

McGILL® SPHERE-ROL® Spherical Bearings



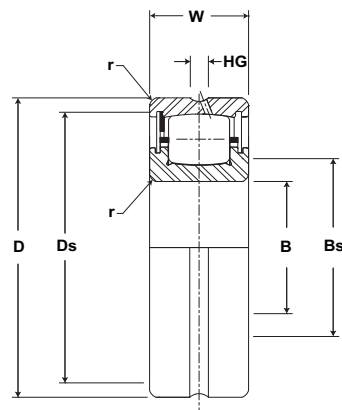
Basic Construction Type: 22200 Series Spherical Bearing With Non-Separable Inner Ring

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
	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	RPM*	N/lb	kg lb
Base Bearing	Nom.	Tol.	Nom.	Tol.	Nom.	Tol.	Ref	Ref	W33	Ref	Ref			
SB-22216	80.000	+0/-0.015	140.000	+0/-0.020	33.00	+0/-0.15	91	124	5	3	2.0	3250	188,600	2.09
	3.1496	+0/-0.0006	5.5118	+0/-0.0008	1.299	+0/-0.006	3.6	4.9	.2	.1	.08		42,400	4.60
SB-22217	85.000	+0/-0.020	150.000	+0/-0.020	36.00	+0/-0.20	97	135	5	3	2.0	3000	226,400	2.68
	3.3465	+0/-0.0008	5.9055	+0/-0.0008	1.417	+0/-0.008	3.8	5.3	.2	.1	.08		50,900	5.90
SB-22218	90.000	+0/-0.020	160.000	+0/-0.025	40.00	+0/-0.20	99	145	5	3	2.0	2800	263,320	3.40
	3.5433	+0/-0.0008	6.2992	+0/-0.0010	1.575	+0/-0.008	3.9	5.7	.2	.1	.08		59,200	7.50
SB-22219	95.000	+0/-0.020	170.000	+0/-0.025	43.00	+0/-0.20	107	155	8	3	2.0	2650	315,360	4.17
	3.7402	+0/-0.0008	6.6929	+0/-0.0010	1.693	+0/-0.008	4.2	6.1	.3	.1	.08		70,900	9.20
SB-22220	100.000	+0/-0.020	180.000	+0/-0.025	46.00	+0/-0.20	112	163	8	3	2.0	2500	345,610	5.03
	3.937	+0/-0.0008	7.0866	+0/-0.0010	1.811	+0/-0.008	4.4	6.4	.3	.1	.08		77,700	11.10
SB-22222	110.000	+0/-0.020	200.000	+0/-0.030	53.00	+0/-0.20	124	180	8	3	2.0	2200	444,800	7.21
	4.3307	+0/-0.0008	7.874	+0/-0.0012	2.087	+0/-0.008	4.9	7.1	.3	.1	.08		100,000	15.90
SB-22224	120.000	+0/-0.020	215.000	+0/-0.030	58.00	+0/-0.20	135	196	10	5	2.0	2050	533,760	8.98
	4.7244	+0/-0.0008	8.4646	+0/-0.0012	2.284	+0/-0.008	5.3	7.7	.4	.2	.08		120,000	19.80
SB-22226	130.000	+0/-0.025	230.000	+0/-0.030	64.00	+0/-0.25	150	211	10	5	2.5	1900	589,360	11.29
	5.1181	+0/-0.0010	9.0551	+0/-0.0012	2.520	+0/-0.010	5.9	8.3	.4	.2	.10		132,500	24.80
SB-22228	140.000	+0/-0.025	250.000	+0/-0.030	68.00	+0/-0.25	160	231	10	5	2.5	1750	707,680	14.19
	5.5118	+0/-0.0010	9.8425	+0/-0.0012	2.677	+0/-0.010	6.3	9.1	.4	.2	.10		159,100	31.30
SB-22230	150.000	+0/-0.025	270.000	+0/-0.036	73.00	+0/-0.25	170	246	13	5	2.5	1600	753,050	17.92
	5.9055	+0/-0.0010	10.6299	+0/-0.0014	2.874	+0/-0.010	6.7	9.7	.5	.2	.10		169,300	39.50
SB-22236	180.000	+0/-0.025	320.000	+0/-0.041	86.00	+0/-0.25	213	290	18	5	3.0	1350	1,024,820	21.92
	7.0866	+0/-0.0010	12.5984	+0/-0.0016	3.386	+0/-0.010	8.4	11.4	.7	.2	.12		230,400	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

