

McGILL® SPHERE-ROL® Spherical Bearings



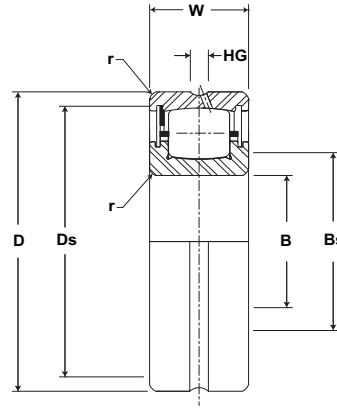
Basic Construction Type: 22300 Series Spherical Bearing With Non-Separable Inner Ring

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



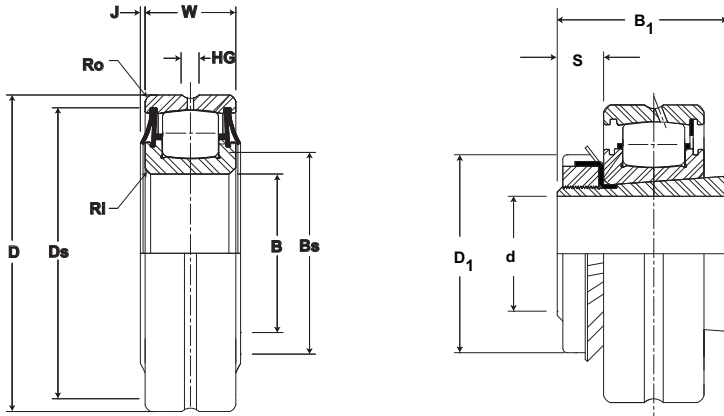
SB 22300

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 inch	mm inch	mm inch	mm inch	mm inch	mm inch	RPM*	N/lb	kg lb
SB-22308	40.000	+0/-.013	90.000	+0/-.015	33.00	+0/-.13	48	79	5	2.3	1.5	5250	113,870	1.04
	1.5748	+0/-.0005	3.5433	+0/-.0006	1.299	+0/-.005	1.9	3.1	.2	.09	.06		25,600	2.30
SB-22309	45.000	+0/-.013	110.000	+0/-.015	36.00	+0/-.13	53	89	8	2.3	1.5	4650	133,880	1.41
	1.7717	+0/-.0005	3.937	+0/-.0006	1.417	+0/-.005	2.1	3.5	.3	.09	.06		30,100	3.10
SB-22310	50.000	+0/-.013	110.000	+0/-.015	40.00	+0/-.13	61	99	8	2.3	2.0	4200	166,360	1.86
	1.9685	+0/-.0005	4.3307	+0/-.0006	1.575	+0/-.005	2.4	3.9	.3	.09	.08		37,400	4.10
SB-22311	55.000	+0/-.013	120.000	+0/-.015	43.00	+0/-.15	66	109	8	3.3	2.0	3800	183,700	2.40
	2.1654	+0/-.0005	4.7244	+0/-.0006	1.693	+0/-.006	2.6	4.3	.3	.13	.08		41,300	5.30
SB-22312	60.000	+0/-.013	130.000	+0/-.020	46.00	+0/-.15	71	117	8	3.3	2.0	3500	243,310	2.99
	2.3622	+0/-.0005	5.1181	+0/-.0008	1.811	+0/-.006	2.8	4.6	.3	.13	.08		54,700	6.60
SB-22313	65.000	+0/-.013	140.000	+0/-.020	48.00	+0/-.15	76	124	8	3.3	2.0	3250	265,550	3.54
	2.5591	+0/-.0005	5.5118	+0/-.0008	1.890	+0/-.006	3.0	4.9	.3	.13	.08		59,700	7.80
SB-22314	70.000	+0/-.013	150.000	+0/-.020	51.00	+0/-.15	84	137	8	3.3	2.0	3000	304,240	4.31
	2.7559	+0/-.0005	5.9055	+0/-.0008	2.008	+0/-.006	3.3	5.4	.3	.13	.08		68,400	9.50
SB-22315	75.000	+0/-.013	160.000	+0/-.025	55.00	+0/-.15	86	137	8	3.3	2.0	2800	332,710	5.39
	2.9528	+0/-.0005	6.2992	+0/-.0010	2.165	+0/-.006	3.4	5.4	0.3	.13	.08		74,800	11.90
SB-22316	80.000	+0/-.013	170.000	+0/-.025	58.00	+0/-.15	91	155	8	3.3	2.0	2650	344,720	6.30
	3.1496	+0/-.0005	6.6929	+0/-.0010	2.284	+0/-.006	3.6	6.1	.3	.13	.08		77,500	13.90

Add K to base number 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 22300

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-22308	.0203 .0008	.0356 .0014	.0559 .0022	.0762 .0030	.0813 .0032	.0305 .0012	.0457 .0018	.0610 .0024	.0813 .0032	.1041 .0041	-	-	-	-	-	-	-	-	-	-	
SB-22309	.0203 .0008	.0356 .0014	.0559 .0022	.0762 .0030	.0813 .0032	.0305 .0012	.0457 .0018	.0610 .0024	.0813 .0032	.1041 .0041	SNW 109	6.4 1.44	9.5 2.14	2.2 .50	11.3 2.53	-	-	-	-	-	
SB-22310	.0254 .0010	.0432 .0017	.0660 .0026	.0914 .0036	.1194 .0047	.0356 .0014	.0559 .0022	.0762 .0030	.0991 .0039	.1245 .0049	-	-	-	-	-	-	-	-	-	-	
SB-22311	.0254 .0010	.0432 .0017	.0660 .0026	.0914 .0036	.1194 .0047	.0356 .0014	.0559 .0022	.0762 .0030	.0991 .0039	.1245 .0049	SNW 111	8.6 1.94	11.2 2.52	2.5 .56	13.2 2.97	-	-	-	-	-	
SB-22312	.0254 .0010	.0432 .0017	.0660 .0026	.0914 .0036	.1194 .0047	.0356 .0014	.0559 .0022	.0762 .0030	.0991 .0039	.1245 .0049	-	-	-	-	-	-	-	-	-	-	
SB-22313	.0305 .0012	.0508 .0020	.0813 .0032	.1118 .0044	.1448 .0057	.0457 .0018	.0711 .0028	.0940 .0037	.1245 .0049	.1549 .0061	SNW 113	9.7 2.19	12.3 2.77	2.8 .63	15.0 3.38	-	-	-	-	-	
SB-22314	.0305 .0012	.0508 .0020	.0813 .0032	.1118 .0044	.1448 .0057	.0457 .0018	.0711 .0028	.0940 .0037	.1245 .0049	.1549 .0061	-	-	-	-	-	-	-	-	-	-	
SB-22315	.0305 .0012	.0508 .0020	.0813 .0032	.1118 .0044	.1448 .0057	.0457 .0018	.0711 .0028	.0940 .0037	.1245 .0049	.1549 .0061	SNW 115	10.9 2.44	13.7 3.08	3.0 .67	17.3 3.88	-	-	-	-	-	
SB-22316	.0356 .0014	.0635 .0025	.0991 .0039	.1346 .0053	.1803 .0071	.0508 .0020	.0813 .0032	.1118 .0044	.1448 .0057	.1905 .0075	SNW 116	12.0 2.69	14.2 3.20	3.0 .67	18.5 4.16	-	-	-	-	-	