

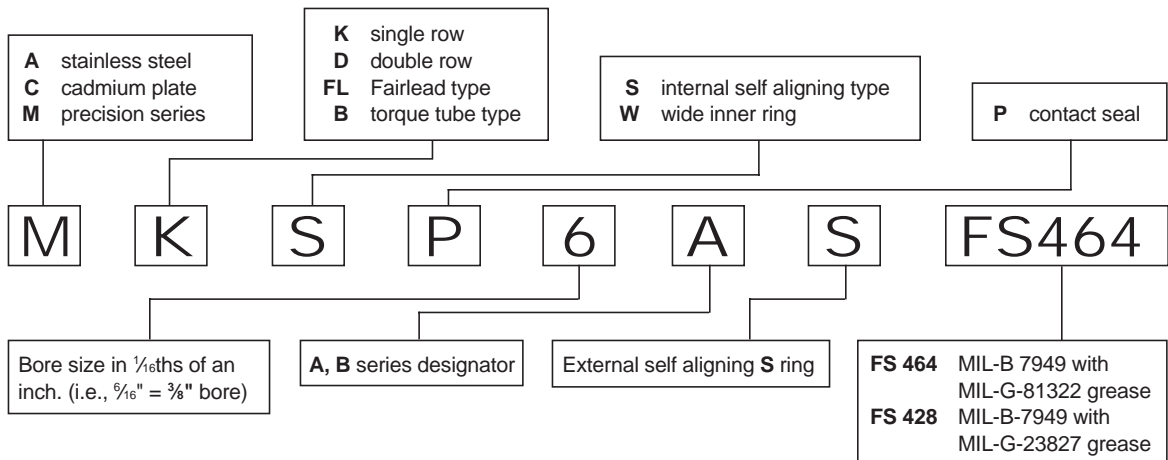
# *Control and Rod End Bearings*

## *Aircraft Control*

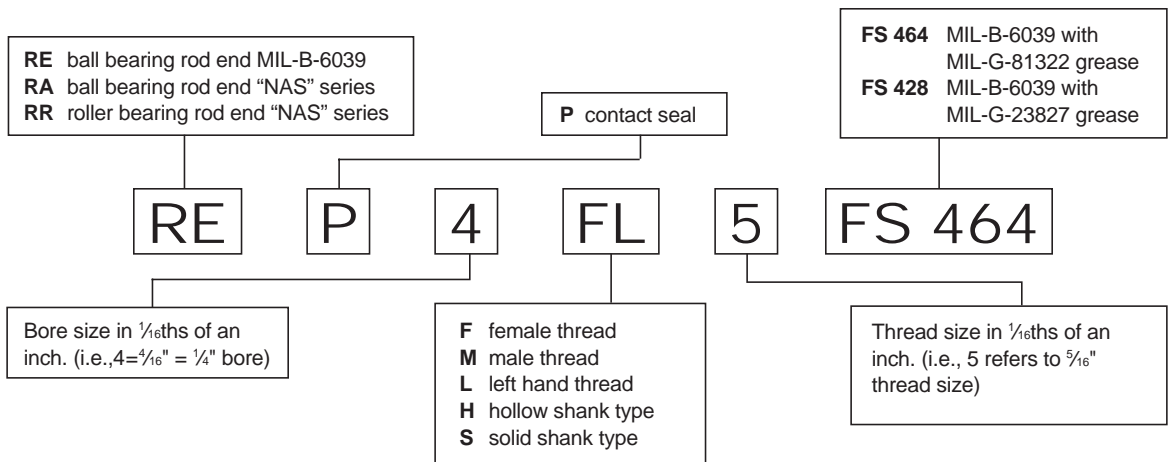
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## Control Bearings



## Rod End Bearings

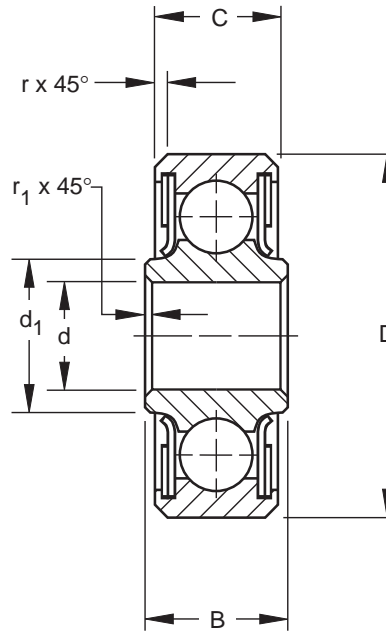




# KP Series Radial Type

**MS27640 • MIL-B-7949**

- Single row, ball, heavy duty.
- Equipped with Teflon seals.
- Exposed surfaces except bore, cap, and seals are cadmium plated.
- Prelubricated. (See Table 1, page 87 for options.)



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87. (Example KP3L FS464)

Bearing Number	MS 27640 Dash No.	Bore d		Outside Diameter D		Widths				d <sub>1</sub>		r <sub>1</sub>		r		Wt.		Radial Limit Load Rating		Thrust Limit Load Rating	
		in.	mm	in.	mm	B	C	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	N	lbs.	N		
KP3L <sup>(1)</sup>	-3A	0.1900	4.826	0.6250	15.875	0.245	6.22	0.203	5.16	0.280	7.11	0.005	0.13	0.01	0.025	0.01	0.005	1560	6950	700	3100
KP3	-3	0.1900	4.826	0.7774	19.746	0.297	7.54	0.270	6.86	0.331	8.41	0.005	0.13	0.022	0.056	0.03	0.014	1880	8300	900	4000
KP4	-4	0.2500	6.350	0.9014	22.896	0.484	12.29	0.335	8.51	0.387	9.83	0.005	0.13	0.032	0.081	0.04	0.018	2680	12000	1200	5300
KP5	-5	0.3125	7.938	1.2500	31.750	0.558	14.17	0.375	9.52	0.469	11.91	0.015	0.38	0.032	0.081	0.09	0.041	5620	25000	2500	11200
KP6	-6	0.3750	9.525	1.4375	36.512	0.620	15.75	0.469	11.91	0.591	15.01	0.015	0.38	0.032	0.081	0.15	0.068	7910	35500	3500	15600
KP8	-8	0.5000	12.700	1.6875	42.862	0.620	15.75	0.500	12.70	0.752	19.10	0.015	0.38	0.044	1.12	0.21	0.095	11810	52000	5200	23200
KP10	-10	0.6250	15.875	1.9375	49.212	0.620	15.75	0.500	12.70	0.850	21.59	0.015	0.38	0.044	1.12	0.28	0.127	14100	63000	6200	27500

<sup>(1)</sup> Bonded Teflon Seals.

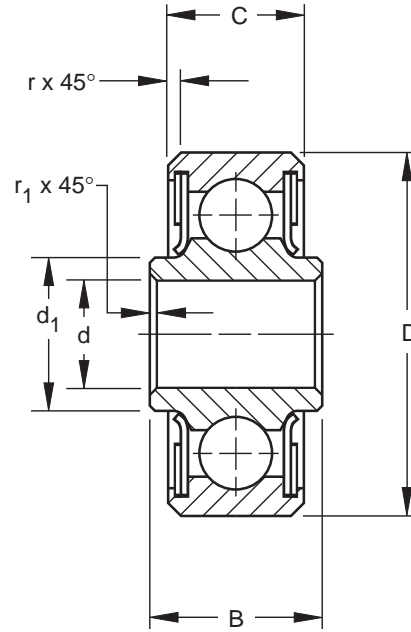
**Note:** These bearings should not be used as track rollers, cam follower rolls, and the like.



# KP-A Series Radial Type

**MS27641 • MIL-B-7949**

- Single row, ball, deep groove.
- Equipped with Teflon seals.
- Exposed surfaces except bore, cap, and seals are cadmium plated.
- Prelubricated. (See Table 1, page 87 for options.)



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87. (Example KP3AL FS464)

Bearing Number	MS 27641 Dash No.	Bore d		Outside Diameter D		Widths				d <sub>1</sub>		r <sub>1</sub>		r		Wt.		Radial Limit Load Rating		Thrust Limit Load Rating	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	N	lbs.	N
KP3AL <sup>(1)</sup>	-	0.1900	4.826	0.5000	12.700	0.237	6.02	0.196	4.98	0.258	6.55	0.005	0.13	0.012	0.30	0.01	0.005	970	4300	430	1900
KP3A	-3	0.1900	4.826	0.6250	15.875	0.297	7.54	0.234	5.94	0.270	6.86	0.005	0.13	0.016	0.41	0.01	0.005	1560	6950	700	3100
KP4A	-4	0.2500	6.350	0.7500	19.050	0.281	7.14	0.219	5.56	0.349	8.86	0.005	0.13	0.016	0.41	0.02	0.009	1880	8300	900	4000
KP5A	-5	0.3125	7.938	0.8125	20.638	0.297	7.54	0.234	5.94	0.428	10.87	0.015	0.38	0.016	0.41	0.02	0.009	2190	9800	1000	4500
KP6A	-6	0.3750	9.525	0.8750	22.225	0.313	7.95	0.250	6.35	0.505	12.83	0.015	0.38	0.016	0.41	0.03	0.014	2500	11200	1100	4900
KP8A	-8	0.5000	12.700	1.1250	28.575	0.375	9.52	0.313	7.95	0.635	16.13	0.015	0.38	0.016	0.41	0.05	0.023	3910	17300	1700	7500
KP10A	-10	0.6250	15.875	1.3750	34.925	0.406	10.31	0.344	8.74	0.760	19.30	0.015	0.38	0.032	0.81	0.08	0.036	6700	30000	3000	13400
KP12A	-12	0.7500	19.050	1.6250	41.275	0.437	11.10	0.375	9.52	0.955	24.26	0.015	0.38	0.032	0.81	0.13	0.059	8790	39000	3900	17300
KP16A	-16	1.0000	25.400	2.0000	50.800	0.500	12.70	0.438	11.13	1.262	32.05	0.015	0.38	0.032	0.81	0.22	0.100	11900	53000	5200	23200
KP20A	-20	1.2500	31.750	2.2500	57.150	0.500	12.70	0.438	11.13	1.512	38.40	0.015	0.38	0.032	0.81	0.26	0.118	13800	61000	6100	27000

<sup>(1)</sup> KP3AL not MS27641.

