

# Cylindrical Roller Bearings

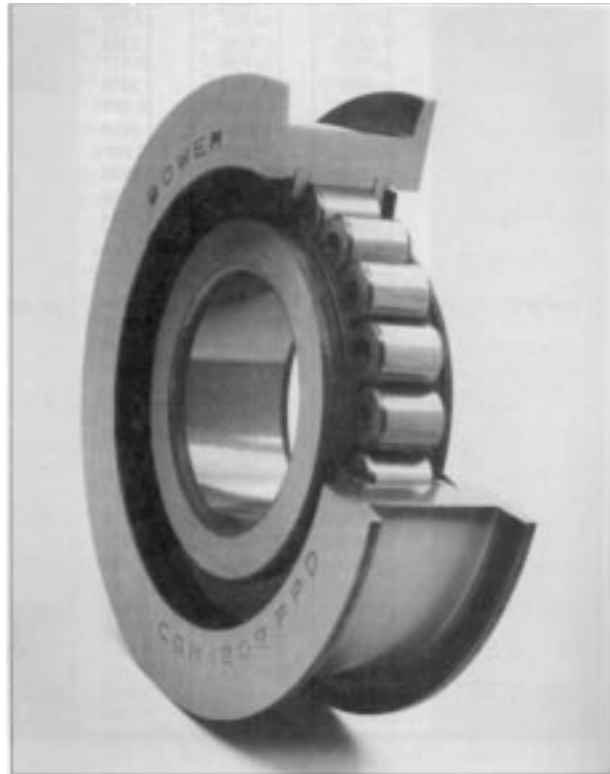
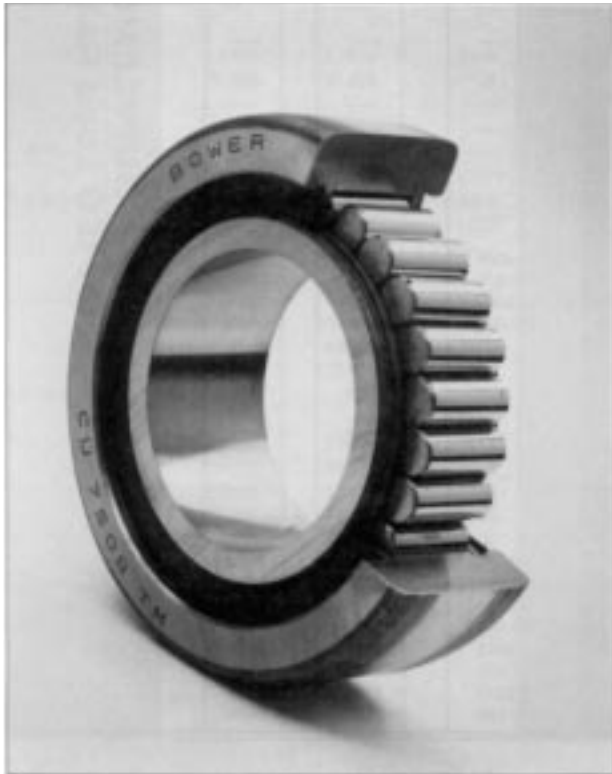
## Mast and Chain Guide Bearings

Fork lift trucks are employed in almost every manufacturing and shipping facility where lifting or movement of materials is required. An essential part of a fork lift truck is the channeled lift structure which is commonly called the mast. Roller bearings are a basic part of the mast as they guide and retain the forks in the vertical channels. Chain sheave roller bearings which guide the chain and facilitate the lifting and lowering of the mast are an important part of the entire upright system.

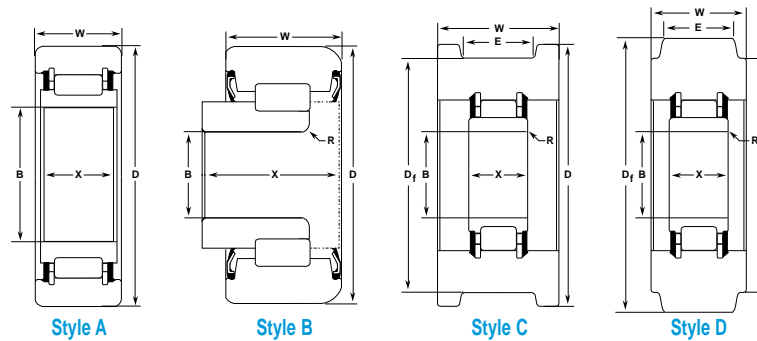
Fork lift trucks handle loads ranging from light, bulky material to heavy loads in excess of 4,000 pounds. Mast guide bearings are specifically designed to withstand the heavy impact and radial loads required in this type of application. Mast or chain guide bearings have heavy section outer rings which serve as rollers, or guides for the carriage in the mast channels. The configuration of the outer ring is designed to fit the contour of the mast channel or chain.

