



Aerospace Bearings - Plain Bearings



[Click Here to Enter](#)



Transport Dynamics
Heim Bearings
Schaublin
Industrial Tectonics
RBC Division

www.rbcbearings.com
866.RBC.AERO



AEROSPACE BEARINGS

Plain Bearings

Self-Lubricated Journal Bearings

[Descriptions](#)

Spherical Bearings

[Descriptions](#)

Self-Lubricated Rod Ends

[Descriptions](#)

SELF-LUBRICATED JOURNAL BEARINGS

__STRAIGHT

___ALUMINIUM BACKING

|___ [M81934/1\(\)A](#) - Self-Lubricated Journal Bearing, Straight

___STAINLESS STEEL BACKING

|___ [M81934/1\(\)C](#) - Self-Lubricated Journal Bearing, Straight

__FLANGED

___ALUMINIUM BACKING

|___ [M81934/2\(\)A](#) - Self-Lubricated Journal Bearing, Flanged

___STAINLESS STEEL BACKING

|___ [M81934/2\(\)C](#) - Self-Lubricated Journal Bearing, Flanged

SPHERICAL BEARINGS

__SELF-LUBRICATED

___STANDARD SERIES

- ___ [MS14101](#) - Narrow Series, Grooved Type
- ___ [MS14102](#) - Wide Series, Chamfered Type
- ___ [MS14103](#) - Wide Series, Grooved Type
- ___ [MS14104](#) - Narrow Series, Chamfered Type

___LINED BORE SERIES

- ___ [M81820/1](#) - Narrow Series, Grooved Type
- ___ [M81820/2](#) - Wide Series, Chamfered Type
- ___ [M81820/3](#) - Wide Series, Grooved Type
- ___ [M81820/4](#) - Narrow Series, Chamfered Type

___EUROPEAN SERIES

- ___ [EN2022](#) - Lightweight Series
- ___ [EN2023](#) - High Capacity Series
- ___ [EN2501](#) - High-Misalignment Series

__METAL TO METAL

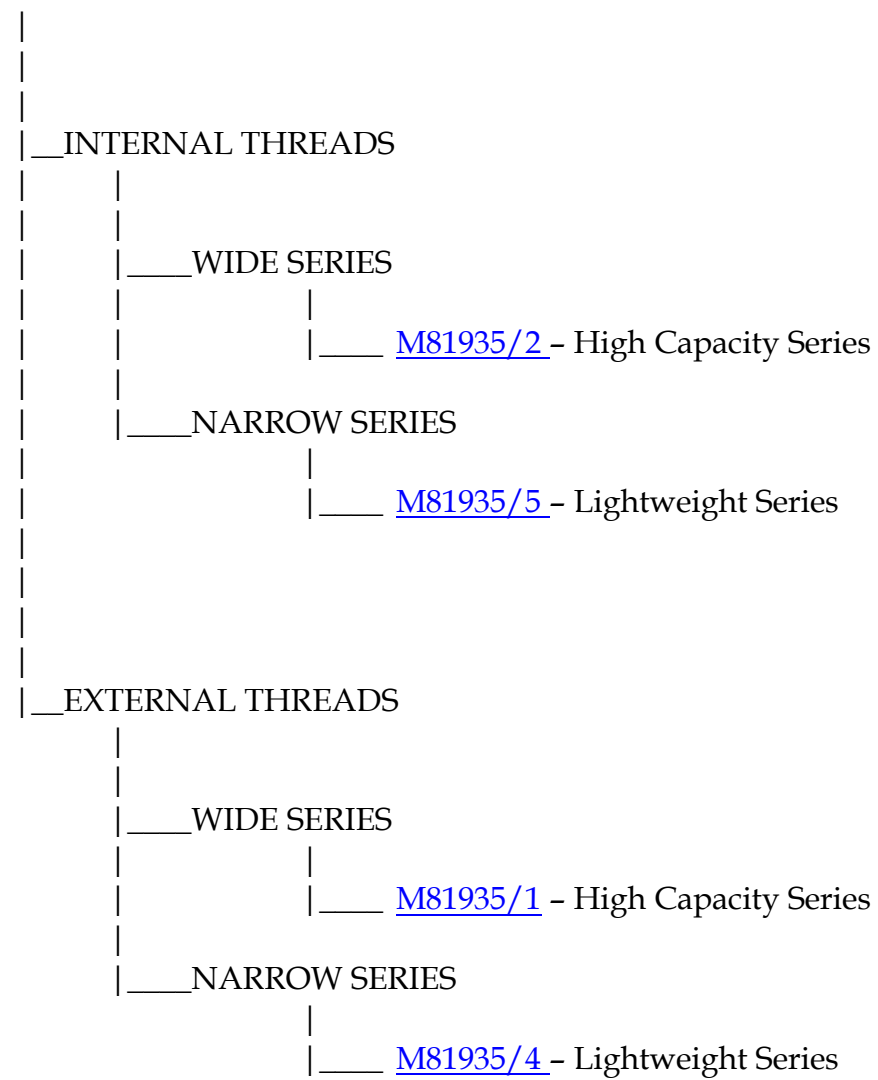
___STANDARD SERIES

- ___ [M81936/1](#) - Lubrication Grooves and Holes on Race and Ball, Grooved
- ___ [M81936/1\(R\)](#) - Lubrication Grooves and Holes on Race only, Grooved
- ___ [M81936/2](#) - Lubrication Grooves and Holes on Race and Ball, Chamfered
- ___ [M81936/2\(R\)](#) - Lubrication Grooves and Holes on Race only, Chamfered

___EUROPEAN SERIES

- ___ [EN2335](#) - Stainless Steel, Re-Lubricate Options

SELF-LUBRICATED ROD ENDS

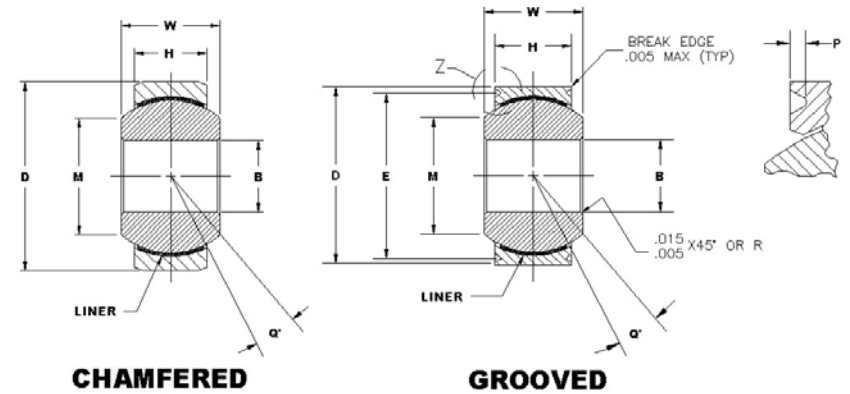


MS14104 - MS14101

Self-Lubricated Spherical Bearing

AS14104 - AS14101 · AS81820 (formerly MIL-B-81820)

- Narrow series, self-lubricated.
- Chamfered type (MS14104)
- Grooved type (MS14101)
- Liners qualified to AS81820



CHAMFERED PART NUMBERS			GROOVED PART NUMBERS			Bore B	O.D. D	Race Width H	Ball Width W	Other Dimensions			Q (ref.)	Static Limit Load		Oscillating Load LBF	No-Load Rotational Breakaway Torque Inch-Pounds		Approx. Weight LBS
03-823 Dash No.	NE Dash No.	MS14104 Dash No.	03-825 Dash No.	NEG Dash No.	MS14101 Dash No.					P	E	M		Radial LBF	Axial LBF		Standard	"K" Type	
-03	3	-3	-03	3	-3	.1900	.5625	.218	.281	0.025	.500	.293	10	3,975	150	1,500	0.25 - 5.0	0 - 0.5	.020
-04	4	-4	-04	4	-4	.2500	.6562	.250	.343	0.035	.594	.364		6,040	430	3,320	0.25 - 8.0	0 - 1.0	.030
-05	5	-5	-05	5	-5	.3125	.7500	.281	.375		.650	.419	8,750	700	5,460				
-	-	-	-05A	5A	-05A	.3125	.7500	.281	.375	0.055	.660	.419	9	8,750	700	5,460	0.25 - 12.0	0 - 2.0	.030
-06	6	-6	-06	6	-6	.3750	.8125	.312	.406		.712	.475		10,540	1,100	6,600			
-07	7	-7	-07	7	-7	.4375	.9062	.343	.437	0.055	.806	.530	8	13,200	1,400	8,050	0.25 - 12.0	0 - 2.0	.040
-08	8	-8	-08	8	-8	.5000	1.000	.390	.500		.876	.600		17,900	2,100	10,400			
-09	9	-9	-09	9	-9	.5625	1.094	.437	.562	0.055	.970	.670	8	23,200	3,680	13,000	0.25 - 12.0	0 - 2.0	.050
-10	10	-10	-10	10	-10	.6250	1.188	.500	.625		1.063	.739		30,500	4,720	16,450			
-12	12	-12	-12	12	-12	.7500	1.438	.593	.750	0.055	1.313	.920	8	46,400	6,750	23,600	0.25 - 12.0	0 - 2.0	.070
-14	14	-14	-14	14	-14	.8750	1.563	.703	.875		1.438	.980		62,200	9,350	30,250			
-16	16	-16	-16	16	-16	1.0000	1.750	.797	1.000	1.626	1.118	9	82,200	12,160	38,000	0.25 - 12.0	0 - 2.0	.090	

All dimensions are in inches.

