

## Tapered Roller Bearing

### Features

Tapered roller bearings consist of an inner ring, an outer ring, a window cage, and tapered rollers. Inner and outer rings with roller and cage assemblies can be mounted separately.

According to the number of rows, tapered roller bearings can be divided into single row tapered roller bearings, double row tapered roller bearings and so on. KMR can provide metric and inch bearings, and those with the letter K in the model number are inch bearings. In new designs, metric tapered roller bearings are preferred.

### Cage

Tapered roller bearings use stamped steel cages by default.

### Contact angle

The axial load capacity depends on the contact angle, that is, the larger the contact angle, the greater the axial load that the bearing can bear.

### Angle misalignment compensation

The improved contact line between the tapered rollers and the inner and outer ring raceways optimizes the stress distribution at the contact point. So that prevent edge stress and allows compensation of bearing misalignment.

When the load ratio  $P/Cr < 0.2$ , the relative inclination angle of the inner and outer rings of the bearing cannot exceed  $4'$ .

## paired bearing

Tapered roller bearings with the suffix DF are face-to-face paired bearing sets that can withstand large bidirectional axial loads. Tapered roller bearings with the suffix DB are back-to-back paired bearing sets that can withstand bidirectional axial loads. It can also withstand overturning moment. Tapered roller bearings with the suffix DT are bearing groups arranged in series. This configuration can be used when the bearing capacity of a single set of bearings is insufficient. This configuration can only bear one-way axial force.

The internal axial clearance of matched bearings is determined by the spacer ring between the two outer rings.

## Radial and axial load carrying capacity

Tapered roller bearings can bear axial loads in one direction and high radial loads. Usually two tapered roller bearings are paired in a symmetrical arrangement.

## Lubricating

Standard design and paired tapered roller bearings can be lubricated with oil or grease.

## Operating temperature

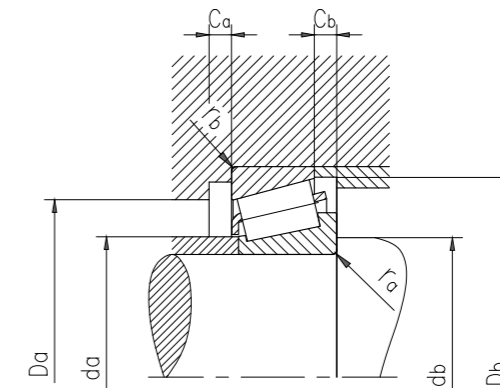
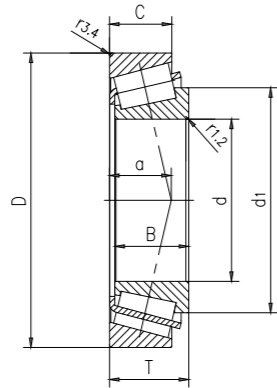
The applicable operating temperature range of tapered roller bearings is  $-30^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$ .



## Suffix for an existing design

Suffix	Meaning
A C D	Deviating or modified internal design, combinations are possible
B	Steep contact angle
E	KMR Explorer bearing (only for double row bearings)
G	Helical groove in the inner ring bore (only for double row bearings)
R	Flanged outer ring
T..	A number immediately following the T identifies the total width of matched bearings,
X	arranged back-to-back or in tandem.
TN9	Glass fibre reinforced PA66 cage, roller centred
TNH	Glass fibre reinforced PEEK cage, roller centred
HA1	Case-hardened inner and outer rings
HA2	Case-hardened outer ring
HA3	Case-hardened inner ring
HA4	Case-hardened inner and outer rings and rollers
HA5	Case-hardened rollers
HA6	Case-hardened outer ring(s) and rollers
HA7	Case-hardened inner ring(s) and rollers
HB1	Bainite-hardened inner and outer rings
HB2	Bainite-hardened outer ring(s)
HN3	Inner ring with special surface heat treatment
L4B	Bearing rings and rollers with special surface coating
/1	Deviating width tolerances of cups and cones for inch bearings (table 4, page 678)
C...	Axial internal clearance (only for double row bearings) The three- or four-digit number immediately following the C is the mean axial internal clearance in $\mu\text{m}$ .
CLO	Geometrical tolerances to ABMA tolerance class 0 (inch bearing)
CLOO	Geometrical tolerances to ABMA tolerance class 00 (inch bearing)
P5	Geometrical tolerances to P5 tolerance class
U..	U combined with a one- or two-digit number identifies tighter total width tolerance, e.g.: $U2 \rightarrow +5/0 \mu\text{m}$ $U4 \rightarrow +10/0 \mu\text{m}$
W	Modified ring width tolerance to $+5/0 \mu\text{m}$
DB..	Two bearings matched for mounting back-to-back. A number immediately following the DB identifies the design of the ring spacers.
DF..	Two bearings matched for mounting face-to-face. A number immediately following the DF identifies the design of the ring spacer.
DT..	Two bearings matched for mounting in tandem. A number immediately following the DT identifies the design of the ring spacers.
C...	Special clearance The two- or three-digit number immediately following the C is the mean axial internal clearance in $\mu\text{m}$ . The range remains the same as specified in table 6, page 679.

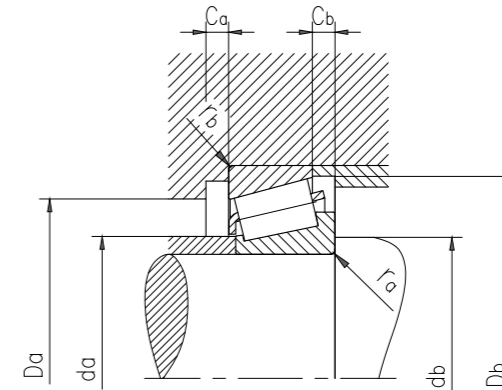
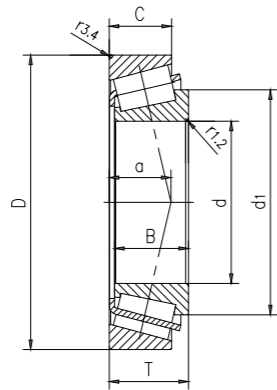
## Metric single row tapered roller bearings



