

McGILL® SPHERE-ROL® Spherical Bearings



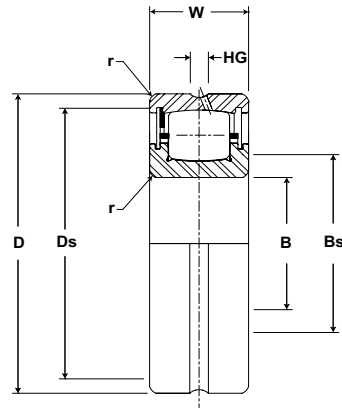
Basic Construction Type: 22200 Series Spherical Bearing With Non-Separable Inner Ring

Rolling Elements: Separated Spherical Rolling Elements

Bearing Material: Bearing Quality Steel

Seal Type: NYLAPLATE or LAMBDA

Lubrication: Sealed Bearings: Polyurea thickened NLGI 2 EP Grease.
Unsealed Bearings: Corrosion Preventive Oil



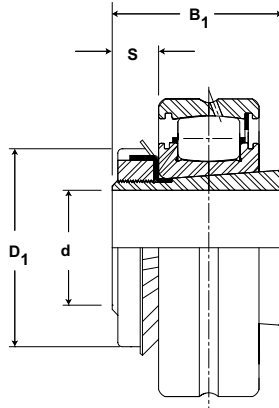
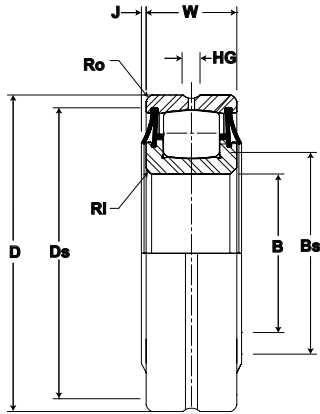
SB 22200 (continued)

Part No.	B		D		W		Bs	Ds	HG	J	r	Limiting Speed (In Oil)	BDR	Bearing Weight
Base Bearing	Bore Diameter		Outside Diameter		Width		Min Shoulder Diameter Inner	Min Shoulder Diameter Outer	Annular Lub Groove	Lambda Seal Minimum Clearance	Maximum radius or fillet to clear		Basic Dynamic Rating	
	mm inch		mm inch		mm inch		mm inch		mm inch		mm inch	RPM*	N/lb	
	Nom.	Tol.	Nom.	Tol.	Nom.	Tol.	Ref	Ref	W33	Ref	Ref		kg lb	
SB-22216	80.000 3.1496	+0/-0.015 +0/-0.0006	140.000 5.5118	+0/-0.020 +0/-0.0008	33.00 1.299	+0/-0.15 +0/-0.006	91 3.6	124 4.9	5 .2	3 .1	2.0 .08	3250	188,600 42,400	2.09 4.60
SB-22217	85.000 3.3465	+0/-0.020 +0/-0.0008	150.000 5.9055	+0/-0.020 +0/-0.0008	36.00 1.417	+0/-0.20 +0/-0.008	97 3.8	135 5.3	5 .2	3 .1	2.0 .08	3000	226,400 50,900	2.68 5.90
SB-22218	90.000 3.5433	+0/-0.020 +0/-0.0008	160.000 6.2992	+0/-0.025 +0/-0.0010	40.00 1.575	+0/-0.20 +0/-0.008	99 3.9	145 5.7	5 .2	3 .1	2.0 .08	2800	263,320 59,200	3.40 7.50
SB-22219	95.000 3.7402	+0/-0.020 +0/-0.0008	170.000 6.6929	+0/-0.025 +0/-0.0010	43.00 1.693	+0/-0.20 +0/-0.008	107 4.2	155 6.1	8 .3	3 .1	2.0 .08	2650	315,360 70,900	4.17 9.20
SB-22220	100.000 3.937	+0/-0.020 +0/-0.0008	180.000 7.0866	+0/-0.025 +0/-0.0010	46.00 1.811	+0/-0.20 +0/-0.008	112 4.4	163 6.4	8 .3	3 .1	2.0 .08	2500	345,610 77,700	5.03 11.10
SB-22222	110.000 4.3307	+0/-0.020 +0/-0.0008	200.000 7.874	+0/-0.030 +0/-0.0012	53.00 2.087	+0/-0.20 +0/-0.008	124 4.9	180 7.1	8 .3	3 .1	2.0 .08	2200	444,800 100,000	7.21 15.90
SB-22224	120.000 4.7244	+0/-0.020 +0/-0.0008	215.000 8.4646	+0/-0.030 +0/-0.0012	58.00 2.284	+0/-0.20 +0/-0.008	135 5.3	196 7.7	10 .4	5 .2	2.0 .08	2050	533,760 120,000	8.98 19.80
SB-22226	130.000 5.1181	+0/-0.025 +0/-0.0010	230.000 9.0551	+0/-0.030 +0/-0.0012	64.00 2.520	+0/-0.25 +0/-0.010	150 5.9	211 8.3	10 .4	5 .2	2.5 .10	1900	589,360 132,500	11.29 24.80
SB-22228	140.000 5.5118	+0/-0.025 +0/-0.0010	250.000 9.8425	+0/-0.030 +0/-0.0012	68.00 2.677	+0/-0.25 +0/-0.010	160 6.3	231 9.1	10 .4	5 .2	2.5 .10	1750	707,680 159,100	14.19 31.30
SB-22230	150.000 5.9055	+0/-0.025 +0/-0.0010	270.000 10.6299	+0/-0.036 +0/-0.0014	73.00 2.874	+0/-0.25 +0/-0.010	170 6.7	246 9.7	13 .5	5 .2	2.5 .10	1600	753,050 169,300	17.92 39.50
SB-22236	180.000 7.0866	+0/-0.025 +0/-0.0010	320.000 12.5984	+0/-0.041 +0/-0.0016	86.00 3.386	+0/-0.25 +0/-0.010	213 8.4	290 11.4	18 .7	5 .2	3.0 .12	1350	1,024,820 230,400	21.92 48.34

