

**REV.  
B**

**AS27640**

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODISS SPECIFIED IN THE SOLICITATION: SAE AS7949.

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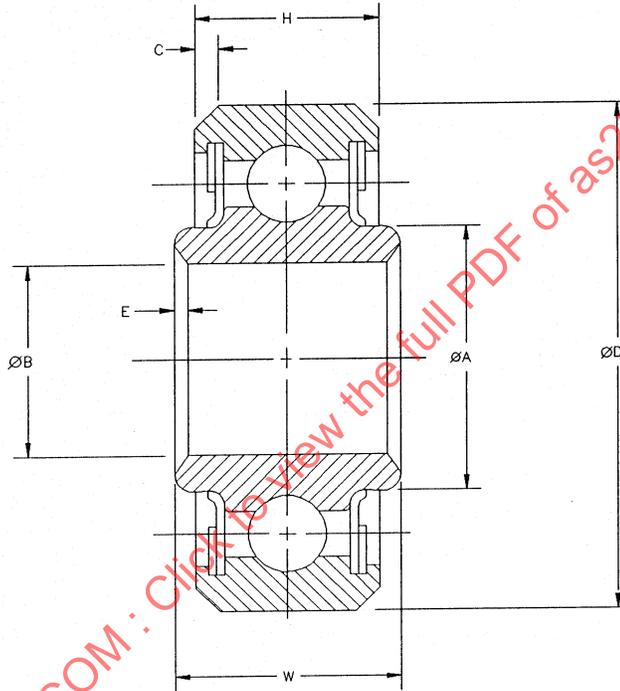


FIGURE 1

ISSUED 1998-04 REVISED 2002-09

PREPARED BY AIRFRAME CONTROL BEARINGS GROUP (ACBG)

**SAE Aerospace**  
An SAE International Group

**AEROSPACE STANDARD**  
(R) BEARING, BALL, AIRFRAME,  
ANTI-FRICTION, HEAVY DUTY

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TABLE 1 - DIMENSIONS AND LOADS

MS DASH NO.	BEARING PART NO. REF. ONLY	ØB 2/ BORE DIAMETER	ØD 1/ OUTSIDE DIAMETER	W WIDTH INNER RING	H WIDTH OUTER RING	øA SHOULDER DIAMETER	E		C		RADIAL LIMIT LOAD RATING LB	THRUST LIMIT LOAD RATING LB	5/ RADIAL LOAD RATING (LB) FOR AVERAGE LIFE OF 10,000 COMPLETE 90° CYCLES		WEIGHT POUNDS (APPROX)	7/ MAXIMUM STARTING TORQUE (IN-OZ)
							4/ INNER RING CORNER CHAMFER	3/ OUTER RING CORNER CHAMFER	CASE I	CASE II						
-3A	KP3L	+0.000 -0.005	.6250 .7774	.245 .297	.203 .270	.280 .331	.015 -.000	.010 .022	.1560 1880	700 900	1520 1700	1260 1450	.01 .03	1		
-4	KP4	.2500	.9014	.484	.335	.390	.015	.032	2680	1200	2410	2030	.04	1		
-5	KP5	.3125	1.2500	.558	.375	.469	.015	.032	5620	2500	4900	3970	.09	1		
-6	KP6	.3750	1.4375	.620	.469	.591	.015	.044	7910	3500	6540	5410	.15	2		
-8	KP8	.5000	1.6875	.620	.500	.768	.015	.044	11800	5200	9320	7700	.21	3		
-10	KP10	.6250	1.9375	.620	.500	.850	.015	.044	14100	6200	11000	9060	.28	4		

- 1/ DIMENSIONS TO BE MET AFTER PLATING.
- 2/ OUT-OF-ROUND TOLERANCES: BORE: +.0002, -.0007; OUTER DIA: +.0005, -.0010.
- 3/ 45° CHAMFER OR A RADIUS GIVING APPROXIMATELY THE SAME GRIP FOR STAKING THE BEARING IN THE HOUSING WILL BE ACCEPTABLE.
- 4/ 45° CHAMFER OR A RADIUS GIVING APPROXIMATELY THE SAME FILLET CLEARANCE WILL BE ACCEPTABLE.
- 5/ CASE I - LOAD FIXED WITH RESPECT TO OUTER RING.  
CASE II - LOAD FIXED WITH RESPECT TO INNER RING.
- 6/ THESE RATINGS ARE FOR OPERATION UP TO 250 °F. FOR OPERATION UP TO 350 °F, THE RATINGS SHALL BE REDUCED BY 20%.
- 7/ SPECIFIED LIMITS ARE FOR BEARINGS LUBRICATED WITH MIL-PRF-81322 GREASE. FOR BEARINGS LUBRICATED WITH MIL-PRF-23827 GREASE, THE TORQUE LIMIT SHALL BE THE SPECIFIED VALUE IN THE TABLE MULTIPLIED BY 1.2.