Type	Dimensions this column conforms to ISO 355 standard (ABMA)	Main dimensions			Dimensions						Shoulder and chamfer dimensions								
		d	D	T	d <sub>1</sub>	B	C	r <sub>1,2</sub> min.	r <sub>3,4</sub> min.	a	d <sub>a</sub> max.	d <sub>b</sub> min.	D <sub>a</sub> min.	D <sub>a</sub> max.	D <sub>b</sub> min.	C <sub>a</sub> min.	C <sub>b</sub> min.	r <sub>a</sub> max.	r <sub>b</sub> max.
		mm			mm						mm								
JM511946/910	M511900	65	110	28	87.9	28	22.5	3	2.5	23	75	77.5	96	99	104	5	5.5	3	2.5
T2DD065	2DD	65	110	31	85.7	31	25	2	2	23	74	75.5	97	100	105	5	6	2	2
33113	3DE	65	110	34	88.3	34	26.5	1.5	1.5	25	74	74.5	96	101	106	6	7.5	1.5	1.5
30213	3EB	65	120	24.75	89	23	20	2	1.5	23	78	75.5	106	111	113	4	4.5	2	1.5
32213	3EC	65	120	32.75	90.3	31	27	2	1.5	26	76	75.5	104	111	115	4	5.5	2	1.5
33213	3EE	65	120	41	92.5	41	32	2	1.5	29	75	75.5	102	111	115	6	9	2	1.5
T7FC065	7FC	65	130	37	102	33.5	26	3	3	44	77	78	98	118	124	4	11	3	3
31313	7GB	65	140	36	103	33	23	3	2.5	42	80	78	111	129	132	5	13	3	2.5
30313	2GB	65	140	36	98.7	33	28	3	2.5	27	84	78	122	129	130	5	8	3	2.5
32313B	5GD	65	140	51	105	48	39	3	2.5	41	79	78	107	129	131	6	12	3	2.5
32313	2GD	65	140	51	99.2	48	39	3	2.5	33	81	78	117	129	130	6	12	3	2.5
32914	2BC	70	100	20	84.7	20	16	1	1	17	77	78	93	92	96	4	4	1	1
32014X	4CC	70	110	25	89.9	25	19	1.5	1.5	23	78	79.5	98	101	105	5	6	1.5	1.5
33014	2CE	70	110	31	88.9	31	25.5	1.5	1.5	22	78	79.5	99	101	105	5	5.5	1.5	1.5
33114	3DE	70	120	37	95.3	37	29	2	1.5	27	80	80.5	104	111	115	6	8	2	1.5
30214	3EB	70	125	26.25	94	24	21	2	1.5	25	82	80.5	110	116	118	4	5	2	1.5
32214	3EC	70	125	33.25	95	31	27	2	1.5	28	81	80.5	108	116	119	4	6	2	1.5
33214	3EE	70	125	41	97.4	41	32	2	1.5	30	80	80.5	107	116	120	6	9	2	1.5
T2ED070	2ED	70	130	43	98.1	42	35	3	2.5	30	81	82.5	111	119	123	7	8	3	2.5
T7FC070	7FC	70	140	39	110	35.5	27	3	3	46	82	83	106	128	133	5	12	3	3
31314	7GB	70	150	38	111	35	25	3	2.5	45	85	83	118	139	141	5	13	3	2.5
30314	2GB	70	150	38	105	35	30	3	2.5	29	90	83	130	139	140	5	8	3	2.5
32314B	5GD	70	150	54	113	51	42	3	2.5	43	85	83	115	139	141	7	12	3	2.5
32314	2GD	70	150	54	106	51	42	3	2.5	35	87	83	125	139	140	6	12	3	2.5
32915	2BC	75	105	20	89.7	20	16	1	1	18	82	83.5	98	97	101	4	4	1	1
32015X	4CC	75	115	25	95.1	25	19	1.5	1.5	24	83	84.5	103	106	110	5	6	1.5	1.5
33015	2CE	75	115	31	95	31	25.5	1.5	1.5	23	84	84.5	104	106	110	6	5.5	1.5	1.5
JM714249/210	M714200	75	120	31	98.1	29.5	25	3	2.5	28	84	87.5	104	109	115	5	6	3	2.5
33115	3DE	75	125	37	100	37	29	2	1.5	28	84	85.5	109	116	120	6	8	2	1.5
30215	4DB	75	130	27.25	99.8	25	22	2	1.5	26	87	85.5	115	121	124	4	5	2	1.5
32215	4DC	75	130	33.25	100	31	27	2	1.5	29	85	85.5	114	121	125	4	6	2	1.5
33215	3DE	75	130	41	102	41	31	2	1.5	31	84	86	111	121	125	6	10	2	1.5
JH415647/610	H415600	75	145	51	111	51	42	3	2.5	35	89	88	123	134	139	9	9	3	2.5
T3FE075	3FE	75	145	52	111	51	43	5	3	39	88	92	117	133	138	7	9	5	3
T7FC075	7FC	75	150	42	116	38	29	3	3	50	88	88	114	138	143	5	13	3	3
31315	7GB	75	160	40	118	37	26	3	2.5	48	91	88	127	149	151	5	14	3	2.5
30315	2GB	75	160	40	112	37	31	3	2.5	30	96	88	139	149	149	5	9	3	2.5

Type	Dimensions this column conforms to ISO 355 standard (ABMA)	Weight	Basic load rating		Fatigue load limit P <sub>u</sub>	Rated speed		Calculate the coefficient		
			Dynamic C	Static C <sub>0</sub>		reference speed	Maximum speed	e	Y	Y <sub>0</sub>
		kg	kN		r/min					
JM511946/910	M511900	1.05	159.6	192.15	22.26	5040	5880	0.4	1.5	0.8
T2DD065	2DD	1.15	178.5	202.65	23.52	5040	6300	0.33	1.8	1
33113	3DE	1.3	183.75	218.4	25.2	5040	5880	0.4	1.5	0.8
30213	3EB	1.1	148.05	140.7	17.115	4725	5880	0.4	1.5	0.8
32213	3EC	1.5	195.3	202.65	23.94	4725	5880	0.4	1.5	0.8
33213	3EE	2	250.95	283.5	32.025	4200	5565	0.4	1.5	0.8
T7FC065	7FC	2.2	203.7	226.8	26.775	3990	5250	0.88	0.68	0.4
31313	7GB	2.35	213.15	202.65	24.78	3780	5040	0.83	0.72	0.4
30313	2GB	2.4	252	239.4	28.875	4200	5040	0.35	1.7	0.9
32313B	5GD	3.75	320.25	362.25	42	3780	5040	0.54	1.1	0.6
32313	2GD	3.5	339.15	351.75	42	3780	5040	0.35	1.7	0.9
32914	2BC	0.49	90.09	117.6	13.335	5250	6300	0.31	1.9	1.1
32014X	4CC	0.85	131.25	160.65	18.165	4725	5880	0.43	1.4	0.8
33014	2CE	1.05	166.95	205.8	23.94	5040	5880	0.28	2.1	1.1
33114	3DE	1.7	221.55	262.5	29.925	4515	5565	0.37	1.6	0.9
30214	3EB	1.25	162.75	163.8	18.9	4515	5565	0.43	1.4	0.8
32214	3EC	1.6	204.75	218.4	25.725	4515	5565	0.43	1.4	0.8
33214	3EE	2.1	259.35	299.25	34.125	3990	5250	0.4	1.5	0.8
T2ED070	2ED	2.5	303.45	341.25	39.9	4200	5250	0.33	1.8	1
T7FC070	7FC	2.65	229.95	252	28.875	3570	4725	0.88	0.68	0.4
31314	7GB	2.85	240.45	231	28.35	3570	4725	0.83	0.72	0.4
30314	2GB	2.95	284.55	273	32.55	3990	4725	0.35	1.7	0.9
32314B	5GD	4.55	363.3	420	47.25	3570	4515	0.54	1.1	0.6
32314	2GD	4.3	381.15	399	47.25	3570	4725	0.35	1.7	0.9
32915	2BC	0.51	91.14	121.8	13.86	5040	5880	0.33	1.8	1
32015X	4CC	0.91	136.5	171.15	19.53	4515	5565	0.46	1.3	0.7
33015	2CE	1.2	175.35	239.4	27.3	4515	5565	0.3	2	1.1
JM714249/210	M714200	1.3	178.5	226.8	26.25	4515	5565	0.44	1.35	0.8
33115	3DE	1.8	226.8	278.25	31.5	4200	5250	0.4	1.5	0.8
30215	4DB	1.4	179.55	184.8	21.42	4200	5250	0.43	1.4	0.8
32215	4DC	1.65	206.85	222.6	25.725	4200	5250	0.43	1.4	0.8
33215	3DE	2.2	267.75	315	35.7	3780	5040	0.43	1.4	0.8
JH415647/610	H415600	3.9	399	472.5	53.55	3780	4725	0.37	1.6	0.9
T3FE075	3FE	3.95	382.2	472.5	52.5	3780	4725	0.43	1.4	0.8
T7FC075	7FC	3.25	261.45	294	32.55	3360	4515	0.88	0.68	0.4
31315	7GB	3.4	267.75	257.25	30.45	3360	4515	0.83	0.72	0.4
30315	2GB	3.5	316.05	304.5	35.7	3570	4515	0.35	1.7	0.9