Add K to base number to indicate K bore option
Add W22 for select OD
All bearings are supplied with W33 option unless otherwise specified
*Refers to oil lubrication and moderate load, use 50% of value for grease lubrication.
Complete adapter number indicated adapter sleeve, locknut, and washer, for components refer to S=sleeve, N= lock Nut, W= lock washer
For Expansion type bearing add E suffix immediately after diametrical clearance specification per nomenclature diagram.
For Sealing options see page D-8
Outside diameter may be oversized, due to internal retaining ring

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.

SPHERE-ROL® Spherical Bearings **McGILL®**



SB 22200 (continued)

Part No.	Straight Bore Internal Radial Clearance								Taper (K) Bore Internal Radial Clearance (1" in 12" on Diameter)								Optional Adapter Dimensions					
	C2		Standard		C3		C4		C2		Standard		C3		C4		Adapter No.	Adapter Shaft Dimension	B1	S	D1	
	mm inch		mm inch		mm inch		mm inch		mm inch		mm inch		mm inch		mm inch			mm inch		mm inch		
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		(Ref)	(Ref)	(Ref)	(Ref)	
SB-22216	.0356 .0014	.0635 .0025	.0991 .0039		.1346 .0053		.1803 .0071		.0508 .0020		.0813 .0032		.1118 .0044		.1448 .0057		SNW 16	12.0 2.69	10.6 2.38	3.0 .67	18.5 4.16	
SB-22217	.0356 .0014	.0635 .0025	.0991 .0039		.1346 .0053		.1803 .0071		.0508 .0020		.0813 .0032		.1118 .0044		.1448 .0057			13.1 2.94	11.0 2.48	3.1 .70	19.6 4.41	
SB-22218	.0356 .0014	.0635 .0025	.0991 .0039		.1346 .0053		.1803 .0071		.0508 .0020		.0813 .0032		.1118 .0044		.1448 .0057		SNW 18	14.2 3.19	11.7 2.64	3.5 .78	20.7 4.66	
SB-22219	.0356 .0014	.0635 .0025	.0991 .0039		.1346 .0053		.1803 .0071		.0508 .0020		.0813 .0032		.1118 .0044		.1448 .0057			-	-	-	-	
SB-22220	.0432 .0017	.0787 .0031	.1219 .0048		.1626 .0064		.2108 .0083		.0635 .0025		.0991 .0039		.1346 .0053		.1753 .0069		SNW 20	15.3 3.44	12.8 2.88	3.7 .84	23.1 5.19	
SB-22222	.0432 .0017	.0787 .0031	.1219 .0048		.1626 .0064		.2108 .0083		.0635 .0025		.0991 .0039		.1346 .0053		.1753 .0069			17.5 3.94	14.2 3.20	4.0 .91	25.4 5.72	
SB-22224	.0508 .0020	.0965 .0038	.1448 .0057		.1905 .0075		.2413 .0095		.0762 .0030		.1194 .0047		.1600 .0063		.2057 .0081		SNW 24	18.6 4.19	15.4 3.47	4.2 .94	27.3 6.13	
SB-22226	.0508 .0020	.0965 .0038	.1448 .0057		.1905 .0075		.2413 .0095		.0762 .0030		.1194 .0047		.1600 .0063		.2057 .0081			19.7 4.44	16.8 3.77	4.4 1.00	30.0 6.75	
SB-22228	.0610 .0024	.1092 .0043	.1651 .0065		.2210 .0087		.2794 .0110		.0864 .0034		.1346 .0053		.1803 .0071		.2311 .0091		SNW 28	22.0 4.94	17.7 3.98	4.7 1.06	31.5 7.09	
SB-22230	.0610 .0024	.1092 .0043	.1651 .0065		.2210 .0087		.2794 .0110		.0864 .0034		.1346 .0053		.1803 .0071		.2311 .0091			23.1 5.19	18.8 4.23	5.0 1.13	34.2 7.69	
SB-22236	.0610 .0024	.1092 .0043	.1651 .0065		.2210 .0087		.2794 .0110		.0864 .0034		.1346 .0053		.1803 .0071		.2311 .0091		SNW 36	28.6 6.44	22.5 5.05	5.6 1.25	40.3 9.06	