



55PW95



55PZ06

#### NTN

# **Tapered Roller Bearing Cones and Cups**

Carry maximum combinations of radial and thrust loads simultaneously. Feature roller guiding inner ring construction. Roller bearing cones have steel cages and are nonlubricated. Use in lower-speed applications where there is a high degree of thrust or radial load, shock loads, and/or alternating thrust and radial loads.

Note: When replacing bearings, replace both cone and cup to ensure optimum performance and longer life.

Bearing				Dynamic	Compatible Cup	Cone	Cup
Industry	Bore	Outside	Cone	Load	Manufacturer	Item	Item
Number	Dia.	Dia.	Width	Capacity	Part Number	No.	No.
LM11949V1	3/4 in	1.634 in	0.875 in	31.5 kN	LM11910	1YTV2	55PY97
LM11749	43/64 in	1.457 in	0.575 in	26.4 kN	LM11710	55PY96	55PY95
LM67048V2	1 1/4 in	2.205 in	0.78 in	38.5 kN	LM67010	1YTV8	55PZ09
25580	1 ¾ in	3.031 in	1 in	84.5 kN	25520	55PX28	55PX27
L68149V1	1 3/8 in	2.205 in	0.78 in	39 kN	L68110, L68111	1YTW3	1YTW4
LM48548	1 3/8 in	2.402 in	0.72 in	51.5 kN	LM48510	55PZ05	55PZ04
LM501349	1 % in	2.756 in	0.78 in	62 kN	LM501310	55PZ07	55PZ06
JLM104948	1 <sup>31</sup> / <sub>32</sub> in	3.071 in	0.846 in	77.5 kN	JLM104910	55PY74	55PY73
L44643	1 in	1.85 in	0.58 in	32 kN	L44610	1YTV6	55PY88
07100	1 in	1.85 in	0.561 in	28.8 kN	07196	55PW95	55PW96

35TW65





## **Needle Roller Bearings**

Feature a thin profile where the radial space is limited. Alloy steel ring. Support high radial loads and high speed applications. **Drawn-Cup** support radial loads with reduced friction and are often used in steering systems and drive-lines for automotive applications. **Heavy-Duty** have a thicker outer shell that serves as the outer-ring raceway for high-load capacity and shock resistance. For demanding applications such as industrial machinery and wind power generation. **Single-Direction Assemblies** include a clutch in the assembly that move the bearing in a single direction. Commonly used in conveyor applications that require movement in only one direction.