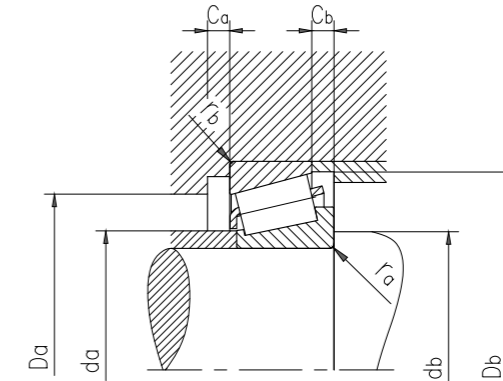
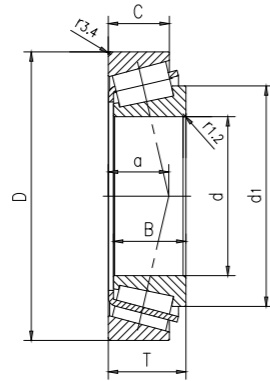
# Metric single row tapered roller bearings



Type	Dimensions this column conforms to ISO 355 standard (ABMA)	Main dimensions			Dimensions							Shoulder and chamfer dimensions							
		d	D	T	d <sub>1</sub>	B	C	r <sub>1,2</sub>	r <sub>3,4</sub>	a	d <sub>a</sub>	d <sub>b</sub>	D <sub>a</sub>	D <sub>a</sub>	D <sub>b</sub>	C <sub>a</sub>	C <sub>b</sub>	r <sub>a</sub>	r <sub>b</sub>
		mm			mm							mm							
32315B	5GD	75	160	58	119	55	45	3	2.5	46	89	88	122	149	151	7	13	3	2.5
32315	2GD	75	160	58	113	55	45	3	2.5	37	92	88	133	149	149	7	13	3	2.5
32916	2BC	80	110	20	94.8	20	16	1	1	19	86	88.5	102	102	106	4	4	1	1
32016X	3CC	80	125	29	103	29	22	1.5	1.5	26	90	90	112	116	120	6	7	1.5	1.5
33016	2CE	80	125	36	102	36	29.5	1.5	1.5	25	90	89.5	112	116	119	6	6.5	1.5	1.5
JM515649/610	M	80	130	35	104	34	28.5	3	2.5	28	90	93	114	119	124	6	6.5	3	2.5
33116	3DE	80	130	37	105	37	29	2	1.5	30	89	91	114	121	126	6	8	2	1.5
30216	3EB	80	140	28.25	105	26	22	2.5	2	27	92	92	124	130	132	4	6	2.5	2
32216	3EC	80	140	35.25	106	33	28	2.5	2	30	91	92	122	130	134	5	7	2.5	2
33216	3EE	80	140	46	110	46	35	2.5	2	34	90	92	119	130	135	7	11	2.5	2
T7FC080	7FC	80	160	45	125	41	31	3	3	53	94	93.5	121	148	152	5	14	3	3
31316	7GB	80	170	42.5	125	39	27	3	2.5	51	97	93.5	134	159	159	5	15.5	3	2.5
30316	2GB	80	170	42.5	122	39	33	3	2.5	33	103	93.5	148	158	159	5	9.5	3	2.5
32316B	5GD	80	170	61.5	128	58	48	3	2.5	49	97	93.5	130	159	160	7	13.5	3	2.5
32316	2GD	80	170	61.5	120	58	48	3	2.5	40	98	93.5	142	159	159	7	13.5	3	2.5
32917	2CC	85	120	23	101	23	18	1.5	1.5	21	93	94.5	111	111	115	4	5	1.5	1.5
32017X	4CC	85	130	29	108	29	22	1.5	1.5	27	95	95	117	121	125	6	7	1.5	1.5
JM716649/610	M716600	85	130	30	107	29	24	3	2.5	29	94	98	115	119	125	5	6	3	2.5
33017	2CE	85	130	36	107	36	29.5	1.5	1.5	26	95	95	118	121	125	6	6.5	1.5	1.5
33117	3DE	85	140	41	112	41	32	2.5	2	32	95	97	122	130	135	7	9	2.5	2
30217	3EB	85	150	30.5	112	28	24	2.5	2	29	97	97	132	140	141	5	6.5	2.5	2
32217	3EC	85	150	38.5	113	36	30	2.5	2	33	97	97	130	140	142	5	8.5	2.5	2
33217	3EE	85	150	49	117	49	37	2.5	2	36	96	97	128	140	144	7	12	2.5	2
T7FC085	7FC	85	170	48	132	45	33	4	4	53	100	100	131	156	161	6	15	4	4
31317	7GB	85	180	44.5	131	41	28	4	3	53	104	100	143	167	169	5	16.5	4	3
30317	2GB	85	180	44.5	126	41	34	4	3	34	108	100	156	167	167	5	10.5	4	3
32317B	5GD	85	180	63.5	135	60	49	4	3	51	102	100	138	168	169	7	14.5	4	3
32317	2GD	85	180	63.5	127	60	49	4	3	41	103	100	150	167	167	7	14.5	4	3
32918	2CC	90	125	23	106	23	18	1.5	1.5	22	98	100	116	116	120	4	5	1.5	1.5
32018X	3CC	90	140	32	115	32	24	2	1.5	29	100	101	125	131	134	6	8	2	1.5
33018	2CE	90	140	39	114	39	32.5	2	1.5	27	101	101	127	131	135	7	6.5	2	1.5
JM718149A/110	M718100	90	145	35	117	34	27	6	2.5	32	100	109	127	134	139	6	8	6	2.5
JM718149/110	M718100	90	145	35	117	34	27	3	2.5	32	100	103	127	134	139	6	8	3	2.5
33118	3DE	90	150	45	120	45	35	2.5	2	34	101	102	130	140	144	7	10	2.5	2
30218	3FB	90	160	32.5	120	30	26	2.5	2	31	104	102	140	150	150	5	6.5	2.5	2
32218	3FC	90	160	42.5	121	40	34	2.5	2	35	103	102	138	150	152	5	8.5	2.5	2
33218	3FE	90	160	55	125	55	42	2.5	2	40	101	102	135	150	154	8	13	2.5	2