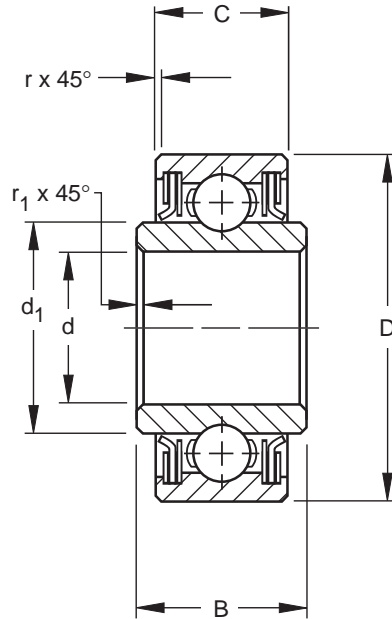
**Note:** These bearings should not be used as track rollers, cam follower rolls, and the like.



# AW-AK Series Radial Type, Stainless Steel

MS27649 • MIL-B-7949

- Single row, ball, deep groove.
- Rings and balls are made of 440C stainless steel (not cadmium plated).
- Equipped with Teflon seals.
- Prelubricated. (See Table 1, page 87 for options.)
- Bores and outside diameters of this series are the same as for corresponding sizes of the KP-A Series on Control Bearings page 9, but rings are wider for retainers and seals, and offsets between inner and outer ring faces are greater, providing increased bracket clearance at mounting.



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87. (Example AW3AK FS464)

Bearing Number	MS 27649 Dash No.	Bore d		Outside Diameter D		Widths				d <sub>1</sub>		r <sub>1</sub>		r		Wt.		Radial Limit Load Rating		Thrust Limit Load Rating	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	N	lbs.	N
		+0.0000, -0.0005		+0.0000, -0.0005		+0.0000, -0.0025	+0.000, -0.005					+0.015, -0.000		+0.015, -0.000			Approx.				
		+0.000, -0.013		+0.000, -0.013		+0.000, -0.064	+0.00, -.13					+0.38, -0.00		+0.38, -0.00			Approx.				
*AW3AK	-3	0.1900	4.826	0.6250	15.875	0.4060	10.310	0.312	7.92	0.317	8.05	0.005	0.13	0.016	0.41	0.018	0.008	750	3350	350	1560
*AW4AK	-4	0.2500	6.350	0.7500	19.050	0.4380	11.130	0.312	7.92	0.415	10.54	0.005	0.13	0.016	0.41	0.028	0.013	880	3900	410	1830
*AW5AK	-5	0.3125	7.938	0.8125	20.638	0.4690	11.910	0.344	8.74	0.462	11.73	0.015	0.38	0.016	0.41	0.033	0.015	1370	6100	640	2850
*AW6AK	-6	0.3750	9.525	0.8750	22.225	0.4690	11.910	0.344	8.74	0.520	13.21	0.015	0.38	0.016	0.41	0.034	0.015	1370	6100	640	2850
*AW8AK	-8	0.5000	12.700	1.1250	28.575	0.5620	14.270	0.438	11.13	0.681	17.30	0.015	0.38	0.016	0.41	0.075	0.034	2250	10000	1050	4650
*AW10AK	-10	0.6250	15.875	1.3750	34.925	0.5940	15.090	0.469	11.91	0.848	21.54	0.015	0.38	0.032	0.81	0.119	0.054	3060	13700	1430	6400
*AW12AK	-12	0.7500	19.050	1.6250	41.275	0.6560	16.660	0.531	13.49	1.052	26.72	0.015	0.38	0.032	0.81	0.189	0.086	4000	17600	1870	8300
*AW16AK <sup>(1)</sup>	-16	1.0000	25.400	2.0000	50.800	0.6880	17.480	0.562	14.27	1.334	33.88	0.015	0.38	0.032	0.81	0.296	0.134	5000	22400	2340	10400
*AW20AK <sup>(1)</sup>	-20	1.2500	31.750	2.2500	57.150	0.6880	17.480	0.562	14.27	1.615	41.02	0.015	0.38	0.032	0.81	0.355	0.161	6000	26500	2800	12500

<sup>(1)</sup> Not in production. Will be produced as requirements justify tooling.

**Note:** These bearings should not be used as track rollers, cam follower rolls, and the like.

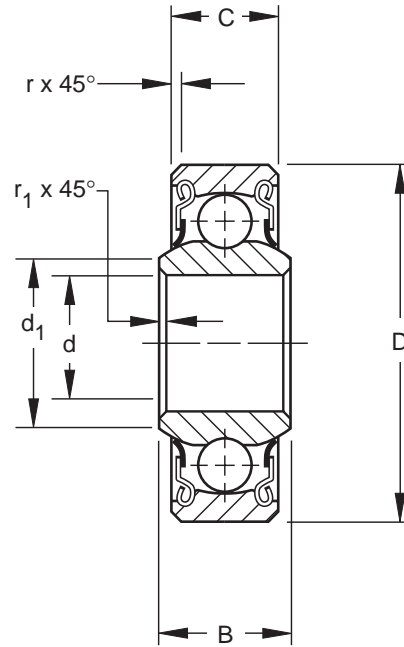
\* Check for availability.



# KSP, KSP-A Series Self-Aligning Type

MS27645 • MIL-B-7949

- Single row, ball, self-aligning.
- Equipped with bonded Teflon seals.
- Exposed surfaces except bore, cap, and seals are cadmium plated.
- Prelubricated. (See Table 1, page 87 for options.)
- Caution: Do not allow these bearings to act as misalignment stops.



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87. (Example KSP3L FS464)

Bearing <sup>(1)</sup> MS Number	MS 27645 Dash No.	Bore d		Outside Diameter D		Widths				d <sub>1</sub>		r <sub>1</sub>		r		Wt.		Radial Limit Load Rating		Thrust Limit Load Rating	
		in.	mm	in.	mm	B		C		in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	N	lbs.	N
		+0.0000,-0.0005	+0.0000,-0.0005	+0.0000,-0.0005	+0.0000,-0.0005	+0.0000,-.005	+0.000,-.005	+0.000,-.005	+0.000,-.005	Approx.	+0.015,-.000	+0.015,-.000	+0.015,-.000	Approx.							
		+0.000,-.013	+0.000,-.013	+0.000,-.013	+0.000,-.013	+0.000,-.15	+0.00,-.13				+0.38,-.00	+0.38,-.00	+0.38,-.00								
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	N	lbs.	N
KSP3L	-3A	0.1900	4.826	0.6250	15.875	0.245	6.22	0.203	5.16	0.256	6.50	0.005	0.13	0.016	0.41	0.01	0.005	550	2450	100	450
KSP4A	-4A	0.2500	6.350	0.7500	19.050	0.281	7.14	0.219	5.56	0.328	8.33	0.005	0.13	0.016	0.41	0.02	0.009	900	4000	200	900
KSP5A	-5A	0.3125	7.938	0.8125	20.638	0.297	7.54	0.234	5.94	0.389	9.88	0.015	0.38	0.016	0.41	0.02	0.009	1000	4400	200	900
KSP6A	-6A	0.3750	9.525	0.8750	22.225	0.313	7.95	0.250	6.35	0.462	11.73	0.016	0.41	0.016	0.41	0.03	0.014	1120	5000	200	900
KSP3	-3	0.1900	4.826	0.7774	19.746	0.297	7.54	0.270	6.86	0.297	7.54	0.005	0.13	0.022	0.56	0.03	0.014	900	4000	200	900
KSP4	-4	0.2500	6.350	0.9014	22.896	0.484	12.29	0.335	8.51	0.396	10.06	0.005	0.13	0.032	0.81	0.04	0.018	1410	6300	300	1340
KSP5	-5	0.3125	7.938	1.2500	31.750	0.558	14.17	0.375	9.52	0.567	14.40	0.015	0.38	0.032	0.81	0.1	0.045	2190	9800	300	1340
KSP6	-6	0.3750	9.525	1.4375	36.512	0.620	15.75	0.469	11.91	0.612	15.54	0.015	0.38	0.032	0.81	0.15	0.068	2980	13200	400	1760
KSP8	-8	0.5000	12.700	1.6875	42.862	0.620	15.75	0.500	12.70	0.796	20.22	0.015	0.38	0.044	1.12	0.23	0.104	3670	16300	500	2240
KSP10	-10	0.6250	15.875	1.9375	49.212	0.813	20.65	0.625	15.88	0.922	23.42	0.015	0.38	0.044	1.12	0.37	0.168	5320	23600	600	2650

<sup>(1)</sup> These bearings are self-aligning for 10° in either direction except KSP4A, KSP5A and KSP6A which are self aligning for 8° in either direction.

Note: These bearings should not be used as track rollers, cam follower rolls, and the like.

