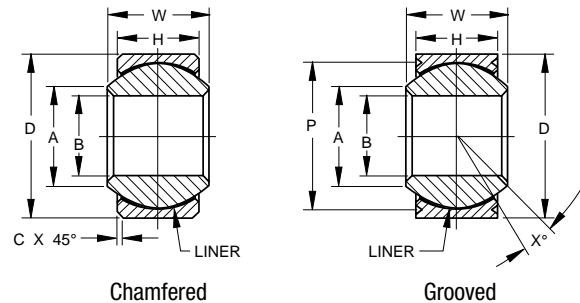


## MS14102 & MS14103 SELF-LUBRICATED SPHERICAL BEARING, WIDE

- AS81820 (formerly MIL-B-81820)
- Wide series, self-lubricated
- High temperature — low wear  
-65°F to +325°F (-53.9°C to +162.8°C)
- Material  
Outer ring: CRES 17-4PH, AMS 5643, HRC 28 min.  
Inner ring: CRES 440C, AMS 5630, HRC 55 min.  
Liner: Fibriloid® or “E” Uniflon® qualified to AS81820



SPHERICAL BEARINGS

## SPECIFICATIONS AND ORDERING INFORMATION

### DIMENSIONS — TOLERANCES

03-824 Chamfered 03-826 Grooved Dash No.	WE WEG Dash No.	MS14102 Chamfered MS14103 Grooved Dash No.	B		D		H		W		A		C <sup>(1)</sup>		P <sup>(2)</sup> Groove Pitch Diameter		X° Ref.
			+0.000, -0.0005 +0.00, -0.013	+0.000, -0.0005 +0.00, -0.013	±.005 ±.13	+0.000, -0.002 +0.0, -0.05	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	
Chamfered/Grooved Part Numbers			in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	
-03	3	-3	.1900	4.826	.6250	15.875	.327	8.31	.437	11.10	.300	7.62	.010	0.25	.563	14.30	15
-04	4	-4	.2500	6.350	.6250	15.875	.327	8.31	.437	11.10	.300	7.62	.010	0.25	.563	14.30	15
-05	5	-5	.3125	7.938	.6875	17.462	.317	8.05	.437	11.10	.360	9.14	.010	0.25	.625	15.88	14
-06	6	-6	.3750	9.525	.8125	20.638	.406	10.31	.500	12.70	.466	11.84	.020	0.51	.712	18.08	8
-07A <sup>(2)</sup>	-7A <sup>(2)</sup>	-7A <sup>(2)</sup>	.4375	11.112	.9062	23.017	.442	11.23	.562	14.27	.537	13.64	.020	0.51	.806	20.47	10
-07	7	-7	.4375	11.112	.9375	23.812	.442	11.23	.562	14.27	.537	13.64	.020	0.51	.837	21.26	10
-08	8	-8	.5000	12.700	1.0000	25.400	.505	12.83	.625	15.88	.607	15.42	.020	0.51	.900	22.86	9
-09	9	-9	.5625	14.288	1.1250	28.575	.536	13.61	.687	17.45	.721	18.31	.020	0.51	1.025	26.04	10
-10	10	-10	.6250	15.875	1.1875	30.162	.567	14.40	.750	19.05	.747	18.97	.020	0.51	1.087	27.61	12
-12	12	-12	.7500	19.050	1.3750	34.925	.630	16.00	.875	22.22	.845	21.46	.030	0.76	1.251	31.78	13
-14	14	-14	.8750	22.225	1.6250	41.275	.755	19.18	.875	22.22	.995	25.27	.030	0.76	1.501	38.13	6
-16	16	-16	1.0000	25.400	2.1250	53.975	1.005	25.53	1.375	34.92	1.269	32.23	.030	0.76	2.001	50.83	12

<sup>(1)</sup>Chamfered Type only. <sup>(2)</sup>Grooved Type only. See page 17 for groove dimensions.

### LOAD RATINGS

03-824 Chamfered 03-826 Grooved Dash No.	WE WEG Dash No.	Oscillating Radial Load Rating <sup>(3)</sup>		Radial Limit Load Rating <sup>(3)</sup>		Axial Limit Load Rating <sup>(3)</sup>		No Load Rotational Breakaway Torque				Weight Max. Ref.	
		lbf.	N	lbf.	N	lbf.	N	Standard		“K” Type		lbs.	kg
Chamfered/Grooved Part Numbers								in.-lbs.	N-m	in.-lbs.	N-m		
-03	3	4900	21600	2500	11100	1770	7800	.25-5	.03-.56	0.05	0-06	.031	.014
-04	4	4900	21600	5500	24400	1770	7800	.25-5	.03-.56	0.05	0-06	.031	.014
-05	5	6050	27000	9400	41800	1640	7350	.25-8	.03-.90	0.10	0-11	.035	.016
-06	6	8310	36500	13700	60900	2630	11600	.25-8	.03-.90	0.10	0-11	.060	.027
-07A <sup>(2)</sup>	7A <sup>(2)</sup>	11750	52000	19700	87600	3650	16300	.25-8	.03-.90	0.10	0-11	.080	.036
-07	7	11750	52000	20700	92000	3650	16300	.25-8	.03-.90	0.10	0-11	.080	.036
-08	8	14950	65500	21400	95000	4970	22000	.25-8	.03-.90	0.10	0-11	.100	.045
-09	9	18100	80000	26600	118000	5370	24000	.25-8	.03-.90	0.10	0-11	.135	.061
-10	10	20250	90000	29000	128500	6130	27500	.25-8	.03-.90	0.10	0-11	.160	.072
-12	12	26200	116000	37000	164500	7730	34500	.25-8	.03-.90	0.10	0-11	.240	.110
-14	14	33600	150000	65200	290000	10800	48000	.25-12	.03-1.4	0.20	0-23	.350	.160
-16	16	56250	250000	104000	462500	19300	86500	.25-12	.03-1.4	0.20	0-23	.970	.440

<sup>(1)</sup>Chamfered Type only. <sup>(2)</sup>Grooved Type only. <sup>(3)</sup>Load ratings based on AS81820. -3 and -4 sizes are limited by pin bending.

Bearing configuration	Part number designations for a 0.2500 in. bore, grooved spherical bearing		
Base P/N (no options)	03-826-04	WEG4	MS14103-4
Low breakaway torque	03-826-04K	WEG4K	MS14103-4K
Cadmium plating	03-826-04P	WEG4C	MS14103-4P
1st oversize O.D. (0.010 in.)	03-826-04T	WEG4Q	MS14103-4T
2nd oversize O.D. (0.020 in.)	03-826-04U	WEG4U	MS14103-4U
PH13-BMO ball material	03-826-04C	WEG4PH	MS14103-4C
Zinc Nickel plating	03-826-04Z	WEG4Z	MS14103-4Z