller bearings	Single-row	Metric series
30336D	Tapered roller bearings	Single-row	Metric series
30336	Tapered roller bearings	Single-row	Metric series
32336	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
32938JR	Tapered roller bearings	Single-row	Metric series
32038JR	Tapered roller bearings	Single-row	Metric series
30238JR	Tapered roller bearings	Single-row	Metric series
32238JR	Tapered roller bearings	Single-row	Metric series
30338D	Tapered roller bearings	Single-row	Metric series
30338	Tapered roller bearings	Single-row	Metric series
32338	Tapered roller bearings	Single-row	Metric series
32940JR	Tapered roller bearings	Single-row	Metric series
32040JR	Tapered roller bearings	Single-row	Metric series
30240JR	Tapered roller bearings	Single-row	Metric series
32240JR	Tapered roller bearings	Single-row	Metric series
30340D	Tapered roller bearings	Single-row	Metric series
30340	Tapered roller bearings	Single-row	Metric series
32340	Tapered roller bearings	Single-row	Metric series
32944JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
32044JR	Tapered roller bearings	Single-row	Metric series
30244JR	Tapered roller bearings	Single-row	Metric series
32244	Tapered roller bearings	Single-row	Metric series
30344	Tapered roller bearings	Single-row	Metric series
32948JR	Tapered roller bearings	Single-row	Metric series
32048JR	Tapered roller bearings	Single-row	Metric series
30248R	Tapered roller bearings	Single-row	Metric series
32248	Tapered roller bearings	Single-row	Metric series
32952JR	Tapered roller bearings	Single-row	Metric series
32052JR	Tapered roller bearings	Single-row	Metric series
30252	Tapered roller bearings	Single-row	Metric series
32252	Tapered roller bearings	Single-row	Metric series
32956JR	Tapered roller bearings	Single-row	Metric series
32056JR	Tapered roller bearings	Single-row	Metric series
30256	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
32256	Tapered roller bearings	Single-row	Metric series
32960JR	Tapered roller bearings	Single-row	Metric series
32060JR	Tapered roller bearings	Single-row	Metric series
30260	Tapered roller bearings	Single-row	Metric series
32964JR	Tapered roller bearings	Single-row	Metric series
32064JR	Tapered roller bearings	Single-row	Metric series
30264	Tapered roller bearings	Single-row	Metric series
32968JR	Tapered roller bearings	Single-row	Metric series
32972JR	Tapered roller bearings	Single-row	Metric series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
A2037/126	Tapered roller bearings	Single-row	Inch series
A2047/126	Tapered roller bearings	Single-row	Inch series
A4050/138	Tapered roller bearings	Single-row	Inch series
A4059/138	Tapered roller bearings	Single-row	Inch series
L21549/11	Tapered roller bearings	Single-row	Inch series
03062/162	Tapered roller bearings	Single-row	Inch series
17580R/20	Tapered roller bearings	Single-row	Inch series
09062/195	Tapered roller bearings	Single-row	Inch series
21063/212	Tapered roller bearings	Single-row	Inch series
HM81649/10	Tapered roller bearings	Single-row	Inch series
LM11749R/10	Tapered roller bearings	Single-row	Inch series
LM11949/10	Tapered roller bearings	Single-row	Inch series
09078/195	Tapered roller bearings	Single-row	Inch series
09067/196	Tapered roller bearings	Single-row	Inch series
07079/196	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
12580/20	Tapered roller bearings	Single-row	Inch series
M12649/10	Tapered roller bearings	Single-row	Inch series
LM12749/11	Tapered roller bearings	Single-row	Inch series
M12648/10	Tapered roller bearings	Single-row	Inch series
1380/28	Tapered roller bearings	Single-row	Inch series
1380/29	Tapered roller bearings	Single-row	Inch series
1755/29	Tapered roller bearings	Single-row	Inch series
1280/20	Tapered roller bearings	Single-row	Inch series
2684/31	Tapered roller bearings	Single-row	Inch series
LM72849/10	Tapered roller bearings	Single-row	Inch series
L44640R/10	Tapered roller bearings	Single-row	Inch series
1779/29	Tapered roller bearings	Single-row	Inch series
07098/196	Tapered roller bearings	Single-row	Inch series
17098/244	Tapered roller bearings	Single-row	Inch series
07097/196	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
07100/96	Tapered roller bearings	Single-row	Inch series
07100S/96	Tapered roller bearings	Single-row	Inch series
L44643R/10	Tapered roller bearings	Single-row	Inch series
07100/204	Tapered roller bearings	Single-row	Inch series
1986R/32	Tapered roller bearings	Single-row	Inch series
M84249/10	Tapered roller bearings	Single-row	Inch series
15101/243	Tapered roller bearings	Single-row	Inch series
15100/245	Tapered roller bearings	Single-row	Inch series
15101/250R	Tapered roller bearings	Single-row	Inch series
M86643R/10	Tapered roller bearings	Single-row	Inch series
2687/31	Tapered roller bearings	Single-row	Inch series
02473/20	Tapered roller bearings	Single-row	Inch series
HM88630/10	Tapered roller bearings	Single-row	Inch series
2682/31	Tapered roller bearings	Single-row	Inch series
L44649R/10	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
15580/23	Tapered roller bearings	Single-row	Inch series
15106/245	Tapered roller bearings	Single-row	Inch series
2688/31	Tapered roller bearings	Single-row	Inch series
15590/20	Tapered roller bearings	Single-row	Inch series
1988R/22	Tapered roller bearings	Single-row	Inch series
15112/245	Tapered roller bearings	Single-row	Inch series
15113/245	Tapered roller bearings	Single-row	Inch series
M86647R/10	Tapered roller bearings	Single-row	Inch series
2689/31	Tapered roller bearings	Single-row	Inch series
02474/20	Tapered roller bearings	Single-row	Inch series
26112/283	Tapered roller bearings	Single-row	Inch series
41125/286	Tapered roller bearings	Single-row	Inch series
41126/286	Tapered roller bearings	Single-row	Inch series
3192/20	Tapered roller bearings	Single-row	Inch series
3198/20	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
02872/20	Tapered roller bearings	Single-row	Inch series
L45449/10	Tapered roller bearings	Single-row	Inch series
2690/31	Tapered roller bearings	Single-row	Inch series
17118/244	Tapered roller bearings	Single-row	Inch series
15117/245	Tapered roller bearings	Single-row	Inch series
14117A/276	Tapered roller bearings	Single-row	Inch series
15116/245	Tapered roller bearings	Single-row	Inch series
