AUTOMOTIVE BEARINGS

Tapered roller bearings

TAPERED ROLLER BEARINGS

Tapered roller bearings are separable with tapered raceways in inner and outer rings. They have single-row, double-row and four-row structures. Tapered roller bearings are capable of taking high radial loads and axial loads in one direction. Load capacity depends on the raceway angle in the cup. The larger the angle is, the greater the load capacity is. When the bearing takes a radial load, a componet force in axial direction is generated. Thus another bearing is needed to take the axial load in the opposite direction. They are generally mounted in pairs in a manner similar to single-row angular contact ball bearings. The clearance of single-row tapered roller bearings needs readjusting before application while double-row and four-row tapered roller bearings does not with clearance finely adjusted before delivery.

Tapered roller bearings have tapered rollers in between the outer ring and inner ring having raceways. Tapered roller bearings are designed so the apices of the cones formed by the raceways of the cone and cup and the conical rollers all coincide at one point on the axis of the bearing making the bearing capable of taking both radial loads and axial loads. Load capacity is determined by contact angle ?. The larger ? is, the greater load capacity is. The magnitude of the angle is described by the calculation coefficient ?. The greater ? is, the larger the angle is and the larger the load capacity is. Tapered roller bearings are separable with the cup and the cone assembly comprising the inner ring, tapered rollers and the cage. The cone assemblies and cups can be mounted independently.

Inntec roller bearings are widely used in cars, rolling mills, engineering machinery, mining machinery and metallurgical machinery.

AUTOMOTIVE BEARINGS

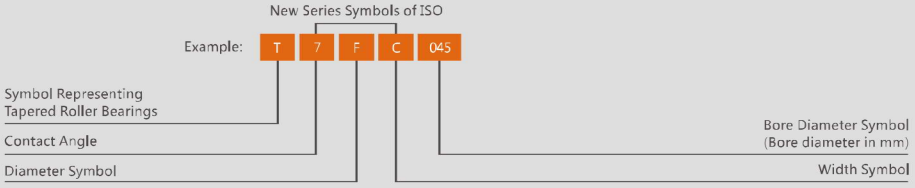
InnTec Bearing

Tapered roller bearings

Table 1 Design and Featured of Combinations of Tapered Roller Bearings

Figure	Arrangement	Examples of Bearing No.	Features
	Back-to-back	HR3021JDB+KLR10	Two standard bearings are combined. The bearing clearances are adjusted by cone spacers or cup spacers. The cones and cups and spacers are marked with serial numbers and mating marks. Components with the same serial number can be assembled referring to the matching symbols.
	Face-to-face	HR3021JDF+KR	
	KBE Type	100KBE31+L	The KBE type is a back-to-back arrangement of bearings with the cup and spacer integrated, and the KH type is a face-toface arrangement in which the cones are integrated. Since the bearing clearance is adjusted using spacers, it is necessary for components to have the same serial number for assembly with reference to matching symbols.
	KH Type	100KH31+L	

Among metric-design tapered roller bearings specified by ISO 355, there are those having new dimensions that are different than the dimension series 3XX used in the past. Part of them are listed in the bearing tables. They conform to the specifications of ISO for the smaller end diameter of the cup and contact angle. The cone and cup assemblies are internationally interchangeable. The bearing number formulation, which is different thanthat for past metric design, is as follows:



Besides metric design tapered roller bearings, there are also inch design bearings. For the cone assemblies and cups of inch design bearings, except four-row tapered roller bearings, the bearing numbers are approximately formulated as follows:

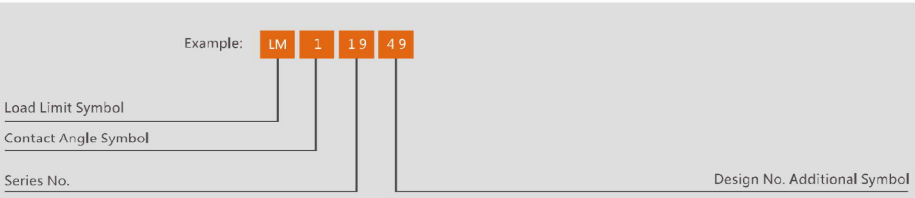


Table 2 Tolerances for Effective Widths of Cone Assemblies and Cups, and Overall Width (CLASS K)

d (mm) Nominal Bore Diameter		Effective Width Deviation of Cone Assembly Δ_{Ts}		Effective Width Deviation of Cup Δ_{Ts}		Overall Width Deviation Δ_{Ts}	
Over	incl.	High	low	High	low	High	low
10	80	+100	0	+100	0	+200	0
80	120	+100	-100	+100	-100	+200	-200
120	315	+150	-150	+200	-100	+350	-250
315	400	+200	-200	+200	-200	+400	-400

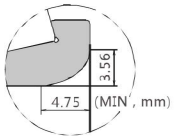
Bearings for Front Axles of Automobiles
(In the bearing tables, those preceded by t)

Table 3 Tolerances for Bore Diameter and Overall Width

Nominal Bore Diameter		Bore Diameter Deviation Δ_{ds}		Overall Width Deviation Δ_{Ts}	
Over (mm) 1/25.4	Incl. (mm) 1/25.4	High	low	High	low
-	76.200 3.0000	+20	0	+356	0

The tolerances for outside diameter and those for radial runout of the cones and cups.

Special Chamfer Dimensions
For bearings marked "spec." In the column of r in the bearing tables, the chamfer dimension of the cone back-face side is as shown on the following figure.



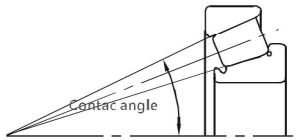
DESIGN, TYPES, AND FEATURES

Tapered roller bearings are designed so the apices of the cones formed by the raceways of the cone and cup and the conical rollers all coincide at one point on the axis of the bearing. When a radial load is imposed, an axial force component occurs; therefore, it is necessary to use two bearings in opposition or some other multiple arrangement.

For metric-design medium-angle and steep-angle tapered roller bearings, the respective contact angle symbol C or D is added after the bore number. For normal-angle tapered roller bearings, no contact angle symbol is used. Medium-angle tapered roller bearings are primarily used for the pinion shafts of differential gears of automobiles.

Among those with high load capacity(HR series), some bearings have the basic number suffixed by J to conform to the specifications of ISO for the cup back face raceway diameter, cup width, and contact angle. Therefore, the cone assembly and cup of bearings with the same basic number suffixed by J are internationally interchangeable.

Among metric-design tapered roller bearings specified by ISO 355, there are those having new dimensions that are different than the dimension series 3XX used in the past. Part of them are listed in the bearing tables. They conform to the specifications of ISO for the smaller end diameter of the cup and contact angle. The cone and cup assemblies are internationally interchangeable. The bearing number formulation, which is different than that for past metric design, is as follows:



InnTec Bearing

Tapered roller bearings

Table 3 Tolerances for Cones(CLASS K)

Nominal Bore Diameter d (mm)		?dmp		Vdp	V dmp	Kia
Over	incl.	high	low	max.	max.	Max.
10	18	0	-12	12	9	15
18	30	0	-12	12	9	18
30	50	0	-12	12	9	20
50	80	0	-15	15	11	25
80	120	0	-20	20	15	30
120	180	0	-25	25	19	35
180	250	0	-30	30	23	50
250	315	0	-35	35	26	60
315	400	0	-40	40	30	70

Table 4 Tolerances for Cups(CLASS K)

Nominal Outside Diameter d (mm)		?Dmp		Vdp	V Dmp	Kia
Over	incl.	high	low	max.	max.	Max.
18	18	0	-12	12	9	18
30	50	0	-14	14	11	20
50	80	0	-16	16	12	25
80	120	0	-18	18	14	35
120	150	0	-20	20	15	40
150	180	0	-25	25	19	45
180	250	0	-30	30	23	50
250	315	0	-35	35	26	60
315	400	0	-40	40	30	70
400	500	0	-45	45	34	80

DIMENSIONS RELATED TO MOUNTING

The dimensions related to mounting tapered roller bearings are listed in the bearing tables. Since the cages protrude from the ring faces of tapered roller bearings, please use care when designing shafts and housings. When heavy axial loads are imposed, the shaft shoulder dimensions and strength must be sufficient to support the cone rib.

PERMISSIBLE MISALIGNMENT

The permissible misalignment angle for tapered roller bearings is approximately 0.0009 radian (3′).

LIMITING SPEEDS

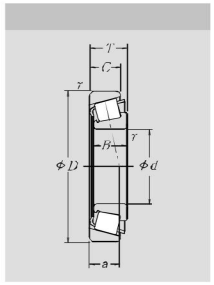
The limiting speeds listed in the bearing tables should be adjusted depending on the bearing load conditions. Also, higher speeds are attainable by making changes in the lubrication method, cage design, etc.

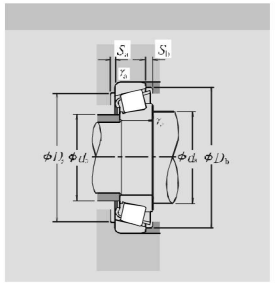
PRECAUTIONS FOR USE OF TAPERED ROLLER BEARINGS

1. If the load on tapered roller bearings becomes too small, or if the ratio of the axial and radial loads for matched bearings exceeds 'e'(e is listed in the bearing tables)during operation, slippage between the rollers and raceways occurs, which may result in smearing. Especially with large bearings since the weight of the rollers and cage is high. If such load conditions are expected, please contact LXB for selection of the bearings.

2. Confirm the dimension of "Abutment and Fillet Dimensions" of Da, Db, Sa, Sb at the time of the HR series adoption.

SINGLE-ROW TAPERED ROLLER BEARINGS



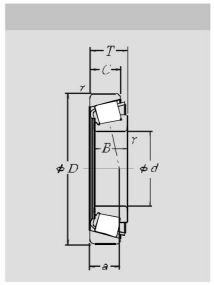


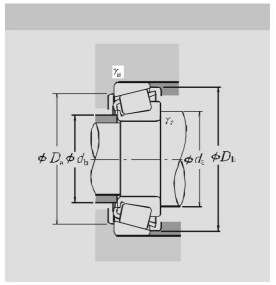
$$P = XF_r + YF_a$$

$F_a/F_r \leq e$		$F_a/F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Dynamic Equivalent Load
Static Equivalent Load
$P_0 = 0.5F_r + Y_0 F_a$
When $F_r > 0.5F_r + Y_0 F_a$ use $P_0 = F_r$
The values of e, Y_1, and Y_0 are given in the table below.

SINGLE-ROW TAPERED ROLLER BEARINGS (INCH DESIGN)



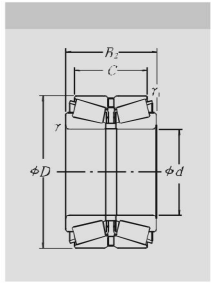


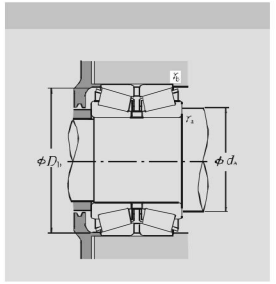
$$P = XF_r + YF_a$$

$F_a/F_r \leq e$		$F_a/F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Dynamic Equivalent Load
Static Equivalent Load
$P_0 = 0.5F_r + Y_0 F_a$
When $F_r > 0.5F_r + Y_0 F_a$ use $P_0 = F_r$
The values of e, Y_1, and Y_0 are given in the table below.

DOUBLE-ROW TAPERED ROLLER BEARINGS





$$P = XF_r + YF_a$$

$F_a/F_r \leq e$		$F_a/F_r > e$	
X	Y	X	Y
1	Y_3	0.67	Y_2

Dynamic Equivalent Load
Static Equivalent Load
$P_0 = F_r + Y_0 F_a$
When $F_r > 0.5F_r + Y_0 F_a$ use $P_0 = F_r$
The values of e, Y_2, Y3 and Y_0 are given in the table below.