Type	Dimensions this column conforms to ISO 355 standard (ABMA)	Weight	Basic load rating		Fatigue load limit P <sub>u</sub>	Rated speed		Calculate the coefficient		
			Dynamic C	Static C <sub>0</sub>		reference speed	Maximum speed	e	Y	Y <sub>0</sub>
		kg	kN		r/min					
32315B	5GD	5.55	430.5	498.75	55.65	3360	4200	0.54	1.1	0.6
32315	2GD	5.2	436.8	462	53.55	3360	4515	0.35	1.7	0.9
32916	2BC	0.54	94.185	131.25	14.7	4725	5880	0.35	1.7	0.9
32016X	3CC	1.3	176.4	226.8	25.725	4200	5250	0.43	1.4	0.8
33016	2CE	1.65	217.35	299.25	33.6	4200	5250	0.28	2.1	1.1
JM515649/610	M	1.75	226.8	288.75	32.55	4200	5040	0.4	1.5	0.8
33116	3DE	1.85	232.05	294	32.55	4200	5040	0.43	1.4	0.8
30216	3EB	1.6	193.2	192.15	22.26	3990	5040	0.43	1.4	0.8
32216	3EC	2.05	239.4	257.25	29.925	3990	4725	0.43	1.4	0.8
33216	3EE	2.9	323.4	393.75	43.575	3570	4725	0.43	1.4	0.8
T7FC080	7FC	4	294	330.75	37.275	3150	4200	0.88	0.68	0.4
31316	7GB	4.05	289.8	278.25	32.025	3150	4200	0.83	0.72	0.4
30316	2GB	4.15	349.65	336	38.325	3360	4200	0.35	1.7	0.9
32316B	5GD	6.65	462	546	59.85	3360	3990	0.54	1.1	0.6
32316	2GD	6.2	424.2	525	58.8	3360	4200	0.35	1.7	0.9
32917	2CC	0.78	120.75	163.8	18.48	4200	5250	0.33	1.8	1
32017X	4CC	1.35	179.55	235.2	26.775	3990	5040	0.44	1.35	0.8
JM716649/610	M716600	1.4	180.6	239.4	27.3	3990	5040	0.44	1.35	0.8
33017	2CE	1.75	234.15	325.5	36.225	3990	5040	0.3	2	1.1
33117	3DE	2.45	281.4	357	39.9	3780	4725	0.4	1.5	0.8
30217	3EB	2.05	226.8	231	26.775	3780	4515	0.43	1.4	0.8
32217	3EC	2.6	276.15	299.25	35.175	3780	4515	0.43	1.4	0.8
33217	3EE	3.55	370.65	451.5	50.4	3360	4515	0.43	1.4	0.8
T7FC085	7FC	4.85	349.65	399	45.15	2940	3990	0.79	0.76	0.4
31317	7GB	4.6	311.85	299.25	33.6	2940	3990	0.83	0.72	0.4
30317	2GB	4.85	390.6	383.25	42.525	3150	3990	0.35	1.7	0.9
32317B	5GD	7.6	437.85	588	65.1	3150	3780	0.54	1.1	0.6
32317	2GD	7.1	456.75	556.5	63	3150	3990	0.35	1.7	0.9
32918	2CC	0.83	124.95	174.3	19.215	4200	5040	0.35	1.7	0.9
32018X	3CC	1.75	218.4	283.5	32.55	3780	4515	0.43	1.4	0.8
33018	2CE	2.2	279.3	372.75	40.95	3780	4725	0.27	2.2	1.3
JM718149A/110	M718100	2.15	258.3	320.25	35.175	3780	4515	0.44	1.35	0.8
JM718149/110	M718100	2.15	258.3	320.25	35.175	3780	4515	0.44	1.35	0.8
33118	3DE	3.1	325.5	409.5	45.15	3570	4515	0.4	1.5	0.8
30218	3FB	2.5	252	257.25	29.925	3570	4200	0.43	1.4	0.8
32218	3FC	3.35	324.45	357	39.9	3570	4200	0.43	1.4	0.8
33218	3FE	4.6	435.75	546	59.85	3150	4200	0.43	1.4	0.8

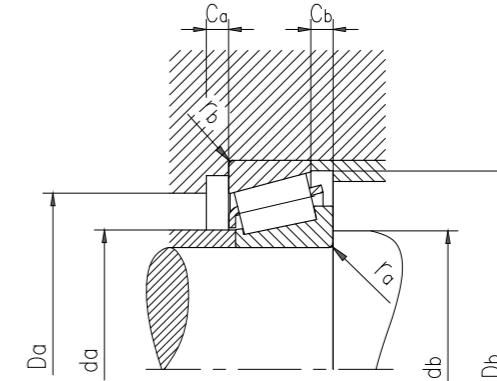
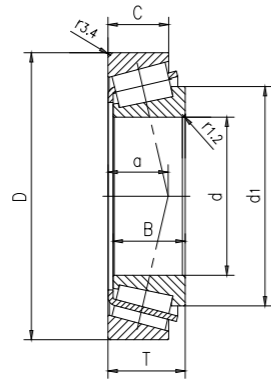
## Metric single row tapered roller bearings



Type	Dimensions this column conforms to ISO 355 standard (ABMA)	Main dimensions			Dimensions						Shoulder and chamfer dimensions								
		d	D	T	d <sub>1</sub>	B	C	r <sub>1,2</sub> min.	r <sub>3,4</sub> min.	a	d <sub>a</sub> max.	d <sub>b</sub> min.	D <sub>a</sub> min.	D <sub>a</sub> max.	D <sub>b</sub> min.	C <sub>a</sub> min.	C <sub>b</sub> min.	r <sub>a</sub> max.	r <sub>b</sub> max.
-	-	mm			mm						mm								
31318	7GB	90	190	46.5	138	43	30	4	3	57	110	105	151	177	179	5	16.5	4	3
30318	2GB	90	190	46.5	133	43	36	4	3	36	114	105	165	177	176	6	10.5	4	3
32318	2GD	90	190	67.5	133	64	53	4	3	44	109	105	157	177	177	7	14.5	4	3
32318B	5GD	90	190	67.5	141	64	53	4	3	55	107	105	145	177	179	7	14.5	4	3
32919	2CC	95	130	23	112	23	18	1.5	1.5	23	103	105	121	121	125	4	5	1.5	1.5
32019X	4CC	95	145	32	120	32	24	2	1.5	31	106	106	130	136	140	6	8	2	1.5
33019	2CE	95	145	39	118	39	32.5	2	1.5	28	105	106	131	136	139	7	6.5	2	1.5
30219	3FB	95	170	34.5	126	32	27	3	2.5	32	110	108	149	158	159	5	7.5	3	2.5
32219	3FC	95	170	45.5	128	43	37	3	2.5	38	109	108	145	158	161	5	8.5	3	2.5
33219	3FE	95	170	58	132	58	44	3	2.5	42	107	108	144	158	163	9	14	3	2.5
31319	7GB	95	200	49.5	145	45	32	4	3	59	114	111	157	187	187	5	17.5	4	3
30319	2GB	95	200	49.5	139	45	38	4	3	38	119	111	172	187	184	7	11.5	4	3
32319	2GD	95	200	71.5	141	67	55	4	3	47	115	111	166	187	186	8	16.5	4	3
32920	2CC	100	140	25	119	25	20	1.5	1.5	23	110	110	131	131	135	5	5	1.5	1.5
T4CB100	4CB	100	145	24	121	22.5	17.5	3	3	29	109	113	133	133	140	4	6.5	3	3
32020X	4CC	100	150	32	125	32	24	2	1.5	32	110	111	134	141	144	6	8	2	1.5
33020	2CE	100	150	39	122	39	32.5	2	1.5	28	109	111	135	141	143	7	6.5	2	1.5
T2EE100	2EE	100	165	47	129	46	39	3	3	35	111	113	145	152	157	7	8	3	3
30220	3FB	100	180	37	134	34	29	3	2.5	35	116	113	157	168	168	5	8	3	2.5
32220	3FC	100	180	49	136	46	39	3	2.5	40	115	113	154	168	171	5	10	3	2.5
33220	3FE	100	180	63	139	63	48	3	2.5	44	112	113	151	168	172	10	15	3	2.5
30320	2GB	100	215	51.5	149	47	39	4	3	40	128	116	184	202	197	6	12.5	4	3
31320X	7GB	100	215	56.5	158	51	35	4	3	64	121	116	168	202	202	7	21.5	4	3
32320	2GD	100	215	77.5	152	73	60	4	3	51	123	116	177	202	200	8	17.5	4	3
32921	2CC	105	145	25	124	25	20	1.5	1.5	25	114	115	135	135	140	5	5	1.5	1.5
32021X	4DC	105	160	35	132	35	26	2.5	2	34	116	117	143	149	154	6	9	2.5	2
33021	2DE	105	160	43	131	43	34	2.5	2	30	117	117	145	149	153	7	9	2.5	2
30221	3FB	105	190	39	143	36	30	3	2.5	37	123	118	165	178	177	5	9	3	2.5
32221	3FC	105	190	53	143	50	43	3	2.5	44	121	119	161	178	180	6	10	3	2.5
30321	2GB	105	225	53.5	155	49	41	4	3	41	133	121	193	212	206	7	12.5	4	3
31321X	7GB	105	225	58	165	53	36	4	3	67	127	121	176	212	211	7	22	4	3
32321	2GD	105	225	81.5	158	77	63	4	3	53	129	121	185	212	209	9	18.5	4	3
32922	2CC	110	150	25	129	25	20	1.5	1.5	26	119	120	140	140	145	5	5	1.5	1.5
JM822049/010	M822000	110	165	35	137	35	26.5	3	2.5	37	119	123	145	153	158	6	8.5	3	2.5
32022X	4DC	110	170	38	140	38	29	2.5	2	36	123	122	152	159	163	7	9	2.5	2
33022	2DE	110	170	47	139	47	37	2.5	2	33	123	122	152	159	161	7	10	2.5	2
33122	3EE	110	180	56	146	56	43	2.5	2	43	122	123	155	169	174	9	13	2.5	2

