

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 MS27641F 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 MS27641F. 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.		
AS27641	SAENORM.COM : Click to view the full PDF of as27641a		
ISSUED 1998-04 REVISED 1998-11			
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, INTERMEDIATE DUTY	AS27641 SHEET 1 OF 3
		REV. A	

REV.
A

AS27641

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.

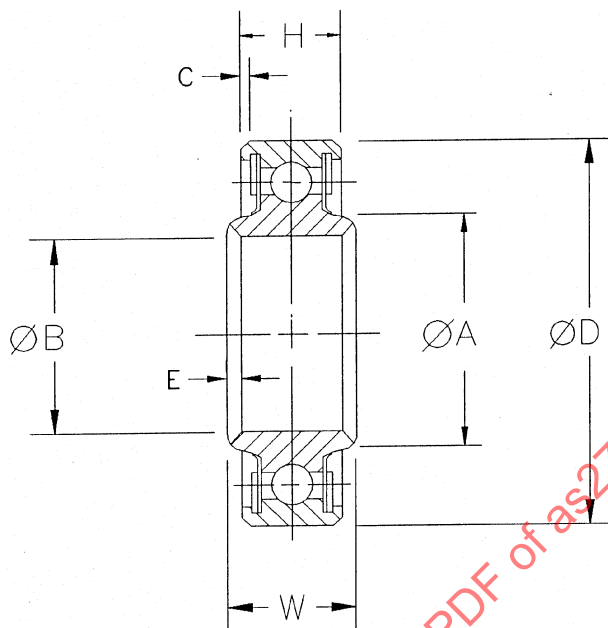


TABLE I. DIMENSIONS AND LOADS

MS DASH NO.	øB	øD	W	H	øA	E	C	RADIAL LIMIT LOAD RATING LBS	THRUST LIMIT LOAD RATING LBS	5/ RADIAL LOAD RATING (LBS.) FOR AVERAGE LIFE OF 10,000 COMPLETE 90° CYCLES		WEIGHT POUNDS (APPROX)	MAXIMUM STARTING TORQUE (INCH-OZ)
	BORE	OUTSIDE	WIDTH	WIDTH	SHOULDER	4/ INNER	3/ OUTER						
	2/ 1/	DIAMETER	INNER	OUTER	DIAMETER	RING	RING						
			1/	1/	INNER	CORNER	CORNER						
					RING (APPROX)	CHAMFER	CHAMFER						
	+0.000 -0.005	+0.000 -0.005	+0.000 -0.005	+0.000 -0.005		+0.015 -0.000	+0.015 -0.000						
										CASE I	CASE II		
-3	.1900	.6250	.297	.234	.297	.005	.016	1560	700	1500	1250	.01	1.0
-4	.2500	.7500	.281	.219	.380			1880	900	1690	1450	.02	1.5
-5	.3125	.8125	.297	.234	.415			2190	1000	1820	1600	.02	1.5
-6	.3750	.8750	.313	.250	.495			2500	1100	1920	1710	.03	2.0
-8	.5000	1.1250	.375	.313	.616			3910	1700	2870	2550	.05	2.5
-10	.6250	1.3750	.406	.344	.768	.015	.032	6700	3000	4980	4360	.08	3.0
-12	.7500	1.6250	.437	.375	.919			8790	3900	5980	5320	.13	3.0
-16	1.0000	2.0000	.500	.438	1.241			11900	5200	7070	6400	.22	4.0
-20	1.2500	2.2500	.500	.438	1.478			13800	6100	7400	6810	.26	5.0

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%.

(F) DENOTES CHANGES