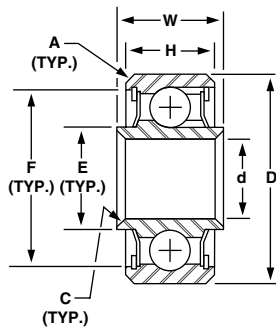


KP- (AS27640) / MKP- Series



Full ball complement (no retainer)

Notes:

1. Rings and balls are manufactured from premium quality AISI 52100 chrome steel.
2. Operating temperature range: -65 to +250 °F.
3. All bearings include removable PTFE seals, except as noted.
4. Bearings are lubricated with MIL-PRF-81322 grease, 80% minimum fill, unless otherwise specified.
5. External surfaces (except bore) are cadmium plated per AMS-QQ-P-416. All dimensions apply after plating.
6. Custom sizes, materials, tolerances, radial internal clearances, lubrication, plating, etc., are available upon request.
7. See "Airframe Part Numbering System" on page 5 for correct NHBB nomenclature.
8. All dimensions are in inches, unless otherwise specified.

Refer to the Qualifications and Manufacturing Schedule for a current list of the Precision Division's AS7949 qualifications and manufacturing capabilities.

KP- (AS27640) — Qualified to SAE AS7949

NHBB BASIC P/N	MS27640 DASH NO.	BORE d	O.D. D	RING WIDTH		BALL COMPLEMENT		RING SHOULDER DIAMETER		RING CHAMFER X 45°		LOAD RATINGS (LBS.)				APPROX. WEIGHT LBS.	MAX. STARTING TORQUE <sup>^</sup> OZ.-IN.
				OUTER H	INNER W	NO.	DIA.	OUTER F	INNER E	OUTER A	INNER C	STATIC		DYNAMIC RADIAL+ RING ROTATION			
												RADIAL LIMIT	THRUST LIMIT	INNER	OUTER		
		+0.0000 -0.0005	+0.0000 -0.0005	+0.000 -0.005	+0.000 -0.005			REF.	REF.	+0.015 -0.000	+0.015 -0.000	RADIAL LIMIT	AXIAL LIMIT				
KP3L <sup>(1)</sup>	-3A	.1900	.6250	.203	.245	10	1/8	.537	.272	.010	.005	1560	700	1520	1260	.01	1.0
KP3	-3	.1900	.7774	.270	.297	12	1/8	.620	.331	.022	.005	1880	900	1700	1450	.03	1.0
KP4	-4	.2500	.9014	.335	.484	11	5/32	.735	.390	.032	.005	2680	1200	2410	2030	.04	1.0
KP5	-5	.3125	1.2500	.375	.558	9	1/4	1.009	.472	.032	.015	5620	2500	4900	3970	.09	1.0
KP6	-6	.3750	1.4375	.469	.620	10	9/32	1.236	.594	.032	.015	7910	3500	6540	5410	.15	2.0
KP8	-8	.5000	1.6875	.500	.620	10	11/32	1.463	.768	.044	.015	11800	5200	9320	7700	.21	3.0
KP10	-10	.6250	1.9375	.500	.620	10	3/8	1.695	.853	.044	.015	14100	6200	11000	9060	.28	4.0

Radial internal clearance: .0004 to .0010

<sup>(1)</sup> Bonded PTFE seals – KP3L (MS27640-3A) only.

MKP- Precision Series

NHBB BASIC P/N	BORE d	O.D. D	RING WIDTH		BALL COMPLEMENT		RING SHOULDER DIAMETER		RING CHAMFER X 45°		LOAD RATINGS (LBS.)				APPROX. WEIGHT LBS.	MAX. STARTING TORQUE <sup>^</sup> OZ.-IN.
			OUTER H	INNER W	NO.	DIA.	OUTER F	INNER E	OUTER A	INNER C	STATIC		DYNAMIC RADIAL+ RING ROTATION			
											RADIAL LIMIT	THRUST LIMIT	INNER	OUTER		
	+0.0000 -0.0003	+0.0000 -0.0004	+0.000 -0.005	+0.000 -0.0025			REF.	REF.	+0.015 -0.000	+0.015 -0.000	RADIAL LIMIT	AXIAL LIMIT				
MKP3L <sup>(1)</sup>	.1900	.6250	.203	.2450	10	1/8	.537	.272	.010	.005	1560	700	1520	1260	.01	1.0
MKP3	.1900	.7774	.270	.2970	12	1/8	.620	.331	.022	.005	1880	900	1700	1450	.03	1.0
MKP4	.2500	.9014	.335	.4840	11	5/32	.735	.390	.032	.005	2680	1200	2410	2030	.04	1.0
MKP5	.3125	1.2500	.375	.5580	9	1/4	1.009	.472	.032	.015	5620	2500	4900	3970	.09	1.0
MKP6	.3750	1.4375	.469	.6200	10	9/32	1.236	.594	.032	.015	7910	3500	6540	5410	.15	2.0
MKP8	.5000	1.6875	.500	.6200	10	11/32	1.463	.768	.044	.015	11800	5200	9320	7700	.21	3.0
MKP10	.6250	1.9375	.500	.6200	10	3/8	1.695	.853	.044	.015	14100	6200	11000	9060	.28	4.0

Radial internal clearance: .0002 to .0005

<sup>(1)</sup> Bonded PTFE seals – MKP3L only.

+Dynamic radial load ratings are for operation up to 250 °F. Reduce load ratings by 20% for 250 to 350 °F operation. Dynamic radial load ratings are based on an average life of 10,000 complete 90° cycles.

<sup>^</sup>Torque limits are for bearings lubricated with MIL-PRF-81322 grease. For bearings lubricated with MIL-PRF-23827, multiply torque limits by a factor of 1.2.