17119/244	Tapered roller bearings	Single-row	Inch series
M86649R/10	Tapered roller bearings	Single-row	Inch series
M88043/10	Tapered roller bearings	Single-row	Inch series
15118/245	Tapered roller bearings	Single-row	Inch series
15119/245	Tapered roller bearings	Single-row	Inch series
15120/245	Tapered roller bearings	Single-row	Inch series
14116/274	Tapered roller bearings	Single-row	Inch series
08125/231	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
LM67048/10	Tapered roller bearings	Single-row	Inch series
15123/245	Tapered roller bearings	Single-row	Inch series
15125/245	Tapered roller bearings	Single-row	Inch series
15126/245	Tapered roller bearings	Single-row	Inch series
2580/20	Tapered roller bearings	Single-row	Inch series
02475/20	Tapered roller bearings	Single-row	Inch series
02476/20	Tapered roller bearings	Single-row	Inch series
M88046/10	Tapered roller bearings	Single-row	Inch series
02875/20	Tapered roller bearings	Single-row	Inch series
02876/20	Tapered roller bearings	Single-row	Inch series
HM88542/10	Tapered roller bearings	Single-row	Inch series
HM88542/12	Tapered roller bearings	Single-row	Inch series
M88048/10	Tapered roller bearings	Single-row	Inch series
26131/283	Tapered roller bearings	Single-row	Inch series
HM88547/10	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
HM89443/10	Tapered roller bearings	Single-row	Inch series
LM48548/10	Tapered roller bearings	Single-row	Inch series
14136A/276	Tapered roller bearings	Single-row	Inch series
HM88649/10	Tapered roller bearings	Single-row	Inch series
16137/284	Tapered roller bearings	Single-row	Inch series
02877/20	Tapered roller bearings	Single-row	Inch series
02878/20	Tapered roller bearings	Single-row	Inch series
25877R/21	Tapered roller bearings	Single-row	Inch series
23690/20	Tapered roller bearings	Single-row	Inch series
28137/300	Tapered roller bearings	Single-row	Inch series
2796R/20	Tapered roller bearings	Single-row	Inch series
31594/20	Tapered roller bearings	Single-row	Inch series
3478/20	Tapered roller bearings	Single-row	Inch series
3581R/25	Tapered roller bearings	Single-row	Inch series
449/432	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
L68149/10	Tapered roller bearings	Single-row	Inch series
L68149/11	Tapered roller bearings	Single-row	Inch series
26883R/22	Tapered roller bearings	Single-row	Inch series
339/332	Tapered roller bearings	Single-row	Inch series
HM88648/10	Tapered roller bearings	Single-row	Inch series
25880R/21	Tapered roller bearings	Single-row	Inch series
2794R/35X	Tapered roller bearings	Single-row	Inch series
HM89449/11	Tapered roller bearings	Single-row	Inch series
26877R/22	Tapered roller bearings	Single-row	Inch series
3479/20	Tapered roller bearings	Single-row	Inch series
3878/20	Tapered roller bearings	Single-row	Inch series
JL69349/10	Tapered roller bearings	Single-row	Inch series
13889/30	Tapered roller bearings	Single-row	Inch series
13889/36	Tapered roller bearings	Single-row	Inch series
LM29748/10	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
LM29749/11	Tapered roller bearings	Single-row	Inch series
13687/21	Tapered roller bearings	Single-row	Inch series
19150R/281	Tapered roller bearings	Single-row	Inch series
19150R/283	Tapered roller bearings	Single-row	Inch series
16150/282	Tapered roller bearings	Single-row	Inch series
16150/284	Tapered roller bearings	Single-row	Inch series
16150/283	Tapered roller bearings	Single-row	Inch series
2788R/35X	Tapered roller bearings	Single-row	Inch series
2788R/29	Tapered roller bearings	Single-row	Inch series
3490/20	Tapered roller bearings	Single-row	Inch series
28150/317	Tapered roller bearings	Single-row	Inch series
27880/20	Tapered roller bearings	Single-row	Inch series
27881/20	Tapered roller bearings	Single-row	Inch series
HM801346/10	Tapered roller bearings	Single-row	Inch series
HM801346X/10	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
25572/20	Tapered roller bearings	Single-row	Inch series
418/414	Tapered roller bearings	Single-row	Inch series
4375/35	Tapered roller bearings	Single-row	Inch series
525/522	Tapered roller bearings	Single-row	Inch series
18587/20	Tapered roller bearings	Single-row	Inch series
2789R/35X	Tapered roller bearings	Single-row	Inch series
3386/20	Tapered roller bearings	Single-row	Inch series
3382/28	Tapered roller bearings	Single-row	Inch series
28158/300	Tapered roller bearings	Single-row	Inch series
344/332	Tapered roller bearings	Single-row	Inch series
344A/332	Tapered roller bearings	Single-row	Inch series
350A/354A	Tapered roller bearings	Single-row	Inch series
420/414	Tapered roller bearings	Single-row	Inch series
543/532X	Tapered roller bearings	Single-row	Inch series
HM801349/10	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
18590/20	Tapered roller bearings	Single-row	Inch series
LM501349/10	Tapered roller bearings	Single-row	Inch series
LM501349/14	Tapered roller bearings	Single-row	Inch series
LM501349/11	Tapered roller bearings	Single-row	Inch series
11162R/300	Tapered roller bearings	Single-row	Inch series
24780R/20	Tapered roller bearings	Single-row	Inch series
336/332	Tapered roller bearings	Single-row	Inch series
342/332	Tapered roller bearings	Single-row	Inch series
M802048/11	Tapered roller bearings	Single-row	Inch series
3877/21	Tapered roller bearings	Single-row	Inch series
3576R/25	Tapered roller bearings	Single-row	Inch series
419/414	Tapered roller bearings	Single-row	Inch series
365A/362A	Tapered roller bearings	Single-row	Inch series
HM803145/10	Tapered roller bearings	Single-row	Inch series
HM803146/10	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
4388/35	Tapered roller bearings	Single-row	Inch series
46162/368	Tapered roller bearings	Single-row	Inch series
HM804840/10	Tapered roller bearings	Single-row	Inch series
526/522	Tapered roller bearings	Single-row	Inch series
HM807035/10	Tapered roller bearings	Single-row	Inch series
4395/35	Tapered roller bearings	Single-row	Inch series
12168/303	Tapered roller bearings	Single-row	Inch series
26884R/22	Tapered roller bearings	Single-row	Inch series
25577/20	Tapered roller bearings	Single-row	Inch series
L102849/10	Tapered roller bearings	Single-row	Inch series
12175/303	Tapered roller bearings	Single-row	Inch series
18685/20	Tapered roller bearings	Single-row	Inch series
25582/20	Tapered roller bearings	Single-row	Inch series
