

Needle/Journal Bearings



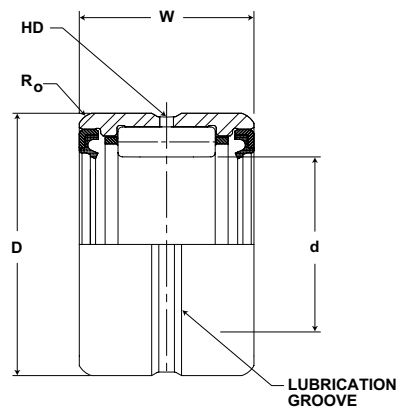
Basic Construction Type: Machined Race With Optional Separable Inner Ring

Rolling Elements: Cage Guided Precision Needles

Bearing Material: Bearing Quality Steel

Seal Type: Rubber Lip

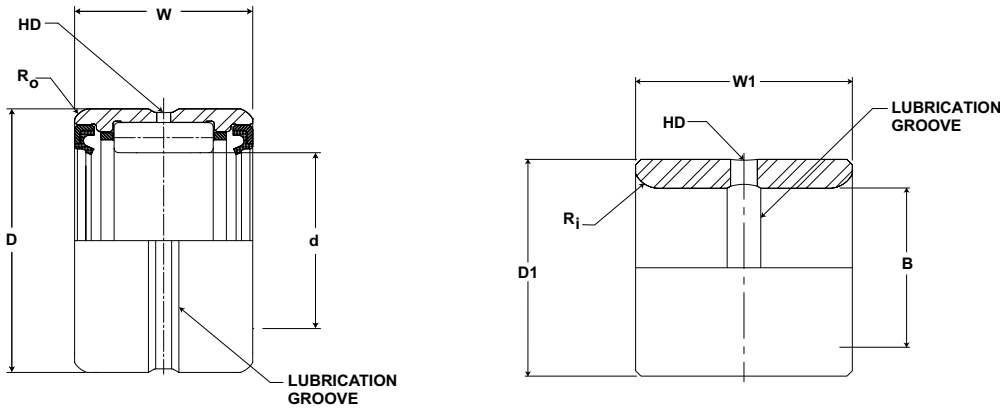
Lubrication: Sealed Bearings: Lithium Soap Grease NLGI #1 Unsealed Bearings: Rust Preventative