SINGLE-ROW TAPERED ROLLER BEARINGS
Bore Diameter 15 28 mm

InnTec Bearing

Tapered roller bearings

Dimensions (mm)							Load ratings (KN)				Revolution speed limit		ISO355	Installation dimensions (mm)									Eff. Load	Constant	Axial Load Factors		Weight	Bearing numbers
d	D	T	B	C	Cone	cup	(N)		(Kgf)		Grease	Oil	Dimension	da	db	Da		Db	Sa	Sb	Cone	cup	Centers				(Kg)	
					R MIN		Cr	Cor	Cr	Cor			Series approx	MIN	MAX	MAX	MIN	MIN	MIN	MIN	Ra MAX		a	e	Y1	Y0		
15.000	35	11.75	11	10	0.6	0.6	14800	13200	1510	1350	11000	15000	-	23	19	30	30	33	2	1.5	0.6	0.6	8.2	0.32	1.9	1	0.053	30202
	42	14.25	13	11	1	1	23600	21100	2400	2160	9500	13000	2FB	24	22	36	36	38.5	2	3	1	1	9.5	0.29	2.1	1.2	0.098	HR30302J
17.000	40	13.25	12	11	1	1	20100	19900	2050	2030	9500	13000	2DB	26	23	34	34	37.5	2	2	1	1	9.7	0.35	1.7	0.96	0.079	HR30203J
	40	17.25	16	14	1	1	27100	28000	2770	2860	9500	13000	2DD	26	22	34	34	37	2	3	1	1	11.2	0.31	1.9	1.1	0.103	HR32203J
	47	15.25	14	12	1	1	29200	26700	2980	2720	8500	12000	2FB	26	24	41	40	43	2	3	1	1	10.4	0.29	2.1	1.2	0.134	HR30303J
	47	15.25	14	10.5	1	1	22000	20300	3240	2070	8000	11000	-	29	23	41	34	44	2	4.5	1	1	15.4	0.81	0.74	0.41	0.129	30303D
	47	20.25	19	16	1	1	37500	36500	3800	3750	8500	11000	2FD	28	23	41	39	43	2	4	1	1	12.5	0.29	2.1	1.2	0.178	HR32303
20.000	42	15	15	12	0.6	0.6	24600	27400	2510	2800	9000	12000	3CC	28	24	37	35	40	3	3	0.6	0.6	10.6	0.37	1.6	0.88	0.097	HR32004XJ
	47	15.25	14	12	1	1	27900	28500	2850	2900	8000	11000	2DB	29	27	41	40	44	2	3	1	1	11	0.35	1.7	0.96	0.127	HR30204J
	47	15.25	14	12	0.3	1	23900	24000	2430	2450	8000	11000	-	29	26	41	37	44	2	3	0.3	1	13	0.55	1.1	0.6	0.126	HR30204C-A
	47	19.25	18	15	1	1	35500	37500	3650	3850	8500	11000	2DD	29	25	41	38	44.5	3	4	1	1	12.6	0.33	1.8	1	0.161	HR32204J
	47	19.25	18	15	1	1	31500	33500	3200	3400	8000	11000	5DD	29	25	41	36	44	2	4	1	1	14.5	0.52	1.2	0.64	0.166	HR32204CJ
	52	16.25	15	13	1.5	1.5	35000	33500	3550	3400	7500	10000	2FB	31	27	44	43	47.5	2	3	1.5	1.5	11.6	0.3	2	1.1	0.172	HR30304J
	52	16.25	15	12	1.5	1.5	25300	24500	2580	2490	7100	10000	-	34	26	43	37	49	2	4	1.5	1.5	16.7	0.81	0.74	0.41	0.168	HR30304D
	52	22.25	21	18	1.5	1.5	45500	47500	4650	4850	8000	11000	2FD	33	26	43	42	48	3	4	1.5	1.5	13.9	0.3	2	1.1	0.241	HR32304J
22.000	44	15	15	11.5	0.6	0.6	25600	29400	2610	3000	8500	11000	3CC	30	27	39	40	42	3	3.5	0.6	0.6	11.1	0.4	1.5	0.83	0.103	HR320/22XJ
	50	15.25	14	12	1	1	29200	30500	2980	3150	7500	10000	-	31	29	44	41	47	2	3	1	1	11.6	0.37	1.6	0.9	0.139	HR302/22
	50	15.25	14	12	1	1	27200	29500	2780	3000	7500	10000	-	31	29	44	39	47	2	3	1	1	13	0.49	1.2	0.67	0.144	HR302/22C
	50	19.25	18	15	1	1	36500	40500	3750	4100	7500	11000	-	31	28	44	46	47	2	4	1	1	13.5	0.37	1.6	0.89	0.18	HR322/22
	50	19.25	18	15	1	1	33500	39500	3400	4000	7500	10000	-	31	29	44	44	48	2	4	1	1	15.2	0.51	1.2	0.65	0.185	HR322/22C
	56	17.25	16	14	1.5	1.5	37000	36500	3750	3750	7100	9500	-	33	30	47	40	50	2	3	1.5	1.5	12.4	0.32	1.9	1	0.208	HR303/22
	56	17.25	16	13	1.5	1.5	34500	34000	3500	3500	6700	95000	-	33	30	47	41	52.5	3	4	1.5	1.5	15.9	0.59	1	0.56	0.207	HR302/22C
25.000	47	15	15	11.5	0.6	0.6	27400	33000	2800	3400	8000	11000	4CC	33	30	42	44	45	3	3.3	0.6	0.6	11.8	0.43	1.4	0.77	0.116	HR32005XJ
	47	17	17	14	0.6	0.6	31000	38000	3150	3900	8000	11000	2CE	33	29	42	43	44	3	3	0.6	0.6	11	0.29	2.1	1.1	0.131	HR33005J
	52	16.25	15	13	1	1	32000	35000	3300	3550	7100	10000	3CC	34	31	46	44	48.5	2	3	1	1	12.7	0.38	1.6	0.88	0.157	HR30205J
	52	16.25	15	12	1	1	28100	31500	2860	3200	9700	9500	-	34	32	46	43	49.5	2	4	1	1	14.4	0.53	1.1	0.62	0.155	HR30205C
	52	19.25	18	16	1	1	40000	45000	4050	4600	7100	10000	2CD	34	30	46	44	50	2	3	1	1	13.5	0.36	1.7	0.92	0.189	HR32205J
	52	19.25	18	15	1	1	35000	42000	3550	4250	7100	9500	-	34	30	46	40	50	2	4	1	1	15.8	0.53	1.1	0.62	0.19	HR32205C
	52	22	22	18	1	1	47500	56500	4850	5750	7500	10000	2DE	34	29	46	43	49.5	4	4	1	1	14.1	0.35	1.7	0.94	0.221	HR33205J
	62	18.25	17	15	1.5	1.5	47500	46000	4850	4700	6300	8500	2FB	36	34	54	54	57	2	3	1.5	1.5	13.2	0.3	2	1.1	0.27	HR30305J
	62	18.25	17	14	1.5	1.5	42000	45000	4300	4550	6000	8500	-	36	35	53	49	58.5	3	4	1.5	1.5	16.4	0.55	1.1	0.6	0.276	HR30305C
	62	18.25	17	13	1.5	1.5	38000	40500	3900	4100	5600	8000	7FB	39	34	53	47	59	2	5	1.5	1.5	19.9	0.83	0.73	0.4	0.265	HR30305DJ
	62	18.25	17	13	1.5	1.5	38000	40500	3900	4100	5600	8000	7FB	39	33	53	47	59	3	5	1.5	1.5	19.9	0.83	0.73	0.4	0.265	HR31305J
	62	25.25	24	20	1.5	1.5	62500	66000	6400	6750	6300	8500	2FD	38	32	53	51	57	3	5	1.5	1.5	15.6	0.3	2	1.1	0.376	HR32305J
28.000	52	16	16	12	1	1	32000	39000	3300	3950	7100	9500	4CC	37	33	46	44	50	3	4	1	1	12.8	0.43	1.7	0.77	0.146	HR320/28XJ
	58	17.25	16	14	1	1	39500	41500	4050	4200	6300	9000	-	37	34	52	50	55	2	3	1	1	13.2	0.35	1.7	0.93	0.203	HR302/28
	58	17.25	16	12	1	1	34000	38500	3450	3900	6300	8500	-	37	34	52	48	54	2	4	1	1	16.9	0.64	0.94	0.52	0.198	HR302/28C
	58	20.25	19	16	1	1	47500	54000	4850	5500	6300	9000	-	37	34	52	49	55	2	4	1	1	14.6	0.37	1.6	0.89	0.243	HR322/28
	58	20.25	19	16	1	1	42000	49500	4300	5050	6300	9000	5DD	37	33	52	45	55	2	4	1	1	16.8	0.56	1.1	0.59	0.251	HR322/28CJ
	68	19.75	18	15	1.5	1.5	55000	55500	5650	5650	6000	8000	-	39	37	59	58	61	2	4.5	1.5	1.5	14.5	0.31	1.9	1.1	0.341	HR303/28
	68	19.75	18	14	1.5	1.5	49500	50500	5000	5150	5600	7500	-	39	38	59	57	63	3	5.5	1.5	1.5	17.4	0.52	1.2	0.64	0.335	HR303/28C

Remarks The suffix C represents medium-angle tapered roller bearings. Since they are designed for specific applications, please consult LXB when using bearings with suffix C.

SINGLE-ROW TAPERED ROLLER BEARINGS
Bore Diameter 30 35 mm

InnTec Bearing

Tapered roller bearings

Dimensions (mm)							Load ratings (KN)				Revolution speed limit		ISO355	Installation dimensions (mm)									Eff. Load	Constant	Axial Load Factors		Weight	Bearing numbers
d	D	T	B	C	Cone	cup	(N)		(Kgf)		Grease	Oil	Dimension	da	db	Da		Db	Sa	Sb	Cone	cup	Centers				(Kg)	
					R MIN		Cr	Cor	Cr	Cor			Series approx	MIN	MAX	MAX	MIN	MIN	MIN	MIN	Ra MAX		a	e	Y1	Y0		
30.000	47	12	12	9	0.3	0.3	17600	24400	1800	2490	7500	10000	2BD	34	34	44	42	44	3	3	0.3	0.3	9.2	0.32	1.9	1	0.074	HR32906J
	55	17	17	13	1	1	36000	44500	3700	4550	6700	9000	4CC	39	35	49	47	53	3	4	1	1	13.5	0.43	1.4	0.77	0.172	HR32006XJ
	55	20	20	16	1	1	42000	54000	4250	5500	6700	9000	2CE	39	35	49	48	52	3	4	1	1	13.1	0.29	2.1	1.1	0.208	HR33006J
	62	17.25	16	14	1	1	43000	47500	4400	4850	6000	8000	3DB	39	37	56	52	58	2	3	1	1	13.9	0.38	1.6	0.88	0.238	HR30206J
	62	17.25	16	12	1	1	35500	37000	3650	3800	5600	7500	-	39	36	56	49	59	2	5	1	1	17.8	0.68	0.88	0.49	0.221	HR30206C
	62	21.25	20	17	1	1	52000	60000	5300	6150	6000	8500	3DC	39	36	56	51	58.5	2	4	1	1	15.4	0.38	1.6	0.88	0.297	HR32203J
	62	21.25	20	16	1	1	48000	56000	4900	5750	6000	8000	-	39	35	56	48	59	2	5	1	1	17.8	0.55	1.1	0.6	0.293	HR32206C
	62	25	25	19.5	1	1	66000	79500	6800	8100	6000	8000	2DE	39	35	56	52	59.5	5	5.5	1	1	16.1	0.34	1.8	0.97	0.355	HR33206J
	72	20.75	19	16	1.5	1.5	59500	60000	6050	6100	5300	7500	2FB	41	40	63	62	66	3	4.5	1.5	1.5	15.1	0.32	1.9	1.1	0.403	HR30306J
	72	20.75	19	14	1.5	1.5	56500	55500	5800	5650	5300	7100	-	41	38	63	59	67	3	6.5	1.5	1.5	18.5	0.55	1.1	0.6	0.383	HR30306C
	72	20.75	19	14	1.5	1.5	49000	52500	5000	5350	4800	6700	7FB	44	40	63	55	68	3	6.5	1.5	1.5	23.1	0.83	0.73	0.4	0.393	HR30306DJ
	72	20.75	19	14	1.5	1.5	49000	52500	5000	5350	4800	6800	7FB	44	40	63	55	68	3	6.5	1.5	1.5	23.1	0.83	0.73	0.4	0.393	HR31306J
	72	28.75	27	23	1.5	1.5	80000	88500	8150	9000	5600	7500	2FD	43	38	63	59	66	3	5.5	1.5	1.5	18	0.32	1.9	1.1	0.57	HR32306J
	72	28.75	27	23	1.5	1.5	76000	86500	7750	8800	5600	7500	5FD	43	36	63	54	68	3	5.5	1.5	1.5	22	0.55	1.1	0.6	0.583	HR32306CJ
32.000	58	17	17	13	1	1	37500	47000	3800	4800	6300	8500	4CC	41	37	52	49	55	3	4	1	1	14.2	0.45	1.3	0.73	0.191	HR320/32XJ
	58	21	20	16	1	1	41000	50000	4150	5100	6300	8500	-	41	37	52	50	55	2	4	1	1	13.8	0.31	1.9	1.1	0.225	330/32
	65	18.25	17	15	1	1	48500	54000	4950	5500	5600	8000	-	41	39	59	56	61	3	3	1	1	14.7	0.37	1.6	0.88	0.277	HR302/32
	65	18.25	17	14	1	1	45500	52500	4650	5350	5600	7500	-	41	39	59	54	62	3	4	1	1	16.9	0.55	1.1	0.6	0.273	HR302/32C
	65	22.25	21	18	1	1	56000	65000	5700	6650	6000	8000	-	41	38	59	54	61	3	4	1	1	15.9	0.37	1.6	0.88	0.336	HR322/32
	65	22.25	21	17	1	1	49500	60000	5050	6100	5600	7500	-	41	39	59	51	62	3	5	1	1	20.2	0.59	1	0.56	0.335	HR322/32C
	65	26	26	20.5	1	1	70000	86500	7150	8850	5600	8000	2DE	41	38	59	55	62	5	5.5	1	1	17	0.35	1.7	0.95	0.4	HR332/32J
	75	21.75	20	17	1.5	1.5	56000	56000	5700	5700	5300	7100	-	44	42	66	64	68	3	4.5	1.5	1.5	15.9	0.33	1.8	1	0.435	303/32
35.000	55	14	14	11.5	0.6	0.6	27400	39000	2790	3950	6300	8500	2BD	43	40	50	50	52.5	3	2.5	0.6	0.6	10.7	0.29	2.1	1.1	0.123	HR32907J
	62	18	18	14	1	1	43500	55500	4400	5650	5600	8000	4CC	44	40	56	54	60	4	4	1	1	15	0.45	1.3	0.73	0.229	HR32007XJ
	62	21	21	17	1	1	49000	65000	4950	6650	5600	8000	2CE	44	40	56	55	59	4	4	1	1	14.1	0.31	2	1.1	0.267	HR33007J
	72	18.25	17	15	1.5	1.5	54000	59500	5500	6050	5300	7100	3BD	46	43	63	62	67	3	3	1.5	1.5	15	0.38	1.6	0.88	0.34	HR30207J
	72	18.25	17	13	1.5	1.5	47000	54500	4750	5550	5000	6700	-	46	44	63	59	68	3	5	1.5	1.5	19.6	0.66	0.91	0.5	0.331	HR30207C
	72	24.25	23	19	1.5	1.5	70500	83500	7150	8550	5300	7100	3DC	46	42	63	61	67.5	3	5	1.5	1.5	17.9	0.38	1.6	0.88	0.456	HR32207J
	72	24.25	23	18	1.5	1.5	60500	71500	6200	7300	5000	7100	-	46	42	63	58	68.5	3	6	1.5	1.5	20.3	0.55	1.1	0.6	0.442	HR32207C
	72	28	28	22	1.5	1.5	86500	108000	8850	11100	5300	7100	2DE	46	41	63	61	68	5	6	1.5	1.5	18.3	0.35	1.7	0.93	0.54	HR33207J
	80	22.75	21	18	2	1.5	76000	79000	7750	8050	4800	6700	2FB	47	45	71	69	74	3	4	2	1.5	16.7	0.32	1.9	1.1	0.538	HR30307J
	80	22.75	21	16	2	1.5	68000	70500	6900	7200	4800	6300	-	47	44	71	65	74	3	6.5	2	1.5	20.3	0.55	1.1	0.6	0.518	HR30307C
	80	22.75	21	15	2	1.5	62000	68000	6350	6950	4300	6000	7FB	51	44	71	62	77	3	7.5	2	1.5	25.2	0.83	0.73	0.4	0.519	HR30307DJ
	80	22.75	21	15	2	1.5	62000	68000	6350	6950	4300	6000	7FB	51	44	71	62	77	3	7.5	2	1.5	25.2	0.83	0.73	0.4	0.52	HR31307J
	80	32.75	31	25	2	1.5	99000	111000	10100	11300	5000	6700	2FE	49	43	71	66	74	3	7.5	2	1.5	20.7	0.32	1.9	1.1	0.765	HR32307J