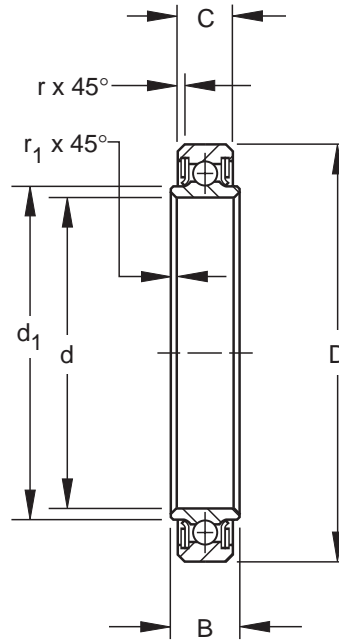
\*Check for availability.



# KP-B Series Radial Torque Tube Type

MS27642 • MIL-B-7949

- Single row, ball.
- Equipped with Teflon seals.
- Exposed surfaces except bore, cap, and seals are cadmium plated.
- Prelubricated. (See Table 1, page 87 for options.)



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87. (Example KP16B FS464)

Bearing Number	MS 27642 Dash No.	Bore d		Outside Diameter D		Widths				d <sub>1</sub>		r <sub>1</sub>		r		Wt.		Radial Limit Load Rating	Thrust Limit Load Rating		
		in.	mm	in.	mm	B	C	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	N			lbs.	N
KP16B	-16	1.0000 <sup>(1)</sup>	25.400 <sup>(1)</sup>	1.7500 <sup>(1)</sup>	44.450 <sup>(1)</sup>	0.437	11.10	0.375	9.52	1.184	30.07	0.024	0.61	0.024	0.61	0.14	0.064	8090	36000	3600	16000
KP21B	-21	1.3130	33.350	2.0625	52.388	0.437	11.10	0.375	9.52	1.478	37.54	0.024	0.61	0.024	0.61	0.16	0.073	9840	43000	4400	19600
KP23B	-23	1.4380	36.525	2.1875	55.562	0.437	11.10	0.375	9.52	1.605	40.77	0.024	0.61	0.024	0.61	0.17	0.077	10500	46500	4700	20800
KP25B	-25	1.5630	39.700	2.3125	58.738	0.437	11.10	0.375	9.52	1.720	43.69	0.024	0.61	0.024	0.61	0.19	0.086	11300	50000	5000	22400
KP29B	-29	1.8130	46.050	2.5625	65.088	0.437	11.10	0.375	9.52	1.960	49.78	0.024	0.61	0.024	0.61	0.21	0.095	12700	56000	5600	25000
KP33B	-33	2.0630	52.400	2.8125	71.438	0.437	11.10	0.375	9.52	2.262	57.45	0.024	0.61	0.024	0.61	0.23	0.104	14400	64000	6400	28500
KP37B	-37	2.3130	58.750	3.0625	77.788	0.437	11.10	0.375	9.52	2.500	63.50	0.024	0.61	0.024	0.61	0.26	0.118	15800	71000	7000	31000
KP47B	-47	2.9380	74.625	3.8750	98.425	0.531	13.49	0.469	11.91	3.120	79.25	0.039	0.99	0.039	0.99	0.49	0.222	24700	100000	10900	48000
KP49B	-49	3.0630	77.800	4.0000	101.600	0.531	13.49	0.469	11.91	3.255	82.68	0.039	0.99	0.039	0.99	0.53	0.24	27500	122000	12100	54000
*KP52B	-52	3.2500	82.550	4.1875	106.362	0.531	13.49	0.469	11.91	3.440	87.38	0.039	0.99	0.039	0.99	0.65	0.295	28700	127000	12600	56000
*KP56B	-56	3.5000	88.900	4.4375	112.712	0.531	13.49	0.469	11.91	3.736	94.89	0.039	0.99	0.039	0.99	0.7	0.318	31200	140000	13700	61000
*KP60B	-60	3.7500	95.250	4.6875	119.062	0.531	13.49	0.469	11.91	4.014	101.96	0.039	0.99	0.039	0.99	0.74	0.336	33100	146000	14600	65500

<sup>(1)</sup>+0.000,-.0005"; +.000,-.013mm.

Note: These bearings should not be used as track rollers, cam follower rolls, and the like.

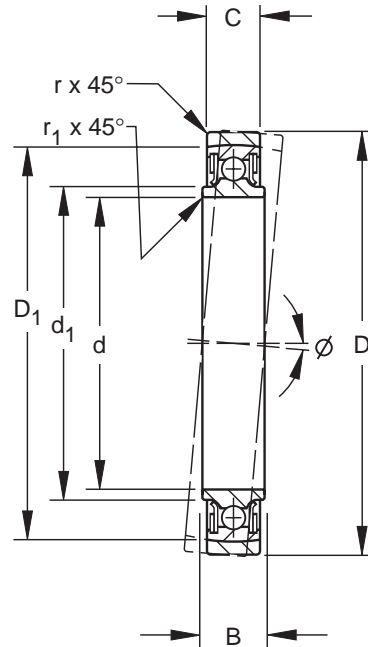
\*Check for availability.



# KP-BS Series Self-Aligning Torque Tube Type

MS27648 • MIL-B-7949

- Single row, ball, external self aligning.
- Equipped with Teflon seals.
- Exposed surfaces except bore, cap, and seals are cadmium plated.
- Prelubricated. (See Table 1, page 87 for options.)
- Series is internally identical to the KP-B series. Self-alignment is provided by an external self-aligning ring whose internal spherically-ground surface is accurately matched to the external spherically-ground surface of the outer ring. These bearings are designed to compensate for initial misalignment.



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87. (Example KP16BS FS464)

Brg. No.	MS 27648 Dash No.	Bore d		Outside Diameter D		Widths				d <sub>1</sub>		r <sub>1</sub>		r		D <sub>1</sub> To Sharp Corner (Ref.)		Δ Mis-alignment Either Direction	Wt. Approx.	Radial Limit Load Rating		Thrust Limit Load Rating		
		in.	mm	in.	mm	B	C	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg			lbs.	N	lbs.	N	
KP16BS	-16	1.0000 <sup>(1)</sup>	25.400 <sup>(1)</sup>	1.9375	49.212	0.437	11.10	0.375	9.52	1.184	30.70	0.024	0.61	0.024	0.61	1.709	43.41	7°25'	0.18	0.082	8090	36000	1600	7100
KP21BS	-21	1.3130	33.350	2.2500	57.150	0.437	11.10	0.375	9.52	1.478	37.54	0.024	0.61	0.024	0.61	2.028	51.51	6°30'	0.2	0.091	9840	43000	2000	9000
KP23BS	-23	1.4380	36.525	2.3750	60.325	0.437	11.10	0.375	9.52	1.605	40.77	0.024	0.61	0.024	0.61	2.155	54.74	6°	0.22	0.1	10500	46500	2200	9800
KP25BS	-25	1.5630	39.700	2.5000	63.500	0.437	11.10	0.375	9.52	1.720	43.69	0.024	0.61	0.024	0.61	2.282	57.96	5°45'	0.25	0.113	11300	50000	2300	10200
KP29BS	-29	1.8130	46.050	2.7500	69.850	0.437	11.10	0.375	9.52	1.960	49.78	0.024	0.61	0.024	0.61	2.535	64.39	5°	0.27	0.122	12700	56000	2600	11600
KP33BS	-33	2.0630	52.400	3.0000	76.200	0.437	11.10	0.375	9.52	2.262	57.45	0.024	0.61	0.024	0.61	2.787	70.79	5°	0.3	0.136	14400	64000	2900	12900
KP37BS	-37	2.3130	58.750	3.2500	82.550	0.437	11.10	0.375	9.52	2.500	63.50	0.024	0.61	0.024	0.61	3.039	77.19	4°30'	0.33	0.15	15800	71000	3200	14300
KP47BS	-47	2.9380	74.625	4.1250	104.775	0.531	13.49	0.469	11.91	3.120	79.25	0.039	0.99	0.039	0.99	3.846	97.69	4°30'	0.64	0.29	24700	100000	5000	22400
*KP48BS	-48	3.0000	76.200	4.2500	107.950	0.531	13.49	0.469	11.91	3.255	82.68	0.039	0.99	0.039	0.99	3.972	100.89	4°	0.69	0.313	27500	122000	5500	24500
KP49BS	-49	3.0625	77.788	4.2500	107.950	0.531	13.49	0.469	11.91	3.255	82.68	0.039	0.99	0.039	0.99	3.972	100.89	4°	0.69	0.313	27500	122000	5500	24500

<sup>(1)</sup> +.0000" (.000mm), -.0005" (.013mm)

Note: These bearings should not be used as track rollers, cam follower rolls, and the like.

\*Check for availability.