Type	Dimensions this column conforms to ISO 355 standard (ABMA)	Weight	Basic load rating		Fatigue load limit P <sub>u</sub>	Rated speed		Calculate the coefficient		
			Dynamic C	Static C <sub>0</sub>		reference speed	Maximum speed	e	Y	Y <sub>0</sub>
-	-	kg	kN			r/min		-		
31318	7GB	5.4	297.15	330.75	37.275	2520	3570	0.83	0.72	0.4
30318	2GB	5.65	370.65	420	46.2	2730	3780	0.35	1.7	0.9
32318	2GD	8.4	511.35	640.5	68.775	2730	3780	0.35	1.7	0.9
32318B	5GD	8.95	567	661.5	72.975	2940	3570	0.54	1.1	0.6
32919	2CC	0.86	127.05	181.65	19.53	3990	4725	0.35	1.7	0.9
32019X	4CC	1.85	216.3	283.5	32.025	3570	4515	0.44	1.35	0.8
33019	2CE	2.3	285.6	393.75	42.525	3570	4515	0.28	2.1	1.1
30219	3FB	3	279.3	288.75	33.075	3360	3990	0.43	1.4	0.8
32219	3FC	4.1	365.4	409.5	45.15	3360	3990	0.43	1.4	0.8
33219	3FE	5.45	483	588	65.1	2940	3990	0.4	1.5	0.8
31319	7GB	6.3	329.7	372.75	40.95	2520	3570	0.83	0.72	0.4
30319	2GB	6.45	370.65	409.5	44.625	2730	3570	0.35	1.7	0.9
32319	2GD	9.8	561.75	703.5	75.6	2520	3570	0.35	1.7	0.9
32920	2CC	1.15	154.35	214.2	23.52	3570	4515	0.33	1.8	1
T4CB100	4CB	1.2	161.7	199.5	21.84	3570	4515	0.48	1.25	0.7
32020X	4CC	1.9	219.45	294	32.55	3360	4200	0.46	1.3	0.7
33020	2CE	2.4	291.9	409.5	43.575	3570	4200	0.28	2.1	1.1
T2EE100	2EE	3.9	402.15	504	54.6	3360	3990	0.31	1.9	1.1
30220	3FB	3.65	319.2	336	37.8	3150	3780	0.43	1.4	0.8
32220	3FC	4.95	409.5	462	50.4	3150	3780	0.43	1.4	0.8
33220	3FE	6.75	558.6	687.75	74.55	2730	3780	0.4	1.5	0.8
30320	2GB	7.95	452.55	514.5	55.65	2520	3360	0.35	1.7	0.9
31320X	7GB	8.6	418.95	488.25	53.55	2310	3150	0.83	0.72	0.4
32320	2GD	12.5	647.85	819	87.15	2310	3360	0.35	1.7	0.9
32921	2CC	1.2	156.45	222.6	23.94	3570	4200	0.35	1.7	0.9
32021X	4DC	2.45	260.4	351.75	39.375	3360	3990	0.44	1.35	0.8
33021	2DE	3	318.15	451.5	47.775	3360	3990	0.28	2.1	1.1
30221	3FB	4.3	349.65	372.75	42	2940	3570	0.43	1.4	0.8
32221	3FC	6	465.15	535.5	57.75	2940	3150	0.43	1.4	0.8
30321	2GB	9.1	485.1	556.5	59.85	2310	3150	0.35	1.7	0.9
31321X	7GB	9.65	450.45	525	55.65	2100	3150	0.83	0.72	0.4
32321	2GD	14	677.25	855.75	89.25	2100	3150	0.35	1.7	0.9
32922	2CC	1.25	161.7	235.2	25.2	3360	4200	0.35	1.7	0.9
JM822049/010	M822000	2.55	268.8	372.75	39.375	3150	3780	0.5	1.2	0.7
32022X	4DC	3.05	302.4	409.5	42	3150	3780	0.43	1.4	0.8
33022	2DE	3.85	360.15	525	55.65	3150	3780	0.28	2.1	1.1
33122	3EE	5.5	477.75	661.5	68.775	2940	3570	0.43	1.4	0.8

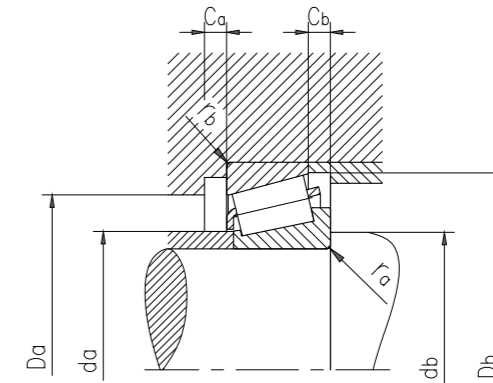
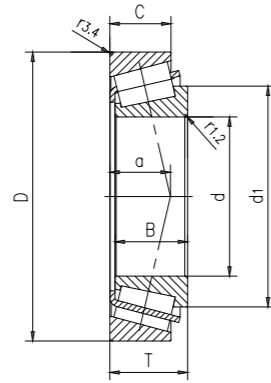
# Metric single row tapered roller bearings