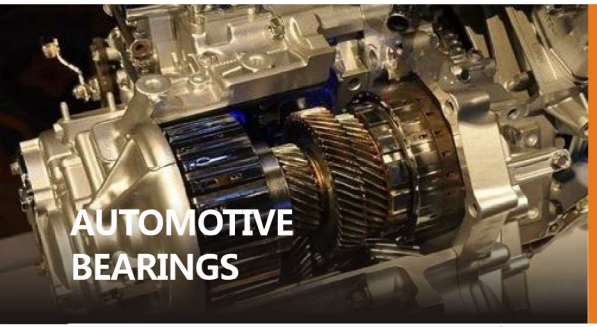
AUTOMOTIVE BEARINGS

SINGLE-ROW TAPERED ROLLER BEARINGS
Bore Diameter 40 50 mm

InnTec Bearing

Tapered roller bearings

Dimensions (mm)							Load ratings (KN)				Revolution speed limit		ISO355	Installation dimensions (mm)									Eff. Load	Constant	Axial Load Factors		Weight	Bearing numbers
d	D	T	B	C	Cone	cup	(N)		(Kgf)		Grease	Oil	Dimension	da	db	Da		Db	Sa	Sb	Cone	cup	Centers				(Kg)	
					R MIN		Cr	Cor	Cr	Cor			Series approx	MIN	MAX	MAX	MIN	MIN	MIN	MIN	Ra MAX		a	e	Y1	Y0		
40.000	62	15	15	12	0.6	0.6	34000	47000	3450	4800	5600	7500	2BC	48	44	57	57	59	3	3	0.6	0.6	11.5	0.29	2.1	1.1	0.161	HR32908J
	68	19	19	14.5	1	1	53000	71000	5400	7250	5300	7100	3CD	49	45	62	60	65.5	4	4.5	1	1	15	0.38	1.6	0.87	0.28	HR32008XJ
	68	22	22	18	1	1	59000	81500	6000	8300	5300	7100	2BE	49	45	62	61	65	4	4	1	1	14.6	0.28	2.1	1.2	0.322	HR33008J
	75	26	26	20.5	1.5	1.5	78500	101000	8000	10300	4800	6700	2CE	51	46	66	65	71	4	5.5	1.5	1.5	18	0.36	1.7	0.93	0.503	HR33108J
	80	19.75	18	16	1.5	1.5	63500	70000	6450	71500	4800	6300	3DB	51	48	71	69	75	3	3.5	1.5	1.5	16.6	0.38	1.6	0.88	0.437	HR30208J
	80	24.75	23	19	1.5	1.5	77000	90500	7900	9200	4800	6300	3DC	51	48	71	68	75	3	5.5	1.5	1.5	18.9	0.38	1.6	0.88	0.548	HR32208J
	80	24.75	23	19	1.5	1.5	74000	90500	7550	9200	4500	6300	5DC	51	47	71	65	76	3	5.5	1.5	1.5	21.9	0.55	1.1	0.6	0.558	HR32208CJ
	80	32	32	25	1.5	1.5	107000	137000	10900	14000	4800	6300	2DE	51	46	71	67	76	5	7	1.5	1.5	20.8	0.36	1.7	0.92	0.744	HR33208J
	90	25.25	23	20	2	1.5	90500	101000	9250	10300	4300	5600	2FB	52	52	81	76	82	3	5	2	1.5	19.5	0.35	1.7	0.96	0.758	HR30308J
	90	25.25	23	18	2	1.5	84500	935000	8600	9500	4300	5600	-	52	50	81	72	84	3	7	2	1.5	22.7	0.53	1.1	0.62	0.735	HR30308C
	90	25.25	23	17	2	1.5	80000	89500	8150	91500	3800	5300	7FB	56	50	81	70	87	3	8	2	1.5	28.7	0.83	0.73	0.92	0.728	HR30308CJ
	90	25.25	23	17	2	1.5	80000	89500	8150	91500	3800	5300	7FB	56	50	81	70	87	3	8	2	1.5	28.7	0.83	0.73	0.96	0.728	HR31308J
	90	35.25	33	27	2	1.5	120000	145000	12200	14800	4300	6000	2FD	54	50	81	73	82	3	8	2	1.5	23.4	0.35	1.7	0.62	1.05	HR32308J
45.000	68	15	15	12	0.6	0.6	34500	50500	3550	5150	5000	6700	2BC	53	50	63	62	64	3	3	0.6	0.6	12.3	0.32	1.9	0.4	0.187	HR32909J
	75	20	20	15.5	1	1	60000	83000	6950	8450	4500	6300	3CC	54	51	69	67	72	4	4.5	1	1	16.6	0.39	1.5	0.4	0.354	HR32009XJ
	75	24	24	19	1	1	69000	99000	8500	10100	4800	6300	2CE	54	51	69	67	71	4	6	1	1	16.3	0.29	2	0.96	0.414	HR33009J
	80	26	26	20.5	1.5	1.5	84000	113000	7700	11600	4500	6000	3CE	56	51	71	69	77	4	5.5	1.5	1.5	19.1	0.38	1.6	1	0.552	HR33109J
	85	20.75	19	16	1.5	1.5	68500	79500	1130	8100	4300	6000	3DB	56	53	76	74	80	3	4.5	1.5	1.5	18.3	0.41	1.5	0.84	0.488	HR30209J
	85	24.75	23	19	1.5	1.5	83000	102000	9050	10400	4300	6000	3DC	56	53	76	73	81	3	5.5	1.5	1.5	20.1	0.41	1.5	1.1	0.602	HR32209J
	85	24.75	23	19	1.5	1.5	75500	95500	14200	9750	4300	5600	5DC	56	52	76	70	82	3	5.5	1.5	1.5	23.6	0.59	1	0.86	0.603	HR32209CJ
	85	32	32	25	1.5	1.5	111000	147000	11400	15000	4300	6000	3DE	56	51	76	72	81	5	7	1.5	1.5	22	0.39	1.6	0.81	0.817	HR33209J
	95	29	26.5	20	2.5	2.5	88500	109000	9750	11100	3600	5000	7FC	60	53	83	71	91	3	9	2	2	32.1	0.87	0.69	0.81	0.918	T7FC045
	95	36	35	30	2.5	2.5	139000	174000	14700	17800	4000	5300	2ED	60	54	83	79	89	5	6	2	2	23.5	0.32	1.9	0.56	1.22	T2ED045
	100	27.25	25	22	2	1.5	112000	127000	11400	12900	3800	5300	2FB	57	58	91	86	93	3	5	2	1.5	21.1	0.35	1.7	0.86	1.01	HR30309J
	100	27.25	25	18	2	1.5	95500	109000	9750	11100	3400	4800	7FB	61	57	91	79	96	3	9	2	1.5	31.5	0.83	0.73	0.38	0.957	HR30309DJ
	100	27.25	25	18	2	1.5	95500	109000	9750	11100	3400	4800	7FB	61	57	91	79	96	3	9	2	1.5	31.5	0.83	0.73	1.02	0.947	HR31309J
	100	38.25	36	30	2	1.5	144000	177000	14700	18000	3800	5300	2FD	59	56	91	82	93	3	8	2	2	25	0.35	1.7	0.96	1.42	HR32309J
50.000	30	36	35	30	2.5	2.5	144000	185000	14600	18800	3800	5000	2ED	65	59	88	83	94	6	6	2	2	24.2	0.34	1.8	0.96	1.3	T2ED050
	72	15	15	12	0.6	0.6	36000	54000	3650	5500	4500	6300	2BC	58	54	67	66	69	3	3	0.6	0.6	13.5	0.34	1.8	0.97	0.193	HR32910J
	80	20	20	15.5	1	1	61000	87000	6250	8900	4300	6000	3CC	59	56	74	71	77	4	4.5	1	1	17.9	0.42	1.4	0.78	0.38	HR32010XJ
	80	24	24	19	1	1	70500	104000	7150	10600	4300	6000	2CE	59	55	74	71	76	4	5	1	1	17.4	0.32	1.9	1	0.452	HR33010J
	85	26	26	20	1.5	1.5	89000	126000	9100	12800	4300	5600	3CE	61	56	76	74	82	4	6	1.5	1.5	20.3	0.41	1.5	0.8	0.597	HR33110J
	90	21.75	20	17	1.5	1.5	76000	91500	7750	9300	4000	5300	3DB	61	58	81	79	85	3	4.5	1.5	1.5	19.6	0.42	1.4	0.79	0.557	HR30210J
	90	24.75	23	19	1.5	1.5	87500	109000	8900	11100	4000	5300	3DC	61	57	81	78	86	3	5.5	1.5	1.5	21	0.42	1.4	0.79	0.642	HR32210J
	90	24.75	23	18	1.5	1.5	77500	102000	7900	10400	3800	5300	5DC	61	58	81	76	87	3	6.5	1.5	1.5	24.6	0.59	1	0.56	0.655	HR32210CJ
	90	32	32	24.5	1.5	1.5	118000	165000	12100	16800	4000	5300	3DE	61	56	81	76	87	5	7.5	1.5	1.5	23.2	0.41	0.5	0.8	0.867	HR33210J
	105	32	29	22	3	3	109000	133000	11100	13600	3200	4500	7FC	74	59	91	78	100	5	10	2.5	2.5	36.4	0.87	0.69	0.38	1.22	T7FC050
	110	29.25	27	23	2.5	2	130000	148000	13300	14100	3400	4800	2FB	65	65	100	95	102	3	6	2	2	23.1	0.35	1.7	0.96	1.28	HR30310J
	110	29.25	27	19	2.5	2	114000	132000	11700	13400	3200	4300	7FB	70	62	100	87	105	3	10	2	2	34.2	0.83	0.73	0.4	1.26	HR30310DJ
	110	29.25	27	19	2.5	2	114000	132000	11700	13400	3200	4300	7FB	70	62	100	87	105	3	10	2	2	34.2	0.83	0.73	0.4	1.26	HR31310J
	110	42.25	40	33	2.5	2	176000	220000	17900	22400	3600	4800	2FD	68	62	100	91	102	3	9	2	2	27.9	0.35	1.7	0.96	1.88	HR32310J



SINGLE-ROW TAPERED ROLLER BEARINGS
Bore Diameter 40 50 mm

InnTec Bearing

Tapered roller bearings

Dimensions (mm)							Load ratings (KN)				Revolution speed limit		ISO355	Installation dimensions (mm)									Eff. Load	Constant	Axial Load Factors		Weight	Bearing numbers
d	D	T	B	C	Cone	cup	(N)		(Kgf)		Grease	Oil	Dimension	da	db	Da		Db	Sa	Sb	Cone	cup	Centers				(Kg)	
					R MIN		Cr	Cor	Cr	Cor			Series approx	MIN	MAX	MAX	MIN	MIN	MIN	MIN	Ra MAX		a	e	Y1	Y0		
	80	17	17	14	1	1	45500	745000	4600	7600	4300	5600	2BC	64	60	74	73	76	4	3	1	1	14.6	0.31	1.9	1.1	0.282	HR32911J
	90	23	23	17.5	1.5	1.5	81500	117000	8300	11900	3800	5300	2CE	66	62	81	80	86	4	5.5	1.5	1.5	19.7	0.41	1.5	0.81	0.568	HR32011XJ
	90	27	27	21	1.5	1.5	91500	138000	9300	14000	3800	5300	3CE	66	62	81	80	86	5	6	1.5	1.5	19.2	0.31	1.9	1.1	0.657	HR33011J
	95	30	30	23	1.5	1.5	112000	158000	11500	16100	3800	5000	3DB	66	62	86	82	91	5	7	1.5	1.5	22.4	0.37	1.6	0.88	0.877	HR33111J
	100	22.75	21	18	2	1.5	94500	113000	9650	11500	3600	5000	3DC	67	64	91	89	94	4	4.5	2	1.5	20.9	0.41	1.5	0.81	0.736	HR30211J
	100	26.75	25	21	2	1.5	110000	137000	11200	14000	3600	5000	3DE	67	63	91	87	95	4	5.5	2	1.5	22.7	0.41	1.5	0.81	0.859	HR32211J
	100	35	35	27	2	1.5	141000	193000	14400	19700	3600	5000	7FC	67	62	91	86	96	6	8	2	1.5	25.2	0.40	1.5	0.83	1.18	HR33211J
	115	34	31	23.5	3	3	126000	164000	12800	16700	3000	4300	2FB	73	66	101	86	109	4	10.5	2.5	2.5	39.0	0.87	0.69	0.38	1.58	T7FC055
	120	31.5	29	25	2.5	2	150000	171000	15200	17500	3200	4300	7FB	70	71	110	101	111	4	6.5	2	2	24.6	0.35	1.7	0.96	1.63	HR30311J
	120	31.5	29	21	2.5	2	131000	153000	13400	15600	2800	4000	7FB	75	67	110	94	114	4	10.5	2	2	37.0	0.83	0.73	0.40	1.58	HR30311DJ
	120	31.5	29	21	2.5	2	131000	153000	13400	15600	2800	4000	7FB	75	67	110	94	114	4	10.5	2	2	37.0	0.83	0.73	0.40	1.58	HR31311J
	120	45.5	43	35	2.5	2	204000	258000	20800	26300	3200	4300	2FD	73	67	110	99	111	4	10.5	2	2	29.9	0.35	0.7	0.96	2.39	HR32311J
	120	45.5	43	35	2.5	2	195000	262000	19900	26700	3200	4300	5FD	73	65	110	91	112	4	10.5	2	2	35.8	0.55	1.1	0.60	2.47	HR32311CJ
	85	17	17	14	1	1	49000	84500	5000	8650	3800	5300	2BC	69	65	79	78	81	4	3	1	1	15.5	0.33	1.8	1.0	0.306	HR32912J
	95	23	23	17.5	1.5	1.5	85500	127000	8700	12900	3600	5000	4CC	71	66	86	85	91	4	5.5	1.5	1.5	20.9	0.43	1.4	0.77	0.608	HR32012XJ
	95	27	27	21	1.5	1.5	96000	150000	9800	15300	3600	5000	2CE	71	66	86	85	90	5	6	1.5	1.5	20.0	0.33	1.8	1.0	0.713	HR33012J
	100	30	30	23	1.5	1.5	115000	166000	11700	16900	3400	4800	3CE	71	68	91	88	96	5	7	1.5	1.5	23.6	0.40	1.5	0.83	0.91	HR33112J
	110	23.75	22	19	2	1.5	104000	123000	10600	12500	3400	4500	3EB	72	69	101	96	103	4	4.5	2	1.5	22.0	0.41	1.5	0.81	0.930	HR30212J
	110	29.75	28	24	2	1.5	131000	167000	13400	17000	3400	4500	3EC	72	68	101	95	104	4	5.5	2	1.5	24.1	0.41	1.5	0.81	1.18	HR32212J
	110	38	38	29	2	1.5	166000	231000	16900	23600	3400	4500	3EE	72	68	101	94	105	6	9	2	1.5	27.6	0.40	1.5	0.82	1.56	HR33212J
	125	37	33.5	26	3	3	151000	197000	15400	20100	2800	3800	7FC	78	72	111	94	119	4	11	2.5	2.5	41.3	0.82	0.73	0.40	2.03	T7FC060
	130	33.5	31	26	3	2.5	174000	201000	17700	20500	3000	4000	2FB	78	77	118	112	120	4	7.5	2.5	2	26.0	0.35	1.7	0.96	2.03	HR30312J
	130	33.5	31	22	3	2.5	151000	177000	15400	18100	2600	3800	7FB	84	74	118	103	125	4	11.5	2.5	2	40.3	0.83	0.73	0.40	1.98	HR30312DJ
	130	33.5	31	22	3	2.5	151000	177000	15400	18100	2600	3800	7FB	84	74	118	103	125	4	11.5	2.5	2	40.3	0.83	0.73	0.40	1.98	HR31312J
	130	48.5	46	37	3	2.5	233000	295000	23700	30000	3000	4000	2FD	81	74	118	107	120	4	11.5	2.5	2	31.4	0.35	1.7	0.96	2.96	HR32312J
	130	48.5	46	35	3	2.5	196000	249000	20000	25400	2800	3800		81	74	116	102	125	4	13.5	2.5	2	39.9	0.58	1.0	0.57	2.86	HR32312C
	90	17	17	14	1	1	49000	86500	5000	8800	3600	5000	2BC	74	70	84	82	86	4	3	1	1	16.8	0.35	1.7	0.93	.0323	HR32913J
	100	23	23	17.5	1.5	1.5	86500	132000	8800	13500	3400	4500	4CC	76	71	91	90	97	4	5.5	1.5	1.5	22.4	0.46	1.3	0.72	0.646	HR32013XJ
	100	27	27	21	1.5	1.5	97500	156000	9950	15900	3400	4500	2CE	76	71	91	90	96	5	6	1.5	1.5	21.1	0.35	1.7	0.95	0.76	HR33013J
	110	34	34	26.5	1.5	1.5	148000	218000	15100	22200	3200	4300	3DE	76	73	101	96	106	6	7.5	1.5	1.5	26.0	0.39	1.5	0.85	1.32	HR33113J
	120	24.75	23	20	2	1.5	122000	151000	12500	15400	3000	4000	3EB	77	78	111	106	113	4	4.5	2	1.5	23.8	0.41	1.5	0.81	1.18	HR30213J
	120	32.75	31	27	2	1.5	157000	202000	16000	20600	3000	4000	3EC	77	75	111	104	115	4	5.5	2	1.5	27.1	0.41	1.5	0.81	1.55	HR32213J
	120	41	41	32	2	1.5	202000	282000	20600	28800	3000	4000	3EE	77	74	111	102	115	6	9	2	1.5	29.2	0.39	1.5	0.85	2.04	HR33213J
	140	36	33	28	3	2.5	200000	233000	20400	23800	2600	3600	2GB	83	83	128	121	130	4	8	2.5	2	27.9	0.35	1.7	0.96	2.51	HR30313J
	140	36	33	23	3	2.5	173000	205000	17700	20900	2400	3400	7GB	89	80	128	111	133	4	13	2.5	2	43.2	0.83	0.73	0.40	2.43	HR30313DJ
	140	36	33	23	3	2.5	173000	205000	17700	20900	2400	3400	7GB	89	80	128	111	133	4	13	2.5	2	43.2	0.83	0.73	0.40	2.43	HR31313J
	140	51	48	39	3	2.5	267000	340000	27300	35000	2800	3800	2GD	86	80	128	116	130	4	12	2.5	2	34.0	0.35	1.7	0.96	3.6	HR32313J

