

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

REV. A	Submitted for recognition as an American National Standard		Form Approved OMB No. 0704-0188	
	NOTICE THIS DOCUMENT HAS BEEN TAKEN DIRECTLY FROM U.S. MILITARY SPECIFICATION MS21428C AND CONTAINS ONLY MINOR EDITORIAL AND FORMAT CHANGES REQUIRED TO BRING IT INTO CONFORMANCE WITH THE PUBLISHING REQUIREMENTS OF SAE TECHNICAL STANDARDS. THE INITIAL RELEASE OF THIS DOCUMENT IS INTENDED TO REPLACE MS21428C. ANY PART NUMBERS ESTABLISHED BY THE ORIGINAL SPECIFICATION REMAIN UNCHANGED. THE ORIGINAL MILITARY SPECIFICATION WAS ADOPTED AS AN SAE STANDARD UNDER THE PROVISIONS OF THE SAE TECHNICAL STANDARDS BOARD (TSB) RULES AND REGULATIONS (TSB 001) PERTAINING TO ACCELERATED ADOPTION OF GOVERNMENT SPECIFICATIONS AND STANDARDS. TSB RULES PROVIDE FOR (A) THE PUBLICATION OF PORTIONS OF UNREVISED GOVERNMENT SPECIFICATIONS AND STANDARDS WITHOUT CONSENSUS VOTING AT THE SAE COMMITTEE LEVEL, AND (B) THE USE OF THE EXISTING GOVERNMENT SPECIFICATION OR STANDARD FORMAT. UNDER DEPARTMENT OF DEFENSE POLICIES AND PROCEDURES, ANY QUALIFICATION REQUIREMENTS AND ASSOCIATED QUALIFIED PRODUCTS LISTS ARE MANDATORY FOR DOD CONTRACTS. ANY REQUIREMENT RELATING TO QUALIFIED PRODUCTS LISTS (QPL'S) HAS NOT BEEN ADOPTED BY SAE AND IS NOT PART OF THIS TECHNICAL REPORT.			
AS21428	SAENORM.COM : Click to view the full PDF of as21428a			
PREPARED BY AIRFRAME CONTROL BEARINGS GROUP (ACBG)				
 SAE The Engineering Society For Advancing Mobility Land Sea Air and Space® 400 Commonwealth Drive, Warrendale, PA 15096-0001		AEROSPACE STANDARD BEARING, BALL, AIRFRAME, ANTI-FRICTION, EXTRA LIGHT DUTY, PRECISION		AS21428 SHEET 1 OF 3
				REV. A

ISSUED 1998-04 REVISED 1998-11

REV.
A

AS21428

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: MIL-B-7949.

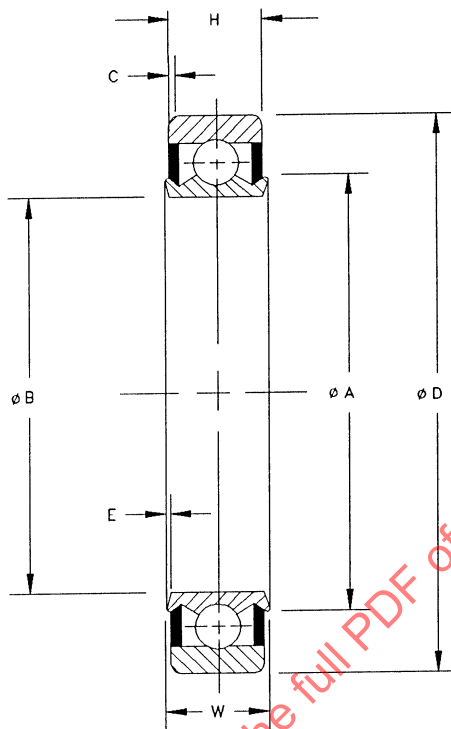


TABLE 1 DIMENSIONS AND LOADS

MS DASH NO.	øB	BORE TOLERANCE	øD	OUTSIDE DIAMETER TOLERANCE	W	H	øA	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/		1/ 2/		1/	1/	SHOULDER	3/ 4/								
	BORE		OUTSIDE DIAMETER		WIDTH INNER RING + .0000 - .0025	WIDTH OUTER RING + .000 - .005	DIAMETER INNER RING APPROX.	CORNER CHAMFER 45° + .020 - .000								
-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	+ .0000 - .0008	1.7500	+ .0000 - .0007			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%.



DENOTES CHANGES