In conjunction with the heavy radial loads experienced, thrust loading is also present, which tends to cause misalignment. The internal construction of NTN-Bower cylindrical roller bearings resists misalignment of the outer ring. All mast guide and chain sheave roller bearings are sealed and factory lubricated with a water resistant grease to prevent contamination of the rolling elements and raceways.

NTN-Bower cylindrical roller bearings for mast and chain guide applications are manufactured for leading fork lift truck manufacturers. They are basic full roller complement (no cage) 1200 and 1300 series bearings of single row construction.



## Mast and Chain Guide Bearings Dimensions and Load Ratings



Bearing Number	Style	B	D	X	W	R	E	D <sub>f</sub>	♦ Radial Load Ratings	
		Inside Diameter	Outside Diameter	Race Width		Break	Sheave		Dynamic	Static
		Inch/mm								lbs/N
▲ CGM-1209-PPA	C	1.5748 40.000	3.755 95.38	0.905 22.99	1.307 33.20	.070 R 1.78	0.995 25.27	4.250 107.95	14200 63000	16100 71500
CGM-1209-PPB	C	1.5748 40.000	3.740 95.00	1.140 28.96	1.025 26.04	.070 R 1.78	0.730 18.54	4.252 108.00	14200 63000	16100 71500
■ CGM-1209-PPC	C	1.5748 40.000	3.230 82.04	1.005 25.53	1.025 26.04	.070 R 1.78	0.730 18.54	3.740 95.00	14200 63000	16100 71500
▲ CGM-1209-PPD	C	1.5748 40.000	3.505 89.03	0.905 22.99	1.125 28.58	.070 R 1.78	0.870 22.10	4.000 101.60	14200 63000	16100 71500
CGM-5207-PPA	C	1.3780 35.000	3.583 91.01	1.187 30.15	1.949 49.50	.118x45° C 3.00	1.646 41.81	4.055 103.00	17800 79500	21400 95500
CGM-5214-PPB	C	1.7717 45.000	5.040 128.02	2.000 50.80	2.717 69.01	.394 R 10.01	1.968 49.99	5.965 151.51	39000 172000	50500 225000
CGM-5216-PPA	C	1.9685 50.000	5.000 127.00	1.574 39.98	2.087 53.01	.110 R 2.79	1.417 35.99	5.906 150.01	43500 193000	55500 248000
■ CS-5704-EM	B	0.7500 19.050	2.250 57.15	0.963 24.46	0.995 25.27	.070 R 1.78	— —	— —	9000 40000	10100 45000
● CU-7508-TM	A	1.5739 39.977	2.295 75.57	0.875 22.23	1.000 25.40	.015x45° C 0.38	— —	— —	13300 59000	18900 84000
CU-8907-TM	C	1.3780 35.000	3.500 88.90	1.062 26.97	1.625 41.28	.040 R 1.02	1.280 32.51	4.000 101.60	19100 85000	21000 93500
CGM-9509-PPA	C	1.7500 44.450	3.723 94.56	1.573 39.95	1.750 44.45	0.070 1.78	1.373 34.87	4.375 111.13		
CU-10308TM	D	1.5748 39.100	4.055 102.10	0.906 23.01	0.906 23.01	0.090 2.29	0.575 14.61	3.493 88.72	16000 71000	18000 80000
CU-10807-TM	C	1.3780 35.000	4.250 107.95	1.062 26.97	1.625 41.28	.040 R 1.02	1.280 32.51	4.750 120.65	19100 85000	21000 93500
CU-15010-TM	A	1.9685 49.100	5.905 149.99	1.575 40.01	2.087 53.01	0.110 2.79	— —	— —	43500 193000	55500 248000

- ▲ Two 1/8 inch diameter holes in inner ring, 180° apart.
- Inner ring not central to outer ring.
- Spherical O.D.
- ◆ Dynamic radial load ratings are based on 500 hrs. L10 Life @ 33 1/3 rpm.