Materials:

- Race: 17-4PH Stainless Steel, heat-treated
- Ball: 440C Stainless Steel, heat-treated
- Liner: Fibriloid or "E" Uniflon qualified to AS81820

Notes:

- 1- For liner specifications, or other liners for high temperature or high speed, please see engineering section or contact RBC Aerospace Bearings
- 2- All load ratings are per AS81820
- 3- Load ratings for sizes -3 & -4 are based on shaft bending rather than bearing capacity

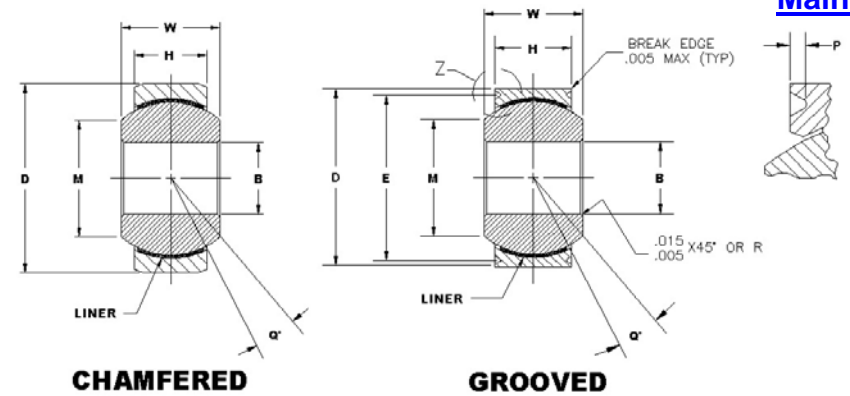
Bearing configuration	Part number designations for a 0.2500" bore, grooved spherical bearing		
Base P/N (no options)	03-825-04	NEG4	MS14101-4
Low breakaway torque	03-825-04K	NEG4K	MS14101-4K
Cadmium plating	03-825-04P	NEG4C	MS14101-4P
1 st oversize O.D. (0.010")	03-825-04T	NEG4Q	MS14101-4T
2 nd oversize O.D. (0.020")	03-825-04U	NEG4U	MS14101-4U
PH13-8MO ball material	03-825-04C	NEG4PH	MS14101-4C

MS14102 - MS14103

Self-Lubricated Spherical Bearing

AS14102 - AS14103 · AS81820 (formerly MIL-B-81820)

- Wide series, self-lubricated.
- Chamfered type (MS14102)
- Grooved type (MS14103)
- Liners qualified to AS81820



CHAMFERED PART NUMBERS			GROOVED PART NUMBERS			Bore B	O.D. D	Race Width H	Ball Width W	Other Dimensions			Static Limit Load		Oscillating Load LBF	No-Load Rotational Breakaway Torque Inch-Pounds		Approx. Weight LBS	
03-824 Dash No.	WE Dash No.	MS14102 Dash No.	03-826 Dash No.	WEG Dash No.	MS14103 Dash No.					P	E	M	Q (ref.)	Radial LBF		Axial LBF	Standard		"K" Type
-03	3	-3	-03	3	-3	.1900	.6250	.327	.437	.025	.563	.300	15	2500	1770	4900	0.25 - 5.0	0 - 0.5	.031
-04	4	-4	-04	4	-4	.2500	.6250	.327	.437		.563	.300	15	5500	1770	4900			
-05	5	-5	-05	5	-5	.3125	.6875	.317	.437		.625	.360	14	9400	1640	6050			
-06	6	-6	-06	6	-6	.3750	.8125	.406	.500	.035	.712	.466	8	13700	2630	8310	0.25 - 8.0	0 - 1.0	.060
-07	7	-7	-07	7	-7	.4375	.9375	.442	.562		.837	.537	10	20700	3650	11750			
-	-	-	-07A	7A	-7A	.4375	.9062	.442	.562		.806	.537	10	19700	3650	11750			
-08	8	-8	-08	8	-8	.5000	1.0000	.505	.625	.055	.900	.607	9	21400	4970	14950	0.25 - 12.0	0 - 2.0	.100
-09	9	-9	-09	9	-9	.5625	1.1250	.536	.687		1.025	.721	10	26600	5370	18100			
-10	10	-10	-10	10	-10	.6250	1.1875	.567	.750		1.087	.747	12	29000	6130	20250			
-12	12	-12	-12	12	-12	.7500	1.3750	.630	.875	.055	1.251	.845	13	37000	7730	26200	0.25 - 12.0	0 - 2.0	.240
-14	14	-14	-14	14	-14	.8750	1.6250	.755	.875		1.501	.995	6	65200	10800	33600			
-16	16	-16	-16	16	-16	1.0000	2.1250	1.005	1.375		2.001	1.27	12	104000	19300	56250			

All dimensions are in inches.

Materials:

- Race: 17-4PH Stainless Steel, heat-treated
- Ball: 440C Stainless Steel, heat-treated
- Liner: Fibriloid or "E" Uniflon qualified to AS81820

Notes:

- 1- For liner specifications, or other liners for high temperature or high speed, please see engineering section or contact RBC Aerospace Bearings
- 2- All load ratings are per AS81820
- 3- Load ratings for sizes -3 & -4 are based on shaft bending rather than bearing capacity

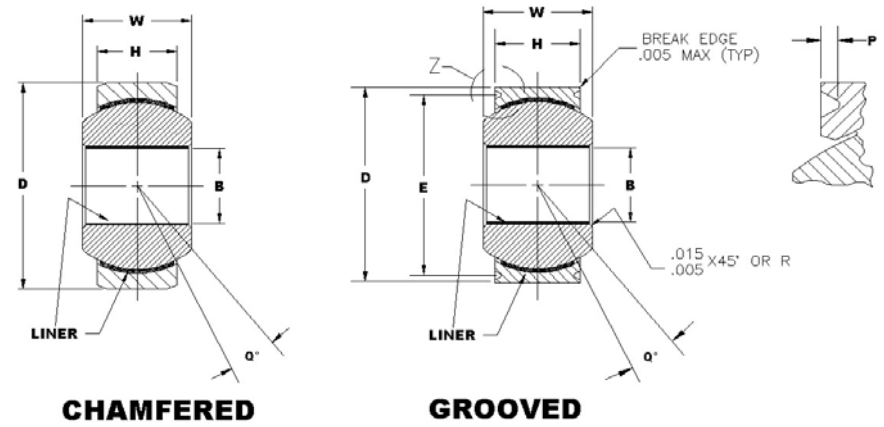
Bearing configuration	Part number designations for a 0.2500" bore, grooved spherical bearing		
Base P/N (no options)	03-826-04	WEG4	MS14103-4
Low breakaway torque	03-826-04K	WEG4K	MS14103-4K
Cadmium plating	03-826-04P	WEG4C	MS14103-4P
1 st oversize O.D. (0.010")	03-826-04T	WEG4Q	MS14103-4T
2 nd oversize O.D. (0.020")	03-826-04U	WEG4U	MS14103-4U
PH13-8MO ball material	03-826-04C	WEG4PH	MS14103-4C

M81820/4 - M81820/1

Self-Lubricated Spherical Bearing, Lined Bore

AS81820/4 - AS81820/1 · AS81820 (formerly MIL-B-81820)

- Narrow series, self-lubricated, lined bore.
- Chamfered type (M81820/4)
- Grooved type (M81820/1)
- Liners qualified to AS81820



