SAE-AS27644

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(Project 3110-1088)

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AMSC N/A FSC 3110

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OMB No. 0704-0188

AS27644

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ISSUED 1998-04

PREPARED BY AIRFRAME CONTROL BEARINGS GROUP (ACBG)

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400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE STANDARD

BEARING, BALL, AIRFRAME,
ANTI-FRICTION, DOUBLE ROW,
HEAVY DUTY

AS27644
SHEET 1 OF 3

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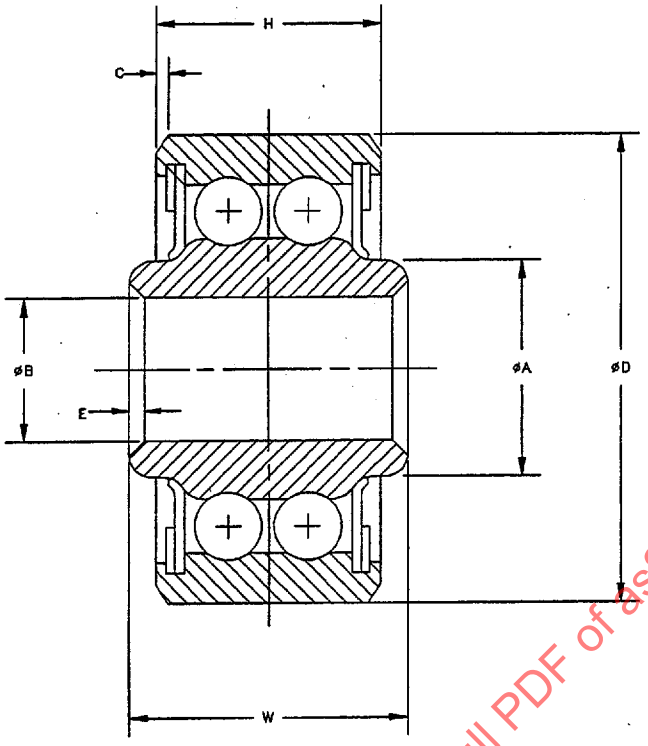

TABLE 1. DIMENSIONS AND LOADS (D)

MS DASH NO.	øB BORE 2/ +.0000 −.0005	øD OUTSIDE DIAMETER 1/ 2/ +.0000 −.0005	W WIDTH INNER RING 1/ +.000 −.005	H WIDTH OUTER RING 1/ +.000 −.005	øA SHOULDER DIAMETER INNER RING (APPROX)	E 4/ INNER RING CORNER CHAMFER +.015 −.000	C 3/ OUTER RING CORNER CHAMFER +.015 −.000	AXIAL INTERNAL CLEARANCE	RADIAL LIMIT LOAD RATING LBS	THRUST LIMIT LOAD RATING LBS	6/ 5/ RADIAL LOAD RATING (LBS.) FOR AVERAGE LIFE OF 10,000 COMPLETE 90° CYCLES CASE I	CASE II	WEIGHT POUNDS (APPROX)	MAXIMUM STARTING TORQUE (INCH-OZ)
−3	.1900	.7774	.495	.473	.302	.005	.018	.005	8/ 2950	1700	2950	2830	.04	1
−4	.2500	.9014	.620	.491	.410		.032	.006	8/ 5370	1800	3550	3020	.06	1
−5	.3125	1.2500	.745	.687	.469	.015			7/ 11000	4000	7360	6250	.17	1
−6	.3750	1.4375	.870	.794	.551				7/ 15760	5300	9690	8120	.26	2
−8	.5000	1.6875	.932	.856	.735		.044	.007	23600	7800	14100	11600	.38	3
−10	.6250	1.9375	.995	.920	.890				28400	9400	15300	13100	.53	3

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/ BOLTS OF 180,000 PSI TENSILE STRENGTH ARE REQUIRED TO DEVELOP THE RADIAL LIMIT LOAD SHOWN.
8/ BOLTS OF 160,000 PSI TENSILE STRENGTH ARE REQUIRED TO DEVELOP THE RADIAL LIMIT LOAD SHOWN.

(D) DENOTES CHANGES