

SAE-AS27646

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(Project 3110-1090)

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AEROSPACE STANDARD

BEARING, BALL, AIRFRAME,
ANTI-FRICTION, EXTRA LIGHT DUTY

AS27646
SHEET 1 OF 3

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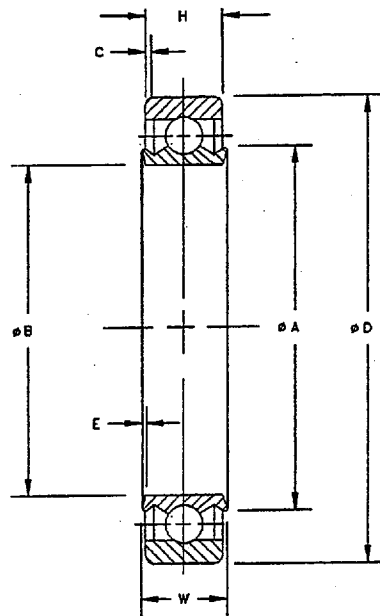


FIGURE 1 BEARING

TABLE I. DIMENSIONS AND LOADS

MS DASH NO.	øB	øD	W	H	øA	E & C	RADIAL LIMIT LOAD RATING LBS	THRUST LIMIT LOAD RATING LBS	4/ 5/ RADIAL LOAD RATING (LBS.) FOR AVERAGE LIFE OF 10,000 COMPLETE 90° CYCLES		WEIGHT POUNDS (APPROX)	MAXIMUM STARTING TORQUE (INCH-OZ)
	5/ BORE	1/ 5/ OUTSIDE DIAMETER	1/ WIDTH INNER RING	1/ WIDTH OUTER RING	SHOULDER DIAMETER INNER RING APPROX.	CORNER CHAMFER X 45°			2/ 3/ LOAD RATING LBS			
	+0.0007 -0.0007	+0.0000 -0.0010	+0.000 -0.005	+0.000 -0.005								
-38	.6250	1.0625	.281	.250	.777	.015	3280	1500	1990	1820	.03	2
-39	.7500	1.1875			.895		3750	1700	2050	1900	.04	2
-40	.8750	1.3125			1.016		4220	1900	2110	1970	.05	3
-41	1.0625	1.5000			1.216		5000	2200	2170	2020	.06	4
-42	1.3125	1.7500			1.451		5950	2700	2220	2130	.09	4
-43	1.5625	2.0000			1.702		6880	3200	2260	2180	.10	5
-44	1.8125 8/	2.2500 7/			1.970		7980	3600	2300	2220	.11	5
-45	2.0625 8/	2.6250 7/			2.286		9220	4000	2340	2260	.15	6
-46	2.3125 8/	2.8750 7/			2.527		10150	4400	2360	2280	.17	6

1/ DIMENSIONS TO BE MET AFTER PLATING.

2/ A RADIUS GIVING APPROXIMATELY THE SAME GRIP FOR STAKING THE BEARING IN THE HOUSING WILL BE ACCEPTABLE.

3/ A RADIUS GIVING APPROXIMATELY THE SAME FILLET CLEARANCE WILL BE ACCEPTABLE.

4/ CASE I = LOAD FIXED WITH RESPECT TO OUTER RING.

CASE II = LOAD FIXED WITH RESPECT TO THE INNER RING.

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

6/ OUT-OF-ROUND TOLERANCES: BORE: -38 THRU -43 ± 0.0010 ; -44 THRU -46: ± 0.0016 OUTSIDE DIAMETER: -38 THRU -43 ± 0.0005 , -0.0015 ; -44 THRU -46: ± 0.0008 , -0.0023 7/ FOR DASH NUMBER SIZES -44, -45, AND -46, THE OUTSIDE DIAMETER TOLERANCE SHALL BE ± 0.0000 TO -0.0015 INCHES.8/ FOR DASH NUMBER SIZES -44, -45, AND -46 THE BORE TOLERANCE SHALL BE ± 0.0010 TO -0.0010 INCHES.

(F) DENOTES CHANGES