SINGLE-ROW TAPERED ROLLER BEARINGS
(INCH DESIGN)
Bore Diameter 12.000 22.225 mm

InnTec Bearing

Tapered roller bearings

Dimensions (mm)							Load ratings (KN)				Revolution speed limit		Installation dimensions (mm)						Eff. Load	Constant	Axial Load Factors		Weight (Kg)		Bearing numbers	
d	D	T	B	C	Cone	cup	(N)		(Kgf)		Grease	Oil					Cone	cup	Centers	e	Y1	Y0	Cone	cup	Cone	cup
					R MIN		Cr	Cor	Cr	Cor			da	db	Da	Db	Ra MAX		a							
12.000	31.991	10.008	10.785	7.938	0.8	1.3	10300	8900	1050	905	13000	18000	16.5	15.5	26	29	0.8	1.3	6.8	0.41	1.5	0.81	0.023	0.017	A2047	A2126
12.700	34.988	10.998	10.988	8.730	1.3	1.3	11700	10900	1200	1110	12000	16000	18.5	17	29	32	1.3	1.3	8.2	0.45	1.3	0.73	0.033	0.022	A4050	A4138
15.000	34.988	10.998	10.988	8.730	0.8	1.3	11700	10900	1200	1110	12000	16000	19.5	19	29	32	0.8	1.3	8.2	0.45	1.3	0.73	0.029	0.022	A4059	A4138
15.875	34.988	10.998	10.998	8.712	1.3	1.3	13800	13400	1410	1360	11000	15000	21.5	19.5	29	32.5	1.3	1.3	7.7	0.32	1.9	1.0	0.031	0.018	L21549	L21511
	39.992	12.012	11.153	9.525	1.3	1.3	14900	15700	1520	1600	9500	13000	22	20.5	34	37	1.3	1.3	10.3	0.53	1.1	0.63	0.044	0.031	A6062	A6157
	41.275	14.288	14.681	11.112	1.3	2.0	21300	19900	2170	2030	1000	13000	21.5	20	34	37.5	1.3	2.0	9.1	0.31	1.9	1.1	0.061	0.035	03062	03162
	42.862	14.288	14.288	9.525	1.5	1.5	17300	17200	1770	1750	8500	12000	24.5	22.5	34.5	39.5	1.5	1.5	13.0	0.70	0.85	0.47	0.061	0.040	11590	11520
	42.862	16.670	16.670	13.495	1.5	1.5	26900	26300	2750	2680	9500	13000	23	21	36.5	39	1.5	1.5	10.6	0.33	1.8	1.0	0.075	0.048	17580	17520
	44.450	15.494	14.381	11.430	1.5	1.5	23800	23900	2430	2440	8500	11000	23.5	21	38	42	1.5	1.5	11.2	0.36	1.7	0.93	0.081	0.039	05062	05175
	49.225	19.845	21.539	14.288	0.8	1.3	37500	37000	3800	3800	8500	11000	22	21.5	42	44.5	0.8	1.3	10.7	0.27	2.3	1.2	0.139	0.065	09062	09195
16.000	47.000	21.000	21.000	16.000	1.0	2.0	35000	36500	3600	3750	9000	12000	27.5	23	37.5	43	1.0	2.0	14.9	0.55	1.1	0.60	0.115	0.082	HM81649	HM81610
16.993	39.992	12.014	11.153	9.525	0.8	1.3	14900	15700	1520	1600	9500	13000	22	21	34	37	0.8	1.3	10.3	0.53	1.1	0.63	0.042	0.031	A6067	A6157
17.455	36.525	11.112	11.112	7.938	1.5	1.5	11600	11000	1190	1120	10000	14000	23.5	21.5	30	33.5	1.5	1.5	8.9	0.49	1.2	0.68	0.030	0.020	A5069	A5144
17.462	39.878	13.843	14.605	10.668	1.3	1.3	22500	22500	2290	2290	10000	13000	23	21.5	34	37	1.3	1.3	8.7	0.29	2.1	1.2	0.055	0.028	LM11749	LM11710
	47.000	14.381	14.381	11.112	0.8	1.3	23800	23900	2430	2440	8500	11000	23	2205	40.5	42.5	0.8	1.3	10.1	0.36	1.7	0.93	0.082	0.047	05068	05185
19.050	39.992	12.014	11.153	9.525	1.0	1.3	14900	15700	1520	1600	9500	13000	24	23	34	37	1.0	1.3	10.3	0.53	1.1	0.63	0.037	0.031	A6075	A6157
	45.237	15.494	16.637	12.065	1.3	1.3	28500	28900	2910	2950	9000	12000	25	23.5	39.5	41.5	1.3	1.3	9.5	0.30	2.0	1.1	0.081	0.044	LM11949	LM11910
	47.000	14.381	14.381	11.112	1.3	1.3	23800	23900	2430	2440	8500	11000	25	23.5	40.5	42.5	1.3	1.3	10.1	0.36	1.7	0.93	0.007	0.047	05075	05185
	49.225	18.034	19.050	14.288	1.3	1.3	37500	37000	3800	3800	8500	11000	25.5	24	42	44.5	1.3	1.3	10.7	0.27	2.3	1.2	0.115	0.065	09067	09195
	49.225	19.845	21.539	14.288	1.2	1.3	37500	37000	3800	3800	8500	11000	25.5	24	42	44.5	1.2	1.3	10.7	0.27	2.3	1.2	0.124	0.065	09078	09195
	49.225	21.209	19.050	17.462	1.3	1.5	37500	37000	3800	3800	8500	11000	25.5	24	41.5	44.5	1.3	1.5	13.8	0.27	2.3	1.2	0.115	0.085	09067	09196
	49.225	23.020	21.539	17.462	1.5	3.5	37500	37000	3800	3800	8500	11000	26	24	39	44.5	1.5	3.5	13.8	0.27	2.3	1.2	0.124	0.082	09074	09194
	53.975	22.225	21.839	15.875	1.5	2.3	40500	39500	4150	4000	7500	10000	31.5	26	43	50	1.5	2.3	16.3	0.59	1.0	0.56	0.156	0.097	21075	21212
19.990	47.000	14.381	14.381	11.112	1.5	1.3	23800	23900	2430	2440	8500	11000	26.5	24	40.5	42.5	1.5	1.3	10.1	0.36	1.7	0.93	0.073	0.047	05079	05185
20.000	51.994	15.011	14.260	12.700	1.5	1.3	26000	27900	2650	2840	7500	10000	27.5	27	45	48	1.5	1.3	12.1	0.40	1.5	0.82	0.105	0.061	07079	07204
20.625	49.225	23.020	21.539	17.462	1.5	1.5	37500	37000	3800	3800	8500	11000	27.5	25.5	41.5	44.5	1.5	1.5	13.8	0.27	2.3	1.2	0.115	0.085	09081	09196
20.638	49.225	19.845	19.845	15.875	1.5	1.5	36000	37000	3650	3750	8000	11000	28.5	26	42.5	45.5	1.5	1.5	12.9	0.32	1.9	1.0	0.114	0.067	12580	12520
21.430	50.005	17.526	18.288	13.970	1.3	1.3	38500	40000	3950	4100	8000	11000	27.5	25.5	44	46	1.3	1.3	10.9	0.28	2.2	1.2	0.115	0.059	M12649	M12610
	45.237	15.494	16.637	12.065	1.3	1.3	29200	33500	2980	3400	8500	11000	27.5	26	39.5	42.5	1.3	1.3	10.0	0.31	2.0	1.1	0.078	0.038	LM12749	LM12710
	45.975	15.494	16.637	12.065	1.3	1.3	29200	33500	2980	3400	8500	11000	27.5	26	40	42.5	1.3	1.3	10.0	0.31	2.0	1.1	0.078	0.043	LM12749	LM12711
22.225	50.005	13.495	14.260	9.525	1.3	1.0	26000	27900	2650	2840	7500	10000	28.5	27	44.5	47	1.3	1.0	10.6	0.40	1.5	0.82	0.097	0.035	07087	07196
	50.005	17.526	18.288	13.970	1.3	1.3	38500	40000	3950	4100	8000	11000	28.5	26.5	44	46	1.3	1.3	10.9	0.28	2.2	1.2	0.111	0.059	M12648	M12610
	52.388	19.368	20.168	14.288	1.5	1.5	40500	43000	4100	4400	7500	10000	29.5	27	45	48.5	1.5	1.5	11.3	0.29	2.1	1.2	0.137	0.067	1380	1328
	53.975	19.368	20.168	14.288	1.5	1.5	40500	43000	4100	4400	7500	10000	29.5	27	46	49	1.5	1.5	11.3	0.29	2.1	1.1	0.137	0.082	1380	1329
	56.896	19.368	19.837	15.875	1.3	1.3	38000	40500	3900	4150	7100	9500	29	27.5	49	51	1.3	1.3	12.2	0.31	2.0	1.1	0.152	0.102	1755	1729
	57.150	22.225	22.225	17.462	0.8	1.5	48000	50000	4850	5100	7100	9500	29.5	29	49	52	0.8	1.5	15.1	0.35	1.7	0.95	0.183	0.106	1280	1220

SINGLE-ROW TAPERED ROLLER BEARINGS
(INCH DESIGN)
Bore Diameter 22.606 28.575 mm

InnTec Bearing

Tapered roller
bearings

Dimensions (mm)							Load ratings (KN)				Revolution speed limit		Installation dimensions (mm)						Eff. Load	Constant	Axial Load Factors		Weight (Kg)		Bearing numbers	
d	D	T	B	C	Cone	cup	(N)		(Kgf)		Grease	Oil					Cone	cup	Centers	e	Y1	Y0	Cone	cup	Cone	cup
					R MIN		Cr	Cor	Cr	Cor			da	db	Da	Db	Ra MAX		a							
22.626	47.000	15.500	15.500	12.000	1.5	1.0	26300	30000	2680	3100	8000	11000	29	27	40.5	44.5	1.5	1	12.2	0.47	1.3	0.70	0.086	0.046	LM72849	LM72810
23.812	50.292	14.224	14.732	10.668	1.5	1.3	27600	32000	2820	3250	7100	10000	30.5	28.5	44.5	47	1.5	1.3	10.9	0.37	1.6	0.88	0.097	0.039	L44640	L44610
	56.896	19.368	19.837	15.875	0.8	1.3	38000	40500	3900	4150	7100	9500	29.5	28.5	49	51	0.8	1.3	12.2	0.31	2.0	1.10	0.143	0.102	1779	1729
24.000	55.000	25.000	25.000	21.000	2.0	2.0	49500	55000	5050	5650	7100	9500	35	30	47	52	2	2	15.8	0.35	1.7	0.93	0.181	0.107	JHM33449	HM33410
24.981	51.994	15.011	14.260	12.700	1.5	1.3	26000	27900	2650	2840	7500	10000	31	29	45	48	1.5	1.3	12.1	0.40	1.5	0.82	0.085	0.061	07098	07204
	52.001	15.011	14.260	12.700	1.5	2.0	26000	27900	2650	2840	7500	10000	31	29	44.5	48	1.5	2	12.1	0.40	1.5	0.82	0.085	0.061	07098	07205
	62.000	16.002	16.566	14.288	1.5	1.5	37000	39500	3750	4000	6300	8500	33	30.5	54	57	1.5	1.5	12.8	0.38	1.6	0.86	0.165	0.091	17098	17244
25.000	50.005	13.495	14.260	90525	1.5	1.0	26000	27900	2650	2840	7500	10000	31	29	44.5	47	1.5	1	10.6	0.40	1.5	0.82	0.085	0.035	07097	07196
	51.994	15.011	14.260	12.700	1.5	1.3	26000	27900	2650	2840	7500	10000	31	29	45	48	1.5	1.3	12.1	0.40	1.5	0.82	0.085	0.061	07097	07204
25.400	50.005	13.495	14.260	9.525	3.3	1.0	26000	27900	2650	2840	7500	10000	35	29.5	44.5	47	3.3	1	10.6	0.40	1.5	0.82	0.082	0.035	07100SA	07196
	50.005	13.495	14.260	9.525	1.0	1.0	26000	27900	2650	2840	7500	10000	30.5	29.5	44.5	47	1	1	10.6	0.40	1.5	0.82	0.084	0.035	07100	07196
	50.292	14.224	14.732	10.668	1.3	1.3	27600	32000	2820	3250	7100	10000	31.5	29.5	44.5	47	1.3	1.3	10.9	0.37	1.6	0.88	0.090	0.039	L44643	L44610
	57.150	17.462	17.462	13.495	1.3	1.5	39500	45500	4050	4650	6700	9000	32.5	30.5	51	53	1.3	1.5	12.4	0.35	1.7	0.95	0.151	0.070	15578	15520
	57.150	19.431	19.431	14.732	1.5	1.5	42500	49000	4300	5000	6700	9000	36	33	48.5	54	1.5	1.5	16.1	0.55	1.1	0.60	0.156	0.089	M84548	M84510
	59.530	23.368	23.114	18.288	0.8	1.5	50000	58000	5100	5900	6300	9000	36	32.5	49.5	56	0.8	1.5	18.3	0.55	1.1	0.60	0.194	0.13	K84249	M84210
	62.000	19.050	20.638	14.288	0.8	1.3	46000	53000	4700	5400	6000	8000	32.5	31.5	55	58	0.8	1.3	13.3	0.35	1.7	0.94	0.222	0.081	15101	15245
	63.500	20.638	20.638	15.875	3.5	1.5	46000	53000	4700	5400	6000	8000	38	31.5	55	59	3.5	1.5	14.9	0.35	1.7	0.94	0.22	0.113	15100	15250
	64.292	21.433	21.433	16.670	1.5	1.5	51000	64500	5200	6600	5600	8000	38	36.5	54	61	1.5	1.5	17.7	0.55	1.1	0.60	0.246	0.128	M86643	M86610
	65.088	22.225	21.463	15.875	1.5	1.5	45000	47500	4600	4850	5600	8000	39	34.5	53	61	1.5	1.5	20.0	0.73	0.82	0.45	0.214	0.142	23100	23256
	68.262	22.225	22.225	17.462	0.8	1.5	55000	64000	5600	6550	5600	7500	34.5	33.5	59	63	0.8	1.5	16.9	0.42	1.4	0.79	0.28	0.152	02473	02420
	72.233	25.400	25.400	19.842	0.8	2.3	63500	83500	6500	8500	5000	7100	39.5	39.5	60	69	0.8	2.3	20.7	0.55	1.1	0.60	0.398	0.188	HM88630	HM88610
	72.626	24.608	24.257	17.462	2.3	1.5	60000	58000	6100	5900	5600	7500	41	36.5	61	68	2.3	1.5	20.7	0.60	1.0	0.55	0.32	0.177	41100	41286
26.988	50.292	14.224	14.732	10.668	3.5	1.3	27600	32000	2820	3250	7100	10000	37.5	31	44.5	47	3.5	1.3	10.9	0.37	1.6	0.88	0.081	0.039	L44649	L44610
	57.150	19.845	19.355	15.875	3.3	1.5	40000	44500	4100	4500	6700	9000	37.5	31.5	51	53.5	3.3	1.5	13.9	0.33	1.8	1.0	0.152	0.077	1997X	1922
	60.325	19.845	17.462	15.875	3.5	1.5	39500	45500	4050	4650	6700	9000	38.5	32	51	54	3.5	1.5	14.7	0.35	1.7	0.95	0.141	0.123	15580	15523
	62.000	19.050	20.638	14.288	0.8	1.3	46000	53000	4700	5400	6000	8000	33.5	33	55	58	0.8	1.3	13.3	0.35	1.7	0.94	0.211	0.081	15106	15245
28.575	57.150	19.845	19.355	15.875	3.5	1.5	40000	44500	4100	4500	6700	9000	39.5	33.5	51	53.5	3.5	1.5	13.9	0.33	1.8	1.0	0.141	0.077	1988	1922
	59.131	15.875	16.764	11.811	S	1.3	34500	41500	3550	4200	6300	8500	40	33.5	52	56	3.5	1.3	12.6	0.41	1.5	0.80	0.147	0.062	LM67043	LM671010
	62.000	19.050	20.638	14.288	3.5	1.3	46000	53000	4700	5400	6000	8000	40	34	55	58	3.5	1.3	13.3	0.35	1.7	0.94	0.199	0.081	15112	15245
	62.000	19.050	20.638	14.288	0.8	1.3	46000	53000	4700	5400	6000	8000	34.5	34	55	58	0.8	1.3	13.3	0.35	1.7	0.94	0.20	0.081	15113	15245
	64.292	21.433	21.433	16.670	1.5	1.5	51000	64500	5200	6600	5600	8000	40	38	54	61	1.5	1.5	17.7	0.55	1.1	0.60	0.223	0.128	M86647	M88610
	68.262	22.225	22.225	17.462	0.8	1.5	55000	64000	5600	6550	5600	7500	36.5	36	59	63	0.8	1.5	16.9	0.42	1.4	0.79	0.257	0.152	02474	02420
	72.626	24.608	24.257	17.462	4.8	1.5	60000	58000	6100	5900	5600	7500	48	36.5	61	68	4.8	1.5	20.7	0.60	1.0	0.55	0.292	0.177	41125	41286
	72.626	24.608	24.257	17.462	1.5	1.5	60000	58000	6100	5900	5600	7500	41.5	36.5	61	68	1.5	1.5	20.7	0.60	1.0	0.55	0.295	0.177	41126	41286
	73.025	22.225	22.225	17.462	0.8	3.3	54500	64500	5550	6600	5300	7100	37.5	37	62	68	0.8	1.3	18.3	0.45	1.3	0.73	0.321	0.16	02872	02820