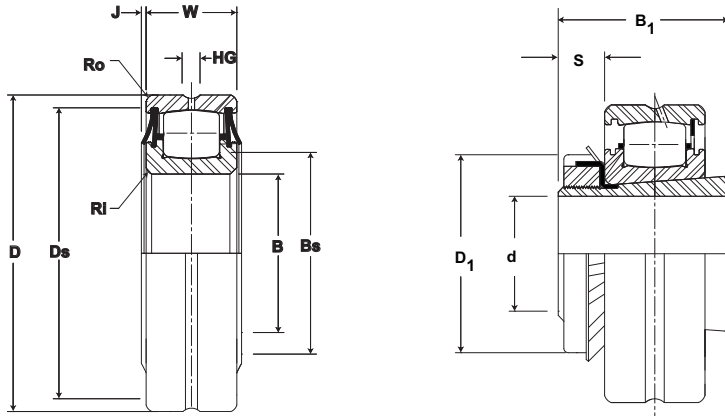
Outside diameter may be oversized, due to internal retaining ring

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						
Base Bearing	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	.0635	.0991		.1346		.1803		.0508		.0813		.1118		.1448		.1905		SNW 16	12.0	10.6	3.0	18.5
	.0014	.0025	.0039		.0053		.0071		.0020		.0032		.0044		.0057		.0075			2.69	2.38	.67	4.16
SB-22217	.0356	.0635	.0991		.1346		.1803		.0508		.0813		.1118		.1448		.1905		SNW 17	13.1	11.0	3.1	19.6
	.0014	.0025	.0039		.0053		.0071		.0020		.0032		.0044		.0057		.0075			2.94	2.48	.70	4.41
SB-22218	.0356	.0635	.0991		.1346		.1803		.0508		.0813		.1118		.1448		.1905		SNW 18	14.2	11.7	3.5	20.7
	.0014	.0025	.0039		.0053		.0071		.0020		.0032		.0044		.0057		.0075			3.19	2.64	.78	4.66
SB-22219	.0356	.0635	.0991		.1346		.1803		.0508		.0813		.1118		.1448		.1905		-	-	-	-	-
	.0014	.0025	.0039		.0053		.0071		.0020		.0032		.0044		.0057		.0075						
SB-22220	.0432	.0787	.1219		.1626		.2108		.0635		.0991		.1346		.1753		.2261		SNW 20	15.3	12.8	3.7	23.1
	.0017	.0031	.0048		.0064		.0083		.0025		.0039		.0053		.0069		.0089			3.44	2.88	.84	5.19
SB-22222	.0432	.0787	.1219		.1626		.2108		.0635		.0991		.1346		.1753		.2261		SNW 22	17.5	14.2	4.0	25.4
	.0017	.0031	.0048		.0064		.0083		.0025		.0039		.0053		.0069		.0089			3.94	3.20	.91	5.72
SB-22224	.0508	.0965	.1448		.1905		.2413		.0762		.1194		.1600		.2057		.2591		SNW 24	18.6	15.4	4.2	27.3
	.0020	.0038	.0057		.0075		.0095		.0030		.0047		.0063		.0081		.0102			4.19	3.47	.94	6.13
SB-22226	.0508	.0965	.1448		.1905		.2413		.0762		.1194		.1600		.2057		.2591		SNW 26	19.7	16.8	4.4	30.0
	.0020	.0038	.0057		.0075		.0095		.0030		.0047		.0063		.0081		.0102			4.44	3.77	1.00	6.75
SB-22228	.0610	.1092	.1651		.2210		.2794		.0864		.1346		.1803		.2311		.2997		SNW 28	22.0	17.7	4.7	31.5
	.0024	.0043	.0065		.0087		.0110		.0034		.0053		.0071		.0091		.0118			4.94	3.98	1.06	7.09
SB-22230	.0610	.1092	.1651		.2210		.2794		.0864		.1346		.1803		.2311		.2997		SNW 30	23.1	18.8	5.0	34.2
	.0024	.0043	.0065		.0087		.0110		.0034		.0053		.0071		.0091		.0118			5.19	4.23	1.13	7.69
SB-22236	.0610	.1092	.1651		.2210		.2794		.0864		.1346		.1803		.2311		.2997		SNW 36	28.6	22.5	5.6	40.3
	.0024	.0043	.0065		.0087		.0110		.0034		.0053		.0071		.0091		.0118			6.44	5.05	1.25	9.06