

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		Federal Supply Class 3110
	NOTICE THIS DOCUMENT HAS BEEN TAKEN DIRECTLY FROM U.S. MILITARY SPECIFICATION MS27647F 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 MS27647F. 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. THIS DOCUMENT HAS BEEN REVISED TO REFLECT THE LATEST VERSION OF THE MILITARY SPECIFICATION AS STATED IN THE DOD CANCELLATION OR INACTIVATION NOTICE. AN EARLIER DOCUMENT WAS USED IN PROCESSING THE PREVIOUS VERSION OF THIS SAE SPECIFICATION.		
AS27647	SAENORM.COM : Click to view the full PDF of as27647a		
ISSUED 1998-04 REVISED 1998-12			
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 WIDE, DOUBLE ROW, INTERMEDIATE DUTY	AS27647 SHEET 1 OF 3
		REV. A	

REV.
A

AS27647

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.

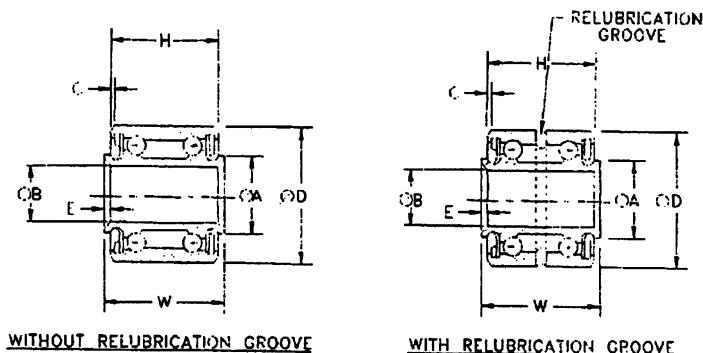


TABLE I. DIMENSIONS AND LOADS

MS DASH NO.	$\pm B$	$\pm D$	W	H	$\pm A$	E	C	RADIAL LIMIT LOAD RATING LBS	THRUST LIMIT LOAD RATING LBS	$\frac{5}{1}$	$\frac{6}{1}$	APPROXIMATE WEIGHT (LBS)	MAXIMUM STARTING TORQUE (INCH-OZ)
	2/ BORE	OUTSIDE DIAMETER 2/ 1/	WIDTH INNER RING 1/	WIDTH OUTER RING 1/	SHOULDER DIAMETER INNER RING (APPROX)	4/ INNER RING CORNER CHAMFER +.015 -.000	3/ OUTER RING CORNER CHAMFER +.015 -.000			5/ RADIAL LOAD RATING (LBS) FOR AVERAGE LIFE OF 10,000 COMPLETE 90° CYCLES	6/ RADIAL LOAD RATING (LBS) FOR AVERAGE LIFE OF 10,000 COMPLETE 90° CYCLES		
	+.0000 -.0005	+.0000 -.0005	+.000 -.005	+.000 -.005						CASE I	CASE II		
-4A	.2500	.6250	.562	.500	.338			.1400	500	1050	960	.025	1
-4	.2500	.7500	.675	.750	.372			.2700	900	2070	1850	.04	1
-5	.3125	.8750	.938	.813	.466	.005	.016	.5140	1600	2600	2320	.07	1
-6	.3750	1.0625	1.188	1.063	.570			.8440	2600	4220	3740	.12	2
-8	.5000	1.4375	1.500	1.3750	.709		.032	1.3520	4700	7610	6320	.29	2

1/ Dimensions to be met after plating.

2/ Out-of-round tolerances: Bore: $+.0002, -.0007$;
outer diameter: $+.0005, -.0010$.

3/ A radius giving approximately the same grip for staking the bearing in the housing is acceptable in lieu of a 45° flat surface chamfer.

4/ A radius giving approximately the same fillet clearance is acceptable in lieu of a 45° flat surface chamfer.

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 . For operation up to 350°F .
The ratings are shall be reduced by 20%.