SINGLE-ROW TAPERED ROLLER BEARINGS
(INCH DESIGN)
Bore Diameter 29.000 32.000 mm

InnTec Bearing

Tapered roller
bearings

Dimensions (mm)							Load ratings (KN)				Revolution speed limit		Installation dimensions (mm)						Eff. Load	Constant	Axial Load Factors		Weight (Kg)		Bearing numbers	
d	D	T	B	C	Cone	cup	(N)		(Kgf)		Grease	Oil					Cone	cup	Centers	e	Y1	Y0	Cone	cup	Cone	cup
					R MIN		Cr	Cor	Cr	Cor			da	db	Da	Db	Ra MAX		a							
29.000	50.292	14.224	14.732	10.668	3.5	1.3	26800	34000	2730	3500	7100	9500	39.5	33	44.5	48	3.5	1.3	10.8	0.37	1.6	0.89	0.079	0.036	L45449	L45410
29.367	66.421	23.812	25.433	19.050	3.5	1.3	65000	73000	6600	7450	6000	8000	41	35	58	60	3.5	1.3	14.3	0.25	2.4	1.3	0.242	0.165	2690	2631
30.000	62.000	16.002	16.566	14.288	1.5	1.5	37000	39500	3750	4000	6300	8500	37	34.5	54	57	1.5	1.5	12.8	0.38	1.6	0.86	0.136	0.091	17118	17244
	62.000	19.050	20.638	14.288	1.3	1.3	46000	53000	4700	5400	6000	8000	36.5	35	55	58	1.3	1.3	13.3	0.35	1.7	0.94	0.189	0.081	15117	15245
	63.500	20.638	20.638	15.875	1.3	1.3	46000	53000	4700	5400	6000	8000	36.5	35	56	59	1.3	1.3	14.9	0.35	1.7	0.94	0.189	0.113	15117	15250
	72.000	19.000	18.923	15.875	1.5	1.5	52000	56000	5300	5700	5600	7500	38	36	62	65	1.5	1.5	14.8	0.36	1.7	0.92	0.225	0.163	26118	26283
30.112	62.000	19.050	20.638	14.288	0.8	1.3	46000	53000	4700	5400	6000	8000	36	35.5	55	58	0.8	1.3	13.3	0.35	1.7	0.94	0.189	0.081	15116	15245
30.162	58.738	14.684	15.080	10.716	3.5	1.0	28800	33500	2940	3450	6000	8000	41.5	35	52	55	3.5	1	13.3	0.47	1.3	0.70	0.12	0.057	08118	08231
	64.292	21.433	21.433	16.670	1.5	1.5	51000	64500	5200	6600	5600	8000	41	38	54	61	1.5	1.5	17.7	0.55	1.1	0.60	0.211	0.128	M86649	M86610
	68.262	22.225	22.225	17.462	2.3	1.5	55500	70500	5650	7200	5300	7500	43.5	39.5	58	65	2.3	1.5	19.1	0.55	1.1	0.60	0.263	0.146	M88043	M88010
	69.850	23.812	25.357	19.050	2.3	1.3	7100	84000	7200	8550	5600	7500	40	36.5	61	64	2.3	1.3	14.5	0.27	2.2	1.2	0.297	0.169	2558	2523
	69.850	23.812	25.357	19.050	0.8	1.3	7100	84000	7200	8550	5600	7500	37	36.5	61	64	0.8	1.3	14.5	0.27	2.2	1.2	0.298	0.169	2559	2523
	76.200	24.608	24.074	16.670	1.5	3.3	67500	69500	5680	7100	5000	6700	45	42	64	73	1.5	3.3	22.9	0.67	0.90	0.49	0.383	0.146	43118	43300
30.213	62.000	19.050	20.638	14.288	3.5	1.3	46000	53000	4700	5400	6000	8000	41.5	35.5	55	58	3.5	1.3	13.3	0.35	1.7	0.94	0.186	0.081	15118	15245
	62.000	19.050	20.638	14.288	0.8	1.3	46000	53000	4700	5400	6000	8000	36	35.5	55	58	0.8	1.3	13.3	0.35	1.7	0.94	0.188	0.081	15120	15245
	62.000	19.050	20.638	14.288	1.5	1.3	46000	53000	4700	5400	6000	8000	37.5	35.5	55	58	1.5	1.3	13.3	0.35	1.7	0.94	0.188	0.081	15119	15245
30.995	64.292	21.433	21.433	16.670	1.5	1.5	51000	64500	5200	6600	5600	8000	42	38	54	61	1.5	1.5	17.7	0.55	1.1	0.60	0.205	0.128	M86648A	M86610
31.750	58.738	16.684	15.080	10.716	1.0	1.0	28800	33500	2940	3450	6000	8000	37.5	36	52	55	1	1	13.3	0.47	1.3	0.70	0.113	0.057	08125	08231
	59.131	15.875	16.764	11.811	S	1.3	34500	41500	3550	4200	6300	8500	42.5	36	52	56	3.5	1.3	12.6	0.41	1.5	0.80	0.127	0.062	LM67048	LM67010
	62.000	18.161	19.050	14.288	S	1.3	46000	53000	4700	5400	6000	8000	42.5	36.5	55	58	3.5	1.3	13.3	0.35	1.7	0.94	0.165	0.081	15123	15245
	62.000	19.050	20.638	14.288	0.8	1.3	46000	53000	4700	5400	6000	8000	37	36.5	55	58	0.8	1.3	13.3	0.35	1.7	0.94	0.176	0.081	15126	15245
	62.000	19.050	20.638	14.288	3.5	1.3	46000	53000	4700	5400	6000	8000	42.5	36.5	55	58	3.5	1.3	13.3	0.35	1.7	0.94	0.174	0.081	15125	15245
	63.500	20.638	20.638	15.875	0.8	1.3	46000	53000	4700	5400	6000	8000	37	36.5	56	59	0.8	1.3	14.9	0.35	1.7	0.94	0.176	0.113	15126	15250
	68.262	22.225	22.225	17.462	3.5	1.5	55000	64000	5600	6550	5600	7500	44.5	38.5	59	63	3.5	1.5	16.9	0.42	1.4	0.79	0.229	0.152	02475	02420
	28.262	22.225	22.225	17.462	1.5	1.5	55500	70500	5650	7200	5300	7500	43	40.5	58	65	1.5	1.5	19.1	0.55	1.1	0.60	0.25	0.146	M88046	M88010
	69.012	19.845	19.583	15.875	3.5	1.3	47000	56000	4800	5700	5600	7500	44	37.5	60	63	3.5	1.3	15.3	0.38	1.6	0.86	0.219	0.135	14125A	14276
	69.012	26.982	26.721	15.875	4.3	3.3	47000	56000	4800	5700	5600	7500	41.5	37.5	59	64	4.3	3.3	15.1	0.38	1.6	0.87	0.289	0.132	14123A	14274
	69.850	23.812	25.357	19.050	0.8	1.3	71000	84000	7200	8550	5600	7500	38.5	37.5	61	64	0.8	1.3	14.5	0.27	2.2	1.2	0.282	0.169	2580	2523
	69.850	23.812	25.357	19.050	3.5	1.3	71000	84000	7200	8550	5600	7500	44	37.5	61	64	3.5	1.3	14.5	0.27	2.2	1.2	0.28	0.169	2582	2523
	72.262	30.162	29.997	23.812	0.8	3.3	79500	90000	8100	9200	5300	7500	39.5	39.5	61	67	0.8	3.3	19.6	0.33	1.8	0.99	0.368	0.225	3188	3120
	73.025	29.370	27.783	23.020	1.3	3.3	74000	100000	7550	10200	5000	7100	45.5	42.5	59	70	1.3	3.3	23.5	0.55	1.1	0.60	0.379	0.242	HM88542	HM88510
	80.000	21.000	22.403	17.826	0.8	1.3	68500	75500	6950	7700	4500	6300	40	39.5	73	75	0.8	1.3	14.6	0.27	2.2	1.2	0.419	0.146	346	332
32.000	72.233	25.400	25.400	19.842	3.3	2.3	63500	83500	6500	8500	5000	7100	48.5	42.5	60	69	3.3	2.3	20.7	0.55	1.1	0.60	0.337	0.188	Hm88638	Hm88610

SINGLE-ROW TAPERED ROLLER BEARINGS
(INCH DESIGN)
Bore Diameter 33.338 ~ 35.000 mm