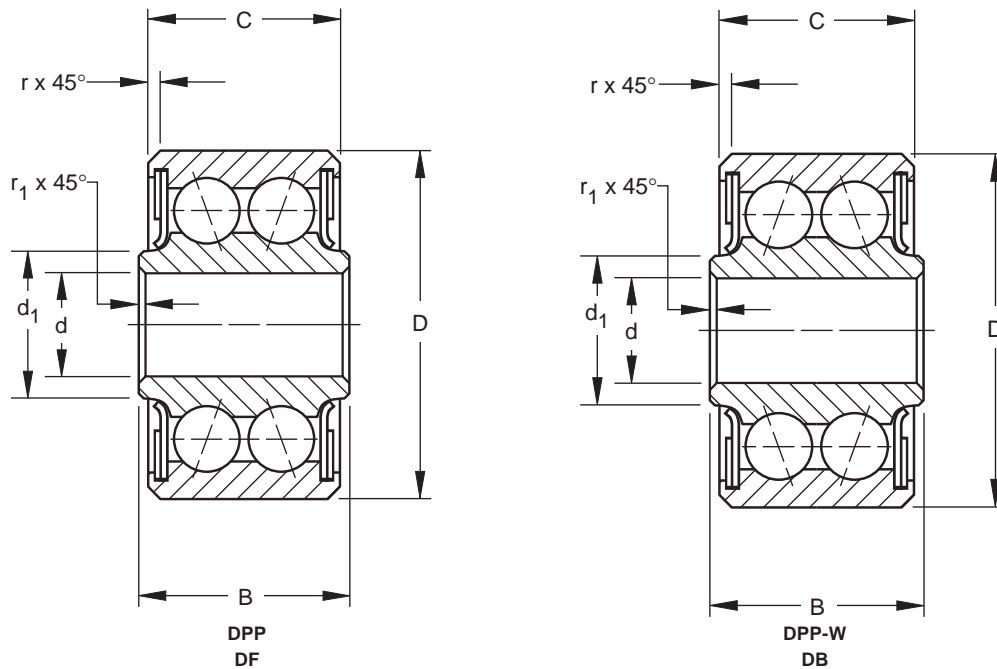




# DPP, DPP-W Series Radial Type Double Row

MS27644 • MIL-B-7949 (DPP Series only)

- Double row, ball.
- Equipped with Teflon seals.
- Exposed surfaces except bore, cap and seals are cadmium plated.
- Prelubricated. (See Table 1, page 87 for options.)
- For use where high moment rigidity is required, DPP-W series only.



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87. (Example DPPS FS464)

Bearing Number	MS 27644 Dash No.	Bore d		Outside Diameter D		Widths			d <sub>1</sub>		r <sub>1</sub>		r		Wt.		Radial Limit Load Rating		Thrust Limit Load Rating		
		in.	mm	in.	mm	B	C	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	N	lbs.	N		
DPP3	-3	0.1900	4.826	0.7774	19.746	0.495	12.57	0.473	12.01	0.302	7.67	0.005	0.13	0.018	0.46	0.04	0.018	2950	13200	1700	7500
DPP4	-4	0.2500	6.350	0.9014	22.896	0.620	15.75	0.491	12.47	0.410	10.41	0.005	0.13	0.032	0.81	0.06	0.027	5370	24000	1800	8000
DPP5	-5	0.3125	7.938	1.2500	31.750	0.745	18.92	0.687	17.45	0.469	11.91	0.015	0.38	0.032	0.81	0.17	0.077	11000	49000	4000	17600
DPP6	-6	0.3750	9.525	1.4375	36.512	0.870	22.10	0.794	20.17	0.551	14.00	0.015	0.38	0.032	0.81	0.26	0.118	15760	69500	5300	23600
DPP8	-8	0.5000	12.700	1.6875	42.862	0.932	23.67	0.856	21.74	0.735	18.67	0.015	0.38	0.044	1.12	0.38	0.172	23600	104000	7800	34500
*DPP10	-10	0.6250	15.875	1.9375	49.212	0.995	25.27	0.920	23.37	0.890	22.61	0.015	0.38	0.044	1.12	0.53	0.240	28400	127000	9400	41500
*DPP3W	-	0.1900	4.826	0.7774	19.746	0.495	12.57	0.473	12.01	0.297	7.54	0.005	0.13	0.018	0.46	0.04	0.018	2950	13200	1450	6400
DPP4W	-	0.2500	6.350	0.9014	22.896	0.620	15.75	0.491	12.47	0.405	10.29	0.005	0.13	0.032	0.81	0.06	0.027	5370	24000	1800	8000
DPP5W	-	0.3125	7.938	1.2500	31.750	0.745	18.92	0.687	17.45	0.548	13.92	0.015	0.38	0.032	0.81	0.17	0.077	11000	49000	4000	17600
DPP6W	-	0.3750	9.525	1.4375	36.512	0.870	22.10	0.794	20.17	0.603	15.32	0.015	0.38	0.032	0.81	0.26	0.118	15760	69500	5300	23600
DPP8W	-	0.5000	12.700	1.6875	42.862	0.932	23.67	0.856	21.74	0.730	18.54	0.015	0.38	0.044	1.12	0.38	0.172	23600	104000	7800	34500
*DPP10W	-	0.6250	15.875	1.9375	49.212	0.995	25.27	0.920	23.37	0.945	24.00	0.015	0.38	0.044	1.12	0.53	0.240	28400	127000	9400	41500

Note: These bearings should not be used as track rollers, cam follower rolls, and the like.

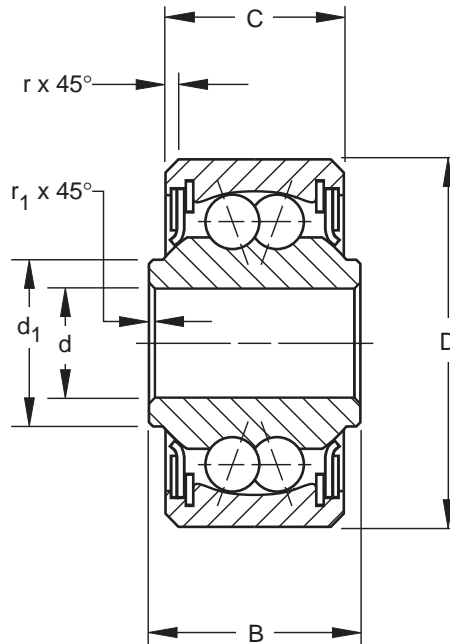
\*Check for availability.



# DSP Series Self-Aligning Type Double Row

MS27643 • MIL-B-7949

- Double row, ball, self-aligning.
- Equipped with Teflon seals.
- Exposed surfaces except bore, cap, and seals are cadmium plated.
- Prelubricated. (See Table 1, page 87 for options.)



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87. (Example DSP3 FS464)

Bearing No. <sup>(1)</sup>	MS 27643 Dash No.	Bore d		Outside Diameter D		Widths				d <sub>1</sub>		r <sub>1</sub>		r		Wt.		Radial Limit Load Rating		Thrust Limit Load Rating	
		in.	mm	in.	mm	B	C	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	N	lbs.	N		
DSP3	-3	0.1900	4.826	0.7774	19.746	0.500	12.70	0.392	9.96	0.304	7.72	0.005	0.13	0.022	0.56	0.04	0.018	1420	6400	200	900
DSP4	-4	0.2500	6.350	0.9014	22.896	0.687	17.45	0.464	11.79	0.430	10.92	0.005	0.13	0.032	0.81	0.06	0.027	1780	8000	300	1340
DSP5	-5	0.3125	7.938	1.2500	31.750	0.812	20.62	0.656	16.66	0.515	13.08	0.015	0.38	0.032	0.81	0.16	0.073	3740	16600	600	2650
DSP6	-6	0.3750	9.525	1.4375	36.512	0.937	23.80	0.750	19.05	0.564	14.33	0.015	0.38	0.032	0.81	0.24	0.109	5100	22800	800	3550
DSP8	-8	0.5000	12.700	1.6875	42.862	1.000	25.40	0.812	20.62	0.775	19.68	0.015	0.38	0.044	1.12	0.36	0.163	7120	31500	1000	4400
DSP10	-10	0.6250	15.875	1.9375	49.212	1.125	28.58	0.937	23.8	0.869	22.07	0.015	0.38	0.044	1.12	0.53	0.240	9000	40000	1300	5850

<sup>(1)</sup> These bearings are self-aligning for 10° in either direction.

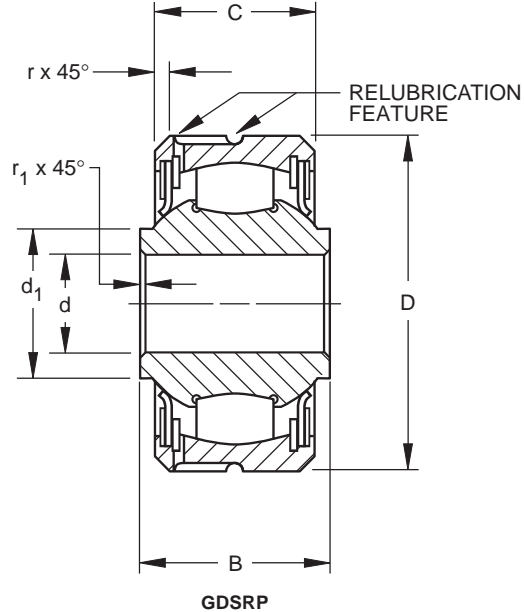
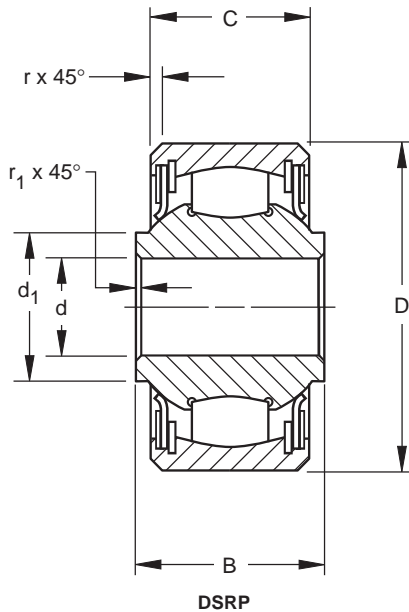
**Note:** These bearings should not be used as track rollers, cam follower rolls, and the like.