MR 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
McGill Outer Ring & Roller Assembly	Military No.	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	lb/N	lb kg
MR 22 N	MS 51961-18					1.000 25.40	1.8747 47.636	1.8757 47.662	+0/-0.007 +0/-0.018	.09 2	0.04 1	8750	9,640 42,879	14,700 65,386	.31 .14
MR 22 SS, S, RS, SRS, RSS		1.3750+0/-0.0005 34.9 +0/-0.13	1.8750 +0/-0.0006 47.6 +0/-0.15	1.250 31.75			1.8747 47.636	1.8757 47.662	+0/-0.007 +0/-0.018	.09 2	0.04 1	2800	9,640 42,879	14,700 65,386	.36 .16
MR 22	MS 51961-19						1.8747 47.636	1.8757 47.662	+0/-0.007 +0/-0.018	.09 2	0.04 1	8750	12,100 53,821	19,700 87,626	.36 .16
MR 24 N	MS 51961-21					1.000 25.40	2.0621 52.398	2.0632 52.426	+0/-0.007 +0/-0.018	.09 2	0.06 2	8000	10,300 45,814	15,500 68,944	.41 .19
MR 24 SS, S, RS, SRS, RSS		1.5000+0/-0.0005 38.1 +0/-0.13	2.0625 +0/-0.0006 52.4 +0/-0.15	1.250 31.75			2.0621 52.398	2.0632 52.426	+0/-0.007 +0/-0.018	.09 2	0.06 2	2500	10,300 45,814	15,500 68,944	.47 .21
MR 24	MS 51961-22						2.0621 52.398	2.0632 52.426	+0/-0.007 +0/-0.018	.09 2	0.06 2	8000	13,000 57,824	20,800 92,518	.47 .21
MR 26 N	MS 51961-24					1.000 25.40	2.1871 55.574	2.1882 55.602	+0/-0.007 +0/-0.018	.09 2	0.06 2	7400	10,600 47,149	16,400 72,947	.46 .21
MR 26 SS, S, RS, SRS, RSS		1.6250+0/-0.0005 41.3 +0/-0.13	2.1875 +0/-0.0006 55.6 +0/-0.15	1.250 31.75			2.1871 55.574	2.1882 55.602	+0/-0.007 +0/-0.018	.09 2	0.06 2	2350	10,600 47,149	16,400 72,947	.51 .23
MR 26	MS 51961-25						2.1871 55.574	2.1882 55.602	+0/-0.007 +0/-0.018	.09 2	0.06 2	7400	13,300 59,158	22,100 98,301	.51 .23
MR 28 N	MS 51961-27					1.000 25.40	2.3121 58.750	2.3132 58.778	+0/-0.007 +0/-0.018	.09 2	0.06 2	6850	11,200 49,818	18,100 80,509	.47 .21
MR 28 SS, S, RS, SRS, RSS		1.7500+0/-0.0005 44.5 +0/-0.13	2.3125 +0/-0.0006 58.8 +0/-0.15				2.3121 59	2.3132 59	+0/-0.007 +0/-0.018	.09 2	0.06 2	2200	11,200 49,818	18,100 80,509	.55 .25
MR 28	MS 51961-28 MS 51961-28			1.250 31.75			2.3121 59	2.3132 59	+0/-0.007 +0/-0.018	.09 2	0.06 2	6850	14,100 62,717	24,400 108,531	.55 .25
							2.3121 59	2.3132 59	+0/-0.007 +0/-0.018	.09 2	0.06 2	6850	14,100 62,717	24,400 108,531	.55 .25
MR 30 SS, S, RS, SRS, RSS		1.8750+0/-0.0005 47.6 +0/-0.13	2.4375 +0/-0.0006 61.9 +0/-0.15	1.250 31.75			2.4371 61.927	2.4382 61.955	+0/-0.007 +0/-0.018	.09 2	0.06 2	2040	11,400 50,707	19,000 84,512	.59 .27
MR 30	MS 51961-29						2.4371 62	2.4382 62	+0/-0.007 +0/-0.018	.09 2	0.06 2	6400	14,400 64,051	25,600 113,869	.59 .27
MR 31		1.9375+0/-0.0005 49.2 +0/-0.13	2.5000 +0/-0.0006 63.5 +0/-0.15	1.250 31.75			2.4996 63.515	2.5007 63.543	+0/-0.007 +0/-0.018	.09 2	0.06 2	6200	12,400 55,155	22,400 99,635	.60 .27
MR 32 N				1.000 25.40			2.5621 65.103	2.5632 65.131	+0/-0.007 +0/-0.018	.09 2	0.06 2	6000	12,000 53,376	20,700 92,074	.55 .25
MR 32 SS, S, RS, SRS, RSS		2.0000+0/-0.0005 50.8 +0/-0.13	2.5625 +0/-0.0006 65.1 +0/-0.15				2.5621 65	2.5632 65	+0/-0.007 +0/-0.018	.09 2	0.06 2	1900	12,000 53,376	20,700 92,074	.61 .28
MR 32	MS 51961-30 MS 51961-30			1.250 31.75			2.5621 65	2.5632 65	+0/-0.007 +0/-0.018	.09 2	0.06 2	6000	15,200 67,610	27,900 124,099	.61 .28
							2.5621 65	2.5632 65	+0/-0.007 +0/-0.018	.09 2	0.06 2	6000	15,200 67,610	27,900 124,099	.61 .28
MR 36 N	MS 51961-31			1.500 38.10			2.9996 76.220	3.0007 76.248	+0/-0.007 +0/-0.018	.13 3	0.08 2	5350	22,400 99,635	39,100 173,917	1.13 .51
MR 36 SS, S, RS, SRS, RSS		2.2500+0/-0.0005 57.2 +0/-0.13	3.0000 +0/-0.0006 76.2 +0/-0.15	1.750 44.45			2.9996 76	3.0007 76	+0/-0.007 +0/-0.018	.13 3	0.08 2	1700	22,400 99,635	39,100 173,917	1.32 .59
MR 36	MS 51961-32						2.9996 76	3.0007 76	+0/-0.007 +0/-0.018	.13 3	0.08 2	5350	26,000 115,648	47,400 210,835	1.32 .59

