

**REV.
B**

AS27648

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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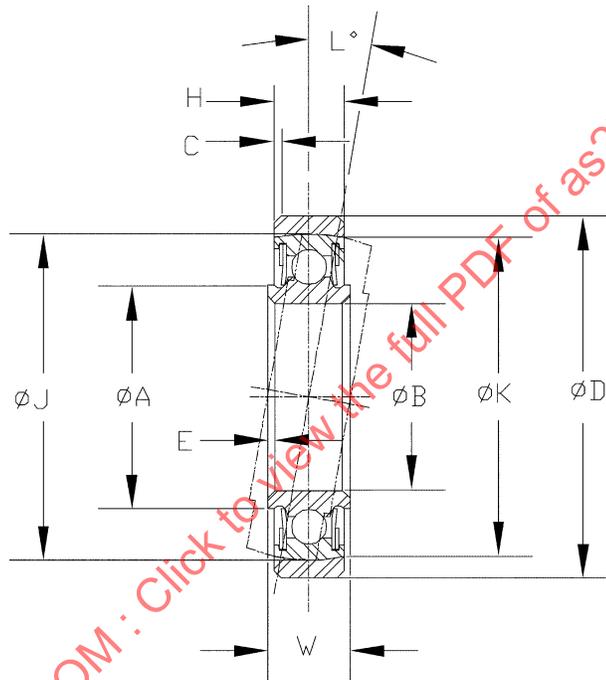


FIGURE 1

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ISSUED 1998-04 REVISED 2002-06

PREPARED BY AIRFRAME CONTROL BEARINGS GROUP (ACBG)



AEROSPACE STANDARD

(R) BEARING, BALL, AIRFRAME,
ANTI-FRICTION, EXTERNAL SELF ALIGNING,
EXTRA LIGHT DUTY

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TABLE 1 - DIMENSIONS AND LOADS

MS DASH NO.	BEARING PART NO. REF. ONLY	ØB	1/	2/	ØD	W	H	ØA	3/	4/	ØK	ØJ	9/	RADIAL THRUST LIMIT LOAD RATING LB	5/	8/	
		BORE DIAMETER	OUTSIDE DIAMETER	WIDTH INNER RING	WIDTH OUTER RING	SHOULDER DIAMETER INNER RING APPROX.	INNER RING CORNER CHAMFER	TO SHARP CORNER (REF)	BRG SPHERE O.D. (REF)	MISALIGNMENT ANGLE, EITHER DIRECTION (REF)	RADIAL LIMIT LOAD RATING LB	RADIAL LOAD RATING (LB) FOR AVERAGE LIFE OF 10,000 COMPLETE 90° CYCLES	MAXIMUM STARTING TORQUE (IN-OZ)				
-16	KP16BS	+0.000 -0.010	1.9375		1.447			1.709			1.740	7° 25'	4260	1600	CASE I 3960	.18	5
-21	KP21BS	+0.000 -0.010	2.2500		1.477			2.028			2.052	6° 30'	4590	2000	CASE II 4290	.20	7
-23	KP23BS	+0.000 -0.010	2.3750		1.575			2.155			2.178	6°	4650	2200	CASE I 4360	.22	9
-25	KP25BS	+0.000 -0.010	2.5000	.437	1.693			2.282			2.302	5° 45'	4680	2300	CASE I 4420	.25	9
-29	KP29BS	+0.000 -0.010	2.7500		1.931			2.535			2.552	5°	4760	2600	CASE I 4530	.27	14
-33	KP33BS	+0.000 -0.010	3.0000		2.247			2.787			2.802	5°	4820	2900	CASE I 4630	.30	14
-37	KP37BS	+0.000 -0.010	3.2500		2.468			3.039			3.052	4° 30'	4880	3200	CASE I 4690	.33	20
-47	KP47BS	+0.000 -0.010	4.1250		3.093			3.846			3.865	4° 30'	6660	5000	CASE I 6390	.64	30
-48	KP48BS	+0.000 -0.010	4.2500	.531	3.222		.469	3.972	.039		3.990	4°	8150	5500	CASE I 7840	.69	30
-49	KP49BS	+0.000 -0.010	4.2500		3.222			3.972			3.990	4°	8150	5500	CASE I 7840	.69	32

1/ ALL DIMENSIONS TO BE MET AFTER PLATING.

2/ OUT-OF-ROUNDNESS: BORE: +.0003, -0.0013 OUTER DIAMETER: +.0010, -.0020.

3/ A RADIUS GIVING APPROXIMATELY THE SAME GRIP FOR STAKING THE BEARING IN THE HOUSING IS ACCEPTABLE IN LIEU OF THE 45° FLAT SURFACE CHAMFER FOR DIMENSION C.

4/ A RADIUS GIVING APPROXIMATELY THE SAME FILLET CLEARANCE IS ACCEPTABLE IN LIEU OF THE 45° FLAT SURFACE CHAMFER FOR DIMENSION E.

5/ CASE I = LOAD IS FIXED WITH RESPECT TO THE OUTER RING.

6/ THESE RATINGS ARE FOR OPERATION UP TO 250 °F. WHEN SUBJECT TO OPERATION UP TO 350 °F, THE RATINGS SHALL BE REDUCED BY 20%.

7/ BORE TOLERANCE FOR -16 IS +.0000 - .0005.

8/ 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.

9/ FOR DESIGN REFERENCE ONLY. WHEN INSTALLED IN THE APPLICATION, THE MISALIGNMENT ANGLE SHOULD NOT EXCEED THE LIMITING VALUES PRESENTED IN TABLE 1.