# DSRP, GDSRP Series Self-Aligning Type Roller

- Exposed surfaces except bore, cap, and seals are cadmium plated.
- Prelubricated. (See Table 1, page 87 for options.)
- The DSRP series is dimensionally interchangeable with the DSP series except the DSRP4 inner ring width and shoulder.
- Equipped with Teflon seals.

- The GDSRP series is dimensionally interchangeable with the DSRP series; however, it is relubricable through grooves and holes drilled outside of the bearing load zone, which permits access of lubricant to rollers and raceways.
- **Caution: Do not allow these bearings to act as misalignment stops.**



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87. (Example DSRP4 FS464)

Bearing Number <sup>(1)</sup>		Bore d		Outside Diameter D		Widths				d <sub>1</sub>		r <sub>1</sub>		r		Rollers		Wt.		Radial Limit Load Rating <sup>(3)</sup>	
DSRP Series	GDSRP Series	+0.0000, -0.0005 +0.000, -0.013	+0.0000, -0.0005 +0.000, -0.013	+0.0000, -0.0005 +0.000, -0.013	+0.0000, -0.0005 +0.000, -0.013	B	C	Approx.		Approx.		No.	Dia.	Approx.		No.	Dia.	lbs.	kg	lbs.	N
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	N
DSRP4	GDSRP4	0.2500	6.350	0.9014	22.896	0.625	15.88	0.404	10.26	0.005	0.13	0.032	0.81	12	0.1514	3.846	0.06	0.027	3025	13400	
DSRP5	GDSRP5	0.3125	7.938	1.2500	31.750	0.812	20.62	0.515	13.08	0.015	0.38	0.032	0.81	11	0.2303	5.850	0.16	0.073	7350	32500	
DSRP6	GDSRP6	0.3750	9.525	1.4375	36.512	0.937	23.80	0.564	14.33	0.015	0.38	0.032	0.81	11	0.2681	6.810	0.24	0.109	9600	42500	
DSRP8	GDSRP8	0.5000	12.700	1.6875	42.862	1.000	25.40	0.775	19.68	0.015	0.38	0.044	1.12	12	0.3023	7.678	0.36	0.163	12500	56000	
*DSRP10	GDSRP10 <sup>(2)</sup>	0.6250	15.875	1.9375	49.212	1.125	28.58	0.869	22.07	0.015	0.38	0.044	1.12	14	0.3016	7.661	0.55	0.249	17700	78000	
*DSRP12	GDSRP12 <sup>(2)</sup>	0.7500	19.050	2.3750	60.325	1.312	33.32	1.150	29.21	0.015	0.38	0.044	1.12	13	0.3900	9.906	1.05	0.476	26900	120000	

<sup>(1)</sup> These bearings are self-aligning for 10° in either direction .  
<sup>(2)</sup> Will be made as demand justifies tooling.  
<sup>(3)</sup> Thrust limit load rating = 30% of the radial limit load rating.

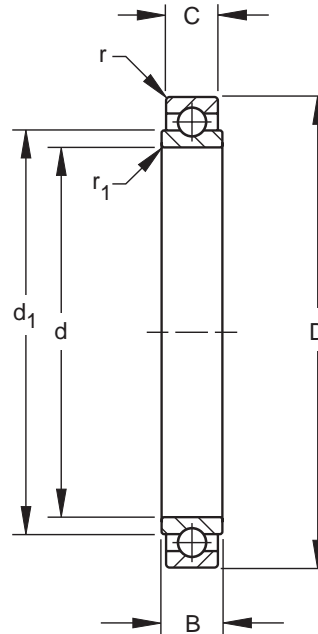
**Note:** These bearings should not be used as track rollers, cam follower rolls, and the like.

\*Check for availability.



# B500 Series Extra Light Torque Tube Type

- Extra light duty.
- Single row, ball.
- This series is made of bearing quality chromium-alloy, high carbon steel and is not cadmium plated.
- Open type - no seals or shields.
- Prepacked with a preservative.



Bearing Number	Bore d		Outside Diameter D		Widths				$d_1$		$r_1^{(3)}$		$r^{(3)}$		Wt.		Radial Limit Load Rating		Thrust Limit Load Rating	
	+0.0007, -0.0007 +0.018, -0.018		+0.0000, -0.0010 +0.0000, -0.025		+0.000, -0.005 +0.00, -0.13		+0.000, -0.005 +0.00, -0.13		Approx.		Approx.		Approx.		lbs.	N	lbs.	N		
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	N	lbs.	N
B538	0.6250	15.875	1.0625	26.988	0.281	7.14	0.250	6.35	0.777	19.74	0.015	0.38	0.015	0.38	0.02	0.009	3280	14600	1500	6700
B539	0.7500	19.050	1.1875	30.162	0.281	7.14	0.250	6.35	0.895	22.73	0.015	0.38	0.015	0.38	0.03	0.014	3750	16600	1700	7500
B540	0.8750	22.225	1.3125	33.338	0.281	7.14	0.250	6.35	1.016	25.81	0.015	0.38	0.015	0.38	0.04	0.018	4220	18600	1900	8500
B541	1.0625	26.988	1.5000	38.100	0.281	7.14	0.250	6.35	1.216	30.89	0.015	0.38	0.015	0.38	0.05	0.023	5000	22400	2200	9800
B542	1.3125	33.338	1.7500	44.450	0.281	7.14	0.250	6.35	1.451	36.86	0.015	0.38	0.015	0.38	0.07	0.032	5950	26500	2700	12000
B543	1.5625	39.688	2.0000	50.800	0.281	7.14	0.250	6.35	1.702	43.23	0.015	0.38	0.015	0.38	0.08	0.036	6880	30500	3200	14300
B544	1.8125 <sup>(1)</sup>	46.038 <sup>(1)</sup>	2.2500 <sup>(2)</sup>	57.150 <sup>(2)</sup>	0.281	7.14	0.250	6.35	1.970	50.04	0.015	0.38	0.015	0.38	0.09	0.041	7980	35500	3600	16000
B545	2.0625 <sup>(1)</sup>	52.388 <sup>(1)</sup>	2.6250 <sup>(2)</sup>	66.675 <sup>(2)</sup>	0.281	7.14	0.250	6.35	2.286	58.06	0.015	0.38	0.015	0.38	0.13	0.059	9220	41500	4000	17600
B546	2.3125 <sup>(1)</sup>	58.738 <sup>(1)</sup>	2.8750 <sup>(2)</sup>	73.025 <sup>(2)</sup>	0.281	7.14	0.250	6.35	2.527	64.19	0.015	0.38	0.015	0.38	0.15	0.068	10150	45500	4400	19600

<sup>(1)</sup> +.0010" (+.025mm), -.0010" (-.025mm).

<sup>(2)</sup> +.0000" (+.000mm), -.0015" (-.038mm).

<sup>(3)</sup> Maximum shaft or housing fillet radius which bearing corners will clear.

**Note:** These bearings should not be used as track rollers, cam follower rolls, and the like.

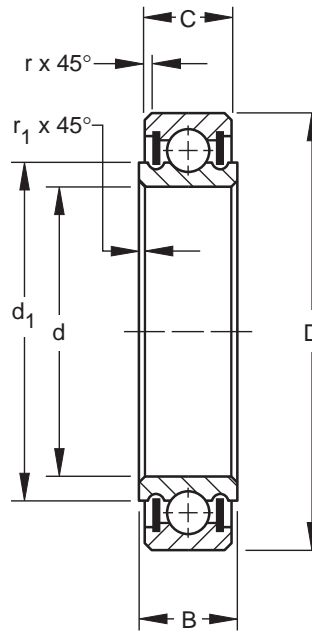
\*Check for availability.



# B500DD Series Extra Light Torque Tube Type

MS27646 • MIL-B-7949

- Extra light duty.
- Single row, ball.
- Teflon coated glass fabric shields.
- Exposed surfaces except bore, cap, and shields are cadmium plated.
- Prelubricated. (See Table 1, page 87 for options.)
- This series is dimensionally interchangeable with the unshielded B500 series.



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87. (Example B538DD FS464)

Bearing Number	MS 27646 Dash No.	Bore d		Outside Diameter D		Widths				d <sub>1</sub>	r <sub>1</sub> <sup>(3)</sup>		r <sup>(3)</sup>		Wt.		Radial Limit Load Rating		Thrust Limit Load Rating		
		in.	mm	in.	mm	B		C			Approx.		in.	mm	in.	mm	lbs.	kg	lbs.	N	lbs.
B538DD	-38	0.6250	15.875	1.0625	26.988	0.281	7.14	0.250	6.35	0.777	19.74	0.015	0.38	0.015	0.38	0.03	0.014	3280	14600	1500	6700
B539DD	-39	0.7500	19.050	1.1875	30.162	0.281	7.14	0.250	6.35	0.895	22.73	0.015	0.38	0.015	0.38	0.04	0.018	3750	16600	1700	7500
B540DD	-40	0.8750	22.225	1.3125	33.338	0.281	7.14	0.250	6.35	1.016	25.81	0.015	0.38	0.015	0.38	0.05	0.023	4220	18600	1900	8500
B541DD	-41	1.0625	26.988	1.5000	38.100	0.281	7.14	0.250	6.35	1.216	30.89	0.015	0.38	0.015	0.38	0.06	0.027	5000	22400	2200	9800
B542DD	-42	1.3125	33.338	1.7500	44.450	0.281	7.14	0.250	6.35	1.451	36.86	0.015	0.38	0.015	0.38	0.09	0.041	5950	26500	2700	12000
B543DD	-43	1.5625	39.688	2.0000	50.800	0.281	7.14	0.250	6.35	1.702	43.23	0.015	0.38	0.015	0.38	0.10	0.045	6880	30500	3200	14300
B544DD	-44	1.8125 <sup>(1)</sup>	46.038 <sup>(1)</sup>	2.2500 <sup>(2)</sup>	57.150 <sup>(2)</sup>	0.281	7.14	0.250	6.35	1.970	50.04	0.015	0.38	0.015	0.38	0.11	0.050	7980	35500	3600	16000
B545DD	-45	2.0625 <sup>(1)</sup>	52.388 <sup>(1)</sup>	2.6250 <sup>(2)</sup>	66.675 <sup>(2)</sup>	0.281	7.14	0.250	6.35	2.286	58.06	0.015	0.38	0.015	0.38	0.15	0.068	9220	41500	4000	17600
B546DD	-46	2.3125 <sup>(1)</sup>	58.738 <sup>(1)</sup>	2.8750 <sup>(2)</sup>	73.025 <sup>(2)</sup>	0.281	7.14	0.250	6.35	2.527	64.19	0.015	0.38	0.015	0.38	0.17	0.077	10150	45500	4400	19600

<sup>(1)</sup> +.0010" (+.025mm), -.0010" (-.025mm).