CHAMFERED PART NUMBERS			GROOVED PART NUMBERS			Bore B	O.D. D	Housing Width H	Ball Width W	Other Dimensions		Q (ref.)	Static Limit Load		Oscillating Load LBF	No-Load Rotational Breakaway Torque Inch-Pounds		Approx. Weight LBS
03-833 Dash No.	NEE Dash No.	M81820/4 Dash No.	03-835 Dash No.	NEEG Dash No.	M81820/1 Dash No.					P	E		LBF	LBF		Standard	"K" Type	
-04	4	-4	-04	4	-4	.2510	.6582	.250	.343	.025	.594	10	5,550	430	2,650	1.0 - 5.0	0 - 0.5	.020
-05	5	-5	-05	5	-5	.3135	.7500	.281	.375	.035	.660	9	7,700	700	3,700	1.0 - 15.0	0 - 1.0	.030
-06	6	-6	-06	6	-6	.3760	.8125	.312	.406		.712		10,200	1,100	4,900			
-07	7	-7	-07	7	-7	.4385	.9062	.343	.437	.806	12,950	1,400	6,700	.050				
-08	8	-8	-08	8	-8	.5010	1.0000	.390	.500	.055	.876	8	17,250	2,100	8,250			.070
-09	9	-9	-09	9	-9	.5635	1.0937	.437	.562		.970		22,150	3,680	10,600			.090
-10	10	-10	-10	10	-10	.6260	1.1875	.500	.625		1.063		27,700	4,720	13,250			.120
-12	12	-12	-12	12	-12	.7510	1.4375	.593	.750		1.313		40,600	6,750	19,400	.210		
-14	14	-14	-14	14	-14	.8760	1.5625	.703	.875		1.438		55,950	9,350	26,750	.270		
-16	16	-16	-16	16	-16	1.0010	1.7500	.797	1.000	1.626	9	73,800	12,160	35,250	1.0 - 25.0	0 - 2.0	.390	

All dimensions are in inches.

Materials:

- Race: 17-4PH Stainless Steel, heat-treated
- Ball: PH13-8MO Stainless Steel, heat-treated
- Liner: Fibriloid or "E" Uniflon qualified to AS81820

Notes:

- 1- For liner specifications, or other liners for high temperature or high speed, please see engineering section or contact RBC Aerospace Bearings
- 2- All load ratings are per AS81820

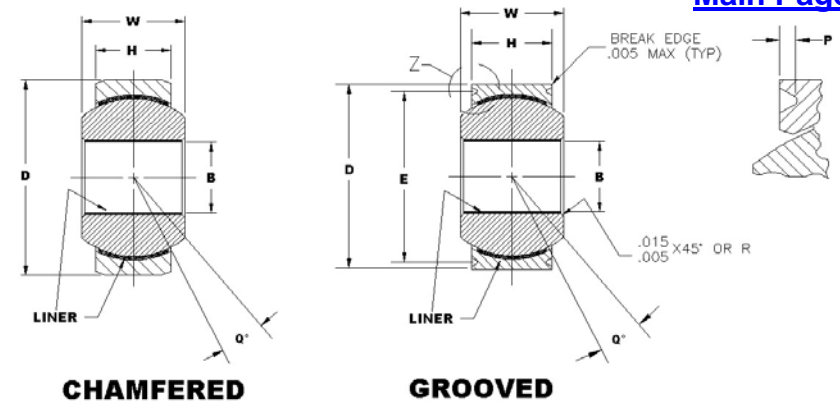
Bearing configuration	Part number designations for a 0.2500" bore, grooved spherical bearing		
Base P/N (no options)	03-835-04	NEEG4	M81820/1-4
Low breakaway torque	03-835-04K	NEEG4K	M81820/1-4K
Cadmium plating	03-835-04P	NEEG4C	M81820/1-4P
1 st oversize O.D. (0.010")	03-835-04T	NEEG4Q	M81820/1-4T
2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

M81820/2 – M81820/3

Self-Lubricated Spherical Bearing, Lined Bore

AS81820/2 – AS81820/3 · AS81820 (formerly MIL-B-81820)

- Wide series, self-lubricated, lined bore.
- Chamfered type (M81820/2)
- Grooved type (M81820/3)
- Liners qualified to AS81820



CHAMFERED PART NUMBERS			GROOVED PART NUMBERS			Bore B	O.D. D	Race Width H	Ball Width W	Other Dimensions			Static Limit Load		Oscillating Load LBF	No-Load Rotational Breakaway Torque Inch-Pounds		Approx. Weight LBS				
03-834 Dash No.	WEE Dash No.	M81820/2 Dash No.	03-836 Dash No.	WEEG Dash No.	M81820/3 Dash No.					P	E	Q (ref.)	Radial LBF	Axial LBF		Standard	"K" Type					
-05	5	-5	-05	5	-5	+0.000 -.0010	+0.000 -.0005	+0.005 -.005	+0.000 +.002	.035	.025	.625	14	9,300	1,640	4,450	1.0 - 15.0	0 - 1.0	.035			
-06	6	-6	-06	6	-6	.3760	.8125	.406	.500					.712	8	13,000				2,630	6,200	.060
-07	7	-7	-07	7	-7	.4385	.9375	.442	.562					.837	10	17,300				3,650	8,250	.080
-	-	-	-07A	7A	-7A	.4385	.9062	.442	.562					.806	10	17,300				3,650	8,250	.080
-08	8	-8	-08	8	-8	.5010	1.0000	.505	.625					.900	9	21,400				4,970	10,600	.100
-09	9	-9	-09	9	-9	.5635	1.1250	.536	.687					1.025	10	26,600				5,370	13,200	.135
-10	10	-10	-10	10	-10	.6260	1.1875	.567	.750					1.087	12	29,000				6,130	16,150	.160
-12	12	-12	-12	12	-12	.7510	1.3750	.630	.875	1.251	13	37,000	7,730	24,800	.240							
-14	14	-14	-14	14	-14	.8760	1.6250	.755	.875	.055	1.501	8	56,000	10,800	26,750	1.0 - 25.0	0 - 2.0	.350				
-16	16	-16	-16	16	-16	1.0010	2.1250	1.005	1.375										2.001	12	103,000	19,300

All dimensions are in inches.

Materials:

- Race: 17-4PH Stainless Steel, heat-treated
- Ball: PH13-8MO Stainless Steel, heat-treated
- Liner: Fibriloid or "E" Uniflon qualified to AS81820

Notes:

- 1- For liner specifications, or other liners for high temperature or high speed, please see engineering section or contact RBC Aerospace Bearings
- 2- All load ratings are per AS81820

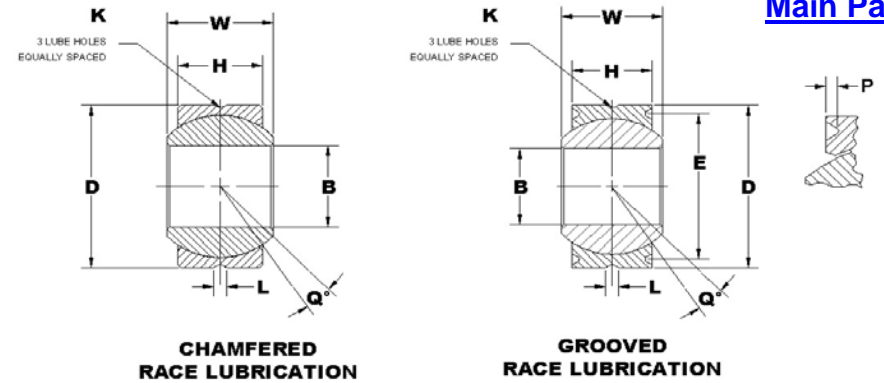
Bearing configuration	Part number designations for a 0.2500" bore, grooved spherical bearing		
Base P/N (no options)	03-836-04	WEEG4	M81820/3-4
Low breakaway torque	03-836-04K	WEEG4K	M81820/3-4K
Cadmium plating	03-836-04P	WEEG4C	M81820/3-4P
1 st oversize O.D. (0.010")	03-836-04T	WEEG4Q	M81820/3-4T
2 nd oversize O.D. (0.020")	03-836-04U	WEEG4U	M81820/3-4U

M81936/1 - M81936/2

Metal-to-Metal Spherical Bearing

AS81936/1 - AS81936/2 · AS81936 (formerly MIL-B-81936)

- Beryllium-Copper Ball
- Chamfered type (M81936/2)
- Grooved type (M81936/1)
- Lubrication holes and grooves on the race (Race Lubrication)
- Lubrication holes and grooves on the race and ball (Race and Ball Lubrication)



