

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 revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

**REV.
B**

AS24466™

FEDERAL SUPPLY CLASS
3110

RATIONALE

AS24466 REV B CHANGES INCLUDE ADDING AISI 1074 WASHER MATERIAL THAT WAS INCORRECTLY REMOVED IN REV A. UPDATED FIGURE 1. CORRECTED TABLE 2 TOLERANCE LIMITS. UPDATED TABLE 3 TITLE. UPDATED SUPERSEDED MATERIAL TO ASTM A295/A295M.

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS39901.

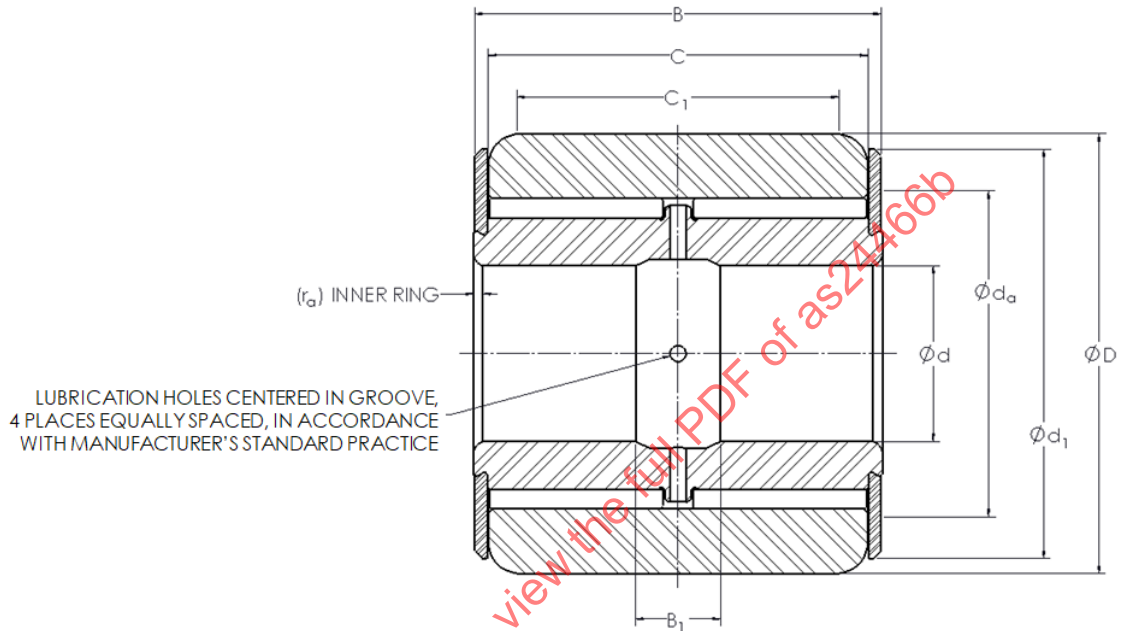
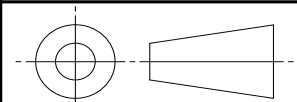


FIGURE 1 - BEARING SECTION

REFER TO AS21439 AS A SUGGESTED REPLACEMENT FOR AS24466 AT THE POINT OF DESIGN. DESIGNERS ARE CAUTIONED TO EVALUATE AS21439 FOR THEIR PARTICULAR APPLICATION.

For more information on this standard, visit
<https://www.sae.org/standards/content/AS24466B/>

THIRD ANGLE PROJECTION



CUSTODIAN: ACBG

PROCUREMENT SPECIFICATION: AS39901



AEROSPACE STANDARD

BEARING, ROLLER, NEEDLE-DOUBLE ROW,
HEAVY DUTY, TRACK ROLLER, TYPE VI,
ANTIFRICTION, INCH

AS24466™
SHEET 1 OF 3

**REV.
B**

Copyright © 2020 SAE International
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
Fax: 724-776-0790