3578R/20	Tapered roller bearings	Single-row	Inch series
355/354A	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
355A/354A	Tapered roller bearings	Single-row	Inch series
HM803149/10	Tapered roller bearings	Single-row	Inch series
49175/368	Tapered roller bearings	Single-row	Inch series
46175/368	Tapered roller bearings	Single-row	Inch series
46176/368	Tapered roller bearings	Single-row	Inch series
33885/21	Tapered roller bearings	Single-row	Inch series
438/432A	Tapered roller bearings	Single-row	Inch series
HM804842/10	Tapered roller bearings	Single-row	Inch series
HM804843/10	Tapered roller bearings	Single-row	Inch series
49576/20	Tapered roller bearings	Single-row	Inch series
527/522	Tapered roller bearings	Single-row	Inch series
HM807040/10	Tapered roller bearings	Single-row	Inch series
535/532A	Tapered roller bearings	Single-row	Inch series
615/612	Tapered roller bearings	Single-row	Inch series
3776/20	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
358/354A	Tapered roller bearings	Single-row	Inch series
LM102949/10	Tapered roller bearings	Single-row	Inch series
LM603049/11	Tapered roller bearings	Single-row	Inch series
LM603049/12	Tapered roller bearings	Single-row	Inch series
LM603049/14	Tapered roller bearings	Single-row	Inch series
25590/26	Tapered roller bearings	Single-row	Inch series
LM503349R/10	Tapered roller bearings	Single-row	Inch series
18690/20	Tapered roller bearings	Single-row	Inch series
359A/354A	Tapered roller bearings	Single-row	Inch series
359S/354A	Tapered roller bearings	Single-row	Inch series
2984/24	Tapered roller bearings	Single-row	Inch series
369A/362A	Tapered roller bearings	Single-row	Inch series
M804049/10	Tapered roller bearings	Single-row	Inch series
HM804846/10	Tapered roller bearings	Single-row	Inch series
386A/382A	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
528/522	Tapered roller bearings	Single-row	Inch series
463/453X	Tapered roller bearings	Single-row	Inch series
467/453X	Tapered roller bearings	Single-row	Inch series
45282/20	Tapered roller bearings	Single-row	Inch series
HM804848/10	Tapered roller bearings	Single-row	Inch series
HM804849/10	Tapered roller bearings	Single-row	Inch series
365S/362A	Tapered roller bearings	Single-row	Inch series
HM807044/10	Tapered roller bearings	Single-row	Inch series
65390/20	Tapered roller bearings	Single-row	Inch series
HH506348/10	Tapered roller bearings	Single-row	Inch series
28579R/21	Tapered roller bearings	Single-row	Inch series
JLM104948/10	Tapered roller bearings	Single-row	Inch series
365/362A	Tapered roller bearings	Single-row	Inch series
366/362A	Tapered roller bearings	Single-row	Inch series
JM205149/10	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
JHM807045/12	Tapered roller bearings	Single-row	Inch series
396/394A	Tapered roller bearings	Single-row	Inch series
L305649R/10	Tapered roller bearings	Single-row	Inch series
LM104949/11	Tapered roller bearings	Single-row	Inch series
18200/337	Tapered roller bearings	Single-row	Inch series
18790/24	Tapered roller bearings	Single-row	Inch series
368/362A	Tapered roller bearings	Single-row	Inch series
368A/362A	Tapered roller bearings	Single-row	Inch series
370A/362A	Tapered roller bearings	Single-row	Inch series
28580R/21	Tapered roller bearings	Single-row	Inch series
375/374	Tapered roller bearings	Single-row	Inch series
3780/20	Tapered roller bearings	Single-row	Inch series
3780/30	Tapered roller bearings	Single-row	Inch series
33889/22	Tapered roller bearings	Single-row	Inch series
385AX/382A	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
28678/22	Tapered roller bearings	Single-row	Inch series
3780/32	Tapered roller bearings	Single-row	Inch series
49585/20	Tapered roller bearings	Single-row	Inch series
529/522	Tapered roller bearings	Single-row	Inch series
529X/522	Tapered roller bearings	Single-row	Inch series
45284/20	Tapered roller bearings	Single-row	Inch series
59200/412	Tapered roller bearings	Single-row	Inch series
HM807046/10	Tapered roller bearings	Single-row	Inch series
4580/35	Tapered roller bearings	Single-row	Inch series
537/532X	Tapered roller bearings	Single-row	Inch series
39575/20	Tapered roller bearings	Single-row	Inch series
619/612	Tapered roller bearings	Single-row	Inch series
65200/500	Tapered roller bearings	Single-row	Inch series
368S/362A	Tapered roller bearings	Single-row	Inch series
28584R/21	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
468/453X	Tapered roller bearings	Single-row	Inch series
LM806649/10	Tapered roller bearings	Single-row	Inch series
33895/22	Tapered roller bearings	Single-row	Inch series
456/453X	Tapered roller bearings	Single-row	Inch series
HM807049/10	Tapered roller bearings	Single-row	Inch series
4595/35	Tapered roller bearings	Single-row	Inch series
539/532X	Tapered roller bearings	Single-row	Inch series
539A/532X	Tapered roller bearings	Single-row	Inch series
66212R/462	Tapered roller bearings	Single-row	Inch series
621/612	Tapered roller bearings	Single-row	Inch series
66584/20	Tapered roller bearings	Single-row	Inch series
5578R/35	Tapered roller bearings	Single-row	Inch series
557S/552A	Tapered roller bearings	Single-row	Inch series
65212/500	Tapered roller bearings	Single-row	Inch series
466/453X	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
6381/20	Tapered roller bearings	Single-row	Inch series
JLM506849/10	Tapered roller bearings	Single-row	Inch series
JM207049/10	Tapered roller bearings	Single-row	Inch series
385/382A	Tapered roller bearings	Single-row	Inch series
385X/382A	Tapered roller bearings	Single-row	Inch series
JH307749/10	Tapered roller bearings	Single-row	Inch series
28680/22	Tapered roller bearings	Single-row	Inch series
5566R/35	Tapered roller bearings	Single-row	Inch series
HM813840/10	Tapered roller bearings	Single-row	Inch series
389/382A	Tapered roller bearings	Single-row	Inch series
387/382A	Tapered roller bearings	Single-row	Inch series
387A/382A	Tapered roller bearings	Single-row	Inch series
387AS/382A	Tapered roller bearings	Single-row	Inch series
387S/382A	Tapered roller bearings	Single-row	Inch series
387/382	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
462/453X	Tapered roller bearings	Single-row	Inch series
469/453X	Tapered roller bearings	Single-row	Inch series
45291/21	Tapered roller bearings	Single-row	Inch series