Type	Dimensions this column conforms to ISO 355 standard (ABMA)	Main dimensions			Dimensions						Shoulder and chamfer dimensions								
		d	D	T	d <sub>1</sub>	B	C	r <sub>1,2</sub> min.	r <sub>3,4</sub> min.	a	d <sub>a</sub> max.	d <sub>b</sub> min.	D <sub>a</sub> min.	D <sub>a</sub> max.	D <sub>b</sub> min.	C <sub>a</sub> min.	C <sub>b</sub> min.	r <sub>a</sub> max.	r <sub>b</sub> max.
-	-	mm			mm						mm								
30222	3FB	110	200	41	149	38	32	3	2.5	39	129	124	174	188	187	6	9	3	2.5
32222	3FC	110	200	56	151	53	46	3	2.5	46	127	124	170	188	190	6	10	3	2.5
30322	2GB	110	240	54.5	166	50	42	4	3	42	142	126	206	226	220	8	12.5	4	3
31322X	7GB	110	240	63	176	57	38	4	3	72	136	126	188	227	224	8	25	4	3
32322	2GD	110	240	84.5	169	80	65	4	3	55	138	126	198	227	222	9	19.5	4	3
32924	2CC	120	165	29	142	29	23	1.5	1.5	28	130	130	154	155	160	5	6	1.5	1.5
T4CB120	4CB	120	170	27	143	25	19.5	3	3	34	131	133	157	157	164	5	7.5	3	3
32024X	4DC	120	180	38	150	38	29	2.5	2	38	132	133	161	169	173	7	9	2.5	2
33024	2DE	120	180	48	149	48	38	2.5	2	36	132	133	160	169	171	6	10	2.5	2
30224	4FB	120	215	43.5	161	40	34	3	2.5	42	141	134	187	203	201	6	9.5	3	2.5
32224	4FD	120	215	61.5	164	58	50	3	2.5	51	137	134	181	203	204	7	11.5	3	2.5
30324	2GB	120	260	59.5	178	55	46	4	3	47	153	136	221	246	237	8	13.5	4	3
31324X	7GB	120	260	68	191	62	42	4	3	78	146	136	203	246	244	9	26	4	3
32324	2GD	120	260	90.5	181	86	69	4	3	59	148	136	213	246	239	10	21.5	4	3
32926	2CC	130	180	32	153	32	25	2	1.5	31	141	142	167	170	173	6	7	2	1.5
32026X	4EC	130	200	45	165	45	34	2.5	2	42	144	143	178	189	192	7	11	2.5	2
33026	2EE	130	200	55	165	55	43	2.5	2	42	144	143	178	189	192	8	12	2.5	2
30226	4FB	130	230	43.75	173	40	34	4	3	44	152	146	203	216	217	6	9.5	4	3
32226	4FD	130	230	67.75	176	64	54	4	3	55	146	146	193	216	219	7	13.5	4	3
30326	2GB	130	280	63.75	192	58	49	5	4	50	165	149	239	264	255	8	14.5	5	4
31326X	7GB	130	280	72	204	66	44	5	4	83	157	149	218	264	261	8	28	5	4
32326	2GD	130	280	98.75	196	93	78	5	5	65	160	149	230	262	260	10	20.5	5	5
32928	2CC	140	190	32	164	32	25	2	1.5	33	151	152	177	180	184	6	7	2	1.5
T4CB140	4CB	140	195	29	165	27	21	3	3	40	150	154	180	182	189	6	8	3	3
32028X	4DC	140	210	45	175	45	34	2.5	2	45	153	153	187	199	202	8	11	2.5	2
30228	4FB	140	250	45.75	187	42	36	4	3	47	164	156	219	236	234	8	9.5	4	3
32228	4FD	140	250	71.75	191	68	58	4	3	59	159	156	210	236	238	8	13.5	4	3
30328	2GB	140	300	67.75	205	62	53	5	4	54	176	159	255	284	273	8	14.5	5	4
31328X	7GB	140	300	77	220	70	47	5	4	90	169	159	235	284	280	9	30	5	4
32328	2GD	140	300	107.75	212	102	85	5	4	71	172	159	247	284	280	12	22.5	5	4
T4DB150	4DB	150	210	32	177	30	23	3	3	41	162	164	194	196	203	5	9	3	3
32930	2DC	150	210	38	177	38	30	2.5	2	35	163	163	194	198	202	7	8	2.5	2
32030X	4DC	150	225	48	187	48	36	3	2.5	48	165	164	200	212	216	8	12	3	2.5
33030	2EE	150	225	59	188	59	46	3	2.5	48	165	164	200	212	217	8	13	3	2.5
30230	4GB	150	270	49	200	45	38	4	3	50	176	167	234	256	250	9	11	4	3
32230	4GD	150	270	77	205	73	60	4	3	64	171	167	226	256	254	8	17	4	3
30330	2GB	150	320	72	223	65	55	5	4	58	189	169	273	303	292	9	17	5	4

Type	Dimensions this column conforms to ISO 355 standard (ABMA)	Weight	Basic load rating		Fatigue load limit P <sub>u</sub>	Rated speed		Calculate the coefficient		
			Dynamic C	Static C <sub>0</sub>		reference speed	Maximum speed	e	Y	Y <sub>0</sub>
-	-	kg	kN			r/min		-		
30222	3FB	5.05	343.35	425.25	45.15	2730	3360	0.43	1.4	0.8
32222	3FC	7.1	515.55	598.5	64.05	2730	3360	0.43	1.4	0.8
30322	2GB	11	532.35	614.25	65.1	2310	2940	0.35	1.7	0.9
31322X	7GB	12	515.55	614.25	64.05	1995	2940	0.83	0.72	0.4
32322	2GD	16.5	708.75	871.5	90.825	1995	2940	0.35	1.7	0.9
32924	2CC	1.8	214.2	320.25	33.6	3150	3780	0.35	1.7	0.9
T4CB120	4CB	1.75	204.75	262.5	27.825	2940	3780	0.48	1.25	0.7
32024X	4DC	3.3	313.95	435.75	44.625	2940	3570	0.46	1.3	0.7
33024	2DE	4.2	373.8	567	58.8	2940	3570	0.3	2	1.1
30224	4FB	6.15	437.85	488.25	51.45	2520	3150	0.43	1.4	0.8
32224	4FD	9.05	601.65	729.75	75.6	2520	3150	0.43	1.4	0.8
30324	2GB	13.5	631.05	745.5	77.175	2100	2730	0.35	1.7	0.9
31324X	7GB	15.5	606.9	729.75	75.6	1785	2520	0.83	0.72	0.4
32324	2GD	21.5	897.75	1176	115.5	1890	2730	0.35	1.7	0.9
32926	2CC	2.4	257.25	383.25	39.9	2730	3360	0.33	1.8	1
32026X	4EC	4.95	407.4	567	57.75	2520	3150	0.43	1.4	0.8
33026	2EE	6.15	493.5	714	72.975	2520	3150	0.35	1.7	0.9
30226	4FB	6.85	473.55	514.5	53.55	2310	2940	0.43	1.4	0.8
32226	4FD	11	619.5	871.5	89.25	2100	2940	0.43	1.4	0.8
30326	2GB	17	712.95	840	85.575	1890	2520	0.35	1.7	0.9
31326X	7GB	18.5	679.35	819	84	1680	2520	0.83	0.72	0.4
32326	2GD	27.5	1069.95	1407	138.6	1680	2520	0.35	1.7	0.9
32928	2CC	2.55	264.6	409.5	42	2730	3150	0.35	1.7	0.9
T4CB140	4CB	2.4	253.05	341.25	35.175	2520	3150	0.5	1.2	0.7
32028X	4DC	5.25	424.2	614.25	61.425	2520	2940	0.46	1.3	0.7
30228	4FB	8.7	473.55	598.5	61.425	1995	2730	0.43	1.4	0.8
32228	4FD	14	725.55	1050	105	1995	2730	0.43	1.4	0.8
30328	2GB	20.5	826.35	997.5	97.65	1785	2310	0.35	1.7	0.9
31328X	7GB	22.5	773.85	945	94.5	1575	2310	0.83	0.72	0.4
32328	2GD	34.5	1281	1743	163.8	1680	2310	0.35	1.7	0.9
T4DB150	4DB	3.1	301.35	409.5	42	2310	2940	0.46	1.3	0.7
32930	2DC	3.95	363.3	556.5	54.6	2310	2940	0.33	1.8	1
32030X	4DC	6.4	478.8	687.75	68.775	2310	2730	0.46	1.3	0.7
33030	2EE	8.05	511.35	908.25	89.25	2310	2730	0.37	1.6	0.9
30230	4GB	10.5	477.75	588	59.85	1890	2520	0.43	1.4	0.8
32230	4GD	18	821.1	1197	117.6	1785	2520	0.43	1.4	0.8
30330	2GB	25	922.95	1113	109.2	1680	2100	0.35	1.7	0.9

