

SAE-AS21428

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Custodians:

Army - AV

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Adopting Activity

Navy - AS

(Project 3110-1082)

Review Activities:

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Navy - SH

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FSC 3110

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AEROSPACE STANDARD

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

AS21428
SHEET 1 OF 3

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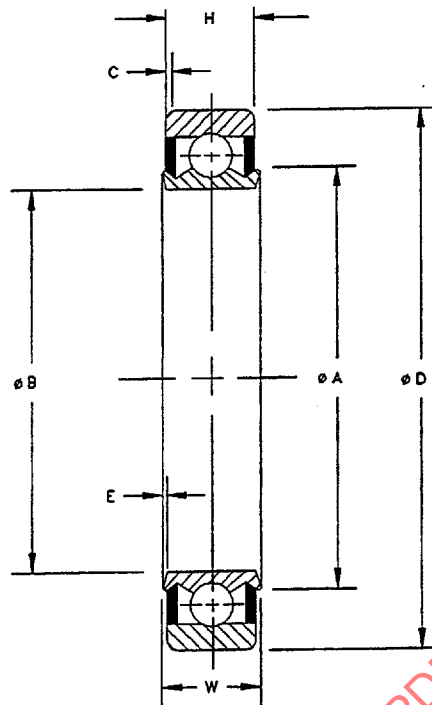


TABLE I. DIMENSIONS AND LOADS

MS DASH NO.	ϕB	BORE TOLERANCE	ϕD	OUTSIDE DIAMETER TOLERANCE	W	H	ϕA	E & C	WEIGHT POUNDS (APPROX)	RADIAL LIMIT LOAD RATING LBS	THRUST LIMIT LOAD RATING LBS	5/ RADIAL LOAD RATING (LBS.) FOR AVERAGE LIFE OF 10,000 COMPLETE 90° CYCLES		MAXIMUM STARTING TORQUE (INCH-OZ)
	2/ BORE		1/ OUTSIDE DIAMETER		1/ WIDTH INNER RING + .0000 - .0025	1/ WIDTH OUTER RING + .000 - .005	SHOULDER DIAMETER INNER RING APPROX.	3/ CORNER CHAMFER 45° + .020 - .000				CASE I	CASE II	
-38	.6250	+ .0000 - .0005	1.0625	+ .0000 - .0005	.2810	.250	.777	.015	.03	3280	1500	1990	1820	2
-39	.7500		1.1875				.895		.04	3750	1700	2050	1900	2
-40	.8750		1.3125				1.016		.05	4220	1900	2110	1970	3
-41	1.0625		1.5000				1.216		.06	5000	2200	2170	2020	4
-42	1.3125	1.7500	1.451	.09			5950		2700	2220	2130	4		
-43	1.5625	2.0000	1.702	.10			6880		3200	2260	2180	5		
-44	1.8125	2.2500	1.970	.11			7960		3600	2300	2220	5		
-45	2.0625	2.6250	2.286	.15			9220		4000	2340	2260	6		
-46	2.3125	2.8750	2.527	.17	10150	4400	2360	2280	6					

1/ DIMENSIONS TO BE MET AFTER PLATING.

2/ OUT-OF-ROUND TOLERANCES:

BORE:

FOR -38 THRU -43: +.0003, -.0008

FOR -44 THRU -46: +.0003, -.0011

OUTER DIAMETER:

FOR -38 THRU -43: +.0005, -.0010

FOR -44 THRU -46: +.0005, -.0012

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

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

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

CASE II = LOAD IS FIXED WITH RESPECT TO THE 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%.

(C) DENOTES CHANGES