

McGILL® GUIDEROL® Bearings

Needle/Journal Bearings



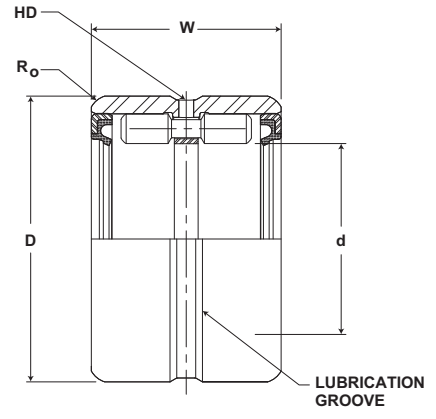
Basic Construction Type: Machined Race with full Complement of Needles

Rolling Elements: Center Guided Precision Needles

Bearing Material: Bearing Quality Steel

Seal Type: Rubber Lip

Lubrication: Sealed Bearings: Lithium Soap Grease NLGI #1
Unsealed Bearings: Rust Preventative

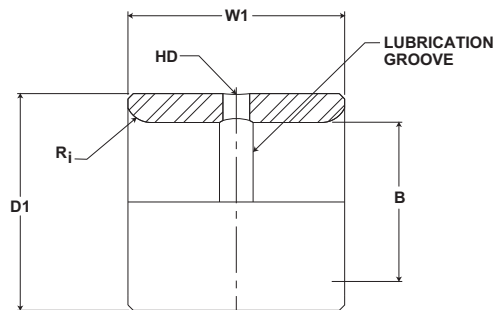
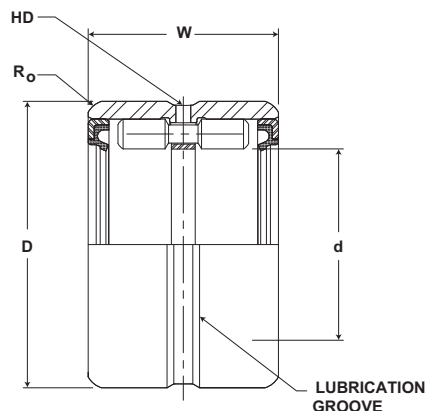


GR SERIES (continued)