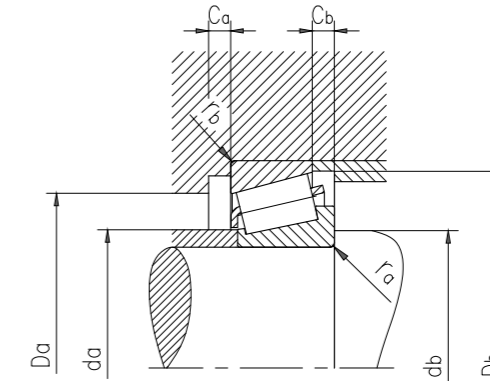
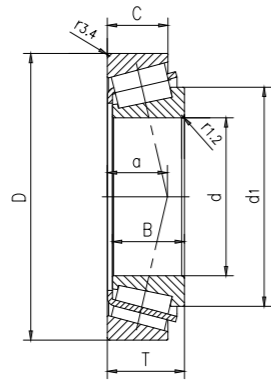
# Metric single row tapered roller bearings



Type	Dimensions this column conforms to ISO 355 standard (ABMA)	Main dimensions			Dimensions						Shoulder and chamfer dimensions								
		d	D	T	d <sub>1</sub>	B	C	r <sub>1,2</sub> min.	r <sub>3,4</sub> min.	a	d <sub>a</sub> max.	d <sub>b</sub> min.	D <sub>a</sub> min.	D <sub>a</sub> max.	D <sub>b</sub> min.	C <sub>a</sub> min.	C <sub>b</sub> min.	r <sub>a</sub> max.	r <sub>b</sub> max.
		mm			mm						mm								
31330X	7GB	150	320	82	234	75	50	5	4	96	181	169	251	304	300	9	32	5	4
T4DB160	4DB	160	220	32	187	30	23	3	3	44	172	174	204	206	213	5	9	3	3
32932	2DC	160	220	38	188	38	30	2.5	2	38	173	173	204	208	212	7	8	2.5	2
32032X	4EC	160	240	51	200	51	38	3	2.5	51	176	175	213	227	231	8	13	3	2.5
T4EE160	4EE	160	245	61	204	59	50	6	4	57	174	181	212	229	236	10	11	6	4
30232	4GB	160	290	52	215	48	40	4	3	53	190	177	252	276	269	7	12	4	3
32232	4GD	160	290	84	222	80	67	4	3	69	183	177	242	276	274	10	17	4	3
30332	2GB	160	340	75	233	68	58	5	4	61	201	179	290	323	310	9	17	5	4
T4DB170	4DB	170	230	32	197	30	23	3	3	44	182	184	215	216	223	6	9	3	3
32934	3DC	170	230	38	200	38	30	2.5	2	41	183	183	213	218	222	7	8	2.5	2
32034X	4EC	170	260	57	214	57	43	3	2.5	55	188	185	230	247	249	10	14	3	2.5
30234	4GB	170	310	57	231	52	43	5	4	58	203	189	269	293	288	8	14	5	4
32234	4GD	170	310	91	238	86	71	5	4	75	196	189	259	293	294	10	20	5	4
30334	2GB	170	360	80	248	72	62	5	4	65	213	190	307	343	329	9	18	5	4
T4DB180	4DB	180	240	32	207	30	23	3	3	47	191	195	224	226	233	6	9	3	3
32936	4DC	180	250	45	216	45	34	2.5	2	53	194	194	225	238	241	8	11	2.5	2
32036X	3FD	180	280	64	230	64	48	3	2.5	59	200	195	247	267	267	10	16	3	2.5
30236	4GB	180	320	57	240	52	43	5	4	60	212	199	278	303	297	8	14	5	4
32236	4GD	180	320	91	247	86	71	5	4	77	205	199	267	303	303	10	20	5	4
32938	4DC	190	260	45	227	45	34	2.5	2	54	205	204	235	248	251	8	11	2.5	2
JM738249/210	M738200	190	260	46	227	44	36.5	3	2.5	54	205	205	235	247	252	8	9.5	3	2.5
32038X	4FD	190	290	64	240	64	48	3	2.5	62	210	205	257	276	279	10	16	3	2.5
30238	4GB	190	340	60	254	55	46	5	4	63	225	210	298	323	318	8	14	5	4
32238	4GD	190	340	97	261	92	75	5	4	80	217	210	286	323	323	12	22	5	4
T4DB200	4DB	200	270	37	232	34	27	3	3	53	214	215	251	255	262	6	10	3	3
32940	3EC	200	280	51	240	51	39	3	2.5	53	217	215	257	266	271	9	12	3	2.5
32040X	4FD	200	310	70	254	70	53	3	2.5	65	222	215	273	296	297	11	17	3	2.5
30240	4GB	200	360	64	269	58	48	5	4	67	237	220	315	343	336	9	16	5	4
32240	3GD	200	360	104	274	98	82	4	4	82	231	218	302	343	340	11	22	4	4
T2DC220	2DC	220	285	41	249	40	33	4	3	45	233	237	270	270	277	7	8	4	3
32944	3EC	220	300	51	259	51	39	3	2.5	58	235	236	275	286	290	9	12	3	2.5
32044X	4FD	220	340	76	280	76	57	4	3	72	244	238	300	325	326	12	19	4	3
30244	3GB	220	400	72	295	65	54	5	4	73	259	240	348	382	371	10	18	5	4
32244	4GD	220	400	114	306	108	90	5	4	95	253	240	334	382	379	13	24	5	4
T4EB240	4EB	240	320	42	276	39	30	3	3	60	256	256	299	305	310	8	12	3	3
32948	4EC	240	320	51	280	51	39	3	2.5	64	255	256	294	306	311	9	12	3	2.5
T2EE240	2EE	240	320	57	277	56	46	6	4	57	254	262	296	303	311	9	11	6	4

