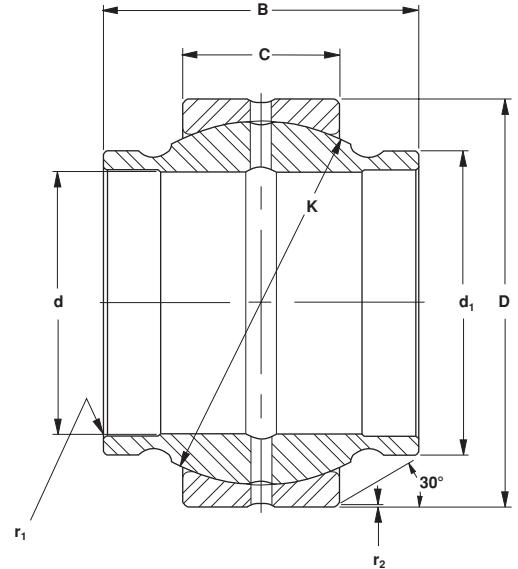
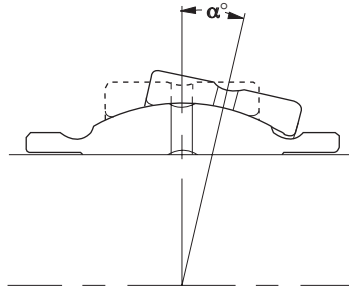


# Spherical Plain Bearings

## Extended Inner Ring - Inch



### Series B--EL

Part Number		d Inside Diameter			D Outside Diameter			B Inner Ring Width +0.000 - 0.005	C Outer Ring Width +0.000 - 0.005	K Sphere Dia.	Unmounted Diametral Clearance	d <sub>1</sub> Shaft Shoulder Dia.	α Tilt Angle (4) (deg)
Open	Sealed	Nom.	Max.	Min.	Nom.	Max.	Min.						
B8-EL	—	1/2	0.5000	0.4995	7/8	0.8750	0.8745	0.750	0.375	0.719	0.002/0.006	0.625	9
B10-EL	—	5/8	0.6250	0.6245	1 1/16	1.0625	1.0620	0.937	0.469	0.899	0.002/0.006	0.780	9
B12-EL	B12-ELSS	3/4	0.7500	0.7495	1 1/4	1.2500	1.2495	1.125	0.562	1.080	0.003/0.007	0.920	9
B14-EL	B14-ELSS	7/8	0.8750	0.8745	1 7/16	1.4375	1.4370	1.312	0.656	1.258	0.003/0.007	1.070	9
B16-EL	B16-ELSS	1	1.0000	0.9995	1 5/8	1.6250	1.6245	1.500	0.750	1.437	0.003/0.007	1.220	9
B20-EL	B20-ELSS	1 1/4	1.2500	1.2495	2	2.0000	1.9995	1.875	0.937	1.795	0.003/0.007	1.525	9
B22-EL	B22-ELSS	1 3/8	1.3750	1.3745	2 3/16	2.1875	2.1869	2.062	1.031	1.937	0.003/0.007	1.670	9
B24-EL	B24-ELSS	1 1/2	1.5000	1.4995	2 7/16	2.4375	2.4369	2.250	1.125	2.155	0.003/0.007	1.850	9
B28-EL	B28-ELSS	1 3/4	1.7500	1.7495	2 13/16	2.8125	2.8119	2.625	1.312	2.515	0.003/0.007	2.165	9
B32-EL	B32-ELSS	2	2.0000	1.9995	3 3/16	3.1875	3.1869	3.000	1.500	2.875	0.003/0.007	2.460	9
B36-EL	B36-ELSS	2 1/4	2.2500	2.2494	3 9/16	3.5625	3.5617	3.375	1.687	3.235	0.004/0.008	2.760	9
B40-EL	B40-ELSS	2 1/2	2.5000	2.4994	3 15/16	3.9375	3.9367	3.750	1.875	3.590	0.004/0.008	3.060	9
B44-EL	B44-ELSS	2 3/4	2.7500	2.7494	4 3/8	4.3750	4.3742	4.125	2.062	3.950	0.004/0.008	3.380	9
B48-EL	B48-ELSS	3	3.0000	2.9994	4 3/4	4.7500	4.7492	4.500	2.250	4.312	0.004/0.008	3.675	9
B52-EL	B52-ELSS	3 1/4	3.2500	3.2494	5 1/8	5.1250	5.1240	4.875	2.437	4.675	0.005/0.009	3.985	9
B56-EL	B56-ELSS	3 1/2	3.5000	3.4992	5 1/2	5.5000	5.4990	5.250	2.625	5.040	0.005/0.009	4.300	9
B60-EL	B60-ELSS	3 3/4	3.7500	3.7492	5 7/8	5.8750	5.8740	5.625	2.812	5.390	0.005/0.009	4.590	9
B64-EL	B64-ELSS	4	4.0000	3.9992	6 1/4	6.2500	6.2490	6.000	3.000	5.750	0.005/0.009	4.905	9
B72-E9L	B72-E9LSS	4 1/2	4.5000	4.4992	7	7.0000	6.9990	6.750	3.375	6.475	0.005/0.009	5.525	7
B80-E9L	B80-E9LSS	5	5.0000	4.9990	7 3/4	7.7500	7.7488	7.500	3.750	7.190	0.005/0.009	6.130	7
B96-E9L	B96-E9LSS	6	6.0000	5.9990	8 3/4	8.7500	8.7488	8.250	4.125	8.156	0.005/0.009	7.020	7

