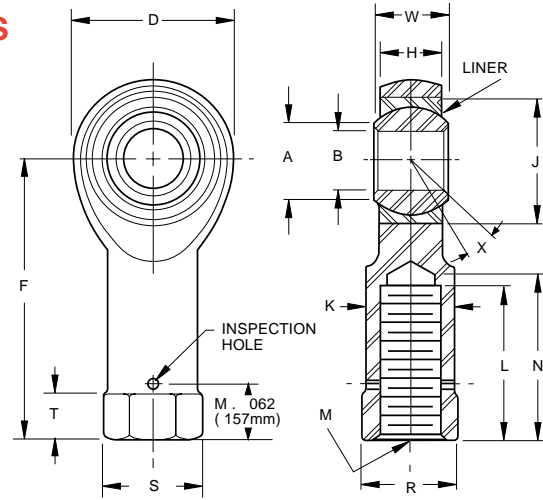


M81935/2 SELF-LUBRICATED ROD END BEARINGS

AS81935/2 • AS81935 (formerly MIL-B-81935)

- Female type, rod end
- High temperature — low wear
-65°F to +325°F (-53.9°C to +162.8°C)
- Material: Bearing inner ring: CRES 440C
Bearing outer ring: CRES 17-4PH
Rod end housing: AISI 4340 steel heat treated to 180,000 psi min. tensile strength. Exposed surface of rod end housing cadmium plated
- Liner: Fibriloid® or “E” Uniflon® qualified to AS81820
- Threads conform to UNJF-3B per AS8879. For left hand thread add “L” or “1” depending on part number ordered
Example: see below
- For rod end with keyway in end of shank add “K” or “1” Example: see below
- For rod end with deep key slot on base add “W” Example: see below



SPECIFICATIONS AND ORDERING INFORMATION

DIMENSIONS — TOLERANCES

PART NUMBERS			B		D		L ⁽¹⁾		F		K		W		H		A		J		N		S ⁽²⁾		T		R ⁽¹⁾		M		X°	
FE	02-824	M81935/2	+0.000, -.0005		±010		Min.		±010		±010		+.000, -.002		±005		Min.		Max.		Max.		Ref.		+.010, -.062		+.002, -.010		UNJF-3B PER AS8879		Min.	
Dash No.	Dash No.	Dash No.	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
03	-03	-03	.1900	4.826	.806	20.47	.750	19.05	1.375	34.92	.422	10.72	.437	11.10	.337	8.56	.30	7.6	.6250	15.875	.875	22.22	.500	12.70	.188	4.78	.437	11.10			5/16-24	15
04	-04	-04	.2500	6.350	.806	20.47	.750	19.05	1.469	37.31	.422	10.72	.437	11.10	.337	8.56	.30	7.6	.6250	15.875	.875	22.22	.500	12.70	.188	4.78	.437	11.10			5/16-24	15
05	-05	-05	.3125	7.938	.900	22.86	.875	22.22	1.625	41.28	.485	12.32	.437	11.10	.327	8.31	.36	9.1	.6875	17.462	1.000	25.40	.580	14.73	.250	6.35	.500	12.70			3/8-24	14
06	-06	-06	.3750	9.525	1.025	26.04	1.000	25.40	1.812	46.02	.547	13.89	.500	12.70	.416	10.57	.47	11.9	.8125	20.638	1.125	28.58	.660	16.76	.250	6.35	.562	14.27			3/8-24	8
07	-07	-07	.4375	11.112	1.150	29.21	1.125	28.58	2.000	50.80	.610	15.49	.562	14.27	.452	11.48	.54	13.7	.9062	23.017	1.250	31.75	.720	18.29	.250	6.35	.625	15.88			7/16-20	10
08	-08	-08	.5000	12.700	1.337	33.96	1.250	31.75	2.250	57.15	.735	18.67	.625	15.88	.515	13.08	.61	15.5	1.0000	25.400	1.375	34.92	.880	22.35	.250	6.35	.750	19.05			1/2-20	9
10	-10	-10	.6250	15.875	1.525	38.74	1.375	34.92	2.500	63.50	.860	21.84	.750	19.05	.577	14.66	.75	19.1	1.1875	30.162	1.500	38.10	1.020	25.91	.375	9.52	.875	22.22			5/8-18	12
12	-12	-12	.7500	19.050	1.775	45.09	1.625	41.28	2.875	73.03	.985	25.02	.875	22.23	.640	16.26	.85	21.6	1.3750	34.925	1.750	44.45	1.160	29.46	.375	9.53	1.000	25.40			3/4-16	13
14	-14	-14	.8750	22.225	2.025	51.44	1.875	47.63	3.375	85.73	1.110	28.19	.875	22.23	.765	19.43	1.00	25.4	1.6250	41.275	2.062	52.37	1.300	33.02	.500	12.70	1.125	28.58			7/8-14	6
16	-16	-16	1.0000	25.400	2.275	70.49	2.125	53.98	4.125	104.78	1.688	42.88	1.375	34.93	1.015	25.78	1.27	32.3	2.1250	53.975	2.312	58.72	2.020	51.31	.563	14.30	1.750	44.45			1 1/4-12	12

⁽¹⁾Completed thread.

⁽²⁾Measured across corners or diameter.

LOAD RATINGS

FE Dash No.	02-824 Dash No.	Ultimate Static Load		Fatigue Load		Axial Proof Load		Weight		No Load Rational Breakaway Torque			
		lbf.	N	lbf.	N	lbf.	N	lbs.	kg	Min.		Max.	
03	-03	2360	10400	1470 ⁽¹⁾	6550 ⁽²⁾	1000	4400	0.080	0.030	.5	.06	6	.68
04	-04	4860	21600	2380	10600	1000	4400	0.084	0.038	.5	.06	6	.68
05	-05	7180	32000	3020	13400	1100	4900	0.102	0.046	1	.11	15	1.70
06	-06	8550	38000	3570	16000	1660	7350	0.161	0.073	1	.11	15	1.70
07	-07	12000	53000	4800	21200	1850	8300	0.212	0.096	1	.11	15	1.70
08	-08	19500	86500	8260	36500	2040	9000	0.325	0.147	1	.11	15	1.70
10	-10	21900	98000	9180	40500	2430	10800	0.481	0.218	1	.11	15	1.70
12	-12	29300	130000	11600	51500	1810	12500	0.673	0.306	1	.11	15	1.70
14	-14	34500	151000	13100	58000	1320	14800	0.959	0.436	1	.11	24	2.71
16	-16	80300	357000	30400	135000	4340	19300	2.717	1.235	1	.11	24	2.71

Notes:

Ultimate Static Load — No fracture of rod ending housing or bearing will occur when the ultimate static load is applied in the bearing along the shank center line.

Axial Static Proof Load — Is the retention strength of the bearing within the eye of the rod end housing. No push out of the bearing cartridge will occur when the housing eye is supported and the axial proof load is applied to the face of insert bearing inner ring.

Fatigue Load — The rod end housing will withstand 50,000 cycles of full tension to 10% tension loading at speeds up to 2800 cpm. Load is applied in line with the rod end shank putting the eye in tension.

⁽¹⁾Based on bolt bending fatigue strength 180000 psi

⁽²⁾Based on bolt bending fatigue strength 127kg/mm².

Check for availability.

Bearing configuration	Part number designations for a 0.2500 in. bore rod end		
Base P/N (no options)	FE4	02-824-04	M81935/2-4
Keyway on threads	FEK4	02-824-041	M81935/2-4K
Left hand thread	FEL4	12-824-04	M81935/2-4L
Deep key slot on base	FEW4	02-824-04W	M81935/2-4W