3979/20	Tapered roller bearings	Single-row	Inch series
39580/20	Tapered roller bearings	Single-row	Inch series
39581/20	Tapered roller bearings	Single-row	Inch series
33225/462	Tapered roller bearings	Single-row	Inch series
623/612	Tapered roller bearings	Single-row	Inch series
65225/500	Tapered roller bearings	Single-row	Inch series
388A/382A	Tapered roller bearings	Single-row	Inch series
66589/20	Tapered roller bearings	Single-row	Inch series
JLM508748/10	Tapered roller bearings	Single-row	Inch series
29580/20	Tapered roller bearings	Single-row	Inch series
397/394A	Tapered roller bearings	Single-row	Inch series
28985/21	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
28985/20	Tapered roller bearings	Single-row	Inch series
5583R/35	Tapered roller bearings	Single-row	Inch series
HM813841/11	Tapered roller bearings	Single-row	Inch series
HM813841A/10	Tapered roller bearings	Single-row	Inch series
65237/500	Tapered roller bearings	Single-row	Inch series
65237A/500	Tapered roller bearings	Single-row	Inch series
H715332/11	Tapered roller bearings	Single-row	Inch series
392/394A	Tapered roller bearings	Single-row	Inch series
29586/20	Tapered roller bearings	Single-row	Inch series
390A/394A	Tapered roller bearings	Single-row	Inch series
395/394A	Tapered roller bearings	Single-row	Inch series
29585/21	Tapered roller bearings	Single-row	Inch series
39585/20	Tapered roller bearings	Single-row	Inch series
477/472	Tapered roller bearings	Single-row	Inch series
HM212046/11	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
5584R/35	Tapered roller bearings	Single-row	Inch series
565/563	Tapered roller bearings	Single-row	Inch series
6382/20	Tapered roller bearings	Single-row	Inch series
H414235/10	Tapered roller bearings	Single-row	Inch series
39586/20	Tapered roller bearings	Single-row	Inch series
JLM710949/10	Tapered roller bearings	Single-row	Inch series
JM511946/10	Tapered roller bearings	Single-row	Inch series
JH211749/10	Tapered roller bearings	Single-row	Inch series
JH211749A/10	Tapered roller bearings	Single-row	Inch series
6379/20	Tapered roller bearings	Single-row	Inch series
H715340/11	Tapered roller bearings	Single-row	Inch series
5595R/35	Tapered roller bearings	Single-row	Inch series
395A/394A	Tapered roller bearings	Single-row	Inch series
395S/394A	Tapered roller bearings	Single-row	Inch series
3984/25	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
39590/20	Tapered roller bearings	Single-row	Inch series
39590/21	Tapered roller bearings	Single-row	Inch series
33262/462	Tapered roller bearings	Single-row	Inch series
HM212049/10	Tapered roller bearings	Single-row	Inch series
HM813844/11	Tapered roller bearings	Single-row	Inch series
641/633	Tapered roller bearings	Single-row	Inch series
6386/20	Tapered roller bearings	Single-row	Inch series
6389/20	Tapered roller bearings	Single-row	Inch series
H414242/10	Tapered roller bearings	Single-row	Inch series
H715341/11	Tapered roller bearings	Single-row	Inch series
399A/394A	Tapered roller bearings	Single-row	Inch series
399AS/394A	Tapered roller bearings	Single-row	Inch series
33269/462	Tapered roller bearings	Single-row	Inch series
570/563	Tapered roller bearings	Single-row	Inch series
H414245/10	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
H715343/11	Tapered roller bearings	Single-row	Inch series
9185/21	Tapered roller bearings	Single-row	Inch series
LL713049/10	Tapered roller bearings	Single-row	Inch series
LM613449/10	Tapered roller bearings	Single-row	Inch series
29675/20	Tapered roller bearings	Single-row	Inch series
33275/462	Tapered roller bearings	Single-row	Inch series
482/472A	Tapered roller bearings	Single-row	Inch series
482/472	Tapered roller bearings	Single-row	Inch series
47487R/20	Tapered roller bearings	Single-row	Inch series
47487R/23	Tapered roller bearings	Single-row	Inch series
482/472X	Tapered roller bearings	Single-row	Inch series
566/563	Tapered roller bearings	Single-row	Inch series
655/653	Tapered roller bearings	Single-row	Inch series
745AR/742	Tapered roller bearings	Single-row	Inch series
835R/832	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
34274/478	Tapered roller bearings	Single-row	Inch series
JLM813049/10	Tapered roller bearings	Single-row	Inch series
JM612949/10	Tapered roller bearings	Single-row	Inch series
33281/462	Tapered roller bearings	Single-row	Inch series
47490R/20	Tapered roller bearings	Single-row	Inch series
567A/563	Tapered roller bearings	Single-row	Inch series
HM813849/11	Tapered roller bearings	Single-row	Inch series
H414249/10	Tapered roller bearings	Single-row	Inch series
H715345/11	Tapered roller bearings	Single-row	Inch series
29685/20	Tapered roller bearings	Single-row	Inch series
33287/462	Tapered roller bearings	Single-row	Inch series
567/563	Tapered roller bearings	Single-row	Inch series
576R/572	Tapered roller bearings	Single-row	Inch series
657/653	Tapered roller bearings	Single-row	Inch series
6460/20	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
744R/742	Tapered roller bearings	Single-row	Inch series
762/752	Tapered roller bearings	Single-row	Inch series
29688/20	Tapered roller bearings	Single-row	Inch series
568/563	Tapered roller bearings	Single-row	Inch series
577R/572	Tapered roller bearings	Single-row	Inch series
JLM714149/10	Tapered roller bearings	Single-row	Inch series
JM714249/10	Tapered roller bearings	Single-row	Inch series
JH415647/10	Tapered roller bearings	Single-row	Inch series
34301/478	Tapered roller bearings	Single-row	Inch series
42687/20	Tapered roller bearings	Single-row	Inch series
42688/20	Tapered roller bearings	Single-row	Inch series
495AX/492A	Tapered roller bearings	Single-row	Inch series
47678R/20	Tapered roller bearings	Single-row	Inch series
47680R/20	Tapered roller bearings	Single-row	Inch series
5760/35	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
495A/493	Tapered roller bearings	Single-row	Inch series
575R/572	Tapered roller bearings	Single-row	Inch series
575SR/572	Tapered roller bearings	Single-row	Inch series
6461/20	Tapered roller bearings	Single-row	Inch series
6461A/20	Tapered roller bearings	Single-row	Inch series
748SR/742	Tapered roller bearings	Single-row	Inch series
659/652	Tapered roller bearings	Single-row	Inch series
HH221430/10	Tapered roller bearings	Single-row	Inch series
