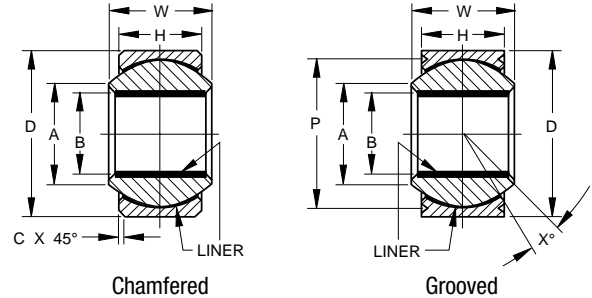


M81820/4 & M81820/1 SELF-LUBRICATED SPHERICAL BEARING, LINED BORE, NARROW

- AS81820/4 & AS81820/1 • AS81820 (formerly MIL-B-81820)
- Narrow series, self-lubricated, lined bore
- 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 PH13-8Mo, AMS 5629, HRC 43 min.
Liner: Fibriloid® or “E” Uniflon® qualified to AS81820



SPECIFICATIONS AND ORDERING INFORMATION

DIMENSIONS – TOLERANCES

03-833 NEE MS81820/4 Chamfered Type 03-835 NEEG MS81820/1 Grooved Type	B Ref.		D		H		W		A		C ⁽¹⁾		p ⁽²⁾ Groove Pitch Diameter		X° Ref.
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	
	+.0000, -.0010 +.000, -.025		+.0000, -.0005 +.000, -.013		±.005 ±.13		+.000, -.002 +.00, -.05		Min.		+.010, -.000 +.25, -.00		+.000 in., -.008 in. +.00 mm, -.20mm		
-04	.2510	6.375	.6562	16.667	.250	6.35	.343	8.71	.364	9.25	.010	.25	.594	15.09	10
-05	.3135	7.963	.7500	19.050	.281	7.14	.375	9.52	.419	10.64	.010	.25	.660	16.76	10
-06	.3760	9.550	.8125	20.638	.312	7.92	.406	10.31	.475	12.06	.020	.51	.712	18.08	9
-07	.4385	11.138	.9062	23.017	.343	8.71	.437	11.10	.530	13.46	.020	.51	.806	20.47	8
-08	.5010	12.725	1.0000	25.400	.390	9.91	.500	12.70	.600	15.24	.020	.51	.876	22.25	8
-09	.5635	14.313	1.0937	27.780	.437	11.10	.562	14.27	.670	17.02	.020	.51	.970	24.64	8
-10	.6260	15.900	1.1875	30.162	.500	12.70	.625	15.88	.739	18.77	.020	.51	1.063	27.00	8
-12	.7510	19.075	1.4375	36.512	.593	15.06	.750	19.05	.920	23.37	.030	.76	1.313	33.35	8
-14	.8760	22.250	1.5625	39.688	.703	17.86	.875	22.22	.980	24.89	.030	.76	1.438	36.53	8
-16	1.0010	25.425	1.7500	44.450	.797	20.24	1.000	25.40	1.118	28.40	.030	.76	1.626	41.30	9

⁽¹⁾Chamfered Type only. ⁽²⁾Grooved Type only. See page 17 for groove dimensions.

LOAD RATINGS

03-833 NEE MS81820/4 Chamfered Type 03-835 NEEG MS81820/1 Grooved Type	Oscillating Radial Load Rating ⁽¹⁾		Radial Limit Load Rating ⁽¹⁾		Axial Limit Load Rating ⁽¹⁾		No Load Rotational Breakaway Torque Inch-Pounds “K” Type Standard				Weight Max.	
	lbf.	N	lbf.	N	lbf.	N	in.-lbs.	N-m	in.-lbs.	N-m	lbs.	kg
-04	2650	11800	5550	25000	430	1900	1-5	.11-.57	0-0.5	0-.06	0.02	0.009
-05	3700	16500	7700	34500	700	3100	1-15	.11-1.7	0-1	0-.11	0.03	0.014
-06	4900	21800	10200	45500	1100	4900	1-15	.11-1.7	0-1	0-.11	0.04	0.018
-07	6700	30000	12950	58000	1400	6200	1-15	.11-1.7	0-1	0-.11	0.05	0.023
-08	8250	37000	17250	77000	2100	9300	1-15	.11-1.7	0-1	0-.11	0.07	0.032
-09	10600	47200	22150	99000	3680	16300	1-15	.11-1.7	0-1	0-.11	0.09	0.041
-10	13250	59000	27700	123500	4720	20800	1-15	.11-1.7	0-1	0-.11	0.12	0.054
-12	19400	86300	40600	181000	6750	30000	1-15	.11-1.7	0-1	0-.11	0.21	0.095
-14	26750	119000	55950	250000	9350	41500	1-25	.11-2.8	0-2	0-.23	0.27	0.122
-16	35250	157000	73800	329000	12160	54000	1-25	.11-2.8	0-2	0-.23	0.39	0.176

⁽¹⁾Load ratings based on AS81820.

Bearing configuration	Part number designations for a 0.2500 in. bore, grooved spherical bearing		
Base P/N (no options)	03-835-04	NEEG4	M81820/1-4
Low breakaway torque	03-835-04K	NEEG4K	M81820/1-4K
Cadmium plating	03-835-04P	NEEG4C	M81820/1-4P
1st oversize O.D. (0.010 in.)	03-835-04T	NEEG4Q	M81820/1-4T
2nd oversize O.D. (0.020 in.)	03-835-04U	NEEG4U	M81820/1-4U
Zinc Nickel plating	03-835-04Z	NEEG4Z	M81820/1-4Z

SPHERICAL BEARINGS