			•		•		
Bearing Industry Number	Bore Dia.	Outside Dia.	Overall Width	Dyn. Radial Load Cap.	Full Comple- ment	Brand	Item No.
		loller Bearing					
		B, Open Clo				W 1.	
1012	5/8 in	7/8 in	0.75 in	3,720 lbf	Yes	Tritan	35TW65
1416	7⁄8 in	1 1/8 in	1 in	7,100 lbf	Yes	Tritan	35TW74
1612	1 in	1 ½ in	0.75 in	5,770 lbf	Yes	Tritan	35TW77
1616	1 in	1 ¼ in	1 in	7,630 lbf	Yes	Tritan	35TW78
		BH, Open Cl		0.040.11.6		T 11	0571/40
812	½ in	3/4 in	0.75 in	3,910 lbf	Yes	Tritan	35TX18
1616	1 in	1 5/16 in	1 in	8,200 lbf	Yes	Tritan	35TX14
1616	1 in	1 5/16 in	1 in	8,200 lbf	Yes	Koyo	779K92
		HK, Open Cl		2.0 [4]	No	Inc	477WC
810	8	12	10 mm	3.8 kN	No	Ina	4ZZW6
1010	10	14	10 mm	4.4 kN	No	Ina	4ZZW8
1210	12	16	10 mm	4.982 kN	No	Tritan	35TZ12
1212	12	18	12 mm	6.5 kN	No	Ina	4ZZW9
2020	20	26	20 mm	15,700 N	No	Ina	4ZZX3
		JH, Open Cl		4 700 11 (		T 11	0571/70
88	½ in	3/4 in	0.5 in	1,700 lbf	No	Tritan	35TX73
		SCE, Open C		004.011.6			47.500
47	1/4 in	7∕16 in	0.438 in	921.8 lbf	No	Ina	4XFG3
68	3/8 in	9/16 in	0.5 in	1,304 lbf	No	Ina	4XFG8
88	½ in	11/16 in	0.5 in	1,551.3 lbf	No	Ina	4XFH5
108	5% in	13/16 in	0.5 in	1,821 lbf	No	Ina	4XFH8
148	7⁄8 in	1 1/8 in	0.5 in	1,843.5 lbf	No	Ina	4XFJ5
610	3/8 in	9/16 in	0.625 in	1,663.7 lbf	No	Ina	4XFG9
810	½ in	11/16 in	0.625 in	1,978.4 lbf	No	Ina	4XFH2
812	½ in	11/16 in	0.75 in	2,225.7 lbf	No	Ina	4XFH3
1010	5/8 in	13/16 in	0.625 in	2,338.1 lbf	No	Ina	4XFH9
1210	3/4 in	1 in	0.625 in	2,877.7 lbf	No	Ina	4XFJ3
1212	3/4 in	1 in	0.75 in	3,462.2 lbf	No	Ina	4XFJ4
1612	1 in	1 ¼ in	0.75 in	4,046.8 lbf	No	Ina	4XFJ8
		Roller Bearin					
		HJ, Double				17	7701/00
162416	1 in	1 ½ in	1 in	5,680 lbf	No	Koyo	779KD8
		MR, Double				T 11	0571/00
12	½ in	3/4 in	1 in	6,190 lbf	No	Tritan	35TX89
				ring Assembl	ies		
		RC, Open Cl				T 11	057)/40
81208	½ in	3/4 in	0.5 in		No	Tritan	35TY16
101410	5⁄8 in	7% in	0.625 in		No	Tritan	35TY17
162110	_ 1 in	1 5/16 in	0.625 in		No	Tritan	35TY19
		RCB, Open (		1 000 11 1		T 11	0571/0:
81214	½ in	3/4 in	0.875 in	1,600 lbf	No	Tritan	35TY21
121616	3/4 in	1 in	1 in	2,000 lbf	No	Tritan	35TY23
162117	1 in	1 5/16 in	1.062 in	3,460 lbf	No	Tritan	35TY24

# Tapered Roller Bearing Assemblies

Commonly used in vehicles where the wheel bearings must handle large vertical (radial) and horizontal (axial) forces at the same time. Held together by an inner race that has a tapered surface for the bearings to roll against, and a flat inner radial surface to slide over a shaft. The outer race is the opposite design with the inner surface that's tapered, and the outer surface being flat. These tapered roller bearing assemblies are case-hardened steel construction and resist heat, heavy loads, humidity, and shocks. Suitable for use in hydraulic engines, gear motor transmissions, and locomotive axles.



## Banded Ball Thrust Bearings





4ZZP5



Can run at higher speeds but with a lower load capacity than roller bearings. They support axial, or thrust, loads in a single direction. **Banded** ease installation and provide extra protection to the internal bearing components against contaminants. They consist of a housing washer, a shaft washer, and a ball and cage assembly that are banded together as one unit. **Separable Grooved-Race** can be separated in three parts to ease repair and replacement. They have grooved raceways which help guide the balls and limit variations in the ball's movement. Bearings can handle higher loads than flat race ball thrust bearings.