<sup>(2)</sup> +.0000" (+.000mm), -.0015" (-.038mm).

<sup>(3)</sup> Maximum shaft or housing fillet radius which bearing corners will clear.

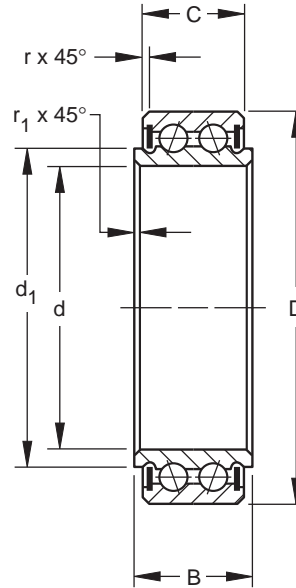
**Note:** These bearings should not be used as track rollers, cam follower rolls, and the like.

\*Check for availability.



# B5500WZZ Series Double Row Torque Tube Type

- Extra light duty.
- Double row, ball.
- Torque tube type.
- Teflon coated glass fabric seals.
- Exposed surfaces except bore, cap, and seals are cadmium plated.
- Prelubricated. (See Table 1, page 87 for options.)



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87. (Example B5538WZZ FS464)

Bearing Number	Bore d		Outside Diameter D		Widths				d <sub>1</sub>		r <sub>1</sub> <sup>(3)</sup>		r <sup>(3)</sup>		Wt.		Radial Limit Load Rating		Thrust Limit Load Rating	
	+0.0000,-.0005 +0.000,-.013		+0.0000-.0005 +0.000,-.013		+0.000,-.005 +0.00,-.13		+0.000-.005 +0.00,-.13		Approx.		Approx.									
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	N	lbs.	N
B5538WZZ	0.6250	15.875	1.0625	26.988	0.562	14.27	0.500	12.70	0.745	18.92	0.015	0.38	0.015	0.38	0.04	0.018	6250	28000	2060	9150
B5539WZZ	0.7500	19.050	1.1875	30.162	0.562	14.27	0.500	12.70	0.865	21.97	0.015	0.38	0.015	0.38	0.06	0.027	7190	32000	2370	10600
B5540WZZ	0.8750	22.225	1.3125	33.338	0.562	14.27	0.500	12.70	0.989	25.12	0.015	0.38	0.015	0.38	0.08	0.036	8120	36000	2680	12000
B5541WZZ	1.0625	26.988	1.5000	38.100	0.562	14.27	0.500	12.70	1.190	30.23	0.015	0.38	0.015	0.38	0.1	0.045	9690	43000	3200	14300
B5542WZZ	1.3125	33.338	1.7500	44.450	0.562	14.27	0.500	12.70	1.430	36.32	0.015	0.38	0.015	0.38	0.14	0.064	11600	52000	3820	17000
B5543WZZ	1.5625	39.688	2.0000	50.800	0.562	14.27	0.500	12.70	1.665	42.29	0.015	0.38	0.015	0.38	0.16	0.073	13400	60000	4430	19600
B5544WZZ	1.8125 <sup>(1)</sup>	46.038 <sup>(1)</sup>	2.2500 <sup>(2)</sup>	57.150 <sup>(2)</sup>	0.562	14.27	0.500	12.70	1.935	49.15	0.015	0.38	0.015	0.38	0.18	0.082	15600	69500	5160	22800
B5545WZZ	2.0625 <sup>(1)</sup>	52.388 <sup>(1)</sup>	2.6250 <sup>(2)</sup>	66.675 <sup>(2)</sup>	0.562	14.27	0.500	12.70	2.265	57.53	0.015	0.38	0.015	0.38	0.26	0.118	18100	80000	5980	26500
*B5546WZZ	2.3125 <sup>(1)</sup>	58.738 <sup>(1)</sup>	2.8750 <sup>(2)</sup>	73.025 <sup>(2)</sup>	0.562	14.27	0.500	12.70	2.505	63.63	0.015	0.38	0.015	0.38	0.3	0.136	20000	90000	6600	29000

<sup>(1)</sup> +.0000" (+.000mm), -.0008" (-.020mm).  
<sup>(2)</sup> +.0000" (+.000mm), -.0007" (-.018mm).

<sup>(3)</sup> Maximum shaft or housing fillet radius which bearing corners will clear.  
**Note:** These bearings should not be used as track rollers, cam follower rolls, and the like.

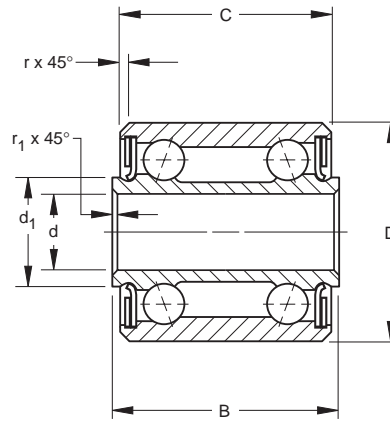
\*Check for availability.



# DW Series

MS27647 • MIL-B-7949

- Extra wide, double row, ball.
- Equipped with Teflon seals.
- Exposed surfaces except bore, cap, and seals are cadmium plated.
- Prelubricated. (See Table 1, page 87 for options.)



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE CONTROL BEARINGS PAGE 87. (Example DW4K2 FS464)

Brg. No.	MS 27647 Dash No.	Bore d		Outside Diameter D		Widths		d <sub>1</sub>	r <sub>1</sub>	r	Wt.	Radial Limit Load Rating		Thrust Limit Load Rating							
		+0.0000, -0.0005 +0.000, -0.013	+0.0000, -0.0005 +0.000, -0.013	+0.000, -0.005 +0.00, -0.13	+0.000, -0.005 +0.00, -0.13	B	C					Approx.	Approx.	lbs.	N	lbs.	N				
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	N	lbs.	N				
DW4K2 <sup>(1)</sup>	-4A	0.2500	6.350	0.6250	15.875	0.562	14.27	0.500	12.70	0.339	8.61	0.005	0.13	0.016	0.41	0.025	0.011	1400	6200	500	2240
DW4K <sup>(1)</sup>	-4	0.2500	6.350	0.7500	19.050	0.875	22.22	0.750	19.05	0.380	9.65	0.005	0.13	0.016	0.41	0.04	0.018	2770	12200	900	4000
DW4	-	0.2500	6.350	0.7500	19.050	0.875	22.22	0.750	19.05	0.375	9.52	0.005	0.13	0.016	0.41	0.06	0.027	3750	16600	1240	5500
DW5	-5	0.3125	7.938	0.8750	22.225	0.938	23.83	0.813	20.65	0.469	11.91	0.005	0.13	0.016	0.41	0.07	0.032	5140	22800	1600	7100
DW6	-6	0.3750	9.525	1.0625	26.988	1.188	30.18	1.063	27.00	0.573	14.55	0.005	0.13	0.016	0.41	0.12	0.054	8440	37500	2600	11600
DW8	-8	0.5000	12.700	1.4375	36.512	1.500	38.10	1.375	34.92	0.712	18.08	0.005	0.13	0.032	0.81	0.29	0.132	15520	69500	4700	20800

<sup>(1)</sup> Retainer type.

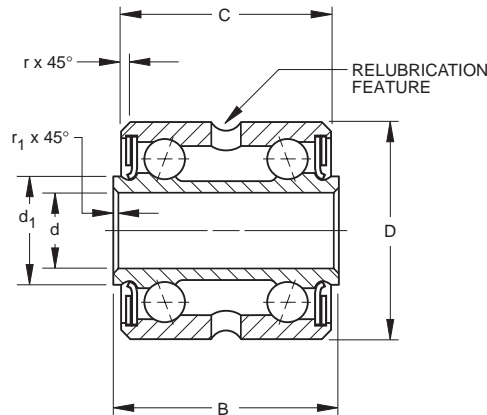
Note: These bearings should not be used as track rollers, cam follower rolls, and the like.

\*Check for availability.

# GDW Series

MS27647 • MIL-B-7949

- Extra wide, double row, ball.
- Equipped with Teflon seals.
- Exposed surfaces except bore are cadmium plated.
- Dimensionally interchangeable with the DW series, the GDW series is relubricable through holes and a groove in the outer ring.
- Prelubricated. (See Table 1, page 87 for options.)