CHAMFERED PART NUMBERS				GROOVED PART NUMBERS				Bore B +.0000 -.0005	O.D. D +.0000 -.0005	Race Width H +.000 -.005	Ball Width W +.000 -.005	Other Dimensions				Q (ref.)	Radial Static Limit Load LBF						
Race & Ball Lubrication		Race Lubrication		Race & Ball Lubrication		Race Lubrication						P +.000 -.015	E +.000 -.010	K				L					
03-580 Dash No.	M81936/2 Dash No.	03-590 Dash No.	M81936/2 Dash No.	03-582 Dash No.	M81936/1 Dash No.	03-592 Dash No.	M81936/1 Dash No.							Min	Max			Min	Max				
-04	-4	-04	-4R	-04	-4	-04	-4R	0.2500	0.6562	0.250	0.343	0.030	0.596	.032				12	6,330				
-05	-5	-05	-5R	-05	-5	-05	-5R	0.3125	0.7500	0.281	0.375	0.040	0.652	.042				11	8,460				
-06	-6	-06	-6R	-06	-6	-06	-6R	0.3750	0.8125	0.312	0.406		0.714					0.808	.062			9	11,400
-07	-7	-07	-7R	-07	-7	-07	-7R	0.4375	0.9062	0.343	0.437		0.878					0.972	.052				14,800
-08	-8	-08	-8R	-08	-8	-08	-8R	0.5000	1.0000	0.390	0.500	1.065	1.315	.062				20,400					
-09	-9	-09	-9R	-09	-9	-09	-9R	0.5625	1.0937	0.437	0.562	1.440	1.440					.078				26,700	
-10	-10	-10	-10R	-10	-10	-10	-10R	0.6250	1.1875	0.500	0.625	1.753	2.003	.078								33,100	
-12	-12	-12	-12R	-12	-12	-12	-12R	0.7500	1.4375	0.593	0.750	2.190	2.440					.093				50,000	
-13	B	-13	-13R	-13	-13	-13	-13R	0.8125	1.5625	0.650	0.812	2.690	2.690	.082								59,000	
-14	-14	-14	-14R	-14	-14	-14	-14R	0.8750	1.6562	0.703	0.875							.078				70,300	
-16	-16	-16	-16R	-16	-16	-16	-16R	1.0000	1.8750	0.797	1.000			.082								11,100	
-18	-18	-18	-18R	-18	-18	-18	-18R	1.1250	2.1250	0.900	1.125							.082				121,500	
-20	-20	-20	-20R	-20	-20	-20	-20R	1.2500	2.3125	1.000	1.250			.082								152,000	
-22	-22	-22	-22R	-22	-22	-22	-22R	1.3750	2.5625	1.100	1.375							.082				186,000	
-24	-24	-24	-24R	-24	-24	-24	-24R	1.5000	2.8125	1.200	1.500			.082								224,000	

All dimensions are in inches.

Materials:

- Race: 17-4PH Stainless Steel, heat-treated
- Ball: Beryllium-Copper

Notes:

- 1- Race lubrication indicates lubrication grooves and grease holes in race only
- 2- Race and ball lubrication indicates grooves and grease holes in race and ball
- 3- For other material combinations please see engineering section or contact RBC Aerospace Bearings

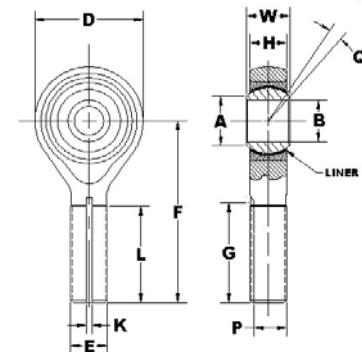
Bearing configuration	Part number designations for a 0.2500" bore, race & ball lubrication, grooved spherical bearing	
Base P/N (no options)	03-582-04	M81936/1-4
1 st oversize O.D. (0.010")	03-582-04T	M81936/1-4T
2 nd oversize O.D. (0.020")	03-582-04U	M81936/1-4U

M81935/1

Self-Lubricated Rod End Bearing

AS81935/1 · AS81935 (formerly MIL-B-81935)

- Wide series, self-lubricated, external threads.
- Spherical bearings per AS81820



PART NUMBERS			Bore B +.0000 -.0005	Ball Width W +.000 -.002	Body Width H +.005 -.005	Head Diameter D +.010 -.010	Length to Center of Ball F +.010 -.010	Thread Length L +.031 +.031	Thread Size E UNJF-3A	Ball Flat Diameter A Min	Keyway Flat G +.000 -.020	Keyway		Mis-alignment angle Q Min	Ultimate Static Radial Load LBF	Fatigue Load LBF	Axial Proof Load LBF	Approx. Weight LBS	No-Load Rotational Breakaway Torque Inch-Pounds	
ME Dash No.	01-824 Dash No.	M81935/1 Dash No.										K +.005 -.000	P +.000 -.005						Min	Max
3	-03	-3	.1900	.437	.337	.806	1.562	.968	.3125-24	.30	.980	.062	.268	15	2360	1470	1000	.072	0.5	6
4	-04	-4	.2500	.437	.337	.806	1.562	.968	.3125-24	.30	.980	.062	.268	15	4860	2380	1000	.072	1	15
5	-05	-5	.3125	.437	.327	.900	1.875	1.187	.3125-24	.36	1.270	.062	.268	14	7180	2770	1100	.087		
6	-06	-6	.3750	.500	.416	1.025	1.938	1.187	.3750-24	.47	1.235	.093	.319	8	8550	3570	1660	.136	1	15
7	-07	-7	.4375	.562	.452	1.150	2.125	1.281	.4375-20	.54	1.402	.093	.383	10	12000	4800	1850	.183		
8	-08	-8	.5000	.625	.515	1.337	2.438	1.468	.5000-20	.61	1.589	.125	.445	9	19500	7680	2040	.278	1	15
10	-10	-10	.6250	.750	.577	1.525	2.625	1.562	.6250-18	.75	1.683	.125	.541	12	21900	9180	2430	.424		
12	-12	-12	.7500	.875	.640	1.775	2.875	1.687	.7500-16	.85	1.808	.125	.663	13	29300	11600	2810	.639	1	24
14	-14	-14	.8750	.875	.765	2.025	3.375	2.000	.8750-14	1.00	2.121	.156	.777	6	34500	13100	3320	.963		
16	-16	-16	1.0000	1.375	1.015	2.775	4.125	2.343	1.2500-12	1.27	2.464	.187	1.136	12	80300	30400	4340	2.546	1	24

All dimensions are in inches.

Materials:

- Body: 4340 Alloy steel, heat-treated, magnetic particle inspection cadmium plated and chromate treated
- Race: 17-4PH Stainless Steel, heat-treated
- Ball: 440C Stainless Steel, heat-treated
- Liner: Fibriloid or "E" Uniflon qualified to AS81820

Notes:

- For liner specifications or the following options:
- Stainless steel rod end body
- High temperature or high speed liners
- please see engineering section or contact RBC Aerospace Bearings.

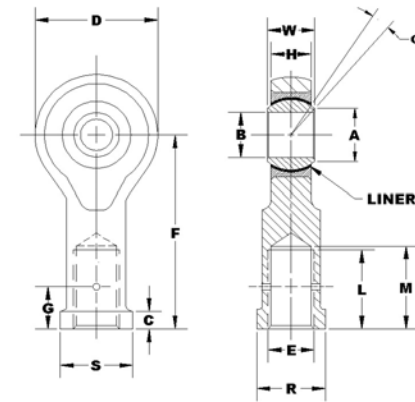
Bearing configuration	Part number designations for a 0.2500" bore rod end		
Base P/N (no options)	ME4	01-824-04	M81935/1-4
Keyway on threads	MEK4	01-824-041	M81935/1-4K
Left hand thread	MEL4	11-824-04	M81935/1-4L

M81935/2

Self-Lubricated Rod End Bearing

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

- Wide series, self-lubricated, internal threads.
- Spherical bearings per AS81820



PART NUMBERS			Bore	Ball Width	Body Width	Head Diameter	Length to Center of Ball	Completed Thread	Thread Size	Ball Flat Diameter	Width Across Flats	Height of Flats	Centerline Drill to End	Across Corners	Internal Depth	Misalignment angle Q	Ultimate Static Radial Load LBF	Fatigue Load LBF	Axial Proof Load LBF	Approx. Weight LBS	No-Load Rotational Breakaway Torque Inch-Pounds	
FE Dash No.	02-824 Dash No.	M81935/2 Dash No.	B	W	H	D	F	L	E	A	R	C	G	S	M	Q					Min	Max
3	-3	-3	.1900	.806	.337	.806	1.375	.750	.3125-24	.30	.437	.188	.375	.500	.875	15	2,360	1,470	1,000	.080	.50	6
4	-4	-4	.2500	.806	.337	.806	1.469	.750	.3125-24	.30	.437	.188	.375	.500	.875	15	4,860	2,380	1,000	.084		
5	-5	-5	.3125	.900	.327	.900	1.625	.875	.3750-24	.36	.500	.250	.437	.580	1.000	14	7,180	3,020	1,100	.102		
6	-6	-6	.3750	1.025	.416	1.025	1.812	1.000	.3750-24	.47	.562	.250	.437	.660	1.125	8	8,550	3,570	1,660	.161		
7	-7	-7	.4375	1.150	.452	1.150	2.000	1.125	.4375-20	.54	.625	.250	.500	.720	1.250	10	12,000	4,800	1,850	.212		
8	-8	-8	.5000	1.337	.515	1.337	2.250	1.250	.5000-20	.61	.750	.250	.562	.880	1.375	9	19,500	8,260	2,040	.325	1	15
10	-10	-10	.6250	1.525	.577	1.525	2.500	1.375	.6250-18	.75	.875	.375	.687	1.020	1.500	12	21,900	9,180	2,430	.481		
12	-12	-12	.7500	1.775	.640	1.775	2.875	1.625	.7500-16	.85	1.000	.375	.812	1.160	1.750	13	29,300	11,600	2,810	.673		
14	-14	-14	.8750	2.025	.765	2.025	3.375	1.875	.8750-14	1.00	1.125	.500	.937	1.300	2.062	6	34,500	13,100	3,320	.959	1	24
16	-16	-16	1.0000	2.775	1.015	2.775	4.125	2.125	1.2500-12	1.27	1.750	.563	1.312	2.020	2.312	12	80,300	30,400	4,340	2.717		

All dimensions are in inches.