Bearing Industry Number	Bore Dia.	Outside Dia.	Overall Width	Dyn. Axial Load Cap.	Static Axial Load Cap.	Brand	Item No.
<b>Banded Ball</b>	<b>Thrust Bear</b>	ings		•	•		
D1	½ in	1 1/32 in	0.563 in	3,850 lbf	5,600 lbf	Ina	4ZZP5
D3	5⁄8 in	1 11/32 in	0.563 in	4,100 lbf	6,700 lbf	Ina	4ZZP6
D5	3/4 in	1 15/32 in	0.563 in	4,250 lbf	7,300 lbf	Ina	4ZZP8
D6	13/16 in	1 15/32 in	0.563 in	4,250 lbf	7,300 lbf	Ina	4ZZP9
D9	1 in	1 31/32 in	0.625 in	6,700 lbf	13,100 lbf	Ina	4ZZR3
D11	1 1/8 in	2 3/32 in	0.625 in	6,900 lbf	14,000 lbf	Ina	4ZZR5
D12	1 3/16 in	2 3/32 in	0.625 in	6,900 lbf	14,000 lbf	Ina	4ZZR6
D15	1 3/8 in	2 15/32 in	0.625 in	7,300 lbf	16,600 lbf	Ina	4ZZR9
D17	1 ½ in	2 19/32 in	0.625 in	7,700 lbf	18,300 lbf	Ina	4ZZT1
D25	2 in	3 11/32 in	0.813 in	10,800 lbf	29,000 lbf	Ina	4ZZT5
D33	2 ½ in	3 31/32 in	0.813 in	11,500 lbf	34,000 lbf	Ina	4ZZT7
		Ball Thrust	Bearings				
F8-16M	8 mm	16 mm	5 mm	3,920 N	4,990 N	Ezo	45VD14



### Needle Roller Thrust Bearings

TRITAN



Consist of an axial cage with needle rollers. Support axial loads in 1 direction. Use directly with surrounding hardened faces or separate thrust washers to provide the most compact thrust solution.

Bearing						iviax.		
Industry	Bore	Outside	Overall	Dyn. Axial	Static Axial	Speed		Item
Number	Dia.	Dia.	Width	Load Cap.	Load Cap.	(ŘPM)	Brand	No.
512	5∕16 in	3/4 in	0.078 in	1,300 lbf	2,900 lbf	24,000	Tritan	35TY07
815	1/2 in	15/ <sub>16</sub> in	0.078 in	1,600 lbf	4,300 lbf	18,000	Tritan	35TY12
815	½ in	<sup>15</sup> ⁄ <sub>16</sub> in	0.078 in	1,910 lbf	5,300 lbf	13,000	Ina	4XFN2
821	8 mm	21 mm	2 mm	7,800 N	19,400 N	18,000	Ina	4ZZN3
1018	5⁄8 in	1 1/8 in	0.078 in	2,160 lbf	6,630 lbf	11,000	Ina	4XFN3
1220	3/4 in	1 ¼ in	0.078 in	2,400 lbf	8,200 lbf	13,000	Tritan	35TX91
1220	3/4 in	1 ¼ in	0.078 in	2,410 lbf	8,000 lbf	9,500	Ina	4XFN4
1226	12 mm	26 mm	2 mm	9,900 N	29,000 N	15,000	Ina	4ZZN5
1625	1 in	1 %16 in	0.078 in	3,100 lbf	12,000 lbf	11,000	Tritan	35TX93
1625	1 in	1 %16 in	0.078 in	3,130 lbf	12,100 lbf	7,500	Ina	4XFN6
2435	1 ½ in	2 ¾16 in	0.078 in	5,200 lbf	26,000 lbf	7,000	Tritan	35TX97
3244	2 in	2 ¾ in	0.078 in	5,800 lbf	32,600 lbf	4,000	Ina	4XFP3
6681	4 1/8 in	5 1/16 in	0.125 in	14,000 lbf	93,000 lbf	3,000	Tritan	35TY11

## Needle Roller Thrust Bearing Washers





Use as fatigue liners for soft housing faces. Combine with needle roller and cage assembly to form a complete needle roller thrust bearing.



Bearing	Dia.	Dia.	Thickness	Brand	No.
0821	8 mm	21 mm	1 mm	Ina	4ZZL1
1018	5⁄8 in	1 1/8 in	1∕32 in	Ina	4XFR1
1226	12 mm	26 mm	1 mm	Ina	4ZZL3
3244	2 in	2 ¾ in	3∕32 in	Tritan	35TY74
3244	2 in	2 ¾ in	1∕32 in	Ina	4XFT1
4060	40 mm	60 mm	1 mm	Ina	4ZZN1
4860	3 in	3 ¾ in	1/16 in	Tritan	35TY61