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87. (Example GDW4K2 FS464)

Brg. No.	MS 27647 Dash No.	Bore d		Outside Diameter D		Widths		d <sub>1</sub>	r <sub>1</sub>	r	Wt.	Radial Limit Load Rating		Thrust Limit Load Rating							
		+0.0000, -0.0005 +0.000, -0.013	+0.0000, -0.0005 +0.000, -0.013	+0.000, -0.005 +0.00, -0.13	+0.000, -0.005 +0.00, -0.13	B	C					Approx.	Approx.	lbs.	N	lbs.	N				
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	N	lbs.	N				
GDW4K2 <sup>(1)</sup>	-4AG	0.2500	6.350	0.6250	15.875	0.562	14.27	0.500	12.70	0.339	8.61	0.005	0.13	0.016	0.41	0.025	0.011	1400	6200	500	2240
GDW4K <sup>(1)</sup>	-4G	0.2500	6.350	0.7500	19.050	0.875	22.22	0.750	19.05	0.380	9.65	0.005	0.13	0.016	0.41	0.04	0.018	2770	12200	900	4000
GDW4	-	0.2500	6.350	0.7500	19.050	0.875	22.22	0.750	19.05	0.375	9.52	0.005	0.13	0.016	0.41	0.06	0.027	3750	16600	1240	5500
GDW5	-5G	0.3125	7.938	0.8750	22.225	0.938	23.83	0.813	20.65	0.469	11.91	0.005	0.13	0.016	0.41	0.07	0.032	5140	22800	1600	7100
GDW6	-6G	0.3750	9.525	1.0625	26.988	1.188	30.18	1.063	27.00	0.573	14.55	0.005	0.13	0.016	0.41	0.12	0.054	8440	37500	2600	11600
GDW8	-8G	0.5000	12.700	1.4375	36.512	1.500	38.10	1.375	34.92	0.712	18.08	0.005	0.13	0.032	0.81	0.29	0.132	15520	69500	4700	20800

<sup>(1)</sup> Retainer type.

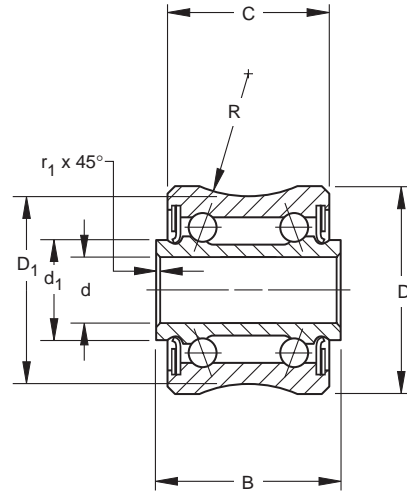
Note: These bearings should not be used as track rollers, cam follower rolls, and the like.

\*Check for availability.



# G Series

- Single and double row.
- Equipped with Buna N rubber seals or stainless steel shields as indicated below.
- Exposed surfaces except bore, cap, and seals are cadmium plated.
- Prepacked with lubricant.

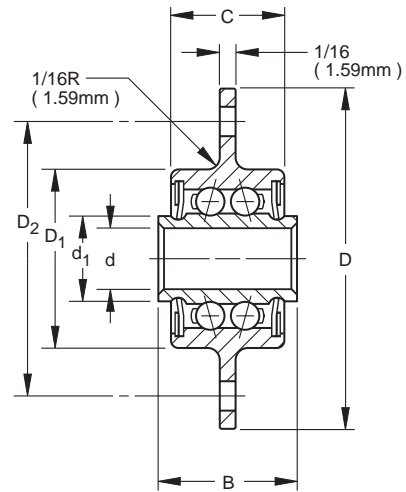


Bearing Number	Bore d		Outside Diameter D		Widths				d <sub>1</sub>		r <sub>1</sub>		D <sub>1</sub>		R		Max. Safe Working Load Radial <sup>(1)</sup>		Wt.	
	in.	mm	in.	mm	B		C		in.	mm	in.	mm	in.	mm	in.	mm	lbs.	N	lbs.	kg
			+0.000 -0.010 +0.00 -0.25		+0.000 -0.005 +0.00 -0.13		+0.000 -0.005 +0.00 -0.13		<b>Approx.</b>		+0.015 -0.000 +0.38 -0.00									<b>Approx.</b>
*GD5M28	0.3125 0.3120	7.938 7.925	1.015	25.78	0.9375 23.81	0.812	20.62	0.472 11.99	0.005 0.13	0.901 22.89	0.900 22.86	0.895 22.73	0.905 22.99	600 2650	0.1 0.045					

<sup>(1)</sup> The maximum safe working load is that radial load to obtain 100,000 feet (30,500 M) peripheral travel life.  
\* Check for availability.

# BCP Series

- Double row, ball.
- Equipped with Buna N rubber seals.
- Exposed surfaces except bore, cap, and seals are cadmium plated.
- Prepacked with lubricant conforming to MIL-G-23827



Bearing Number <sup>(1)</sup>	Bore d	Flange Outside Diameter D		Widths				d <sub>1</sub>		D <sub>1</sub>		D <sub>2</sub>		Wt.		Radial Limit Load Rating		Thrust Limit Load Rating	
		in.	mm	in.	mm	B		C		in.	mm	in.	mm	lbs.	kg	lbs.	N	lbs.	N
		+0.0000 -0.0005 +0.000 -0.13		±0.010 ±.25	+0.000 -0.005 +0.00 -0.13		±0.005 ±.13		<b>Approx.</b>		±0.010 ±.25		±0.005 ±.13		<b>Approx.</b>				
BCP4W10	FS302	0.25 6.350	1.625 41.28	0.625 15.88	0.500 12.70	0.404 10.26	0.750 19.05	1.312 33.32	0.06 0.027	2770 12200	700 3100								
BCP5W11	FS302	0.3125 7.938	1.687 42.85	0.687 17.45	0.562 14.27	0.453 11.51	0.875 22.22	1.375 34.92	0.08 0.036	3280 14600	900 4000								

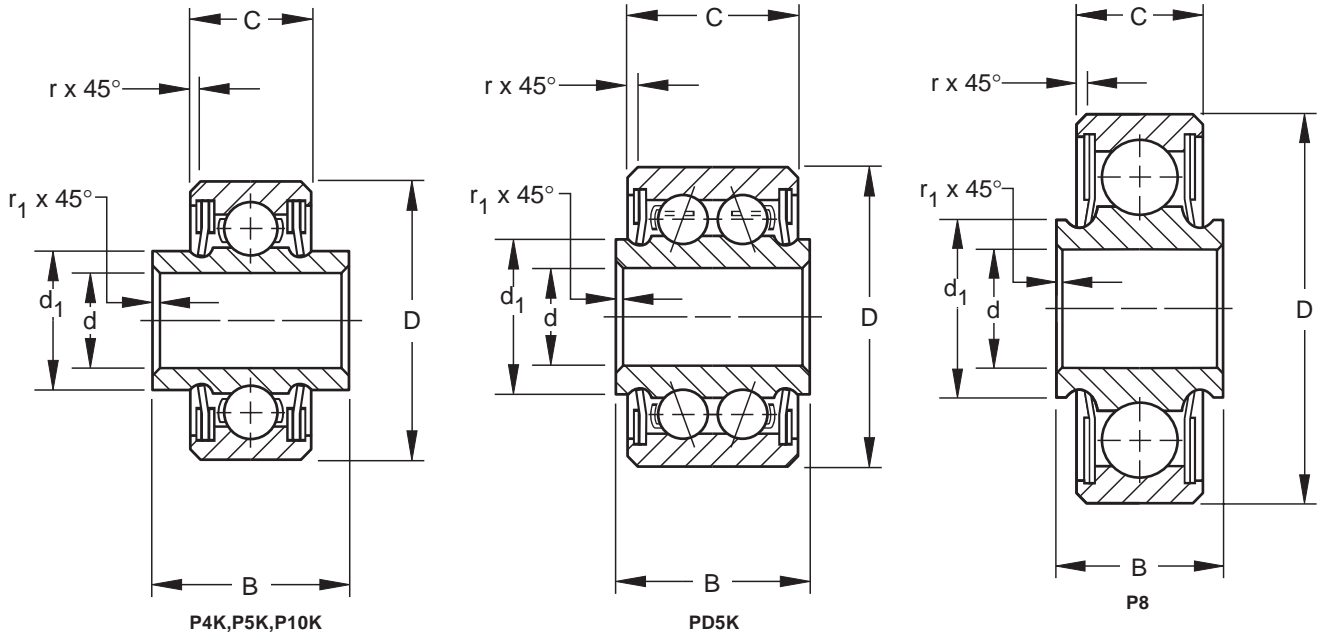
<sup>(1)</sup> Both sizes are furnished with 12 equally spaced holes in the flange. Holes are .140 (+.005,-.000) inches in diameter.





# P Series

- Equipped with Teflon seals.
- Exposed surfaces except bore, cap, and seals are cadmium plated.
- Prelubricated. (See Table 1, page 87 for options.)
- Retainer type (except P8).
- For MIL-P-7034 Pulleys.



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87. (Example P4K FS464)

Bearing Number	Bore d		Outside Diameter D		Widths				d <sub>1</sub>	r <sub>1</sub>	r	Wt.		Radial Limit Load Rating	Thrust Limit Load Rating					
	in.	mm	in.	mm	B	C	in.	mm				lbs.	kg			lbs.	N			
P4K	0.2500	6.350	0.8750	22.225	0.438	11.13	0.375	9.52	0.423	10.74	0.005	0.13	0.022	0.56	0.04	0.018	1710	7650	800	3550
P5K	0.3125	7.938	0.8750	22.225	0.625	15.88	0.375	9.52	0.455	11.56	0.005	0.13	0.022	0.56	0.04	0.018	1710	7650	800	3550
PD5K	0.3125	7.938	0.9375	23.812	0.625	15.88	0.563	14.30	0.455	11.56	0.005	0.13	0.022	0.56	0.07	0.032	3420	15300	1030	4550
P8 <sup>(1)</sup>	0.5000	12.700	1.6875	42.862	0.750	19.05	0.563	14.30	0.768	19.51	0.005	0.13	0.032	0.81	0.24	0.109	11800	52000	5200	23200
P10K	0.6250	15.875	1.1875	30.162	0.438	11.13	0.375	9.52	0.769	19.53	0.005	0.13	0.022	0.56	0.06	0.027	2440	10800	1100	4900

<sup>(1)</sup> Full type - No retainer.

