

SAE-AS27647

ADOPTION NOTICE

SAE-AS27647, "Bearings, Ball, Airframe, Anti-Friction, Extra Wide, Double Row, Intermediate Duty," was adopted on 23 July 1998, for use by the Department of Defense (DoD). Proposed changes by DoD activities must be submitted to the DoD Adopting Activity: Commander, Naval Air Warfare Center Aircraft Division, Code 414100B120-3, Highway 547, Lakehurst, NJ 08733-5100. DoD activities may obtain copies of this standard from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094. The private sector and other government agencies may purchase copies from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE-AS27647 should be used instead of MS27647F, which was canceled on 23 July 1998.

Custodians:

Army - AV
Navy - AS
Air Force - 99

Adopting Activity
Navy - AS
(Project 3110-1091)

Review Activities:

Army - AR, AT, MI
Navy - SH
Air Force - 84
DLA - GS

AMSC N/A

FSC 3110

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

Submitted for recognition as an American National Standard

Form Approved
OMB No. 0704-0188**AS27647****NOTICE**

THIS DOCUMENT HAS BEEN TAKEN DIRECTLY FROM U.S. MILITARY SPECIFICATION MS27647E 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 MS27647E. 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.

ANY MATERIAL RELATING TO QUALIFIED PRODUCT LISTS HAS NOT BEEN ADOPTED BY SAE. THIS MATERIAL WAS PART OF THE ORIGINAL MILITARY SPECIFICATION AND IS REPRINTED HERE FOR HISTORIC REFERENCE ONLY.

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.

SAENORM.COM : Click to view the full PDF of as27647

ISSUED 1998-04

PREPARED BY AIRFRAME CONTROL BEARINGS GROUP (ACBG)

SAE The Engineering Society
For Advancing Mobility
Land Sea Air and Space
INTERNATIONAL
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

Copyright 1998 Society of Automotive Engineers, Inc.
All rights reserved.

Printed in the U.S.A.

QUESTIONS REGARDING THIS DOCUMENT:
TO PLACE A DOCUMENT ORDER:

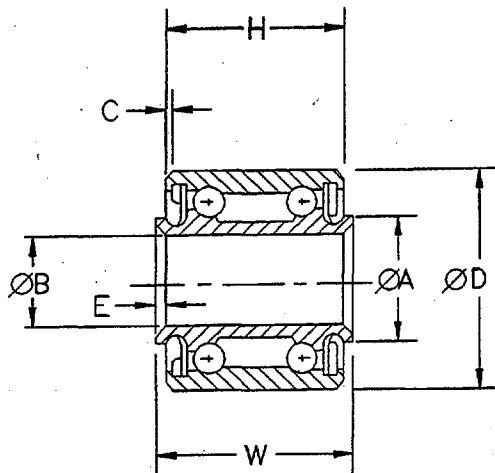
(724) 772-8510
(724) 776-4970

FAX: (724) 776-0243

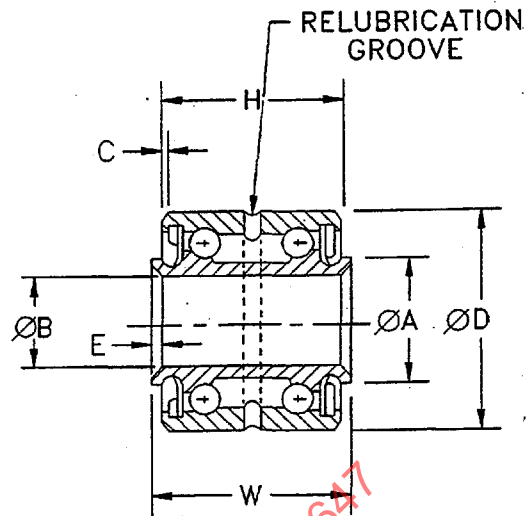
Distributed under license from the IHS Archive

SAE WEB ADDRESS: <http://www.sae.org>

AS27647



WITHOUT RELUBRICATION GROOVE



WITH RELUBRICATION GROOVE

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		APPROXIMATE WEIGHT (LBS)	MAXIMUM STARTING TORQUE (INCH-OZ)
	2/ BORE	OUTSIDE DIAMETER	WIDTH INNER RING	WIDTH OUTER RING	SHOULDER DIAMETER INNER RING (APPROX)	4/ INNER RING CORNER CHAMFER	3/ OUTER RING CORNER CHAMFER						
	2/ 1/	2/ 1/	1/	1/									
	+ .0000 - .0005	+ .0000 - .0005	+ .000 - .005	+ .000 - .005		+ .015 - .000	+ .015 - .000			CASE I	CASE II		
-4A	.2500	.6250	.562	.500	.338	.005	.016	1400	500	1050	960	.025	1
-4	.2500	.7500	.875	.750	.372			2700	900	2070	1850	.04	1
-5	.3125	.8750	.938	.813	.466			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	1.370	.709		.032	15520	4700	7610	6520	.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 SHALL BE REDUCED BY 20%.

(E) DENOTES CHANGE