Materials:

- Body: 4340 Alloy steel, heat-treated, magnetic particle inspection cadmium plated and chromate treated
- Race: 17-4PH Stainless Steel, heat-treated
- Ball: 440C Stainless Steel, heat-treated
- Liner: Fibriloid or "E" Uniflon qualified to AS81820

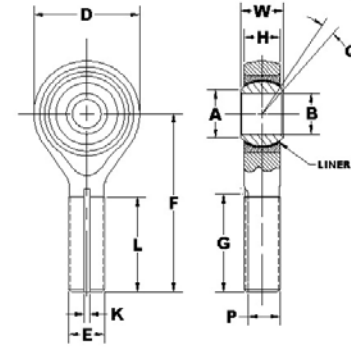
Notes:

- For liner specifications or the following options:
- Stainless steel rod end body
- High temperature or high speed liners
- please see engineering section or contact RBC Aerospace Bearings.

Bearing configuration	Part number designations for a 0.2500" 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

M81935/4

Self-Lubricated Rod End Bearing



AS81935/4 · AS81935 (formerly MIL-B-81935)

- Narrow series, self-lubricated, external threads.
- Liner qualified to AS81820

PART NUMBERS		Bore B +.0000 -.0005	Ball Width W +.000 -.002	Body Width H +.005 -.005	Head Diameter D +.010 -.010	Length to Center of Ball F +.010 -.010	Thread Length L +.031 +.031	Thread Size E UNJF-3A	Ball Flat Diameter A Min	Keyway Flat G +.000 -.020	Keyway		Mis-alignment angle Q Min	Ultimate Static Radial Load LBF	Fatigue Load LBF	Axial Proof Load LBF	Approx. Weight LBS	No-Load Rotational Breakaway Torque Inch-Pounds	
ME- AN Dash No.	M81935/4 Dash No.										K +.005 -.000	P +.000 -.005						Min	Max
3	-3	.1900	.281	.228	.680	1.315	.775	.2500-28	.293	.896	.062	.207	10	3,000	1,100	150	.038	0.5	6
4	-4	.2500	.343	.260	.827	1.443	.775	.2500-28	.364	.896				5,300	1,500	430	.045		
5	-5	.3125	.375	.291	.984	1.948	1.187	.3125-24	.419	1.308	.093	.268	9	8,600	2,400	700	.081	1	15
6	-6	.3750	.406	.322	1.131	2.030	1.187	.3750-24	.475	1.308				.319	.383	13,000	3,600		
7	-7	.4375	.437	.353	1.294	2.250	1.281	.4375-20	.530	1.402	.125	.445	8	17,800	5,000	1,400	.172		
8	-8	.5000	.500	.400	1.459	2.544	1.468	.5000-20	.600	1.589				24,200	6,800	2,040	.254		
10	-10	.6250	.625	.510	1.763	2.832	1.562	.6250-18	.739	1.683	.156	.541	9	38,500	10,800	2,430	.455	1	24
12	-12	.7500	.750	.603	2.140	3.193	1.687	.7500-16	.920	1.808				.663	.777	56,600	16,000		
14	-14	.8750	.875	.713	2.372	3.677	2.000	.8750-14	.980	2.121	.156	.777	9	77,400	21,900	3,190	1.141	1	24
16	-16	1.0000	1.000	.807	2.681	3.968	2.100	1.0000-12	1.118	2.221				.900	.900	101,400	28,600		

All dimensions are in inches.

Materials:

- Body: 4340 Alloy steel, heat-treated, magnetic particle inspection cadmium plated and chromate treated
- Race: 17-4PH Stainless Steel, heat-treated
- Ball: 440C Stainless Steel, heat-treated
- Liner: "E" Uniflon qualified to AS81820

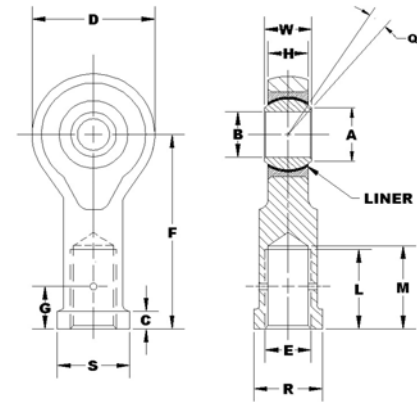
Notes:

- For liner specifications or the following options:
- Stainless steel rod end body
- High temperature or high speed liners
- please see engineering section or contact RBC Aerospace Bearings.

Bearing configuration	Part number designations for a 0.2500" bore rod end	
Base P/N (no options)	ME4AN	M81935/4-4
Keyway on threads	MEK4AN	M81935/4-4K
Left hand thread	MEL4AN	M81935/4-4L

M81935/5

Self-Lubricated Rod End Bearing



AS81935/5 · AS81935 (formerly MIL-B-81935)

- Narrow series, self-lubricated, internal threads.
- Liner qualified to AS81820

PART NUMBERS		Bore	Ball Width	Body Width	Head Diameter	Length to Center of Ball	Completed Thread	Thread Size	Ball Flat Diameter	Width Across Flats	Height of Flats	Centerline Drill to End	Across Corners	Internal Depth	Mis-alignment angle Q	Ultimate Static Radial Load LBF	Fatigue Load LBF	Axial Proof Load LBF	Approx. Weight LBS	No-Load Rotational Breakaway Torque Inch-Pounds	
FE- AN Dash No.	M81935/5 Dash No.	B +.0000 -0.0005	W +.000 -0.002	H +.005 -0.005	D +.010 -0.010	F +.010 -0.010	L Min	E UNJF-3B	A Min	R +.002 -0.010	C +.010 -0.062	G +.020 -0.020	S Ref.	M Max	Min					Min	Max
3	-3	.1900	.281	.228	.680	1.210	.625	.2500-28	.293	.375		.312	.430	.750	10	3000	1100	150	.044	.50	6
4	-4	.2500	.343	.260	.827	1.338	.625	.2500-28	.364	.375	.188	.312	.430	.750	10	5500	1300	430	.052		
5	-5	.3125	.375	.291	.984	1.566	.750	.3125-24	.419	.437		.375	.500	.875	9	8900	2000	700	.087		
6	-6	.3750	.406	.322	1.131	1.908	1.000	.3750-24	.475	.625	.250	.437	.720	1.125	8	13400	3100	1100	.137	1	15
7	-7	.4375	.437	.353	1.294	2.125	1.125	.4375-20	.530	.625		.500	.720	1.250	8	18200	4200	1400	.193		
8	-8	.5000	.500	.400	1.459	2.356	1.250	.5000-20	.600	.875	.375	.562	1.020	1.375	8	24600	5700	2040	.279		
10	-10	.6250	.625	.510	1.763	2.707	1.375	.6250-18	.739	.875		.687	1.375	1.500	8	39500	9200	2430	.504		
12	-12	.7500	.750	.603	2.140	3.193	1.625	.7500-16	.920	1.125	.500	.812	1.300	1.750	8	57200	13500	2940	.860		
14	-14	.8750	.875	.713	2.372	3.677	1.875	.8750-14	.980	1.250	.500	.937	1.375	2.062	9	77800	18400	3100	1.266	1	24
16	-16	1.0000	1.000	.807	2.681	4.101	2.125	.0000-12	1.118	1.375		1.062	1.590	2.312	9	101000	24000	3570	1.814		

All dimensions are in inches.