Part No.	d		D		W			Housing Bore Diameter			HD	Ro	Limiting Speed (In Oil)*	Basic Dynamic Rating	Basic Static Rating	Outer & Roller Assembly Weight
	Shaft Diameter		Outside Diameter		Width						Radial Lub. Hole Diameter	Max Hsg Radius to Clear				
	inch mm		inch mm		inch mm			inch mm			inch mm					
	Nom	Tol.	Nom	Tol.	Tol +0/-0.005 (+0/-0.13)	Rotating	Stationary	Tol.	(Ref)	(Ref)	RPM	lb/N				
GR 20 N					1.000 25.40	1.7497 44.460	1.7507 44.485	+0/-0.0007 +0/-0.018	.09 2	0.04 1	4,800	6,500 28,912	17,000 75,616	.27 .12		
GR 20 SS, S, RS, SRS, RSS	1.2500 31.8	+0/-0.0005 +0/-0.013	1.7500 44.5	+0/-0.0005 +0/-0.013	1.250 31.75	1.7497 44.460	1.7507 44.485	+0/-0.0007 +0/-0.018	.09 2	0.04 1	3,050	6,500 28,912	17,000 75,616	.39 .15		
GR 20					1.250 31.75	1.7497 44.460	1.7507 44.485	+0/-0.0007 +0/-0.018	.09 2	0.04 1	4,800	8,300 36,918	23,100 102,749	.39 .15		
GR 22 N					1.000 25.40	1.8747 47.636	1.8757 47.662	+0/-0.0007 +0/-0.018	.09 2	0.04 1	4,400	7,100 31,581	18,600 82,733	.31 .14		
GR 22 SS, S, RS, SRS, RSS	1.3750 34.9	+0/-0.0005 +0/-0.013	1.8750 47.6	+0/-0.0006 +0/-0.015	1.250 31.75	1.8747 47.636	1.8757 47.662	+0/-0.0007 +0/-0.018	.09 2	0.04 1	2,800	7,100 31,581	18,600 82,733	.36 .16		
GR 22					1.250 31.75	1.8747 47.636	1.8757 47.662	+0/-0.0007 +0/-0.018	.09 2	0.04 1	4,400	9,050 40,254	25,500 113,424	.36 .16		
GR 24 N					1.000 25.40	2.0621 52.398	2.0632 52.426	+0/-0.0007 +0/-0.018	.09 2	0.06 2	4,000	7,150 31,803	20,200 89,850	.41 .19		
GR 24 SS, S, RS, SRS, RSS	1.5000 38.1	+0/-0.0005 +0/-0.013	2.0625 52.4	+0/-0.0006 +0/-0.015	1.250 31.75	2.0621 52.398	2.0632 52.426	+0/-0.0007 +0/-0.018	.09 2	0.06 2	2,500	7,150 31,803	20,200 89,850	.47 .21		
GR 24					1.250 31.75	2.0621 52.398	2.0632 52.426	+0/-0.0007 +0/-0.018	.09 2	0.06 2	4,000	9,150 40,699	27,800 123,654	.47 .21		
GR 26 N					1.000 25.40	2.1871 55.574	2.1882 55.602	+0/-0.0007 +0/-0.018	.09 2	0.06 2	3,700	7,500 33,360	21,700 96,522	.46 .21		
GR 26 SS, S, RS, SRS, RSS	1.6250 41.3	+0/-0.0005 +0/-0.013	2.1875 55.6	+0/-0.0006 +0/-0.015	1.250 31.75	2.1871 55.574	2.1882 55.602	+0/-0.0007 +0/-0.018	.09 2	0.06 2	2,350	7,500 33,360	21,700 96,522	.51 .23		
GR 26					1.250 31.75	2.1871 55.574	2.1882 55.602	+0/-0.0007 +0/-0.018	.09 2	0.06 2	3,700	9,600 42,701	29,800 132,550	.51 .23		
GR 28 N					1.000 25.40	2.3121 58.750	2.3132 58.778	+0/-0.0007 +0/-0.018	.09 2	0.06 2	3,400	7,750 34,472	23,300 103,638	.47 .21		
GR 28 SS, S, RS, SRS, RSS	1.7500 44.5	+0/-0.0005 +0/-0.013	2.3125 58.8	+0/-0.0006 +0/-0.015	1.250 31.75	2.3121 58.750	2.3132 58.778	+0/-0.0007 +0/-0.018	.09 2	0.06 2	2,200	7,750 34,472	23,300 103,638	.55 .25		
GR 28					1.250 31.75	2.3121 58.750	2.3132 58.778	+0/-0.0007 +0/-0.018	.09 2	0.06 2	3,400	9,850 43,813	32,100 142,781	.55 .25		
GR 30 SS, S, RS, SRS, RSS	1.8750 47.6	+0/-0.0005 +0/-0.013	2.4375 61.9	+0/-0.0006 +0/-0.015	1.250 31.75	2.4371 61.927	2.4382 61.955	+0/-0.0007 +0/-0.018	.09 2	0.06 2	2,040	8,150 36,251	25,200 112,090	.59 .27		
GR 30					1.250 31.75	2.4371 61.927	2.4382 61.955	+0/-0.0007 +0/-0.018	.09 2	0.06 2	3,100	8,150 36,251	25,200 112,090	.59 .27		
GR 32 N					1.000 25.40	2.5621 65.103	2.5632 65.131	+0/-0.0007 +0/-0.018	.09 2	0.06 2	3,000	8,000 35,584	26,700 118,762	.55 .25		
GR 32 SS, S, RS, SRS, RSS	2.0000 50.8	+0/-0.0005 +0/-0.013	2.5625 65.1	+0/-0.0006 +0/-0.015	1.250 31.75	2.5621 65.103	2.5632 65.131	+0/-0.0007 +0/-0.018	.09 2	0.06 2	1,900	8,000 35,584	26,700 118,762	.61 .28		
GR 32					1.250 31.75	2.5621 65.103	2.5632 65.131	+0/-0.0007 +0/-0.018	.09 2	0.06 2	3,000	10,250 45,592	36,700 163,242	.61 .28		
						2.5621 65.103	2.5632 65.131	+0/-0.0007 +0/-0.018	.09 2	0.06 2	3,000	10,250 45,592	36,700 163,242	.61 .28		

For sealed bearings, Outside diameter may be slightly oversize due to seal press fit.
For DS matching as DS suffix to part number
* For bearing properly filled with #1 grease reduce speed by 50%

Metric dimensions for reference only.
Not all parts are available from stock. Please contact customer service for availability (800) 626-2120.
For more information on bearing capabilities outside of our standard offering, please contact Application Engineering (800) 626-2093.