InnTec Bearing

Tapered roller
bearings

Dimensions (mm)							Load ratings (KN)				Revolution speed limit		Installation dimensions (mm)						Eff. Load	Constant	Axial Load Factors		Weight (Kg)		Bearing numbers	
d	D	T	B	C	Cone	cup	(N)		(Kgf)		Grease	Oil					Cone	cup	Centers	e	Y1	Y0	Cone	cup	Cone	cup
					R MIN		Cr	Cor	Cr	Cor			da	db	Da	Db	Ra MAX		a							
33.338	66.675	20.638	20.638	15.875	3.5	1.5	46000	53500	4650	5450	5600	7500	44.5	38.5	58	61	3.5	1.5	15.2	0.37	1.6	0.89	0.196	0.121	1680	1620
	68.262	22.225	22.225	17.462	0.8	1.5	55500	70500	5650	7200	5300	7500	42.5	41	58	65	0.8	1.5	19.0	0.55	1.1	0.60	0.236	0.146	M88048	M88010
	69.012	19.845	19.583	15.875	3.5	3.3	47000	56000	4800	5700	5600	7500	45	38.5	59	63	3.5	3.3	15.3	0.38	1.6	0.86	0.207	0.132	14130	14274
	69.012	19.845	19.583	15.875	0.8	1.3	47000	56000	4800	5700	5600	7500	39.5	38.5	60	63	0.8	1.3	15.3	0.38	1.6	0.86	0.209	0.135	14131	14276
	69.850	23.812	25.357	19.050	3.5	1.3	71000	84000	7200	8550	5600	7500	45	39	61	64	3.5	1.3	14.5	0.27	2.2	1.2	0.263	0.169	2585	2523
	72.000	19.000	18.923	15.875	3.5	1.5	52000	56000	5300	5700	5600	7500	44.5	38.5	62	65	3.5	1.5	14.7	0.36	1.7	0.92	0.200	0.163	26131	26283
	72.626	30.162	29.997	23.812	0.8	3.3	79500	90000	8100	9200	5300	7500	41.5	40.5	61	67	0.8	3.3	19.6	0.33	1.8	0.99	0.348	0.225	3197	3120
	73.025	29.370	27.783	23.020	0.8	3.3	74000	100000	7550	10200	5000	7100	45.5	42.5	59	70	0.8	3.3	23.5	0.55	1.1	0.60	0.362	0.242	HM88547	HM88510
	76.200	29.370	28.575	23.020	3.5	0.8	78500	106000	8000	10800	4800	6700	53	44.5	65	73	3.5	0.8	23.6	0.55	1.1	0.60	0.419	0.261	HM89444	HM89411
	76.200	29.370	28.575	23.020	0.8	3.3	78500	106000	8000	10800	4800	6700	46.5	44.5	62	73	0.8	3.3	23.6	0.55	1.1	0.60	0.421	0.257	HM89443	HM89410
	79.375	25.400	24.074	17.462	3.5	1.5	67500	69500	6850	7100	5000	6700	51	42	67	74	3.5	1.5	23.7	0.67	0.90	0.49	0.348	0.220	43131	43312
34.925	65.088	18.034	18.288	13.970	S	1.3	47500	57500	4850	5900	5600	7500	46	40	58	61	3.5	1.3	14.1	0.38	1.6	0.88	0.172	0.087	LM48548	LM48510
	65.088	20.320	18.288	16.256	S	1.3	47500	57500	4850	5900	5600	7500	46	40	58	61	3.5	1.3	16.4	0.38	1.6	0.88	0.172	0.108	LM48548	LM48511
	66.675	20.638	20.638	16.670	3.5	2.3	53000	62500	5400	6400	5600	7500	46.5	40	58	62	3.5	2.3	15.2	0.35	1.7	0.94	0.194	0.112	M38549	M38510
	69.012	19.845	19.583	15.875	3.5	1.3	47000	56000	4800	5700	5600	7500	46	40	60	63	3.5	1.3	15.3	0.38	1.6	0.86	0.194	0.135	14138A	14276
	69.012	19.845	19.583	15.875	1.5	1.3	47000	56000	4800	5700	5600	7500	42	40	60	63	1.5	1.3	15.1	0.38	1.6	0.86	0.196	0.135	14137A	14276
	72.233	25.400	25.400	19.842	2.3	2.3	63500	83500	6500	8500	5000	7100	48.5	42.5	60	69	2.3	2.3	20.7	0.55	1.1	0.60	0.307	0.188	HM88649	HM88610
	73.025	22.225	22.225	17.462	0.8	3.3	54500	64500	5550	6600	5300	7100	42.5	42	62	68	0.8	3.3	18.3	0.47	1.3	0.73	0.266	0.160	02878	02820
	73.025	22.225	23.812	17.462	3.5	3.3	63500	77000	6500	7850	5300	7100	47	41.5	63	68	3.5	3.3	16.1	0.37	1.6	0.90	0.291	0.150	2877	2820
	73.025	23.812	24.608	19.050	1.5	0.8	71000	86000	7250	8750	5300	7100	43	40.5	65	68	1.5	0.8	15.7	0.29	2.1	1.10	0.306	0.167	25877	25821
	73.025	23.812	24.608	19.050	3.5	2.3	71000	86000	7250	8750	5300	7100	47	40.5	64	68	3.5	2.3	15.7	0.29	2.1	1.10	0.304	0.165	25878	25820
	76.200	29.370	28.575	23.020	0.8	0.8	78500	106000	8000	10800	4800	6700	47.5	44.5	65	73	0.8	0.8	23.6	0.55	1.1	0.60	0.403	0.261	HM89446A	HM89411
	76.200	29.370	28.575	23.020	3.5	0.8	78500	106000	8000	10800	4800	6700	53	44.5	65	73	3.5	0.8	23.6	0.55	1.1	0.60	0.400	0.261	HM89446	HM89411
	76.200	29.370	28.575	23.020	3.5	3.3	78500	106000	8000	10800	4800	6700	53	44.5	62	73	3.5	3.3	23.6	0.55	1.1	0.60	0.400	0.257	HM89446	HM89410
	76.200	29.370	28.575	23.812	1.5	3.3	80500	96500	8200	9850	5000	6700	46	43.5	64	72	1.5	3.3	21.3	0.40	1.5	0.82	0.404	0.235	31594	31520
	79.375	29.370	29.771	23.812	3.5	3.3	88000	106000	8950	10800	4800	6700	50	43.5	67	74	3.5	3.3	20.0	0.37	1.6	0.90	0.448	0.259	3478	3420
34.976	68.262	15.875	16.520	11.908	1.5	1.5	45000	53500	4600	5450	5300	7100	42.5	40.5	61	65	1.5	1.5	14.5	0.44	1.4	0.74	0.196	0.073	19138	19268
	72.085	22.385	19.583	18.415	1.3	2.3	47000	56000	4800	5700	5600	7500	41.5	40	60	65	1.3	2.3	17.7	0.38	1.6	0.87	0.198	0.210	14139	14283
	80.000	21.006	20.940	15.875	1.5	1.5	56500	64500	5750	6600	5000	6700	43.5	41	59	73	1.5	1.5	16.0	0.40	1.5	0.82	0.308	0.199	28138	28315
35.000	59.131	15.875	16.764	11.938	S	1.3	35000	47000	3550	4750	6000	8000	45.5	39	52	56	3.5	1.3	13.2	0.42	1.4	0.79	0.117	0.056	L68149	L68110
	59.975	15.875	16.764	11.938	S	1.3	35000	47000	3550	4750	6000	8000	45.5	39	53	56	3.5	1.3	13.2	0.42	1.4	0.79	0.117	0.064	L68149	L68111
	62.000	16.700	17.000	13.600	S	1.0	38000	50000	3900	5100	5600	8000	46	40	55	59	3.5	1	14.4	0.44	1.4	0.74	0.137	0.074	LM78349	LM78310
	62.000	16.700	17.000	13.600	S	1.5	38000	50000	3900	5100	5600	8000	46	40	54	59	3.5	1.5	14.4	0.44	1.4	0.74	0.138	0.073	LM78349	LM78310
	65.987	20.638	20.638	16.67	3.5	2.3	53000	62500	5400	6400	5600	7500	46	39.5	59	61	3.5	2.3	15.2	0.35	1.7	0.94	0.193	0.103	M38547	M38511
	73.025	26.988	26.975	22.225	3.5	0.8	75500	88500	7650	9050	5300	7500	49	42	63	68	3.5	0.8	18.1	0.37	1.6	0.89	0.309	0.212	23691	23621

AUTOMOTIVE BEARINGS

SINGLE-ROW TAPERED ROLLER BEARINGS
(INCH DESIGN)
Bore Diameter 35.717 ~ 41.275 mm

InnTec Bearing

Tapered roller bearings

Dimensions (mm)							Load ratings (KN)				Revolution speed limit		Installation dimensions (mm)						Eff. Load	Constant	Axial Load Factors		Weight (Kg)		Bearing numbers	
d	D	T	B	C	Cone	cup	(N)		(Kgf)		Grease	Oil					Cone	cup	Centers	e	Y1	Y0	Cone	cup	Cone	cup
					R MIN		Cr	Cor	Cr	Cor			da	db	Da	Db	Ra MAX		a							
35.717	72.233	25.400	25.400	19.842	3.5	2.3	63500	83500	6500	8500	5000	7100	52	43	60	69	3.5	2.3	20.7	0.55	1.1	0.60	0.298	0.188	HM88648	HM88610
36.487	73.025	23.812	24.608	19.050	1.5	0.8	71000	86000	7250	8750	5300	7100	44	42	65	68	1.5	0.8	15.7	0.29	2.1	1.1	0.291	0.167	25880	25821
36.512	76.200	29.370	28.575	23.020	3.5	3.3	78500	106000	8000	10800	4800	6700	54	44.5	62	73	3.5	3.3	23.6	0.55	1.1	0.60	0.38	0.257	HM89449	HM89410
	79.375	29.370	29.771	23.812	0.8	3.3	88000	106000	89500	10800	4800	6700	45.5	44.5	67	74	0.8	3.3	20.0	0.37	1.6	0.90	0.429	0.259	3479	3420
	88.501	25.400	23.698	17.462	2.3	1.5	73000	81000	7450	8250	4000	5600	54	50	75	84	2.3	1.5	27.9	0.78	0.77	0.42	0.502	0.245	44143	44348
	93.662	31.750	31.750	23.195	1.5	3.3	10000	142000	11200	14400	4000	5600	48.5	46.5	79	87	1.5	3.3	24.0	0.40	1.5	0.82	0.765	0.405	46143	46368
38.000	63.000	17.000	17.000	13.500	S	1.3	38500	52000	3900	5300	5600	7500	49	42.5	56	60	4.5	1.3	14.6	0.42	1.4	0.79	0.132	0.071	JL69349	JL69310
	63.500	12.700	11.908	9.525	1.5	0.8	24100	30500	2460	3100	5300	7100	45	42.5	59	60	1.5	0.8	11.9	0.35	1.7	0.95	0.109	0.046	13889	13830
	65.088	18.034	18.288	13.970	2.3	1.3	42500	55000	4300	5650	5300	7500	46	42.5	59	62	2.3	1.3	13.7	0.33	1.8	0.99	0.160	0.079	LM29749	LM29710
	65.088	18.034	18.288	13.970	S	1.3	42500	55000	4300	5650	5300	7500	49	42.5	59	62	3.5	1.3	13.7	0.33	1.8	0.99	0.158	0.079	LM29748	LM29710
	65.088	19.812	18.288	15.748	2.3	1.3	42500	55000	4300	5650	5300	7500	46	42.5	58	62	2.3	1.3	15.5	0.33	1.8	0.99	0.16	0.094	LM29749	LM29711
	68.262	15.875	16.520	11.908	1.5	1.5	45000	53500	4600	5450	5300	7100	45	43	61	65	1.5	1.5	14.5	0.44	1.4	0.74	0.173	0.073	19150	19268
	69.012	19.050	19.050	15.083	2.0	2.3	49000	61000	4950	6250	5300	7100	46.5	43	61	65	2.0	2.3	15.8	0.40	1.5	0.82	0.193	0.104	13687	13621
	69.012	19.050	19.050	15.083	3.5	0.8	49000	61000	4950	6250	5300	7100	49.5	43	62	65	3.5	0.8	15.8	0.40	1.5	0.82	0.191	0.105	13685	13620
	72.238	20.638	20.638	15.875	3.5	1.3	48500	59500	4950	6050	5300	7100	49.5	43	63	67	3.5	1.3	16.0	0.40	1.5	0.82	0.212	0.146	16150	16284
	73.025	23.812	25.654	19.050	3.5	0.8	73500	91000	7500	9300	5000	6700	50	43.5	66	69	3.5	0.8	15.9	0.30	2.0	1.1	0.312	0.135	2788	2735X
	76.200	13.812	25.654	19.050	3.5	3.3	73500	91000	7500	9300	5000	6700	50	43.5	66	70	3.5	3.3	15.9	0.30	2.0	1.1	0.312	0.187	2788	2720
	76.200	13.812	25.654	19.050	3.5	0.8	73500	91000	7500	9300	5000	6700	50	43.5	68	70	3.5	0.8	15.9	0.30	2.0	1.1	0.312	0.191	2788	2729
	79.375	29.370	29.771	23.812	3.5	3.3	88000	106000	8950	10800	4800	6700	52	45.5	67	74	3.5	3.3	20.0	0.37	1.6	0.90	0.404	0.259	3490	3420
	80.035	24.608	23.698	18.512	0.8	1.5	69000	84500	7000	8600	4500	6300	48	47	68	75	0.8	1.5	21.5	0.56	1.1	0.59	0.362	0.209	27880	27820
	82.550	39.370	28.575	23.020	0.8	3.3	87000	117000	8850	11900	4500	6000	51	49	68	78	0.8	3.3	24.2	0.55	1.1	0.60	0.483	0.282	HM801346	HM801310
	88.501	25.400	23.698	17.462	2.3	1.5	73000	81000	7450	8250	4000	5600	55	51	75	84	2.3	1.5	27.9	0.78	0.77	0.42	0.484	0.245	44150	44348
	88.501	26.988	29.083	22.225	3.5	1.5	96500	109000	9800	11100	4500	6000	51	44.5	77	80	3.5	1.5	17.1	0.26	2.3	1.3	0.500	0.329	418	414
	95.250	30.958	23.301	20.638	1.5	0.8	87500	97000	8950	9850	3600	5300	55	53	81	89	1.5	0.8	30.7	0.74	0.81	0.45	0.665	0.365	53150	53375
39.688	73.025	25.654	22.098	21.336	0.8	2.3	62500	80000	6400	8150	5000	6700	45.5	48	64	69	0.8	2.3	19.7	0.33	1.8	0.99	0.266	0.169	M201047	M201011
	76.200	23.812	25.654	19.050	3.5	3.3	73500	91000	7500	9300	5000	6700	52	45	66	70	3.5	3.3	15.9	0.30	2.0	1.1	0.292	0.187	2789	2720
	80.167	29.370	30.391	23.812	0.8	3.3	92500	108000	9450	11000	4800	6300	46.5	45.5	70	75	0.8	3.3	18.4	0.27	2.2	1.2	0.442	0.217	3386	3320
40.000	80.000	21.000	22.403	17.826	3.5	1.3	68500	75500	6950	7700	4500	6300	52	45.5	73	75	3.5	1.3	14.5	0.27	2.2	1.2	0.338	0.146	344	332
	80.000	21.000	22.403	17.826	0.8	1.3	68500	75500	6950	7700	4500	6300	46	45.5	73	75	0.8	1.3	14.5	0.27	2.2	1.2	0.339	0.146	344A	332
	88.501	25.400	23.698	17.462	2.3	1.5	76000	81000	7450	8250	4000	5600	56	51	75	84	2.3	1.5	27.9	0.78	0.77	0.42	0.463	0.245	44157	44348
41.000	68.000	17.500	18.000	14.500	S	1.5	43500	58000	4450	5950	5300	7100	52	45	61	65	3.5	1.5	13.9	0.35	1.7	0.95	0.160	0.082	LM300849	LM300811
41.275	73.025	16.667	17.462	12.700	3.5	1.5	44500	54000	4550	5500	4800	6700	53	46	66	69	3.5	1.5	14.0	0.35	1.7	0.94	0.199	0.086	18590	18520
	73.431	17.558	19.812	14.732	3.5	0.8	54500	67000	5550	6850	4800	6700	53	46.5	67	70	3.5	0.8	16.3	0.40	1.5	0.83	0.226	0.108	LM501349	LM501310
	73.431	21.430	19.812	16.604	3.5	0.8	54500	67000	5550	6850	4800	6700	53	46.5	66	70	3.5	0.8	18.2	0.40	1.5	0.83	0.226	0.129	Lm501349	Lm501314

AUTOMOTIVE BEARINGS

SINGLE-ROW TAPERED ROLLER BEARINGS
(INCH DESIGN)
Bore Diameter 41.275 ~ 44.450 mm