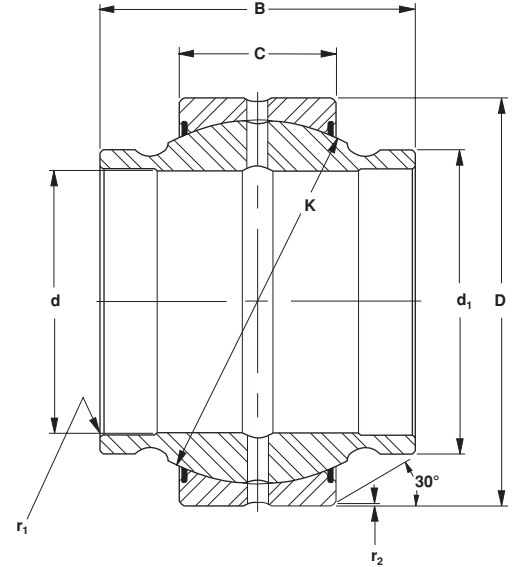
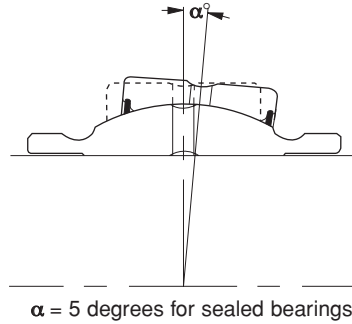
All dimensions are in inches.

Outer rings of bearings size 72 and above are double fractured (suffix-9L).

Bore dimensions apply after MoS<sub>2</sub> coating. All other dimensions are before coating.

# Spherical Plain Bearings

## Extended Inner Ring - Inch



### Series B--ELSS

	r <sub>1</sub> Shaft Fillet Max.	r <sub>2</sub> Hsg. Fillet Max.	Approx. Weight (lb)	Recommended Load Limits ①			Recommended Shaft Diameter				Recommended Housing Bore ②		Basic Part Number
				Static Radial (lbf)	Static Thrust (lbf)	Dynamic Radial (lbf)	ISO f6 (Slip Fit)		ISO m5 (Press Fit)		ISO R7 (Press Fit)		
							Max.	Min.	Max.	Min.	Max.	Min.	
	0.015	0.022	0.05	9,400	1,400	2,300	0.4994	0.4989	0.5006	0.5003	0.8742	0.8734	-8
	0.022	0.032	0.08	14,700	2,500	3,600	0.6244	0.6239	0.6256	0.6253	1.0617	1.0609	-10
	0.022	0.032 ③	0.14	21,200	3,900	5,300	0.7492	0.7487	0.7507	0.7503	1.2490	1.2480	-12
	0.022	0.032 ③	0.21	28,800	5,400	7,200	0.8742	0.8737	0.8757	0.8753	1.4365	1.4355	-14
	0.022	0.032 ③	0.31	37,700	7,300	9,400	0.9992	0.9987	1.0007	1.0003	1.6240	1.6230	-16
	0.022	0.032	0.59	58,800	11,900	14,700	1.2490	1.2484	1.2508	1.2504	1.9988	1.9976	-20
	0.022	0.032	0.75	69,800	13,500	17,400	1.3740	1.3734	1.3758	1.3754	2.1863	2.1851	-22
	0.022	0.032	1.09	84,800	16,600	21,200	1.4990	1.4984	1.5008	1.5004	2.4363	2.4351	-24
	0.022	0.032	1.68	115,400	23,600	28,800	1.7490	1.7484	1.7508	1.7504	2.8113	2.8101	-28
	0.022	0.032	2.44	150,900	31,900	37,700	1.9988	1.9981	2.0010	2.0005	3.1860	3.1846	-32
	0.022	0.032	3.46	191,000	42,000	47,700	2.2488	2.2481	2.2510	2.2505	3.5610	3.5596	-36
	0.022	0.032	4.75	235,500	52,900	58,800	2.4988	2.4981	2.5010	2.5005	3.9359	3.9345	-40
	0.022	0.032	6.40	285,000	62,600	71,200	2.7488	2.7481	2.7510	2.7505	4.3734	4.3720	-44
	0.022	0.032	7.92	339,500	76,300	84,800	2.9988	2.9981	3.0010	3.0005	4.7481	4.7465	-48
	0.022	0.032	10.30	398,700	91,500	99,600	3.2486	3.2477	3.2511	3.2505	5.1231	5.1215	-52
	0.022	0.032	12.90	463,000	109,200	115,700	3.4986	3.4977	3.5011	3.5005	5.4981	5.4965	-56
	0.022	0.032	15.70	530,400	126,100	132,600	3.7486	3.7477	3.7511	3.7505	5.8731	5.8715	-60
	0.022	0.032	18.90	603,700	144,500	150,900	3.9986	3.9977	4.0011	4.0005	6.2481	6.2465	-64
	0.032	0.044	27.00	764,800	290,400	191,200	4.4986	4.4977	4.5011	4.5005	6.9979	6.9963	-72
	0.032	0.044	36.70	943,600	360,900	235,900	4.9983	4.9973	5.0013	5.0006	7.7476	7.7458	-80
	0.032	0.044	45.50	1,177,500	387,600	294,300	5.9983	5.9973	6.0013	6.0006	8.7475	8.7457	-96

① Ultimate static and impact loads should not exceed 150% of catalog ratings.

② See technical section for alternate housing diameter recommendations.

③ Housing fillet  $r_2=0.015$ " for bearings with seals.

④ Applies only to bearings without seals. Use 5 degrees for sealed bearings.