GR SERIES (continued)

Part No.		B		D1		W1	HD	Ri	Recommended Shaft Diameter with inner ring			Inner Weight
Outer Ring & Roller Assembly	Separable Inner Ring Only	Bore Diameter		Outside Diameter		Width	Radial Lub. Hole Diameter	Max Shaft Radius to Clear				
		inch mm		inch mm		inch mm			inch mm			lb kg
		Nom	Tol.	Nom	Tol.	Tol +0/-0.005 (+0/.13)	(Ref)	(Ref)	Rotating	Stationary	Tol.	
GR 20 N	MI 16 N	1.0000 25.410	+0/-0.0005 +0/-0.013	1.2491 31.740	+0/-0.0006 +0/-0.015	1.010 25.66	0.13 3	0.40 10	1.0005 25.4	0.9996 25.4	+0/-0.0005 +0/-0.013	.13 .06
GR 20 SS, S, RS, SRS, RSS	MI 16	1.0000 25.410	+0/-0.0005 +0/-0.013	1.2491 31.740	+0/-0.0006 +0/-0.015	1.260 32.02	0.13 3	0.40 10	1.0005 25.4	0.9996 25.4	+0/-0.0005 +0/-0.013	.16 .07
GR 20	MI 16	1.0000 25.410	+0/-0.0005 +0/-0.013	1.2491 31.740	+0/-0.0006 +0/-0.015	1.260 32.02	0.13 3	0.40 10	1.0005 25.4	0.9996 25.4	+0/-0.0005 +0/-0.013	.16 .07
GR 22 N	MI 18 N	1.1250 28.586	+0/-0.0005 +0/-0.013	1.3741 34.916	+0/-0.0006 +0/-0.015	1.010 25.66	0.13 3	0.40 10	1.1255 28.6	1.1246 28.6	+0/-0.0005 +0/-0.013	.14 .06
GR 22 SS, S, RS, SRS, RSS	MI 18	1.1250 28.586	+0/-0.0005 +0/-0.013	1.3741 34.916	+0/-0.0006 +0/-0.015	1.260 32.02	0.13 3	0.40 10	1.1255 28.6	1.1246 28.6	+0/-0.0005 +0/-0.013	.17 .08
GR 22	MI 17	1.0625 26.998	+0/-0.0005 +0/-0.013	1.3741 34.916	+0/-0.0006 +0/-0.015	1.260 32.02	0.13 3	0.40 10	1.0630 27.0	1.0621 27.0	+0/-0.0005 +0/-0.013	.16 .07
GR 24 N	MI 20 N	1.2500 31.763	+0/-0.0005 +0/-0.013	1.4990 38.090	+0/-0.0006 +0/-0.015	1.010 25.66	0.13 3	0.06 2	1.2505 31.8	1.2496 31.8	+0/-0.0005 +0/-0.013	.19 .09
GR 24 SS, S, RS, SRS, RSS	MI 20	1.2500 31.763	+0/-0.0005 +0/-0.013	1.4990 38.090	+0/-0.0006 +0/-0.015	1.260 32.02	0.13 3	0.06 2	1.2505 31.8	1.2496 31.8	+0/-0.0005 +0/-0.013	.22 .09
GR 24	MI 19	1.1875 30.174	+0/-0.0005 +0/-0.013	1.4990 38.090	+0/-0.0006 +0/-0.015	1.260 32.02	0.13 3	0.06 2	1.1880 30.2	1.1871 30.2	+0/-0.0005 +0/-0.013	.24 .11
GR 26 N	MI 21 N	1.3125 33.351	+0/-0.0005 +0/-0.013	1.6240 41.266	+0/-0.0006 +0/-0.015	1.010 25.66	0.13 3	0.06 2	1.3130 33.4	1.3121 33.3	+0/-0.0005 +0/-0.013	.20 .09