InnTec Bearing

Tapered roller bearings

Dimensions (mm)							Load ratings (KN)				Revolution speed limit		Installation dimensions (mm)						Eff. Load	Constant	Axial Load Factors		Weight (Kg)		Bearing numbers	
d	D	T	B	C	Cone	cup	(N)		(Kgf)		Grease	Oil					Cone	cup	Centers	e	Y1	Y0	Cone	cup	Cone	cup
					R MIN		Cr	Cor	Cr	Cor			da	db	Da	Db	Ra MAX		a							
41.275	76.200	18.009	13.384	14.288	1.5	1.5	42500	51000	4350	5200	4500	6300	49	46.5	67	71	1.5	1.5	17.4	0.49	1.2	0.68	0.212	0.129	11162	11300
	76.200	22.225	23.020	17.462	3.5	0.8	66000	82000	6700	8400	4800	6700	53	47.5	68	72	3.5	0.8	17.0	0.39	1.5	0.84	0.279	0.150	24780	24720
	76.200	25.400	23.020	20.638	3.5	2.3	66000	82000	6700	8400	4800	6700	54	47	66	72	3.5	2.3	20.0	0.39	1.5	0.84	0.279	0.189	24780	24721
	79.375	23.812	25.400	19.050	3.5	0.8	77000	98500	7850	10000	4800	6300	54	47	71	74	3.5	0.8	16.4	0.32	1.9	1.0	0.349	0.186	26882	26822
	80.000	21.000	22.403	17.826	0.8	1.3	68500	75500	6950	7700	4500	6300	47	46	73	75	0.8	1.3	14.5	0.27	2.2	1.2	0.325	0.146	336	332
	80.000	21.000	22.403	17.826	3.5	1.3	68500	75500	6950	7700	4500	6300	53	46	73	75	3.5	1.3	14.5	0.27	2.2	1.2	0.323	0.146	342	332
	80.167	25.400	25.400	20.638	3.5	3.3	77000	98500	7850	10000	4800	6300	54	47	69	74	3.5	3.3	18.0	0.32	1.9	1.0	0.349	0.219	26882	26820
	82.550	26.543	25.654	20.193	3.5	3.3	78500	102000	8000	10400	4300	6000	57	51	70	79	3.5	3.3	22.9	0.55	1.1	0.60	0.406	0.230	M802048	M802011
	85.725	30.162	30.162	23.812	3.5	3.3	91000	115000	9300	11700	4300	6000	57	50	73	81	3.5	3.3	21.8	0.40	1.5	0.82	0.506	0.285	3877	3820
	87.312	30.162	30.886	23.812	0.8	3.3	96000	120000	9800	12200	4300	6000	49	48	75	81	0.8	3.3	19.5	0.31	2.0	1.1	0.532	0.304	3576	3525
	88.501	25.400	23.698	17.462	2.3	1.5	73000	81000	7450	8250	4000	5600	57	51	75	84	2.3	1.5	28.0	0.78	0.77	0.42	0.447	0.245	44162	44348
	88.900	30.162	29.370	23.020	3.5	3.3	96500	129000	9800	13200	4000	5600	60	53	74	85	3.5	3.3	25.6	0.55	1.1	0.60	0.579	0.322	HM803146	HM803110
	88.900	30.162	29.370	23.020	0.8	3.3	96500	129000	9800	13200	4000	5600	54	53	74	85	0.8	3.3	25.6	0.55	1.1	0.60	0.582	0.322	HM803145	HM803110
	90.488	39.688	40.386	33.338	3.5	3.3	139000	180000	14200	18400	4300	5600	57	51	77	85	3.5	3.3	24.6	0.28	2.1	1.2	0.789	0.459	4388	4335
	93.662	31.750	31.750	26.195	0.8	3.3	110000	142000	11200	14400	4000	5600	52	51	79	87	0.8	3.3	24.0	0.40	1.5	0.82	0.695	0.405	46162	46368
	95.250	30.162	29.370	23.020	3.5	3.3	106000	143000	10800	14500	3800	5300	61	54	81	91	3.5	3.3	26.1	0.55	1.1	0.60	0.726	0.354	HM804840	HM804810
	98.425	30.958	28.301	20.638	1.5	0.8	87500	97000	8950	6850	3600	5300	57	53	82	91	1.5	0.8	30.7	0.74	0.81	0.45	0.618	0.442	53162	53387
42.862	76.992	17.462	17.145	11.908	1.5	1.5	44000	54000	4450	5500	4500	6000	51	48.5	68	73	1.5	1.5	17.7	0.51	1.2	0.65	0.228	0.098	12168	12303
	82.550	19.842	19.837	15.080	2.3	1.5	58500	69000	5950	7050	4500	6300	52	48.5	73	76	2.3	1.5	17.6	0.43	0.4	0.77	0.283	0.176	22168	22325
	82.931	23.812	25.400	19.050	2.3	0.8	76500	99000	7800	10100	4500	6000	53	48.5	74	77	2.3	0.8	17.6	0.33	1.8	0.99	0.383	0.203	25578	25520
	82.931	26.988	25.400	22.225	2.3	2.3	76500	99000	7800	10100	4500	6000	53	49.5	72	77	2.3	2.3	20.8	0.33	1.8	0.99	0.383	0.248	25578	25523
42.875	76.200	25.400	25.400	20.638	3.5	1.5	77000	98500	7850	10000	4800	6300	55	48.5	69	73	3.5	1.5	18.0	0.32	1.9	1.0	0.337	0.136	26884	26823
	80.000	21.000	22.403	17.826	3.5	1.3	68500	75500	6950	7700	4500	6300	54	47.5	73	75	3.5	1.3	14.5	0.27	2.2	1.2	0.305	0.146	342S	332
	82.931	26.988	25.400	22.225	3.5	2.3	76500	99000	7800	10100	4500	6000	55	49	72	77	3.5	2.3	20.8	0.33	1.8	0.99	0.381	0.248	25577	25523
	83.058	23.812	25.400	19.050	3.5	3.3	76500	99000	7800	10100	4500	6000	55	49	72	77	3.5	3.3	17.6	0.33	1.8	0.99	0.381	0.201	25577	25521
43.000	74.988	19.638	19.837	14.288	1.5	1.3	52500	68000	5350	6900	4800	6300	51	48.5	67	71	1.5	1.3	17.2	0.44	1.4	0.74	0.240	0.106	16986	16829
44.450	80.962	16.050	17.462	14.288	0.3	1.5	45000	57000	4600	5800	4300	6000	50	50	72	76	0.3	1.5	20.1	0.53	1.1	0.63	0.252	0.144	13175	13318
	82.931	23.812	25.400	19.050	3.5	0.8	76500	99000	7800	10100	4500	6000	57	50	74	77	3.5	0.8	17.6	0.33	1.8	0.99	0.359	0.203	25580	25520
	83.058	23.812	26.400	19.050	3.5	3.3	76500	99000	7800	10100	4500	6000	56	5	72	78	3.5	3.3	17.6	0.33	1.8	0.99	0.359	0.201	25580	25521
	87.312	30.162	30.886	23.812	3.5	3.3	96000	120000	9800	12200	4300	6000	57	51	75	81	3.5	3.3	19.5	0.31	2.0	1.1	0.477	0.304	3578	3525
	88.900	30.162	29.370	23.020	3.5	3.3	96500	129000	9800	13200	4000	5600	62	53	74	85	3.5	3.3	25.6	0.55	1.1	0.60	0.528	0.322	HM803149	HM803110
	83.264	30.162	30.302	23.812	3.5	3.3	103000	136000	10500	13900	3800	5300	58	52	82	88	3.5	3.3	22.4	0.34	1.8	0.97	0.678	0.292	3782	3720
	93.662	31.750	31.750	25.400	0.8	3.3	120000	147000	12200	15000	4000	5600	54	53	82	87	0.8	3.3	21.6	0.36	1.7	0.92	0.648	0.371	49176	49368
	93.662	31.750	31.750	25.400	3.5	3.3	120000	147000	12200	15000	4000	5600	59	53	82	87	3.5	3.3	21.6	0.36	1.7	0.92	0.645	0.371	49175	49368
	93.662	31.750	31.750	23.195	3.5	3.3	110000	142000	11200	14400	4000	5600	60	54	79	87	3.5	3.3	24.0	0.40	1.5	0.82	0.635	0.405	46176	46368
	95.250	27.863	29.901	22.225	3.5	2.3	106000	126000	10800	12900	4300	5600	57	51	83	87	3.5	2.3	18.6	0.28	2.1	1.2	0.555	0.374	438	432

SINGLE-ROW TAPERED ROLLER BEARINGS
(INCH DESIGN)
Bore Diameter 44.450 ~ 47.625 mm

InnTec Bearing

Tapered roller
bearings

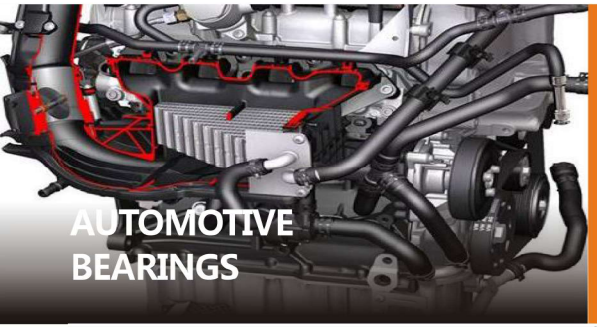
Dimensions (mm)							Load ratings (KN)				Revolution speed limit		Installation dimensions (mm)						Eff. Load	Constant	Axial Load Factors		Weight (Kg)		Bearing numbers	
d	D	T	B	C	Cone	cup	(N)		(Kgf)		Grease	Oil					Cone	cup	Centers	e	Y1	Y0	Cone	cup	Cone	cup
					R MIN		Cr	Cor	Cr	Cor			da	db	Da	Db	Ra MAX		a							
44.450	95.250	30.162	29.370	23.020	3.5	3.3	106000	143000	10800	14500	3800	5300	63	57	81	91	3.5	3.3	26.1	0.55	1.1	0.60	0.677	0.354	HM804843	HM804810
	95.250	30.958	28.301	20.638	3.5	0.8	87500	97000	8950	9850	3600	5300	63	53	81	89	3.5	0.8	30.7	0.74	0.81	0.45	0.572	0.365	53177	53375
	95.250	30.958	28.301	20.638	1.3	0.8	87500	97000	8950	9850	3600	5300	59	53	81	89	1.3	0.8	30.7	0.74	0.81	0.45	0.574	0.365	53176	53375
	95.250	30.958	28.301	20.638	2.0	0.8	87500	97000	8950	9850	3600	5300	60	53	81	89	2.0	0.8	30.7	0.74	0.81	0.45	0.574	0.365	53178	53375
	95.250	30.958	28.301	22.225	1.3	0.8	100000	122000	10200	12500	3600	5000	61	54	81	91	1.3	0.8	31.5	0.74	0.81	0.45	0.651	0.389	HM903247	HM903210
	95.250	30.958	28.575	22.225	3.5	0.8	100000	122000	10200	12500	3600	5000	65	54	81	91	3.5	0.8	31.5	0.74	0.81	0.45	0.635	0.389	HM903249	HM903210
	98.425	30.958	28.301	20.638	3.5	0.8	87500	97000	8950	9850	3600	5300	63	53	82	91	3.5	0.8	30.7	0.74	0.81	0.45	0.568	0.442	53177	53387
	103.188	43.658	44.475	36.512	1.3	3.3	178000	238000	18100	24300	3800	5000	58	56	89	97	1.3	3.3	27.0	0.30	2.0	1.1	1.23	0.637	5256	5335
	104.775	36.512	36.512	28.575	3.5	3.3	139000	192000	14200	19600	3400	4800	66	59	89	100	3.5	3.3	29.7	0.49	1.2	0.68	1.14	0.502	HM807040	HM807010
	107.950	27.783	29.317	22.225	3.5	0.8	116000	149000	11800	15200	3400	4800	60	54	97	100	3.5	0.8	20.7	0.34	1.8	0.98	0.93	0.420	460	453A
	111.125	30.162	26.909	20.638	3.5	3.3	92500	110000	9450	11200	3200	4300	67	60	92	105	3.5	3.3	37.3	0.88	0.68	0.37	0.867	0.514	55175	55437
	114.300	44.450	44.450	34.925	3.5	3.3	172000	205000	17500	20900	3600	4800	65	59	97	107	3.5	3.3	32.2	0.43	1.4	0.77	1.39	0.894	65385	65320
44.983	82.931	23.812	25.400	19.050	1.5	0.8	76500	99000	7800	10100	4500	6000	53	51	74	77	1.5	0.8	17.6	0.33	1.8	0.99	0.354	0.203	25584	25520
45.000	93.264	20.638	22.225	15.082	0.8	1.3	77000	93000	7900	9500	3800	5300	54	54	85	88	0.8	1.3	17.1	0.34	1.8	0.97	0.492	0.174	376	374
45.230	79.985	19.842	20.638	15.080	2.0	1.3	62000	78500	6300	8000	4500	6000	57	52	68	74	2.0	1.3	15.9	0.37	1.6	0.90	0.274	0.136	17887	17831
45.242	73.431	19.558	19.812	15.748	3.5	0.8	53500	75000	5450	7650	4800	6300	56	50	68	70	3.5	0.8	14.6	0.31	2.0	1.1	0.213	0.102	LM102949	LM102910
	77.788	19.842	19.842	15.080	3.5	0.8	56000	71000	5700	7250	4500	6300	57	50	71	74	3.5	0.8	17.2	0.43	1.4	0.77	0.249	0.119	LM603049	LM603011
	77.788	21.430	19.842	16.667	3.5	0.8	56000	71000	5700	7250	4500	6300	57	50	70	74	3.5	0.8	18.8	0.43	1.4	0.77	0.249	0.137	LM603049	LM603012
45.618	82.931	23.812	25.400	19.050	3.5	0.8	76500	99000	7800	10100	4500	6000	58	51	74	77	3.5	0.8	17.6	0.33	1.8	0.99	0.343	0.203	25590	25520
	82.931	26.988	25.400	22.225	3.5	2.3	76500	99000	7800	10100	4500	6000	58	51	72	77	3.5	2.3	20.8	0.33	1.8	0.99	0.343	0.248	25590	25523
46.000	75.000	18.000	18.000	14.000	2.3	1.5	51000	71500	5200	7300	4500	6300	55	51	67	71	2.3	1.5	15.9	0.40	1.5	0.82	0.209	0.096	503349	LM503310
46.038	79.375	17.462	17.462	13.495	2.3	1.5	46000	57000	4700	5800	4500	6000	56	51	71	74	2.3	1.5	15.5	0.37	1.6	0.88	0.211	0.126	18690	18620
	80.962	19.050	17.462	14.288	0.8	1.5	45000	57000	4600	5800	4300	6000	52	52	72	76	0.8	1.5	20.1	0.53	1.1	0.63	0.236	0.144	13181	13318
	85.000	20.638	21.692	17.462	2.3	1.3	71500	81500	7300	8300	4300	6000	55	51	77	80	2.3	1.3	15.4	0.31	2.0	1.1	0.343	0.162	2595	354A
	85.000	25.400	25.608	20.638	3.5	1.3	79500	105000	8100	10700	4300	6000	58	52	76	80	3.5	1.3	19.0	0.35	1.7	0.95	0.397	0.223	2984	2924
	95.250	27.783	29.901	22.225	3.5	0.8	106000	126000	10800	12900	4300	5600	59	52	84	87	3.5	0.8	18.6	0.28	2.1	1.2	0.536	0.381	436	432A
47.625	88.900	20.638	22.225	16.513	3.5	1.3	73000	85000	7450	86500	4000	5600	60	53	81	84	3.5	1.3	16.6	0.32	1.9	1.0	0.381	0.166	369A	362A
	88.900	25.400	25.400	19.050	3.5	3.3	86000	107000	8750	10900	4000	5600	63	56	77	85	3.5	3.3	23.8	0.55	1.1	0.60	0.455	0.218	M804049	M804010
	95.250	30.162	29.370	23.020	3.5	3.3	106000	143000	10800	14500	3800	5300	66	57	81	91	3.5	3.3	26.1	0.55	1.1	0.60	0.626	0.354	HM804846	HM804810
	101.600	34.925	36.068	26.988	3.5	3.3	137000	169000	14000	17200	3800	5000	62	55	89	95	3.5	3.3	22.1	0.29	2.1	1.2	0.894	0.416	528	522
	111.125	30.162	26.909	20.638	3.5	3.3	925000	110000	94500	11200	3200	4300	69	62	92	105	3.5	3.3	37.3	0.88	0.68	0.37	0.817	0.514	55187	55437
	112.712	30.162	26.909	20.638	3.5	3.3	925000	110000	94500	11200	3200	4300	69	62	92	106	3.5	3.3	37.3	0.88	0.68	0.37	0.816	0.554	55187	55443
	117.475	33.338	31.750	23.812	3.5	3.3	137000	156000	13900	15900	3200	4300	66	62	100	111	3.5	3.3	32.1	0.63	0.96	0.53	1.19	0.552	66187	66462
	123.825	36.512	32.791	25.400	3.5	3.3	143000	160000	14600	16400	3000	4000	72	66	102	106	3.5	3.3	37.0	0.74	0.81	0.45	1.29	0.790	72187	72487