LM814849/10	Tapered roller bearings	Single-row	Inch series
34306/478	Tapered roller bearings	Single-row	Inch series
34307/478	Tapered roller bearings	Single-row	Inch series
42690/20	Tapered roller bearings	Single-row	Inch series
661/653	Tapered roller bearings	Single-row	Inch series
756A/752	Tapered roller bearings	Single-row	Inch series
HH221431/10	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
JM515649/10	Tapered roller bearings	Single-row	Inch series
98316/788	Tapered roller bearings	Single-row	Inch series
496/492A	Tapered roller bearings	Single-row	Inch series
47681R/20	Tapered roller bearings	Single-row	Inch series
581R/572	Tapered roller bearings	Single-row	Inch series
740R/742	Tapered roller bearings	Single-row	Inch series
27687/20	Tapered roller bearings	Single-row	Inch series
495/492A	Tapered roller bearings	Single-row	Inch series
47686R/20A	Tapered roller bearings	Single-row	Inch series
HM516448/10	Tapered roller bearings	Single-row	Inch series
580R/572X	Tapered roller bearings	Single-row	Inch series
580R/572	Tapered roller bearings	Single-row	Inch series
582R/572	Tapered roller bearings	Single-row	Inch series
663/653	Tapered roller bearings	Single-row	Inch series
749AR/742	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
750AR/742	Tapered roller bearings	Single-row	Inch series
757/752	Tapered roller bearings	Single-row	Inch series
27689/20	Tapered roller bearings	Single-row	Inch series
27690/20	Tapered roller bearings	Single-row	Inch series
27691/20	Tapered roller bearings	Single-row	Inch series
498/492A	Tapered roller bearings	Single-row	Inch series
JM716649/10	Tapered roller bearings	Single-row	Inch series
JHM516849/10	Tapered roller bearings	Single-row	Inch series
JH217249/10	Tapered roller bearings	Single-row	Inch series
98335/788	Tapered roller bearings	Single-row	Inch series
749R/742	Tapered roller bearings	Single-row	Inch series
749SR/742	Tapered roller bearings	Single-row	Inch series
497/492A	Tapered roller bearings	Single-row	Inch series
497A/493	Tapered roller bearings	Single-row	Inch series
HM617049/10	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
665/653	Tapered roller bearings	Single-row	Inch series
665A/653	Tapered roller bearings	Single-row	Inch series
596/592A	Tapered roller bearings	Single-row	Inch series
758/752	Tapered roller bearings	Single-row	Inch series
677/672	Tapered roller bearings	Single-row	Inch series
841R/832	Tapered roller bearings	Single-row	Inch series
L217849/10	Tapered roller bearings	Single-row	Inch series
HM518445/10	Tapered roller bearings	Single-row	Inch series
759/752	Tapered roller bearings	Single-row	Inch series
766/752	Tapered roller bearings	Single-row	Inch series
6580R/35	Tapered roller bearings	Single-row	Inch series
679/672	Tapered roller bearings	Single-row	Inch series
855R/854	Tapered roller bearings	Single-row	Inch series
HH221434/10	Tapered roller bearings	Single-row	Inch series
98350/788	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
HM218248/10	Tapered roller bearings	Single-row	Inch series
JM718149/10	Tapered roller bearings	Single-row	Inch series
JHM318448/10	Tapered roller bearings	Single-row	Inch series
6581XR/35	Tapered roller bearings	Single-row	Inch series
760/752	Tapered roller bearings	Single-row	Inch series
47890R/20	Tapered roller bearings	Single-row	Inch series
681/672	Tapered roller bearings	Single-row	Inch series
681A/672	Tapered roller bearings	Single-row	Inch series
778/772	Tapered roller bearings	Single-row	Inch series
857R/854	Tapered roller bearings	Single-row	Inch series
JM719149/13	Tapered roller bearings	Single-row	Inch series
LL319349/10	Tapered roller bearings	Single-row	Inch series
L319249/10	Tapered roller bearings	Single-row	Inch series
47896R/20	Tapered roller bearings	Single-row	Inch series
594A/592XE	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
52375/618	Tapered roller bearings	Single-row	Inch series
683/672	Tapered roller bearings	Single-row	Inch series
864R/854	Tapered roller bearings	Single-row	Inch series
HH221440/10	Tapered roller bearings	Single-row	Inch series
685/672	Tapered roller bearings	Single-row	Inch series
HH221442/10	Tapered roller bearings	Single-row	Inch series
HH224334/10	Tapered roller bearings	Single-row	Inch series
HH221447/10	Tapered roller bearings	Single-row	Inch series
JM720249/10	Tapered roller bearings	Single-row	Inch series
JHM720249/10	Tapered roller bearings	Single-row	Inch series
52393/618	Tapered roller bearings	Single-row	Inch series
52400/618	Tapered roller bearings	Single-row	Inch series
52401/618	Tapered roller bearings	Single-row	Inch series
687/672	Tapered roller bearings	Single-row	Inch series
780/772	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
861R/854	Tapered roller bearings	Single-row	Inch series
HH221449/10	Tapered roller bearings	Single-row	Inch series
98400/788	Tapered roller bearings	Single-row	Inch series
941/932	Tapered roller bearings	Single-row	Inch series
HH224335/10	Tapered roller bearings	Single-row	Inch series
782/772	Tapered roller bearings	Single-row	Inch series
786/772	Tapered roller bearings	Single-row	Inch series
787/772	Tapered roller bearings	Single-row	Inch series
71412/750	Tapered roller bearings	Single-row	Inch series
56418R/650	Tapered roller bearings	Single-row	Inch series
L521949R/10	Tapered roller bearings	Single-row	Inch series
37425/625	Tapered roller bearings	Single-row	Inch series
LM522546/10	Tapered roller bearings	Single-row	Inch series
48190/20	Tapered roller bearings	Single-row	Inch series
56425R/650	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
56425R/662	Tapered roller bearings	Single-row	Inch series
71425/750	Tapered roller bearings	Single-row	Inch series
936/932	Tapered roller bearings	Single-row	Inch series
HH224340/10	Tapered roller bearings	Single-row	Inch series
37431/625	Tapered roller bearings	Single-row	Inch series
LM522548/10	Tapered roller bearings	Single-row	Inch series
LM522549/10	Tapered roller bearings	Single-row	Inch series
64433R/700	Tapered roller bearings	Single-row	Inch series
JM822049/10	Tapered roller bearings	Single-row	Inch series
JHM522649/10	Tapered roller bearings	Single-row	Inch series
64450R/700	Tapered roller bearings	Single-row	Inch series
68450/712	Tapered roller bearings	Single-row	Inch series
71450/750	Tapered roller bearings	Single-row	Inch series