Tel: +1 724-776-4970 (outside USA)
Email: CustomerService@sae.org

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

ISSUED 2002-11 REVISED 2020-07

TABLE 1 - BEARING PROPERTIES

DASH NO.	Ød BORE	ØD OUTER RING OUTSIDE DIA	B OVER ALL WIDTH	C OUTER RING WIDTH	C ₁ TRACK CONTACT WIDTH	Ød ₁ WASH OUTSIDE DIA	B ₁ LUBE GROOVE WIDTH	r _a 1/FILL ET MAX	TOTAL RAD. CLEAR-ANCE MAX	Ød _A CLAMP DIA MIN	2/ LIMIT LOAD RATING (LBF)	3/ LOAD RATING AS A TRACK ROLLER (LBF)	TRACK CAP 40 HRC (LBF)	WGT (LB)
-6	.3750	1.1250	1.000	.875	.750	1.000	.188	.022	.0014	.672	7130	5370	2600	.228
-8	.5000	1.3750	1.250	1.125	1.000	1.250	.250	.032	.0014	.891	12500	9370	4250	.416
-10	.6250	1.6250	1.500	1.375	1.125	1.500	.375	.032	.0014	1.109	19900	15000	5650	.693
-12	.7500	1.8750	1.750	1.625	1.375	1.750	.375	.032	.0014	1.281	28500	21400	7950	1.08
-14	.8750	2.1250	2.000	1.875	1.625	2.000	.375	.032	.0015	1.469	38500	28900	10650	1.55
-16	1.0000	2.3750	2.250	2.049	1.794	2.215	.375	.032	.0015	1.578	44900	33600	13200	2.20
-20	1.2500	2.7500	2.500	2.299	2.044	2.500	.375	.032	.0015	1.844	59500	44600	17300	3.10
-24	1.5000	3.0000	2.750	2.549	2.294	2.750	.375	.032	.0015	1.984	71300	35600	21200	4.12
-28	1.7500	3.4375	3.000	2.792	2.544	3.187	.375	.032	.0015	2.281	92000	69000	27000	5.80
-32	2.0000	3.8750	3.000	2.799	2.544	3.625	.375	.032	.0015	2.562	102000	76600	30400	7.00

- 1/ THE CHAMFER ON THE BEARING SHALL CLEAR THE MAXIMUM FILLET RADIUS GIVEN IN THE TABLE. HOWEVER, THIS SPECIFICATION DOES NOT CONTROL BEARING CHAMFER CONTOURS.
- 2/ THE LIMIT LOAD RATING LISTED CAN BE DEFINED AS THE MAXIMUM RADIAL LOAD WHICH CAN BE APPLIED TO A BEARING WITHOUT IMPAIRING THE SUBSEQUENT FUNCTIONING OF THE BEARING. THE ULTIMATE OR STATIC FRACTURE LOAD RATING SHALL NOT BE LESS THAN 1.5 TIMES THE LIMIT LOAD RATING.
- 3/ THE LOAD RATING AS A TRACK ROLLER IS THE LOAD THE BEARING WILL CARRY AS A TRACK ROLLER FOR A L₁₀ LIFE OF 20000 REVOLUTIONS.

TABLE 2 - TOLERANCE LIMITS

Ød BASIC BORE		ALLOWABLE DEVIATION FROM d OF SINGLE MEAN DIA Ød		ALLOWABLE DEVIATION FROM OVER-ALL WIDTH B		ALLOWABLE DEVIATION FROM WASH OUTSIDE DIA Ød ₁		ALLOWABLE DEVIATION FROM LUBRICATION GROOVE WIDTH B ₁		ØD BASIC OUTER RING OUTSIDE DIA		ALLOWABLE DEVIATION FROM D OF SINGLE MEAN DIA D		ALLOWABLE DEVIATION FROM OUTER RING WIDTH C	
OVER	INCL	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	OVER	INCL	HIGH	LOW	HIGH	LOW
.2500	2.0000	+0	-.0007	+0	-.005	+.010	-.010	+0	-.062	1.000	3.875	+0	-.001	+0	-.005

TABLE 3 - LUBRICATION HOLE

NUMBER OF HOLES	
INNER RING	
4	

REQUIREMENTS:

1. MATERIAL:

- INNER RING, OUTER RING, AND NEEDLES: 52100 STEEL PER AMS6440, AMS6444, AMS6447, OR ASTM A295/A295M.
- ENDWASHERS: 52100 STEEL PER AMS6440, AMS6444, AMS6447, OR ASTM A295/A295M. 8620 STEEL PER AMS6274, OR AISI 1074 STEEL PER ASTM A684/A684M.
- RETAINING RINGS (OPTIONAL): BRASS.

2. HEAT TREAT:

- OUTER RING: HARDEN AND TEMPER TO 58 TO 62 HRC.
- INNER RING: HARDEN AND TEMPER TO 60 TO 64 HRC OR INDUCTION HARDEN TO 60 TO 64 HRC FOR .015 INCH MINIMUM DEPTH AND 50 HRC AT .030 MINIMUM DEPTH.
- NEEDLES: HARDEN AND TEMPER TO 60 TO 64 HRC.
- ENDWASHERS: HARDEN AND TEMPER TO 51 TO 56 HRC.

	AEROSPACE STANDARD	AS24466™ SHEET 2 OF 3	REV. B
	BEARING, ROLLER, NEEDLE-DOUBLE ROW, HEAVY DUTY, TRACK ROLLER, TYPE VI, ANTIFRICTION, INCH		