SINGLE-ROW TAPERED ROLLER BEARINGS
(INCH DESIGN)
Bore Diameter 48.412 ~ 52.388 mm

InnTec Bearing

Tapered roller
bearings

Dimensions (mm)							Load ratings (KN)				Revolution speed limit		Installation dimensions (mm)						Eff. Load	Constant	Axial Load Factors		Weight (Kg)		Bearing numbers	
d	D	T	B	C	Cone	cup	(N)		(Kgf)		Grease	Oil					Cone	cup	Centers	e	Y1	Y0	Cone	cup	Cone	cup
					R MIN		Cr	Cor	Cr	Cor			da	db	Da	Db	Ra MAX		a							
48.412	95.250	30.162	29.370	23.020	3.5	3.3	106000	143000	10800	14500	3800	5300	66	57	81	91	3.5	3.3	26.1	0.55	1.1	0.60	0.61	0.354	HM804849	HM804810
	95.250	30.162	29.370	23.020	2.3	3.3	106000	143000	10800	14500	3800	5300	63	57	81	91	2.3	3.3	26.1	0.55	1.1	0.60	0.614	0.354	HM804848	HM804810
49.212	104.775	36.512	36.512	28.575	3.5	0.8	139*000	192000	14200	19600	3400	4800	69	63	91	100	3.5	0.8	29.7	0.49	1.2	0.68	1.03	0.508	HM807044	HM807011
	114.300	44.450	44.450	36.068	3.5	3.3	196000	243000	20000	24800	3400	4800	71	61	97	107	3.5	3.3	30.8	0.40	1.5	0.82	1.43	0.837	HH506348	HH506310
50.000	82.000	21.500	21.500	17.000	3.0	0.5	71000	96000	7250	9800	4300	5600	60	55	76	78	3.0	0.5	16.1	0.31	2.0	1.1	0.306	0.129	JLM104948	JLM104910
	82.550	21.590	22.225	16.510	0.5	1.3	71000	96000	7250	9800	4300	5600	55	55	75	78	0.5	1.3	15.7	0.31	2.0	1.1	0.316	0.133	LM104947A	LM104911
	88.900	20.638	22.225	16.513	2.3	1.3	73000	85000	7450	8650	4000	5600	59	55	81	84	2.3	1.3	16.6	0.32	1.9	1.0	0.351	0.166	366	362A
	90.000	28.000	28.000	23.000	3.0	2.5	104000	136000	10600	13900	4000	5600	62	57	80	85	3.0	2.5	19.9	0.33	1.8	1.0	0.507	0.246	JM205149	JM205110
	105.000	37.000	36.000	29.000	3.0	2.5	139000	192000	14200	19600	3400	4800	69	63	90	100	3.0	2.5	29.7	0.49	1.2	0.68	1.01	0.523	JHM807045	JHM807012
50.800	80.962	18.258	18.258	14.288	1.5	1.5	53000	81000	5400	8250	4300	5600	58	56	73	77	1.5	1.5	15.7	0.36	1.7	0.93	0.239	0.119	L305649	L305610
	82.550	23.622	22.225	18.542	3.5	0.8	71000	96000	7250	9800	4300	5600	62	55	75	78	3.5	0.8	17.8	0.31	2.0	1.1	0.303	0.156	LM104949	LM104911
	82.931	21.590	22.225	16.510	3.5	1.3	71000	96000	7250	9800	4300	5600	62	55	75	78	3.5	1.3	15.7	0.31	2.0	1.1	0.301	0.140	LM104949	LM104912
	85.000	17.462	17.462	13.495	3.5	1.5	48500	63000	4950	6450	4300	5600	62	56	77	80	3.5	1.5	16.7	0.41	1.5	0.81	0.239	0.136	18790	18720
	85.725	19.050	18.263	12.700	1.5	1.5	42500	54000	4350	5500	4000	5300	59	56	76	81	1.5	1.5	21.0	0.57	1.1	0.58	0.268	0.136	18200	18337
	88.900	20.638	22.225	16.513	3.5	1.3	73000	85000	7450	8650	4000	5600	62	56	81	84	3.5	1.3	16.6	0.32	1.9	1.0	0.338	0.166	368A	362A
	88.900	20.638	22.225	16.513	1.5	1.3	73000	85000	7450	8650	4000	5600	58	56	81	84	1.5	1.3	16.6	0.32	1.9	1.0	0.341	0.166	368	362A
	92.075	24.608	25.400	19.845	3.5	0.8	84000	117000	8600	11900	4000	5300	63	57	83	87	3.5	0.8	20.0	0.38	1.6	0.87	0.460	0.247	28580	28521
	93.264	30.162	30.302	23.812	0.8	0.8	103000	136000	10500	13900	3800	5300	58	58	84	88	0.8	0.8	22.4	0.34	1.8	0.97	0.568	0.297	3775	3730
	93.264	30.162	30.302	23.812	3.5	0.8	103000	136000	10500	13900	3800	5300	64	58	84	88	3.5	0.8	22.4	0.34	1.8	0.97	0.564	0.297	3780	3730
	95.250	27.783	28.575	22.225	3.5	2.3	110000	144000	11200	14700	3800	5300	64	58	85	90	3.5	2.3	19.8	0.33	1.8	1.0	0.601	0.267	33889	33821
	101.600	31.750	31.750	25.400	3.5	3.3	118000	150000	12100	15200	3600	5000	66	59	88	96	3.5	3.3	23.4	0.10	1.5	0.82	0.744	0.389	49585	49520
	101.600	34.925	36.068	26.988	0.8	3.3	137000	169000	14000	17200	3800	5000	59	58	89	95	0.8	3.3	22.1	0.29	2.1	1.2	0.822	0.416	529	522
	101.600	34.925	36.068	26.988	3.5	3.3	137000	169000	14000	17200	3800	5000	65	58	89	95	3.5	3.3	22.1	0.29	2.1	1.2	0.819	0.416	529X	522
	104.775	36.512	36.512	28.575	3.5	0.8	139000	192000	14200	19600	3400	4800	70	63	91	100	3.5	0.8	29.7	0.49	1.2	0.68	0.992	0.508	HM807046	HM807011
	104.775	36.512	36.512	28.575	3.5	3.3	139000	192000	14200	19600	3400	4800	70	63	89	100	3.5	3.3	29.7	0.49	1.2	0.68	0.993	0.502	HM807046	HM807010
	108.966	34.925	36.512	26.988	3.5	3.3	145000	181000	14700	18500	3600	4800	68	61	93	101	3.5	3.3	25.4	0.40	1.5	0.82	0.943	0.594	59200	59429
	111.125	30.162	26.909	20.638	3.5	3.3	113000	152000	11500	15400	3000	4300	71	65	92	105	3.5	3.3	37.6	0.88	0.68	0.37	0.845	0.514	55200C	55437
	111.125	30.162	26.909	20.638	3.5	3.3	92500	110000	9450	11200	3200	4300	71	64	92	105	3.5	3.3	37.3	0.88	0.68	0.37	0.767	0.514	55200	55437
	123.825	36.512	32.791	25.400	3.5	3.3	162000	199000	16500	20300	2800	4000	77	67	102	116	3.5	3.3	38.0	0.74	0.81	0.45	1.33	0.790	72200C	72487
	123.825	36.512	32.791	25.400	3.5	3.3	143000	160000	14600	16400	3000	4000	74	66	102	116	3.5	3.3	37.0	0.74	0.81	0.45	1.22	0.790	72200	72487
	127.000	44.450	44.450	34.925	3.5	3.3	199000	258000	20200	26300	3000	4000	75	69	107	119	3.5	3.3	35.0	0.49	1.2	0.68	1.86	1.03	65200	65500
	127.000	50.800	52.388	41.275	3.5	3.3	236000	300000	24000	31000	3200	4300	71	65	108	117	3.5	3.3	30.7	0.30	2.0	1.1	2.08	1.22	6279	6220
52.388	92.075	24.608	25.400	19.845	3.5	0.8	84500	117000	8600	11900	4000	5300	65	58	83	87	3.5	0.8	20.0	0.38	1.6	0.87	0.435	0.247	28584	28521
	100.00	25.000	22.225	21.824	2.3	2.0	77000	93000	7900	9500	3800	5300	62	58	86	90	2.3	2.0	21.4	0.34	1.8	0.97	0.392	0.435	377	372
	111.125	30.162	26.909	20.638	3.5	3.3	92500	110000	9450	11200	3200	4300	72	64	92	105	3.5	3.3	37.3	0.88	0.68	0.37	0.737	0.514	55206	55437



DOUBLE-ROW TAPERED ROLLER BEARINGS
Bore Diameter 40 ~ 90 mm

InnTec Bearing

Tapered roller bearings

Dimensions (mm)						Load ratings (KN)		Revolution speed limit		Installation dimensions (mm)				Constant	Axial Load Factors			Weight (Kg)	Bearing numbers	
d	D	B2	C	r	r1	Cr	Cor	Grease	Oil	da	Db	ra	rb	e	Y2	Y3	Y0			
				min						min	min	max								
40	80	45	37.5	1.5	0.6	109000	140000	3700	5100	51	75	1.5	0.6	0.37	2.7	1.8	1.8	0.97	HR40KBE	42+L
45	85	47	37.5	1.5	0.6	117000	159000	3400	4700	56	81	1.5	0.6	0.40	2.5	1.7	1.6	1.08	HR45KBE	42+L
	85	55	43.5	1.5	0.6	143000	204000	3400	4700	56	81	1.5	0.6	0.40	2.5	1.7	1.6	1.31	HR45KBE	52X+L
50	90	48	38.5	1.5	0.6	131000	183000	3200	4400	61	87	1.5	0.6	0.42	2.4	1.6	1.6	1.20	HR50KBE	042+L
	90	49	39.5	1.5	0.6	131000	183000	3200	4400	61	87	1.5	0.6	0.42	2.4	1.6	1.6	1.22	HR50KBE	42+L
	90	55	43.5	1.5	0.6	150000	218000	3200	4400	61	87	1.5	0.6	0.42	2.4	1.6	1.6	1.39	HR50KBE	52X+L
	110	64	52.5	2.5	0.6	224000	297000	2700	3700	65	104	2	0.6	0.35	2.9	2.0	1.9	2.77	HR50KBE	043+L
55	100	51	41.5	2	0.6	162000	226000	2900	3900	67	96	2	0.6	0.40	2.5	1.7	1.6	1.59	HR55KBE	042+L
	100	52	42.5	2	0.6	162000	226000	2900	3900	67	96	2	0.6	0.40	2.5	1.7	1.6	1.63	HR55KBE	1003+L
	100	60	48.5	2	0.6	188000	274000	2900	3900	67	97	2	0.6	0.40	2.5	1.7	1.6	1.88	HR55KBE	52X+L
	120	70	57.0	2.5	0.6	256000	342000	2500	3400	70	113	2	0.6	0.35	2.9	2.0	1.9	3.52	HR55KBE	43+L
60	110	53	43.5	2	0.6	178000	246000	2700	3600	72	105	2	0.6	0.40	2.5	1.7	1.6	2.03	HR60KBE	042+L
	110	66	54.5	2	0.6	225000	335000	2700	3600	72	106	2	0.6	0.40	2.5	1.7	1.6	2.52	HR60KBE	52X+L
	130	74	59	3	1	298000	405000	2300	3200	78	122	2.5	1	0.35	2.9	2.0	1.9	4.40	HR60KBE	43+L
65	120	56	46.5	2	0.6	210000	300000	2400	3200	77	115	2	0.6	0.40	2.5	1.7	1.6	2.58	HR65KBE	42+L
	120	57	47.5	2	0.6	210000	300000	2400	3200	77	115	2	0.6	0.40	2.5	1.7	1.6	2.61	HR65KBE	1202+L
	120	73	61.5	2	0.6	269000	405000	2400	3300	77	117	2	0.6	0.40	2.5	1.7	1.6	3.35	HR65KBE	52X+L
	140	79	63	6	1	340000	465000	2100	2900	83	132	2.5	1	0.55	2.9	2.0	1.9	5.42	HR65KBE	43+L
70	125	57	46.5	2	0.6	227000	325000	2300	3100	82	120	2	0.6	0.42	2.4	1.6	1.6	2.79	HR70KBE	042+L
	125	59	48.5	2	0.6	227000	325000	2300	3100	82	120	2	0.6	0.42	2.4	1.6	1.6	2.85	HR70KBE	42+L
	125	74	61.5	2	0.6	270000	410000	2300	3100	82	121	2	0.6	0.42	2.4	1.6	1.6	3.58	HR70KBE	52X+L
	150	83	67	3	1	390000	535000	2000	2700	88	142	2.5	1	0.35	2.9	2.0	1.9	6.45	HR70KBE	43+L
75	130	62	51.5	2	0.6	245000	365000	2200	3000	87	126	2	0.6	0.44	2.3	1.6	1.5	3.15	HR75KBE	42+L
	130	74	61.5	2	0.6	283000	440000	2200	3000	87	127	2	0.6	0.44	2.3	1.6	1.5	3.73	HR75KBE	52X+L
	160	87	69	3	1	435000	600000	1900	2500	93	151	2.5	1	0.35	2.9	2.0	1.9	7.66	HR75KBE	043+L
80	140	61	49	2.5	0.6	269000	390000	2000	2800	95	134	2	0.6	0.42	2.4	1.6	1.6	3.70	HR80KBE	042+L
	140	64	51.5	2.5	0.6	269000	390000	2000	2800	95	134	2	0.6	0.42	2.4	1.6	1.6	3.70	HR80KBE	42+L
	140	78	63.5	2.5	0.6	330000	505000	2000	2800	95	136	2	0.6	0.42	2.4	1.6	1.6	4.59	HR80KBE	52X+L
	170	92	73	3	1	475000	655000	1700	2400	98	161	2.5	1	0.35	2.9	2.0	1.9	9.02	HR80KBE	043+L
80	150	70	57	2.5	0.6	315000	465000	1900	2600	100	143	2	0.6	0.42	2.4	1.6	1.6	4.69	HR85KBE	42+L
	150	86	69	2.5	0.6	360000	555000	1900	2600	100	144	2	0.6	0.42	2.4	1.6	1.6	5.70	HR85KBE	52X+L
	180	98	77	4	1	530000	745000	1600	2200	106	169	3	1	0.35	2.9	2.0	1.9	10.8	HR85KBE	043+L
90	160	71	58	2.5	0.6	345000	510000	1800	2400	105	152	2	0.6	0.42	2.4	1.6	1.6	5.53	HR90KBE	042+L
	160	74	61	2.5	0.6	345000	510000	1800	2400	105	152	2	0.6	0.42	2.4	1.6	1.6	5.71	HR90KBE	42+L
	160	94	77	2.5	0.6	440000	700000	1800	2400	105	154	2	0.6	0.42	2.4	1.6	1.6	7.26	HR90KBE	52X+L