938/932	Tapered roller bearings	Single-row	Inch series
HH224346/10	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
HH926744/10	Tapered roller bearings	Single-row	Inch series
HH224349/10	Tapered roller bearings	Single-row	Inch series
71453/750	Tapered roller bearings	Single-row	Inch series
71455/750	Tapered roller bearings	Single-row	Inch series
68462/712	Tapered roller bearings	Single-row	Inch series
68463/712	Tapered roller bearings	Single-row	Inch series
HM624749/10	Tapered roller bearings	Single-row	Inch series
HH228340/10	Tapered roller bearings	Single-row	Inch series
HH228349/10	Tapered roller bearings	Single-row	Inch series
L327249/10	Tapered roller bearings	Single-row	Inch series
48684/20	Tapered roller bearings	Single-row	Inch series
48685/20	Tapered roller bearings	Single-row	Inch series
JHM534149/10	Tapered roller bearings	Single-row	Inch series
JM734449/10	Tapered roller bearings	Single-row	Inch series
L435049/10	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
JM736149/10	Tapered roller bearings	Single-row	Inch series
JM738249/10	Tapered roller bearings	Single-row	Inch series
L540049/10	Tapered roller bearings	Single-row	Inch series
JHM840449/10	Tapered roller bearings	Single-row	Inch series
LM245833/10	Tapered roller bearings	Single-row	Inch series
M249732/10	Tapered roller bearings	Single-row	Inch series
LM245846/10	Tapered roller bearings	Single-row	Inch series
LM245848/10	Tapered roller bearings	Single-row	Inch series
M246942/10	Tapered roller bearings	Single-row	Inch series
M249734/10	Tapered roller bearings	Single-row	Inch series
M249749/10	Tapered roller bearings	Single-row	Inch series
M349549/10	Tapered roller bearings	Single-row	Inch series
L555249/10	Tapered roller bearings	Single-row	Inch series

Bearing No.	Classification[1]	Classification[2]	Classification[3]
46T30305DJR/29.5	Tapered roller bearings	Double-row	TDO type
46T30306DJR/31.5	Tapered roller bearings	Double-row	TDO type
46T30307DJR/35.5	Tapered roller bearings	Double-row	TDO type
46T30208JR/37.5	Tapered roller bearings	Double-row	TDO type
46T32208JR/43.5	Tapered roller bearings	Double-row	TDO type
46T30308DJR/39.5	Tapered roller bearings	Double-row	TDO type
46T30308JR/45.5	Tapered roller bearings	Double-row	TDO type
46T30209JR/37.5	Tapered roller bearings	Double-row	TDO type
46T32209JR-1/43.5	Tapered roller bearings	Double-row	TDO type
46T30309DJR/41.5	Tapered roller bearings	Double-row	TDO type
46T30309JR/49.5	Tapered roller bearings	Double-row	TDO type
46T30210JR/39.5	Tapered roller bearings	Double-row	TDO type
46T32210JR/43.5	Tapered roller bearings	Double-row	TDO type
46T30310DJR/52.5	Tapered roller bearings	Double-row	TDO type
46T30310JR/51.5	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
46T32310JR/71.5	Tapered roller bearings	Double-row	TDO type
46T30211JR/41.5	Tapered roller bearings	Double-row	TDO type
46T32211JR-1/48.5	Tapered roller bearings	Double-row	TDO type
46T30311DJR/49	Tapered roller bearings	Double-row	TDO type
46T30311JR/57	Tapered roller bearings	Double-row	TDO type
46T32311JR/76	Tapered roller bearings	Double-row	TDO type
46T30212JR/43.5	Tapered roller bearings	Double-row	TDO type
46T32212JR/54.5	Tapered roller bearings	Double-row	TDO type
46T30312DJR/51	Tapered roller bearings	Double-row	TDO type
46T30312JR/59	Tapered roller bearings	Double-row	TDO type
46T32312JR/81	Tapered roller bearings	Double-row	TDO type
46T30213JR/46.5	Tapered roller bearings	Double-row	TDO type
46T32213JR/61.5	Tapered roller bearings	Double-row	TDO type
46T30313DJR/53	Tapered roller bearings	Double-row	TDO type
46T30313JR/63	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
46T32313JR/84	Tapered roller bearings	Double-row	TDO type
46T30214JR/48.5	Tapered roller bearings	Double-row	TDO type
46T32214JR/61.5	Tapered roller bearings	Double-row	TDO type
46T30314DJR/57	Tapered roller bearings	Double-row	TDO type
46T30314JR/67	Tapered roller bearings	Double-row	TDO type
46T32314JR/92	Tapered roller bearings	Double-row	TDO type
46215	Tapered roller bearings	Double-row	TDO type
46215A	Tapered roller bearings	Double-row	TDO type
46T30215JR/51.5	Tapered roller bearings	Double-row	TDO type
46T32215JR/61.5	Tapered roller bearings	Double-row	TDO type
46T30315JR/69	Tapered roller bearings	Double-row	TDO type
46T32315JR/99	Tapered roller bearings	Double-row	TDO type
46216	Tapered roller bearings	Double-row	TDO type
46T30216JR/51.5	Tapered roller bearings	Double-row	TDO type
46T32216JR/63.5	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
46T30316JR/73	Tapered roller bearings	Double-row	TDO type
46T30217JR/57	Tapered roller bearings	Double-row	TDO type
46T32217JR/69	Tapered roller bearings	Double-row	TDO type
46T30317JR/77	Tapered roller bearings	Double-row	TDO type
46T32317JR/108	Tapered roller bearings	Double-row	TDO type
46218	Tapered roller bearings	Double-row	TDO type
46218A	Tapered roller bearings	Double-row	TDO type
46T30218JR/61	Tapered roller bearings	Double-row	TDO type
46T32218JR/77	Tapered roller bearings	Double-row	TDO type
46T30318JR/81	Tapered roller bearings	Double-row	TDO type
46T32318JR/115	Tapered roller bearings	Double-row	TDO type
46T30219JR/63	Tapered roller bearings	Double-row	TDO type
46T32219JR/83	Tapered roller bearings	Double-row	TDO type
46T30319JR/85	Tapered roller bearings	Double-row	TDO type
46T32319JR/118	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
46220A	Tapered roller bearings	Double-row	TDO type
46320	Tapered roller bearings	Double-row	TDO type
46320A	Tapered roller bearings	Double-row	TDO type
46T30220JR/67	Tapered roller bearings	Double-row	TDO type
46T32220JR/87	Tapered roller bearings	Double-row	TDO type
46T30320JR/87	Tapered roller bearings	Double-row	TDO type
46T32320JR/127	Tapered roller bearings	Double-row	TDO type
46T30221JR/70	Tapered roller bearings	Double-row	TDO type
46T32221JR/95	Tapered roller bearings	Double-row	TDO type
46T30321JR/91	Tapered roller bearings	Double-row	TDO type
46T32321JR/133	Tapered roller bearings	Double-row	TDO type
46222	Tapered roller bearings	Double-row	TDO type
46322	Tapered roller bearings	Double-row	TDO type
46322A	Tapered roller bearings	Double-row	TDO type
46T30222JR/74	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
46T32222JR/101	Tapered roller bearings	Double-row	TDO type