Materials:

- Body: 4340 Alloy steel, heat-treated, magnetic particle inspection cadmium plated and chromate treated
- Race: 17-4PH Stainless Steel, heat-treated
- Ball: 440C Stainless Steel, heat-treated
- Liner: "E" Uniflon qualified to AS81820

Notes:

- For liner specifications or the following options:
- Stainless steel rod end body
- High temperature or high speed liners
- please see engineering section or contact RBC Aerospace Bearings.

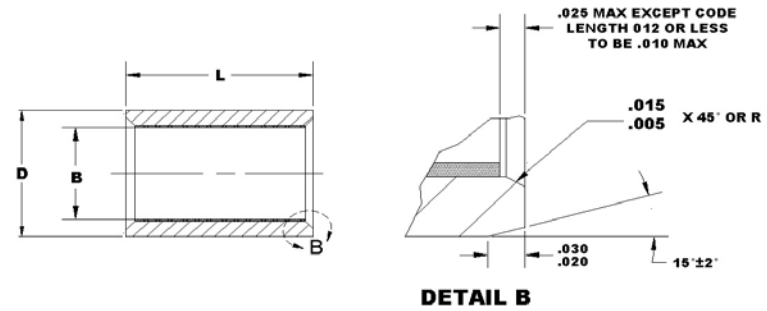
Bearing configuration	Part number designations for a 0.2500" bore rod end	
Base P/N (no options)	FE4AN	M81935/5-4
Keyway on threads	FEK4AN	M81935/5-4K
Left hand thread	FEL4AN	M81935/5-4L

M81934/1

Self-Lubricated Straight Journal Bearing

AS81934/1 · AS81934 (formerly MIL-B-81934)

- Aluminum and stainless steel
- Liners qualified to AS81934



PART NUMBERS Stainless Steel			PART NUMBERS Aluminum			Bore Nominal Size	Bore B +.0000 -.0010	Outside Diameter D		WEIGHT LB/IN (REF) L=1.000	
PBE()C Dash No.	06-282 Dash No.	M81934/1()C Dash No.	PBE()A Dash No.	06-382 Dash No.	M81934/1()A Dash No.			Aluminum +.0005 -.0005	Steel +.0000 -.0005	Aluminum	Steel
04	-04	-04	04	-04	-04	0.2500	0.2515	0.3760	0.3760	0.006	0.016
05	-05	-05	05	-05	-05	0.3125	0.3140	0.4386	0.4386	0.007	0.019
06	-06	-06	06	-06	-06	0.3750	0.3765	0.5012	0.5012	0.008	0.022
07	-07	-07	07	-07	-07	0.4375	0.4390	0.5638	0.5638	0.009	0.025
08	-08	-08	08	-08	-08	0.5000	0.5015	0.6265	0.6265	0.011	0.028
09	-09	-09	09	-09	-09	0.5625	0.5640	0.6892	0.6892	0.012	0.031
10	-10	-10	10	-10	-10	0.6250	0.6265	0.8142	0.8142	0.021	0.056
11	-11	-11	11	-11	-11	0.6875	0.6890	0.8767	0.8767	0.022	0.060
12	-12	-12	12	-12	-12	0.7500	0.7515	0.9393	0.9393	0.024	0.065
14	-14	-14	14	-14	-14	0.8750	0.8765	1.0645	1.0645	0.028	0.075
16	-16	-16	16	-16	-16	1.0000	1.0015	1.1898	1.1898	0.031	0.084
18	-18	-18	18	-18	-18	1.1250	1.1265	1.3148	1.3148	0.035	0.094
20	-20	-20	20	-20	-20	1.2500	1.2515	1.4398	1.4398	0.038	0.103
22	-22	-22	22	-22	-22	1.3750	1.3765	1.5648	1.5648	0.041	0.113
24	-24	-24	24	-24	-24	1.5000	1.5015	1.7523	1.7523	0.062	0.171
26	-26	-26	26	-26	-26	1.6250	1.6265	1.8773	1.8773	0.067	0.183
28	-28	-28	28	-28	-28	1.7500	1.7515	2.0023	2.0023	0.071	0.196
32	-32	-32	32	-32	-32	2.0000	2.0015	2.2523	2.2523	0.081	0.222

All dimensions are in inches.

Materials:

Sleeve: Aluminum:

Alloy 2024-T851
anodized or chemical film treatment

Stainless Steel:

17-4PH Stainless Steel, heat treated

Liner: Fibriloid or "E" Uniflon qualified to AS81934

Notes:

- 1- For liner specifications or the following options:
-High temperature or high speed liners
please see engineering section or contact RBC Aerospace Bearings.
- 2- Must add length code to basic part numbers in multiples of 1/32"
(dimension "L" on the drawing)
- 3- Load ratings per AS81934
Static Limit (Alum.) = 50,000 B x (L-.100) (LBS)
Static Limit (Cres) = 78,500 B x (L-.100) (LBS)
Dynamic Limit = 37,500 B x (L-.100) (LBS)

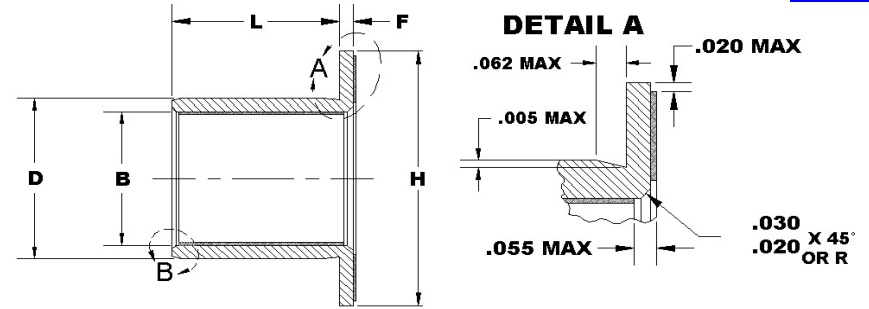
Bearing configuration	Part number designations for a 0.250" bore and 0.250" long aluminum journal bearing		
Base P/N (no options)	06-382-04008	PBE04A08	M81934/1-4A008
Cadmium plating	06-382-04008P	PBE04A08C	M81934/1-4A008P
1 st oversize O.D. (0.010")	06-382-04008T	PBE04A08Q	M81934/1-4A008T
2 nd oversize O.D. (0.020")	06-382-04008U	PBE04A08U	M81934/1-4A008U

M81934/2

Self-Lubricated Flanged Journal Bearing

AS81934/2 · AS81934 (formerly MIL-B-81934)

- Aluminum and stainless steel
- Liners qualified to AS81934



PART NUMBERS Stainless Steel			PART NUMBERS Aluminum			Bore Nominal Size	Bore B +0.000 -0.010	Outside Diameter D		Flange Width F +0.000 -0.0050	Flange Diameter H +0.000 -0.020	SLEEVE WEIGHT LB/IN (REF) L=1.000		FLANGE WEIGHT LB/IN (REF)	
FBE()C Dash No.	07-282 Dash No.	M81934/2()C Dash No.	FBE()A Dash No.	07-382 Dash No.	M81934/2()A Dash No.			Aluminum +0.0005 -0.0005	Steel +0.000 -0.0005			Aluminum	Steel	Aluminum	Steel
04	-04	-04	04	-04	-04			0.2500	0.2515			0.3760	0.3760	0.0625	0.750
05	-05	-05	05	-05	-05	0.3125	0.3140	0.4386	0.4386	0.812	0.007	0.019	0.003		0.007
06	-06	-06	06	-06	-06	0.3750	0.3765	0.5012	0.5012	0.875	0.008	0.022	0.003		0.007
07	-07	-07	07	-07	-07	0.4375	0.4390	0.5638	0.5638	0.937	0.009	0.025	0.003		0.008
08	-08	-08	08	-08	-08	0.5000	0.5015	0.6265	0.6265	1.000	0.011	0.028	0.003		0.009
09	-09	-09	09	-09	-09	0.5625	0.5640	0.6892	0.6892	1.125	0.012	0.031	0.004		0.011
10	-10	-10	10	-10	-10	0.6250	0.6265	0.8142	0.8142	1.250	0.021	0.056	0.005		0.014
11	-11	-11	11	-11	-11	0.6875	0.6890	0.8767	0.8767	1.375	0.022	0.060	0.006		0.016
12	-12	-12	12	-12	-12	0.7500	0.7515	0.9393	0.9393	1.500	0.024	0.065	0.007		0.020
14	-14	-14	14	-14	-14	0.8750	0.8765	1.0645	1.0645	1.625	0.028	0.075	0.008		0.022
16	-16	-16	16	-16	-16	1.0000	1.0015	1.1898	1.1898	1.750	0.031	0.084	0.009	0.024	
18	-18	-18	18	-18	-18	1.1250	1.1265	1.3148	1.3148	1.875	0.035	0.094	0.015	0.041	
20	-20	-20	20	-20	-20	1.2500	1.2515	1.4398	1.4398	2.000	0.038	0.103	0.016	0.045	
22	-22	-22	22	-22	-22	1.3750	1.3765	1.5648	1.5648	2.125	0.041	0.113	0.017	0.048	
24	-24	-24	24	-24	-24	1.5000	1.5015	1.7523	1.7523	2.250	0.062	0.171	0.018	0.051	
26	-26	-26	26	-26	-26	1.6250	1.6265	1.8773	1.8773	2.375	0.067	0.183	0.020	0.055	
28	-28	-28	28	-28	-28	1.7500	1.7515	2.0023	2.0023	2.500	0.071	0.196	0.021	0.058	
32	-32	-32	32	-32	-32	2.0000	2.0015	2.2523	2.2523	2.750	0.081	0.222	0.023	0.065	

All dimensions are in inches.