Type	Dimensions this column conforms to ISO 355 standard (ABMA)	Weight	Basic load rating		Fatigue load limit P <sub>u</sub>	Rated speed		Calculate the coefficient		
			Dynamic C	Static C <sub>0</sub>		reference speed	Maximum speed	e	Y	Y <sub>0</sub>
		kg	kN		r/min					
31330X	7GB	27	873.6	1071	105	1470	2100	0.83	0.72	0.4
T4DB160	4DB	3.25	269.85	435.75	43.575	2310	2730	0.48	1.25	0.7
32932	2DC	4.2	366.45	567	55.65	2310	2730	0.35	1.7	0.9
32032X	4EC	7.8	558.6	819	80.325	2100	2520	0.46	1.3	0.7
T4EE160	4EE	10.5	681.45	1029	101.325	2100	2520	0.44	1.35	0.8
30232	4GB	13	594.3	771.75	75.6	1680	2310	0.43	1.4	0.8
32232	4GD	23	980.7	1470	138.6	1680	2310	0.43	1.4	0.8
30332	2GB	29	1018.5	1239	119.7	1575	2100	0.35	1.7	0.9
T4DB170	4DB	3.45	322.35	462	45.15	2100	2730	0.46	1.3	0.7
32934	3DC	4.5	368.55	614.25	57.75	2100	2520	0.37	1.6	0.9
32034X	4EC	10.5	656.25	960.75	92.4	1995	2310	0.44	1.35	0.8
30234	4GB	16.5	689.85	908.25	87.15	1575	2100	0.43	1.4	0.8
32234	4GD	28.5	1128.75	1711.5	157.5	1575	2100	0.43	1.4	0.8
30334	2GB	34.5	1158.15	1407	135.45	1470	1890	0.35	1.7	0.9
T4DB180	4DB	3.65	324.45	472.5	46.2	2100	2520	0.48	1.25	0.7
32936	4DC	6.65	456.75	771.75	71.4	1995	2310	0.48	1.25	0.7
32036X	3FD	14	832.65	1218	115.5	1785	2310	0.43	1.4	0.8
30236	4GB	17	660.45	855.75	84	1575	2100	0.46	1.3	0.7
32236	4GD	29.5	1122.45	1711.5	157.5	1470	1995	0.46	1.3	0.7
32938	4DC	7	465.15	803.25	75.6	1890	2310	0.48	1.25	0.7
JM738249/210	M738200	7.1	465.15	803.25	75.6	1890	2310	0.48	1.25	0.7
32038X	4FD	15	846.3	1260	117.6	1680	2100	0.44	1.35	0.8
30238	4GB	20.5	801.15	1050	99.75	1470	1890	0.43	1.4	0.8
32238	4GD	36	1330.35	2026.5	184.8	1365	1890	0.43	1.4	0.8
T4DB200	4DB	5.45	421.05	630	59.85	1785	2310	0.48	1.25	0.7
32940	3EC	9.5	617.4	997.5	92.4	1785	2100	0.4	1.5	0.8
32040X	4FD	19	840	1438.5	133.35	1470	1995	0.43	1.4	0.8
30240	4GB	24.5	887.25	1176	111.3	1365	1785	0.43	1.4	0.8
32240	3GD	42.5	1365	2100	189	1365	1785	0.4	1.5	0.8
T2DC220	2DC	6.45	513.45	871.5	78.75	1680	2100	0.31	1.9	1.1
32944	3EC	10	631.05	1050	96.075	1575	1995	0.43	1.4	0.8
32044X	4FD	24.5	1002.75	1743	157.5	1365	1785	0.43	1.4	0.8
30244	3GB	34.5	1111.95	1470	133.35	1260	1680	0.43	1.4	0.8
32244	4GD	59.5	1806	2835	243.6	1155	1575	0.43	1.4	0.8
T4EB240	4EB	8.45	480.9	855.75	77.175	1470	1785	0.46	1.3	0.7
32948	4EC	11	655.2	1134	101.325	1470	1785	0.46	1.3	0.7
T2EE240	2EE	12.5	799.05	1386	123.9	1470	1785	0.35	1.7	0.9

## Metric single row tapered roller bearings



Type	Dimensions this column conforms to ISO 355 standard (ABMA)	Main dimensions			Dimensions						Shoulder and chamfer dimensions								
		d	D	T	d <sub>1</sub>	B	C	r <sub>1,2</sub> min.	r <sub>3,4</sub> min.	a	d <sub>a</sub> max.	d <sub>b</sub> min.	D <sub>a</sub> min.	D <sub>a</sub> max.	D <sub>b</sub> min.	C <sub>a</sub> min.	C <sub>b</sub> min.	r <sub>a</sub> max.	r <sub>b</sub> max.
		mm			mm						mm								
32048X	4FD	240	360	76	300	76	57	4	3	77	262	258	318	345	346	12	19	4	3
30248	3GB	240	440	79	324	72	60	4	4	80	285	261	383	420	409	8	19	4	4
32248	4GD	240	440	127	346	120	100	5	4	105	276	262	365	420	415	7	27	4	3
32952	3EC	260	360	63.5	308	63.5	48	3	2.5	68	280	276	328	345	347	11	15.5	3	2.5
32052X	4FC	260	400	87	328	87	65	5	4	84	288	281	352	382	383	14	22	5	4
32252	4GD	260	480	137	366	130	106	5	5	112	303	286	401	458	454	10	31	5	4
32956	4EC	280	380	63.5	329	63.5	48	3	2.5	74	299	297	348	365	368	11	15.5	3	2.5
32056X	4FC	280	420	87	348	87	65	5	4	89	306	301	370	402	402	14	22	5	4
32256	4GD	280	500	137	384	130	106	6	5	116	319	302	418	478	473	10	31	5	4
32960	3FD	300	420	76	359	76	57	4	3	79	325	319	383	404	405	13	19	4	3
32060X	4GD	300	460	100	377	100	74	5	4	97	330	322	404	440	439	10	26	4	3
32260	4GD	300	540	149	412	140	115	6	5	126	343	326	453	518	511	10	34	5	4
32964	3FD	320	440	76	379	76	57	4	3	84	343	337	402	424	426	9	19	3	2.5
32064X	4GD	320	480	100	399	100	74	5	4	103	350	342	424	460	461	10	26	4	3
32264	4GD	320	580	159	442	150	125	6	5	133	368	343	486	559	550	12	34	6	5
32968	4FD	340	460	76	399	76	57	4	3	90	361	357	421	444	446	14	19	3	2.5
32972	4FD	360	480	76	419	76	57	4	3	96	380	377	439	464	466	10	19	3	2.5

Type	Dimensions this column conforms to ISO 355 standard (ABMA)	Weight	Basic load rating		Fatigue load limit P <sub>u</sub>	Rated speed		Calculate the coefficient		
			Dynamic C	Static C <sub>0</sub>		reference speed	Maximum speed	e	Y	Y <sub>0</sub>
		kg	kN		r/min					
32048X	4FD	26.5	1038.45	1890	163.8	1260	1680	0.46	1.3	0.7
30248	3GB	47	1365	1848	163.8	1050	1470	0.43	1.4	0.8
32248	4GD	81.5	2013.9	3517.5	283.5	1050	1365	0.43	1.4	0.8
32952	3EC	19	955.5	1606.5	140.7	1365	1680	0.4	1.5	0.8
32052X	4FC	38	1303.05	2310	199.5	1155	1470	0.43	1.4	0.8
32252	4GD	105	2457	3832.5	315	945	1260	0.43	1.4	0.8
32956	4EC	20	997.5	1743	150.15	1260	1470	0.43	1.4	0.8
32056X	4FC	40.5	1352.4	2478	210	1050	1365	0.46	1.3	0.7
32256	4GD	108	2530.5	4095	325.5	892.5	1260	0.44	1.35	0.8
32960	3FD	31.5	1182.3	2352	195.3	997.5	1365	0.4	1.5	0.8
32060X	4GD	58	1726.2	3150	257.25	945	1260	0.43	1.4	0.8
32260	4GD	140	3081.75	4987.5	383.25	840	1155	0.43	1.4	0.8
32964	3FD	33.5	1213.8	2478	202.65	945	1260	0.43	1.4	0.8
32064X	4GD	64	1746.15	3255	262.5	892.5	1155	0.46	1.3	0.7
32264	4GD	174	3520.65	5775	435.75	787.5	1050	0.43	1.4	0.8
32968	4FD	35	1221.15	2520	205.8	892.5	1260	0.44	1.35	0.8
32972	4FD	37	1250.55	2677.5	214.2	840	1155	0.46	1.3	0.7