Metric dimensions for reference only.
 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%



MR SERIES (continued)

Part No.		Military No.	B		D1		W1	HD	Ri	Recommended Shaft Diameter with inner ring			Inner Weight
McGill Outer Ring & Roller Assembly	Separable Inner Ring Only		Bore Diameter		Outside Diameter		Width	Radial Lub. Hole Diameter	Max Shaft Radius to Clear				lb kg
			inch mm		inch mm		inch mm			inch mm			
			Nom	Tol.	Nom	Tol.	Tol +0/-0.005 (+0/-0.13)	(Ref)	(Ref)	Rotating	Stationary	Tol.	
MR 22 N	MI 18 N	MS 500072-12	1.1250 28.586	+0/-0.0005 +0/-0.013	1.374 34.9	+0/-0.0006 +0/-0.015	1.010 25.7	.13 3.2	.40 10.2	1.1255 28.599	1.1246 28.579	+0/-0.0005 +0/-0.013	.14 .06
MR 22 SS, S, RS, SRS, RSS	MI 17		1.0625 26.998	+0/-0.0005 +0/-0.013	1.374 34.9	+0/-0.0006 +0/-0.015	1.260 32.0	0.13 3	0.40 10	1.0630 27.011	1.0621 26.991	+0/-0.0005 +0/-0.013	.16 .07
MR 22	MI 18	MS 500072-13	1.1250 28.586	+0/-0.0005 +0/-0.013	1.374 34.9	+0/-0.0006 +0/-0.015	1.260 32.0	0.13 3	0.40 10	1.1255 28.599	1.1246 28.579	+0/-0.0005 +0/-0.013	.17 .08
MR 24 N	MI 20 N	MS 500072-15	1.2500 31.763	+0/-0.0005 +0/-0.013	1.499 38.1	+0/-0.0006 +0/-0.015	1.010 25.7	.13 3.2	.06 1.5	1.2505 31.775	1.2496 31.755	+0/-0.0005 +0/-0.013	.19 .09
MR 24 SS, S, RS, SRS, RSS	MI 19	MS 500072-16	1.250 31.8	+0/-0.0005 +0/-0.013	1.499 38.1	+0/-0.0006 +0/-0.015	1.260 32.0	.13 3.2	.06 1.5	1.2505 31.775	1.2497 31.755	+0/-0.0005 +0/-0.013	.24 .11
	MI 20	MS 500072-14	1.1875 30.174	+0/-0.0005 +0/-0.013	1.499 38.1	+0/-0.0006 +0/-0.015	1.260 32.0	.13 3.2	.06 1.5	1.1880 30.187	1.1871 30.167	+0/-0.0005 +0/-0.013	.22 .09
MR 26 N	MI 21 N	MS 500072-17	1.3125 33.351	+0/-0.0005 +0/-0.013	1.624 41.3	+0/-0.0006 +0/-0.015	1.010 25.7	.13 3.2	.06 1.5	1.3130 33.363	1.3121 33.343	+0/-0.0005 +0/-0.013	.20 .09
MR 26 SS, S, RS, SRS, RSS	MI 21		1.3125 33.351	+0/-0.0005 +0/-0.013	1.624 41.3	+0/-0.0006 +0/-0.015	1.260 32.0	0.13 3	0.06 2	1.3130 33.363	1.3122 33.343	+0/-0.0005 +0/-0.013	.26 .12
MR 26	MI 22 4S	MS 500072-18	1.3750 34.939	+0/-0.0005 +0/-0.013	1.624 41.3	+0/-0.0006 +0/-0.015	1.260 32.0	0.13 3	0.06 2	1.3755 34.951	1.3746 34.931	+0/-0.0005 +0/-0.013	.20 .09
MR 28 N	MI 24 N	MS 500072-21	1.5000 38.115	+0/-0.0005 +0/-0.013	1.749 44.4	+0/-0.0006 +0/-0.015	1.010 25.7	.13 3.2	.06 1.5	1.5005 38.128	1.4996 38.107	+0/-0.0005 +0/-0.013	.22 .09