46T30322JR/93	Tapered roller bearings	Double-row	TDO type
46T32322JR/142	Tapered roller bearings	Double-row	TDO type
46224	Tapered roller bearings	Double-row	TDO type
46224A	Tapered roller bearings	Double-row	TDO type
46324	Tapered roller bearings	Double-row	TDO type
46324A	Tapered roller bearings	Double-row	TDO type
46324AS	Tapered roller bearings	Double-row	TDO type
46T30224JR/78	Tapered roller bearings	Double-row	TDO type
46T32224JR/109	Tapered roller bearings	Double-row	TDO type
46T30324JR/101	Tapered roller bearings	Double-row	TDO type
46T32324JR/145	Tapered roller bearings	Double-row	TDO type
46226	Tapered roller bearings	Double-row	TDO type
46226A	Tapered roller bearings	Double-row	TDO type
46326	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
46326A	Tapered roller bearings	Double-row	TDO type
46T30226JR/78.5	Tapered roller bearings	Double-row	TDO type
46T32226JR/117.5	Tapered roller bearings	Double-row	TDO type
46T30326JR/107.5	Tapered roller bearings	Double-row	TDO type
46228	Tapered roller bearings	Double-row	TDO type
46228A	Tapered roller bearings	Double-row	TDO type
46328	Tapered roller bearings	Double-row	TDO type
46328A	Tapered roller bearings	Double-row	TDO type
46T30228JR/82.5	Tapered roller bearings	Double-row	TDO type
46T32228JR/125.5	Tapered roller bearings	Double-row	TDO type
46T30328JR/115.5	Tapered roller bearings	Double-row	TDO type
46230	Tapered roller bearings	Double-row	TDO type
46230A	Tapered roller bearings	Double-row	TDO type
46330	Tapered roller bearings	Double-row	TDO type
46330A	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
46T32230JR/130	Tapered roller bearings	Double-row	TDO type
46T30230JR/87	Tapered roller bearings	Double-row	TDO type
46T30330JR/120	Tapered roller bearings	Double-row	TDO type
46232	Tapered roller bearings	Double-row	TDO type
46232A	Tapered roller bearings	Double-row	TDO type
46332	Tapered roller bearings	Double-row	TDO type
46332A	Tapered roller bearings	Double-row	TDO type
46T30232JR/91	Tapered roller bearings	Double-row	TDO type
46T32232JR/144	Tapered roller bearings	Double-row	TDO type
46234	Tapered roller bearings	Double-row	TDO type
46234A	Tapered roller bearings	Double-row	TDO type
46334	Tapered roller bearings	Double-row	TDO type
46334A	Tapered roller bearings	Double-row	TDO type
46T30234JR/97	Tapered roller bearings	Double-row	TDO type
46T32234JR/152	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
46236	Tapered roller bearings	Double-row	TDO type
46236A	Tapered roller bearings	Double-row	TDO type
46336	Tapered roller bearings	Double-row	TDO type
46336A	Tapered roller bearings	Double-row	TDO type
46T30236JR/99	Tapered roller bearings	Double-row	TDO type
46T32236JR/152	Tapered roller bearings	Double-row	TDO type
46238	Tapered roller bearings	Double-row	TDO type
46238A	Tapered roller bearings	Double-row	TDO type
46338	Tapered roller bearings	Double-row	TDO type
46338A	Tapered roller bearings	Double-row	TDO type
46T30238JR/105	Tapered roller bearings	Double-row	TDO type
46T32238JR/160	Tapered roller bearings	Double-row	TDO type
46240	Tapered roller bearings	Double-row	TDO type
46240A	Tapered roller bearings	Double-row	TDO type
46340	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
46340A	Tapered roller bearings	Double-row	TDO type
46T30240JR/110	Tapered roller bearings	Double-row	TDO type
46T32240JR/174	Tapered roller bearings	Double-row	TDO type
46244	Tapered roller bearings	Double-row	TDO type
46244A	Tapered roller bearings	Double-row	TDO type
46344	Tapered roller bearings	Double-row	TDO type
46344A	Tapered roller bearings	Double-row	TDO type
46T30244JR/114	Tapered roller bearings	Double-row	TDO type
46248	Tapered roller bearings	Double-row	TDO type
46248A	Tapered roller bearings	Double-row	TDO type
46348	Tapered roller bearings	Double-row	TDO type
46348A	Tapered roller bearings	Double-row	TDO type
46252	Tapered roller bearings	Double-row	TDO type
46252A	Tapered roller bearings	Double-row	TDO type
46352	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
46352A	Tapered roller bearings	Double-row	TDO type
46256	Tapered roller bearings	Double-row	TDO type
46256A	Tapered roller bearings	Double-row	TDO type
46356	Tapered roller bearings	Double-row	TDO type
46356A	Tapered roller bearings	Double-row	TDO type
46260	Tapered roller bearings	Double-row	TDO type
46260A	Tapered roller bearings	Double-row	TDO type
46360	Tapered roller bearings	Double-row	TDO type
46360A	Tapered roller bearings	Double-row	TDO type
46360D	Tapered roller bearings	Double-row	TDO type
46264	Tapered roller bearings	Double-row	TDO type
46264A	Tapered roller bearings	Double-row	TDO type
46364	Tapered roller bearings	Double-row	TDO type
46364A	Tapered roller bearings	Double-row	TDO type
46268	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
46268A	Tapered roller bearings	Double-row	TDO type
46368	Tapered roller bearings	Double-row	TDO type
46368A	Tapered roller bearings	Double-row	TDO type
46272	Tapered roller bearings	Double-row	TDO type
46272A	Tapered roller bearings	Double-row	TDO type
46372	Tapered roller bearings	Double-row	TDO type
46372A	Tapered roller bearings	Double-row	TDO type
46276	Tapered roller bearings	Double-row	TDO type
46276A	Tapered roller bearings	Double-row	TDO type
46376	Tapered roller bearings	Double-row	TDO type
46376A	Tapered roller bearings	Double-row	TDO type
46280	Tapered roller bearings	Double-row	TDO type
46280A	Tapered roller bearings	Double-row	TDO type
46380	Tapered roller bearings	Double-row	TDO type
46380A	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
46284	Tapered roller bearings	Double-row	TDO type
46284A	Tapered roller bearings	Double-row	TDO type
46384	Tapered roller bearings	Double-row	TDO type
46384A	Tapered roller bearings	Double-row	TDO type
46288	Tapered roller bearings	Double-row	TDO type
46288A	Tapered roller bearings	Double-row	TDO type
46388	Tapered roller bearings	Double-row	TDO type
46388A	Tapered roller bearings	Double-row	TDO type
46292	Tapered roller bearings	Double-row	TDO type
46292A	Tapered roller bearings	Double-row	TDO type
46392	Tapered roller bearings	Double-row	TDO type
46392A	Tapered roller bearings	Double-row	TDO type
46296	Tapered roller bearings	Double-row	TDO type
46296A	Tapered roller bearings	Double-row	TDO type
46396	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