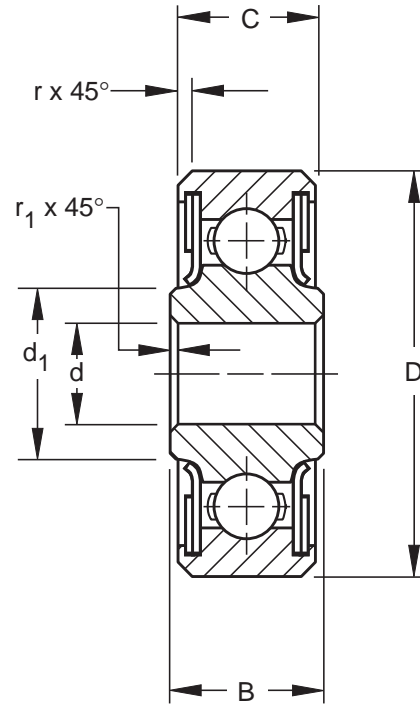
**Note:** Although the P Series bearings are designed for use in pulleys, they are well suited for use in other airframe applications. However these bearings should not be used as track rollers, cam follower rolls, and the like.

\*Check for availability.



# P Series

- Equipped with Teflon seals.
- Exposed surfaces except bore, cap, and seals are cadmium plated.
- Prelubricated. (See Table 1, page 87 for options.)
- Retainer type.
- For MIL-P-7034 Pulleys.



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87. (Example P4K FS464)

Bearing Number	Bore d		Outside Diameter D		Widths B C		d <sub>1</sub>		r <sub>1</sub>		r		Wt.		Radial Limit Load Rating	Thrust Limit Load Rating				
	+0.0000,-.0005 +0.000,-.013		+0.0000,-.0005 +0.000,-.013		+0.000,-.005 +0.00,-.13		+0.000,-.005 +0.00,-.13		+0.015,-.000 +0.38,-.00		+0.015,-.000 +0.38,-.00		Approx.							
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg						
*KP3K	0.1900	4.826	0.7774	19.746	0.297	7.54	0.270	6.86	0.332	8.43	0.005	0.13	0.024	0.61	0.02	0.009	1090	4800	600	2650
*KP3AK	0.1900	4.826	0.6250	15.875	0.297	7.54	0.234	5.94	0.297	7.54	0.005	0.13	0.016	0.41	0.01	0.005	705	3150	385	1700
*KP3AK-2 <sup>(1)</sup>	0.1900	4.826	0.6250	15.875	0.625	15.88	0.234	5.94	0.297	7.54	0.005	0.13	0.016	0.41	0.02	0.009	705	3150	385	1700
*W4AK	0.2500	6.350	0.7500	19.050	0.438	11.13	0.312	7.92	0.372	9.45	0.005	0.13	0.016	0.41	0.03	0.014	1090	4800	600	2650
*KP4K	0.2500	6.350	0.9014	22.896	0.484	12.29	0.335	8.51	0.390	9.91	0.005	0.13	0.034	0.86	0.04	0.018	1710	7650	800	3550

<sup>(1)</sup> Not used in MIL-P-7034 Pulleys.

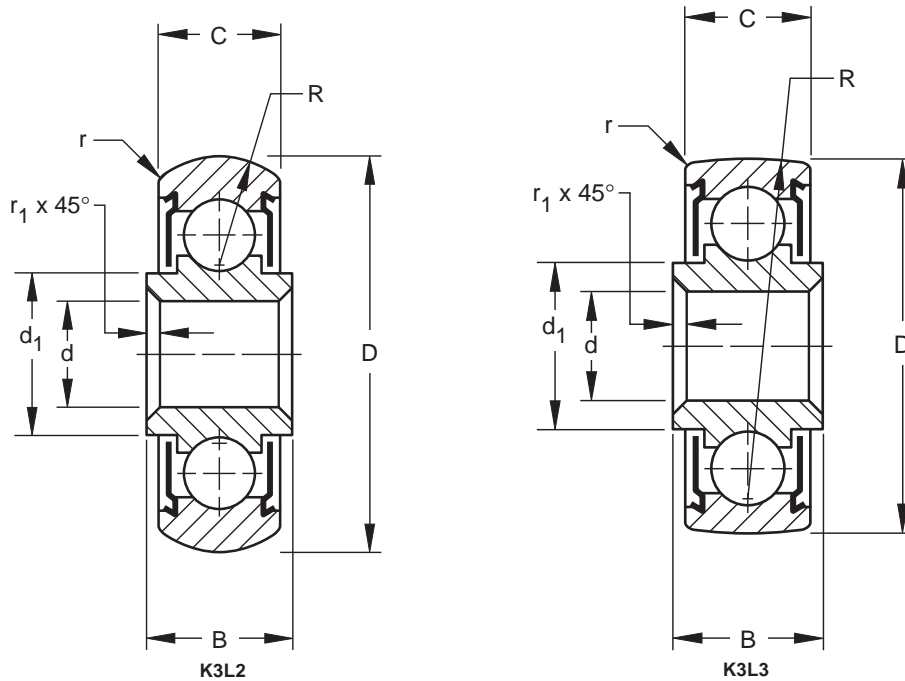
**Note:** Although the P Series bearings are designed for use in pulleys, they are well suited for use in other airframe applications. However these bearings should not be used as track rollers, cam follower rolls, and the like.

\*Check for availability.



# K Series

- Single row, ball.
- Exposed surfaces except bore, cap, and seals are cadmium plated.
- Equipped with Teflon seals or stainless steel shields.



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87. (Example KP3L2 FS464)

Bearing Number	Bore d		Outside Diameter D		Widths				d <sub>1</sub>		r <sub>1</sub>		r		R		Max. Safe Working Load Radial <sup>(1)</sup>		Wt. Approx.	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs	N	lbs.	kg
*K3L2 <sup>(2)</sup>	0.1900	4.826	0.687	17.45	0.245	6.22	0.203	5.16	0.275	6.98	0.005	0.13	0.020	0.51	0.187	4.75	200	880	0.01	0.005
*K3L3 <sup>(2)</sup>	0.1900	4.826	0.635	16.13	0.245	6.22	0.203	5.16	0.275	6.98	0.005	0.13	0.020	0.51	0.550	13.97	200	880	0.01	0.005
			0.632	16.05											0.500	12.70				

<sup>(1)</sup>The maximum safe working load is that radial load to obtain 100,000 feet (30,500m) peripheral travel life.

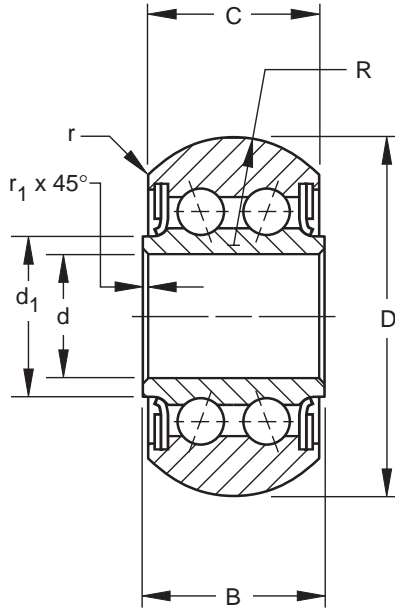
<sup>(2)</sup> Factory Specification (FS) not required. Prepacked with lubricant conforming to MIL-G-23827. Equipped with stainless steel shields.

\*Check for availability.



# D Series

- Double row, ball.
- These bearings incorporate Teflon seals.
- Exposed surfaces except bore, cap, and seals are cadmium plated.
- Prelubricated. (See Table 1, page 87 for options.)



TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE PAGE 87.

Bearing Number	Bore d		Outside Diameter D		Widths				d <sub>1</sub>		r <sub>1</sub>		r		R		Max. Safe Working Load Radial <sup>(1)</sup>		Wt.	
	+0.0000,-.0005 +0.000,-.013				+0.000,-.005 +0.00,-.13		+0.000,-.005 +0.00,-.13		Approx.		+0.015-.000 +.38,-.00		(REF)				lbs N		Approx.	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs	N	lbs.	kg
D7R6-2	0.4375	11.112	1.250	31.75	0.625	15.88	0.600	15.24	0.566	14.38	0.005 <sup>(2)</sup>	0.13 <sup>(2)</sup>	0.05	1.27	0.375	9.52	2000	8800	0.16	0.073
			1.240	31.50			0.590	14.99							0.365	9.27				

<sup>(1)</sup> The maximum safe working load is that radial load to obtain 100,00 feet (30,500m) peripheral travel life.

<sup>(2)</sup> +.010" (+.25mm) -.000" (-.00mm).

<sup>(3)</sup> Centerline of Radius located .090" (2.29mm) to .120" (3.05mm) from faces of outer ring.

<sup>(4)</sup> Centerline of Radius located .100" (2.54mm) to .120" (3.05mm) from faces of outer ring.

\*Check for availability.