GR 26 SS, S, RS, SRS, RSS	MI 21	1.3125 33.351	+0/-0.0005 +0/-0.013	1.6240 41.266	+0/-0.0006 +0/-0.015	1.260 32.02	0.13 3	0.06 2	1.3130 33.4	1.3121 33.3	+0/-0.0005 +0/-0.013	.26 .12
GR 26	MI 22 4S	1.3750 34.939	+0/-0.0005 +0/-0.013	1.6240 41.266	+0/-0.0006 +0/-0.015	1.260 32.02	0.13 3	0.06 2	1.3755 35.0	1.3746 34.9	+0/-0.0005 +0/-0.013	.20 .09
GR 28 N	MI 24 N	1.5000 38.115	+0/-0.0005 +0/-0.013	1.7490 44.442	+0/-0.0006 +0/-0.015	1.010 25.66	0.13 3	0.06 2	1.5005 38.1	1.4996 38.1	+0/-0.0005 +0/-0.013	.22 .09
GR 28 SS, S, RS, SRS, RSS	MI 22	1.3750 34.939	+0/-0.0005 +0/-0.013	1.7490 44.442	+0/-0.0006 +0/-0.015	1.260 32.02	0.13 3	0.06 2	1.3755 35.0	1.3746 34.9	+0/-0.0005 +0/-0.013	.26 .12
GR 28	MI 23	1.4375 36.527	+0/-0.0005 +0/-0.013	1.7490 44.442	+0/-0.0006 +0/-0.015	1.260 32.02	0.13 3	0.06 2	1.4380 36.5	1.4371 36.5	+0/-0.0005 +0/-0.013	.27 .12
	MI 24	1.5000 38.115	+0/-0.0005 +0/-0.013	1.7490 44.442	+0/-0.0006 +0/-0.015	1.260 32.02	0.13 3	0.06 2	1.5005 38.1	1.4996 38.1	+0/-0.0005 +0/-0.013	.22 .09
GR 30 SS, S, RS, SRS, RSS	MI 25 4S	1.5625 39.703	+0/-0.0005 +0/-0.013	1.8740 47.618	+0/-0.0006 +0/-0.015	1.260 32.02	0.13 3	0.06 2	1.5630 39.7	1.5621 39.7	+0/-0.0005 +0/-0.013	.27 .12
GR 30	MI 25 4S	1.5625 39.703	+0/-0.0005 +0/-0.013	1.8740 47.618	+0/-0.0006 +0/-0.015	1.260 32.02	0.13 3	0.06 2	1.5630 39.7	1.5621 39.7	+0/-0.0005 +0/-0.013	.27 .12
GR 32 N	MI 26 N	1.6250 41.291	+0/-0.0005 +0/-0.013	1.9989 50.792	+0/-0.0007 +0/-0.018	1.010 25.66	0.13 3	0.06 2	1.6255 41.3	1.6246 41.3	+0/-0.0005 +0/-0.013	.30 .14
GR 32 SS, S, RS, SRS, RSS	MI 25	1.5625 39.703	+0/-0.0005 +0/-0.013	1.9989 50.792	+0/-0.0007 +0/-0.018	1.260 32.02	0.13 3	0.06 2	1.5630 39.7	1.5621 39.7	+0/-0.0005 +0/-0.013	.30 .14
GR 32	MI 26	1.6250 41.291	+0/-0.0005 +0/-0.013	1.9989 50.792	+0/-0.0007 +0/-0.018	1.260 32.0	0.13 3	0.06 2	1.6255 41.3	1.6246 41.3	+0/-0.0005 +0/-0.013	.38 .17
	MI 27	1.6875 42.879	+0/-0.0005 +0/-0.013	1.9989 50.792	+0/-0.0007 +0/-0.018	1.260 32.0	0.13 3	0.06 2	1.6880 42.9	1.6871 42.9	+0/-0.0005 +0/-0.013	.32 .15