46396A	Tapered roller bearings	Double-row	TDO type
462/500	Tapered roller bearings	Double-row	TDO type
462/500A	Tapered roller bearings	Double-row	TDO type
463/500	Tapered roller bearings	Double-row	TDO type
463/500A	Tapered roller bearings	Double-row	TDO type
462/530	Tapered roller bearings	Double-row	TDO type
462/530A	Tapered roller bearings	Double-row	TDO type
463/530	Tapered roller bearings	Double-row	TDO type
463/530A	Tapered roller bearings	Double-row	TDO type
462/560	Tapered roller bearings	Double-row	TDO type
462/560A	Tapered roller bearings	Double-row	TDO type
463/560	Tapered roller bearings	Double-row	TDO type
463/560A	Tapered roller bearings	Double-row	TDO type
462/600	Tapered roller bearings	Double-row	TDO type
462/600A	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
463/600	Tapered roller bearings	Double-row	TDO type
463/600A	Tapered roller bearings	Double-row	TDO type
462/630	Tapered roller bearings	Double-row	TDO type
462/630A	Tapered roller bearings	Double-row	TDO type
463/630	Tapered roller bearings	Double-row	TDO type
463/630A	Tapered roller bearings	Double-row	TDO type
462/670	Tapered roller bearings	Double-row	TDO type
462/670A	Tapered roller bearings	Double-row	TDO type
463/670	Tapered roller bearings	Double-row	TDO type
463/670A	Tapered roller bearings	Double-row	TDO type
462/710	Tapered roller bearings	Double-row	TDO type
462/710A	Tapered roller bearings	Double-row	TDO type
463/710	Tapered roller bearings	Double-row	TDO type
463/710A	Tapered roller bearings	Double-row	TDO type
462/750	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
462/750A	Tapered roller bearings	Double-row	TDO type
463/750	Tapered roller bearings	Double-row	TDO type
463/750A	Tapered roller bearings	Double-row	TDO type
462/800	Tapered roller bearings	Double-row	TDO type
462/800A	Tapered roller bearings	Double-row	TDO type
463/800	Tapered roller bearings	Double-row	TDO type
463/800A	Tapered roller bearings	Double-row	TDO type
462/850	Tapered roller bearings	Double-row	TDO type
462/850A	Tapered roller bearings	Double-row	TDO type
463/850	Tapered roller bearings	Double-row	TDO type
463/850A	Tapered roller bearings	Double-row	TDO type
462/900	Tapered roller bearings	Double-row	TDO type
462/900A	Tapered roller bearings	Double-row	TDO type
462/950	Tapered roller bearings	Double-row	TDO type
462/950A	Tapered roller bearings	Double-row	TDO type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
45320	Tapered roller bearings	Double-row	TDI type
45322	Tapered roller bearings	Double-row	TDI type
45224	Tapered roller bearings	Double-row	TDI type
45324	Tapered roller bearings	Double-row	TDI type
45226	Tapered roller bearings	Double-row	TDI type
45326	Tapered roller bearings	Double-row	TDI type
45228	Tapered roller bearings	Double-row	TDI type
45328	Tapered roller bearings	Double-row	TDI type
45230	Tapered roller bearings	Double-row	TDI type
45330	Tapered roller bearings	Double-row	TDI type
45232	Tapered roller bearings	Double-row	TDI type
45332	Tapered roller bearings	Double-row	TDI type
45234	Tapered roller bearings	Double-row	TDI type
45334	Tapered roller bearings	Double-row	TDI type
45236	Tapered roller bearings	Double-row	TDI type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
45336	Tapered roller bearings	Double-row	TDI type
45238	Tapered roller bearings	Double-row	TDI type
45338	Tapered roller bearings	Double-row	TDI type
45240	Tapered roller bearings	Double-row	TDI type
45340	Tapered roller bearings	Double-row	TDI type
45244	Tapered roller bearings	Double-row	TDI type
45344	Tapered roller bearings	Double-row	TDI type
45246	Tapered roller bearings	Double-row	TDI type
45248	Tapered roller bearings	Double-row	TDI type
45348	Tapered roller bearings	Double-row	TDI type
45252	Tapered roller bearings	Double-row	TDI type
45352	Tapered roller bearings	Double-row	TDI type
45256	Tapered roller bearings	Double-row	TDI type
45356	Tapered roller bearings	Double-row	TDI type
45260	Tapered roller bearings	Double-row	TDI type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
45360	Tapered roller bearings	Double-row	TDI type
45264	Tapered roller bearings	Double-row	TDI type
45364R	Tapered roller bearings	Double-row	TDI type
45268	Tapered roller bearings	Double-row	TDI type
45368	Tapered roller bearings	Double-row	TDI type
45272	Tapered roller bearings	Double-row	TDI type
45372	Tapered roller bearings	Double-row	TDI type
45276	Tapered roller bearings	Double-row	TDI type
45376	Tapered roller bearings	Double-row	TDI type
45280	Tapered roller bearings	Double-row	TDI type
45380	Tapered roller bearings	Double-row	TDI type
45284	Tapered roller bearings	Double-row	TDI type
45384	Tapered roller bearings	Double-row	TDI type
45288	Tapered roller bearings	Double-row	TDI type
45388	Tapered roller bearings	Double-row	TDI type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
45292	Tapered roller bearings	Double-row	TDI type
45392	Tapered roller bearings	Double-row	TDI type
45296	Tapered roller bearings	Double-row	TDI type
45396	Tapered roller bearings	Double-row	TDI type
452/500	Tapered roller bearings	Double-row	TDI type
453/500	Tapered roller bearings	Double-row	TDI type
452/530	Tapered roller bearings	Double-row	TDI type
453/530	Tapered roller bearings	Double-row	TDI type
452/560	Tapered roller bearings	Double-row	TDI type
453/560	Tapered roller bearings	Double-row	TDI type
452/600	Tapered roller bearings	Double-row	TDI type
453/600	Tapered roller bearings	Double-row	TDI type
452/630	Tapered roller bearings	Double-row	TDI type
453/630	Tapered roller bearings	Double-row	TDI type
452/670	Tapered roller bearings	Double-row	TDI type

Bearing No.	Classification[1]	Classification[2]	Classification[3]
453/670	Tapered roller bearings	Double-row	TDI type
452/710	Tapered roller bearings	Double-row	TDI type
453/710	Tapered roller bearings	Double-row	TDI type
452/750	Tapered roller bearings	Double-row	TDI type
453/750	Tapered roller bearings	Double-row	TDI type
452/800	Tapered roller bearings	Double-row	TDI type
453/800	Tapered roller bearings	Double-row	TDI type
452/850	Tapered roller bearings	Double-row	TDI type
453/850	Tapered roller bearings	Double-row	TDI type
452/900	Tapered roller bearings	Double-row	TDI type
452/950	Tapered roller bearings	Double-row	TDI type

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