Materials:

Sleeve: Aluminum:

Alloy 2024-T851

anodized or chemical film treatment

Stainless Steel

17-4PH Stainless Steel, heat treated

Liner: Fibriloid or "E" Uniflon qualified to AS81934

Notes:

1- For liner specifications or the following options:

-High temperature or high speed liners

please see engineering section or contact RBC Aerospace Bearings.

2- Must add length code to basic part numbers in multiples of 1/32" (dimension "L" on the drawing)

3- Load ratings per AS81934

Static Limit (Alum.) = 50,000 B x (L-.130) (LBS)

Static Limit (Cres) = 78,500 B x (L-.130) (LBS)

Dynamic Limit = 37,500 B x (L-.130) (LBS)

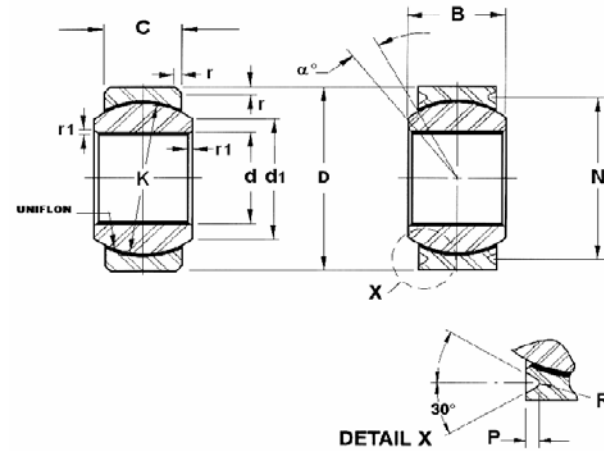
Bearing configuration	Part number designations for a 0.250" bore and 0.250" long stainless steel journal bearing		
Base P/N (no options)	07-282-04008	FBE04C08	M81934/2-4C008
Cadmium plating	07-282-04008P	FBE04C08C	M81934/2-4C008P
1 st oversize O.D. (0.010")	07-282-04008T	FBE04C08Q	M81934/2-4C008T
2 nd oversize O.D. (0.020")	07-282-04008U	FBE04C08U	M81934/2-4C008U

EN2022

Self-Lubricated Spherical Bearing

European Standards

- Light series, self-lubricated.
- Chamfered type (EN2022S)
- Grooved type (EN2022R)
- Liner qualified to AS81820



Dash No	Ball					Outer race		Chamfer (S)	V-groove (R)			Loads			Movement		Weight (g)								
	ø d Bore	ø d1	B Width	r1	ø K	ø D O. diam.	C Width	r	ø N	P	R	Radial Cs	Axial Ca	Oscillating Load	Angle a°	No-load rotational breakaway torque (Nm)									
	Tol. (µm)	mini	+ 0.00	- 0.06		Tol. (µm)	+ 0.1		+ 0.1	+ 0.0	+ 0.1	(kN)													
12	12	0	14.3	10	0.5 to 0.8	17.5	22	7	0.8	+0,4	-0,3	20.2	24.2	0.7	0.2	40.5	1.5	16.2	11	0.12 to 0.80	17				
15	15	-8	18.7	12		22.2	26	9								22.2	26	9			66.9	5.1	26.7	9	32
17	17		21.2	14		25.4	30	10								28.2	7.1	34.9			87.4	7.1	34.9	10	49
20	20	0	24.9	16	0.6 to 1.0	29.6	35	12	1	+0,5	-0,4	33.2	39.4	0.9	0.3	127.3	13.7	50.9	7	0.25 to 1.00	65				
25	25	-10	30.0	20		36.0	42	16								39.4	13.7	50.9			216.7	28.6	86.7	7	115
30	30		34.3	22		40.7	47	18								44.4	38.0	105.0			262.5	38.0	105.0	6	160
35	35		40.5	25	0.6 to 1.0	47.6	55	20	1.2	0	-0,4	51.8	58.8	1.4	0.3	348.1	49.0	139.0	7	0.40 to 2.00	229				
40	40	0	45.0	28		53.0	62	22								58.8	61.2	164.1			410.2	61.2	164.1	7	315
45	45	-12	51.3	32		60.4	68	25								64.8	81.9	218.2			545.5	81.9	218.2	7	460
50	50		58.2	35	67.9	75	28	71.8	105.6	278.3	695.7	105.6	278.3	7	560										

All dimensions are metric.

Materials:

- Race: 17-4PH Stainless Steel, heat-treated
- Ball: 440C Stainless Steel, heat-treated
- Liner: Uniflon qualified to AS81820

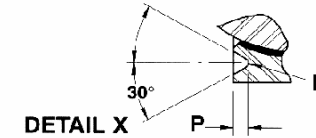
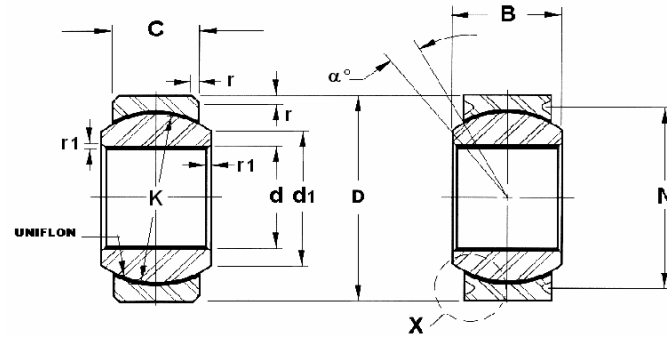
Bearing configuration	Part number designations for a 12mm bore, wide series, spherical bearing
Chamfered outer ring	EN2022S12
Grooved outer ring	EN2022R12

EN2023

Self-Lubricated Spherical Bearing

European Standards

- Normal series, self-lubricated.
- Chamfered type (EN2023S)
- Grooved type (EN2023R)
- Liner qualified to AS81820



Dash No	Ball				Outer race		Chanfrein (S)		V-groove (R)			Loads			Movement		Weight (g)			
	ϕ d Bore	ϕ d1	B Width	ϕ K	ϕ D O. diam.	C Width	r	ϕ N	P	R	Radial Cs	Axial Ca	Oscillating Load	Angle a°	No-load rotational breakaway torque					
	Tol. (μ m)	mini	+0.00 -0.06		Tol. (μ m)	+0.1 -0.1	Tol. (mm)	+0.1 -0.0	+0.0 -0.2	+0.1 -0.0	(kN)				(Nm)					
Wide series	06L	6	7.88	11	13.5	16	+0	8.5	0.8	+0.0 -0.3	14.2	0.7	0.2	40	6.1	16	15	0.08 to 0.50	16	
	08L	8	10.2	11	15	18	-8	8						16.2	41	5.1	17			14
	10L	10	12.24	12.5	17.5	21		10						18.4	63	9.5	25			10
	12L	12	15.41	16	22.2	26	+0	13						23.4	105	18.6	42			10
	15L	15	18.87	17	25.4	29	-9	13.5						26.4	126	20.4	50			9
	17L	17	20.12	18	27	30		14.5						27.4	145	24.3	58			9
	20L	20	23.53	20	30.9	35	+0 -11	16						31.8	191	30.7	76			8
	25L	25	35.26	32	47.6	54	+0 -13	26						50.8	491	93.2	197			9
30L	30	40.84	34	53.2	60		28	56.8	548	109.7	220	8	0.40 to 2.00	500						
Narrow series	05E	5	8.6	7	11.1	14	+0	5.5	0.8	+0.1 -0.2	12.2	0.7	0.2	18	1.5	7.4	9	0.08 to 0.50	7	
	06E	6	8.9	9	13.5	16	-8	6.5						14.2	27	2.7	11			14
	10E	10	11.9	10.5	15.9	21	+0	8						17.4	44	5.1	17			11
	12E	12	14.9	13	19.8	25	-9	10						22.4	68	9.5	27			10
	22E	22	27.1	22	34.9	40	+0	18						36.8	240	40.5	96			8
	25E	25	29.7	25	38.8	45	-11	20						41.8	307	51.7	123			8
	30E	30	35.5	28	45.2	51	+0 -13	24						47.8	389	78	156			6

All dimensions are metric.