MR 28 SS, S, RS, SRS, RSS	MI 22	MS 500072-19	1.3750 34.939	+0/-0.0005 +0/-0.013	1.749 44.4	+0/-0.0006 +0/-0.015	1.260 32.0	.13 3.2	.06 1.5	1.3755 34.951	1.3746 34.931	+0/-0.0005 +0/-0.013	.26 .12
	MI 23	MS 500072-20	1.4375 36.527	+0/-0.0005 +0/-0.013	1.749 44.4	+0/-0.0006 +0/-0.015	1.260 32.0	.13 3.2	.06 1.5	1.4380 36.540	1.4371 36.519	+0/-0.0005 +0/-0.013	.27 .12
	MI 24	MS 500072-22	1.5000 38.115	+0/-0.0005 +0/-0.013	1.749 44.4	+0/-0.0006 +0/-0.015	1.260 32.0	.13 3.2	.06 1.5	1.5005 38.128	1.4996 38.107	+0/-0.0005 +0/-0.013	.22 .09
MR 30 SS, S, RS, SRS, RSS	MI 25 4S		1.5625 39.703	+0/-0.0005 +0/-0.013	1.874 47.6	+0/-0.0006 +0/-0.015	1.260 32.0	.13 3.2	0.06 2	1.5630 39.716	1.5621 39.696	+0/-0.0005 +0/-0.013	.27 .12
MR 30			1.5625 39.703	+0/-0.0005 +0/-0.013	1.874 47.6	+0/-0.0006 +0/-0.015	1.260 32.0	.13 3.2	0.06 2	1.5630 39.716	1.5621 39.696	+0/-0.0005 +0/-0.013	.27 .12
MR 31	MI 26 2S		1.6250 41.291	+0/-0.0005 +0/-0.013	1.936 49.2	+0/-0.0007 +0/-0.018	1.260 32.0	.13 3.2	.06 1.5	1.6255 41.304	1.6246 41.284	+0/-0.0005 +0/-0.013	.30 .14
MR 32 N	MI 26 N		1.6250 41.291	+0/-0.0005 +0/-0.013	1.999 50.8	+0/-0.0007 +0/-0.018	1.010 25.7	.13 3.2	.06 1.5	1.6255 41.304	1.6246 41.284	+0/-0.0005 +0/-0.013	.30 .14
MR 32 SS, S, RS, SRS, RSS	MI 25		1.5625 39.703	+0/-0.0005 +0/-0.013	1.999 50.8	+0/-0.0007 +0/-0.018	1.260 32.0	.13 3.2	.06 1.5	1.5630 39.716	1.5621 39.696	+0/-0.0005 +0/-0.013	.30 .14
MR 32	MI 26	MS 500072-23	1.6250 41.291	+0/-0.0005 +0/-0.013	1.999 50.8	+0/-0.0007 +0/-0.018	1.260 32.0	.13 3.2	.06 1.5	1.6255 41.304	1.6246 41.284	+0/-0.0005 +0/-0.013	.38 .17
	MI 27		1.6875 42.879	+0/-0.0005 +0/-0.013	1.999 50.8	+0/-0.0007 +0/-0.018	1.260 32.0	.13 3.2	.06 1.5	1.6880 42.892	1.6871 42.872	+0/-0.0005 +0/-0.013	.32 .15
MR 36 N	MI 28 N	MS 500072-24	1.7500 44.468	+0/-0.0005 +0/-0.013	2.249 57.1	+0/-0.0007 +0/-0.018	1.510 38.4	.19 4.8	.06 1.5	1.7505 44.480	1.7496 44.460	+0/-0.0005 +0/-0.013	.63 .29
MR 36 SS, S, RS, SRS, RSS	MI 28	MS 500072-25	1.750 44.5	+0/-0.0005 +0/-0.013	2.249 57.1	+0/-0.0007 +0/-0.018	1.760 44.7	0.19 5	0.06 2	1.7505 44.480	1.7497 44.460	+0/-0.0005 +0/-0.013	.74 .34
	MI 30		1.8750 47.644	+0/-0.0005 +0/-0.013	2.249 57.1	+0/-0.0007 +0/-0.018	1.760 44.7	0.19 5	0.06 2	1.8755 47.656	1.8746 47.636	+0/-0.0005 +0/-0.013	.85 .39

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.