

REV.
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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.

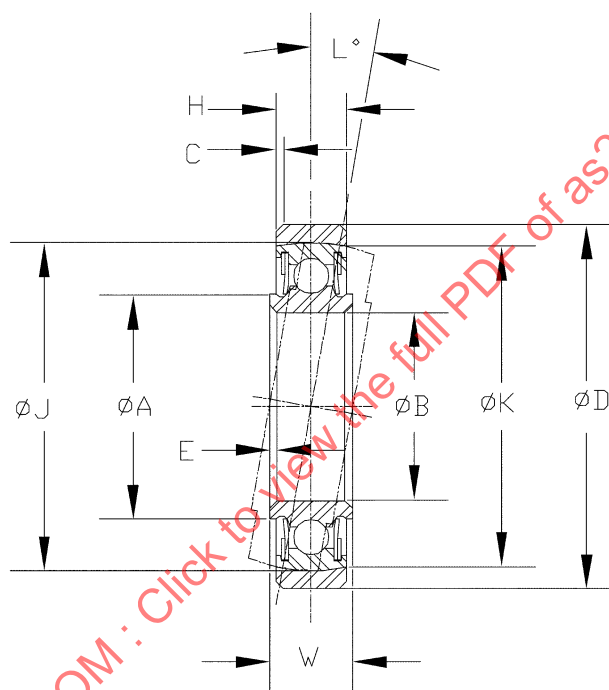


FIGURE 1

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PREPARED BY AIRFRAME CONTROL BEARINGS GROUP (ACBG)

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AEROSPACE STANDARD

(R)

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

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SHEET 1 OF 3**REV.**
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TABLE 1 - DIMENSIONS AND LOADS

MS DASH NO.	BEARING PART NO. REF. ONLY	ØB	ØD	W	H	ØA	E AND C		ØK	ØJ	L ° 9/ MISALIGNMENT ANGLE, EITHER DIRECTION (REF)	RADIAL LIMIT LOAD RATING LB	THRUST LIMIT LOAD RATING LB	6/ RADIAL LOAD RATING (LB) FOR AVERAGE LIFE OF 10,000 COMPLETE 90° CYCLES		WEIGHT POUNDS (APPROX)	8/ MAXIMUM STARTING TORQUE (IN-OZ)
		7/ BORE DIAMETER	1/ OUTSIDE DIAMETER	2/ WIDTH INNER RING	1/ WIDTH OUTER RING	SHOULDER DIAMETER INNER RING APPROX.	3/ INNER RING CORNER CHAMFER	4/ OUTER RING CORNER CHAMFER	TO SHARP CORNER (REF)	BRG SPHERE O.D. (REF)				CASE I	CASE II		
-16	KP16BS	+0.000 -0.0010	1.0000 1.9375	+0.000 -0.005	+0.000 -0.005	1.147 1.477	+0.015 -0.000		1.709 2.028	1.740 2.052	7° 25' 6° 30'	1600 2000	1600 2000	4260 4590	3960 4290	.18 .20	5
-21	KP21BS	1.3130	2.2500			1.477			2.155	2.178	6°	2200	2200	4650	4360	.22	7
-23	KP23BS	1.4380	2.3750			1.575			2.282	2.302	5° 45'	2300	2300	4680	4420	.25	9
-25	KP25BS	1.5630	2.5000	.437	.375	1.693	-.024		2.535	2.552	5°	2600	2600	4760	4530	.27	9
-29	KP29BS	1.8130	2.7500			1.931			2.787	2.802	5°	2900	2900	4820	4630	.30	14
-33	KP33BS	2.0630	3.0000			2.247			3.039	3.052	4° 30'	3200	3200	4880	4690	.33	20
-37	KP37BS	2.3130	3.2500			2.468			3.846	3.865	4° 30'	5000	5000	6660	6390	.64	30
-47	KP47BS	2.9380	4.1250			3.093			3.972	3.990	4°	5500	5500	8150	7840	.69	30
-48	KP48BS	3.0000	4.2500	.531	.469	3.222	.039		3.972	3.990	4°	5500	5500	8150	7840	.69	30
-49	KP49BS	3.0630	4.2500			3.222			3.972	3.990	4°	5500	5500	8150	7840	.69	32

1/ ALL DIMENSIONS TO BE MET AFTER PLATING.

2/ OUT-OF-ROUNDNESS: BORE: +.0003, -.00013 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.

CASE II = LOAD IS FIXED WITH RESPECT TO THE INNER 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/ BEARING 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.