Materials:

- Race: 17-4PH Stainless Steel, heat-treated
- Ball: 440C Stainless Steel, heat-treated
- Liner: Uniflon qualified to AS81820

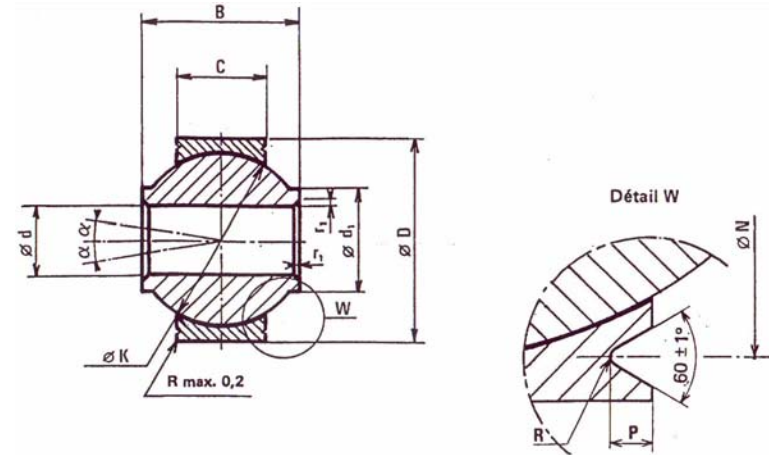
Bearing configuration	Part number designations for a 12mm bore, wide series, spherical bearing
Chamfered outer ring	EN2023S12L
Grooved outer ring	EN2023R12L

EN2501

High-Misalignment Self-Lubricated Spherical Bearing

European Standards

- Extended inner ring, self-lubricated.
- Liner qualified to AS81820



Dash No	Ball					Outer race		V-groove (R)			Loads			Movement		Weight (g)
	Ø d Bore	Ø d1 mini	B Width	Ø K	Ø D O. diam.	C Width	Ø N	P	R	Radial Cs	Axial Ca	Oscillating Load	Angle a°	No-load rotational breakaway torque (Nm)		
	Tol. (µm)	mini	+ 0.00		Tol. (µm)	+ 0.1	+ 0.1	+ 0.0	+ 0.1	(kN)						
		- 0.06				- 0.1	- 0.0	- 0.2	- 0.0							
06	6	9	14	0.3	18	8	16.2	0.7	0.2	41.5	5.1	16.6	9	0.12 to 0.80	15	
08	8	11	15	to 0.8	21	10	18.4	0.9	0.3	63.0	9.5	25.2	8		22	
10	10	13.5	20		26	13	23.4			105.1	18.6	42.2	10		48	

All dimensions are metric.

Materials:

- Race: 17-4PH Stainless Steel, heat-treated
- Ball: 440C Stainless Steel, heat-treated
- Liner: Uniflon qualified to AS81820

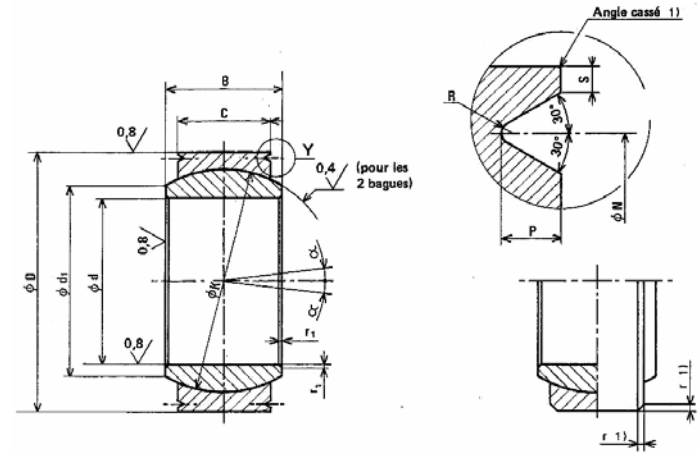
Bearing configuration	Part number designations for a 8mm bore spherical bearing
Basic P/N	EN2501-08

EN2335

Metal-to-Metal Spherical Bearing

European Standards

- Swaged series, metal-to-metal.
- Chamfered or grooved type
- Lubrication holes and grooves on the race
- Lubrication holes and grooves on the race and ball



Dash No	Ball				Outer race		Chamfer (S)	V-groove (R)			Lube hole and groove		Loads		Movement		Angle a°	Weight	
	φ d Bore	φ d1	B Width	φ K approx.	φ D o. diam.	C Width	r	φ N	P	R	E	F	Radial Cs	Axial Ca	Axial play	Radial play			
	Tol. (μm)	mini	h11		Tol. (μm)	+0.0 -0.25		+0.1 -0.0	+0.0 -0.2	+0.1 -0.0				(kN)	(μm)	maxi. (μm)	mini.	(g)	
04	4	6	5	8	12		0.3						7.2	0.45			16	3	
05	5	8	6	10	14	+0	4						12.6	0.8			13	5	
06	6	10	6	13	14	-8	4						16	1	35	5	13	5	
08	8	13	8	16	16		5						21	1.8	à	à	15	8	
10	10	16	9	19	19		6						31	2.5	75	35	12	12	
12	12	18	10	22	22	+0	7	0.5	20.2				40.5	3.5			11	17	
15	15	22	12	25	26	-9	9	à	24.2	0.7	0.2	1.5	2.8	70	5.3		8	32	
17	17	25	14	28	30		10	1.2	28.2			2	2.9	91.4	6.7		10	49	
20	20	29	16	32	35	+0	12	0.6	33.2			2.5	4	130	9.8	40 à 80	5 à 40	25	12
25	25	34	20	36	42	-11	16	à	39.4	0.9	0.3			216.7	18		9	65	
30	30	41	22	41	47		18	1.5	44.4					277.5	25	50 à 100	5 à 50	30	15
																	6	160	

All dimensions are metric.

Materials:

Race: 17-4PH Stainless Steel, heat-treated

Ball: 440C Stainless Steel, heat-treated

Bearing configuration	Part number designations for a 12mm bore spherical bearing
Chamfered outer ring	EN2335S12
Grooved outer ring	EN2335R12
Reduced radial play	EN2335P12
No lubrication hole and grooves	EN2335-12E
Lubrication holes and grooves in the ball only	EN2335-12F
Lubrication holes and grooves in the ball and race	EN2335-12G

Innovation. Commitment. Quality.

RBC has been producing bearings in the USA since 1919. In addition to unique custom bearings, RBC offers a full line of standard industrial and aerospace bearings, including:



Spherical Plain Bearings

Radial, angular contact, extended inner ring, high misalignment. **QuadLube®**, **ImpactTuff®**, **SpreadLock® Seal**, **CrossLube®** bearings, and self-lubricating bearings. Available in inch and metric sizes.



Rod Ends

Commercial and industrial, precision, Mil-Spec series, self-lubricating, and aircraft. **Heim Unibal®** and **Spherco®** brands. Available in inch and metric sizes.



Thin Section Ball Bearings

Standard cross sections to one inch. Sizes to 40 inches. Stainless steel and other materials are available. Seals are available on all sizes and standard cross sections.



Ball Bearings

Precision ground, semiground, unground. High loads, long life, smooth operation. **Nice** brand is offered in caged and full complement configurations.



Self-Lubricating Bearings

Radial, thrust, rod ends, spherical bearings, high temperature, high loads. Available in inch and metric sizes. **Fiberglide®**.



Cam Followers

Standard stud, heavy stud, yoke type, caged roller followers. Patented **RBC Roller®** cylindrical roller cam followers, **HexLube®** universal cam followers, airframe track rollers.



Airframe Control Bearings

Ball bearing types, self-lubricating types, needle roller track rollers.



Needle Roller Bearings

Pitchlign® caged heavy duty needle roller bearings, inner rings, **TJ TandemRoller®** bearings for long life.



Pins and shafts

Bremen and **Miller** pins, needle rollers, shafts, and rollers.



Tapered Roller Bearings

Tyson® brand case-hardened in many sizes. Used in Class 8 heavy truck and trailer wheel bearings, gearboxes, and final drive transmissions.



Ball Screws

Precision ground, rolled, ball splines. Long life, low wear, high accuracy. **QuickTurn™ Ball Screw Repair Service**.



Specials

RBC manufactures many specialty bearings for the aerospace, oil and energy, semiconductor equipment, packaging, heavy truck, and other industries.