

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.

AS24466

FEDERAL SUPPLY CLASS
3110

NOTICE

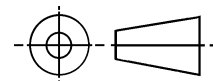
THIS DOCUMENT HAS BEEN TAKEN DIRECTLY FROM U.S. MILITARY SPECIFICATION MS24466K AND CONTAINS ONLY MINOR EDITORIAL AND FORMAT CHANGES REQUIRED TO BRING IT INTO CONFORMANCE WITH THE PUBLISHING REQUIREMENTS OF SAE TECHNICAL STANDARDS. THE INITIAL RELEASE OF THIS DOCUMENT IS INTENDED TO REPLACE MS24466K. 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 SAE TECHNICAL DOCUMENT.

SAENORM.COM : Click to view the full PDF of as24466

THIRD ANGLE PROJECTION



ISSUED 2002-11

CUSTODIAN: ACBG/ROLLING ELEMENT SUBCOMMITTEE

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

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

AS24466
SHEET 1 OF 6

THIS SPECIFICATION SHEET IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE.

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DoDISS) SPECIFIED IN THE SOLICITATION: MIL-B-3990.

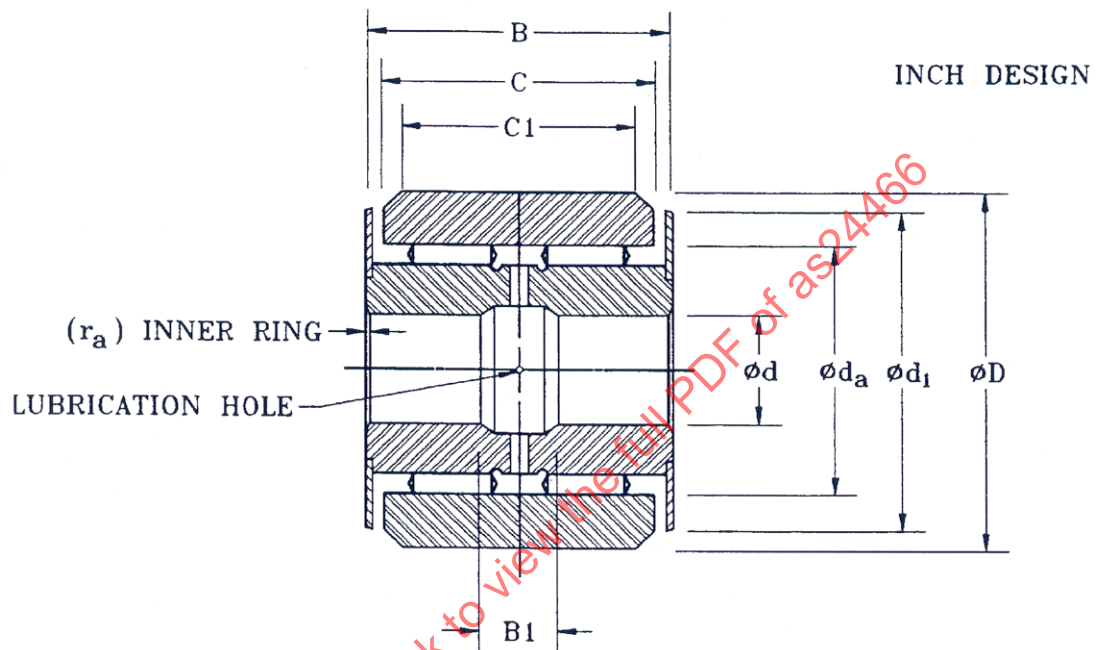


FIGURE 1. BEARING SECTION.

INACTIVE FOR NEW DESIGN: USE MS21439

TABLE I. Bearing properties.

DASH NO.	Ød BORE	Ø D OUTER RING OUTSIDE DIA.	B OVER ALL WIDTH	C OUTER RING WIDTH	C ₁ TRACK CONTACT WIDTH	Ø d ₁ WASHER OUTSIDE DIA.	B ₁ LUBRICATION GROOVE WIDTH	r _s I/ FILLET MAX	TOTAL RADIAL CLEARANCE MAX	Ø d _s CLAMPING DIA. MIN	DIMENSIONS IN INCHES			
											2/ LIMIT LOAD RATING LBF	3/ LOAD RATING AS A TRACK ROLLER LBF	TRACK CAPACITY 40HRC LBF	MASS (APPROX) LB
-6	0.3750	1.1250	1.000	0.875	0.750	1.000	0.188	0.022	0.0014	0.672	7130	5370	2600	0.228
-8	0.5000	1.3750	1.250	1.125	1.000	1.250	0.250	0.032	0.0014	0.891	12500	9370	4250	0.416
-10	0.6250	1.6250	1.500	1.375	1.125	1.500	0.375	0.032	0.0014	1.109	19900	15000	5650	0.693
-12	0.7500	1.8750	1.750	1.625	1.375	1.750	0.375	0.032	0.0014	1.281	28500	21400	7950	1.08
-14	0.8750	2.1250	2.000	1.875	1.625	2.000	0.375	0.032	0.0015	1.469	38500	28900	10650	1.55
-16	1.0000	2.3750	2.250	2.049	1.794	2.215	0.375	0.032	0.0015	1.578	44900	33600	13200	2.20
-20	1.2500	2.7500	2.500	2.299	2.044	2.500	0.375	0.032	0.0015	1.844	59500	44600	17300	3.10
-24	1.5000	3.0000	2.750	2.549	2.294	2.750	0.375	0.032	0.0015	1.984	71300	35600	21200	4.12
-28	1.7500	3.4375	3.000	2.792	2.544	3.187	0.375	0.032	0.0015	2.281	92000	69000	27000	5.80
-32	2.0000	3.8750	3.000	2.799	2.544	3.625	0.375	0.032	0.0015	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 be not 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 L-10 life of 20,000 revolutions.

TABLE II. Bearing properties.

DIMENSIONS IN MILLIMETERS

DASH NO.	Ød BORE	ØD OUTER RING OUTSIDE DIA.	B OVER ALL WIDTH	C OUTER RING WIDTH	C ₁ TRACK CONTACT WIDTH	Ød ₁ WASHER OUTSIDE DIA.	B ₁ LUBRICATION GROOVE WIDTH	r _s 1/ FILLET MAX	TOTAL RADIAL CLEARANCE MAX	Ø d _s CLAMPING DIA. MIN	2/ LIMIT ¹ LOAD RATING M	3/ LOAD RATING AS A TRACK ROLLER M	TRACK CAPACITY 40HRC M	MASS (APPROX) KG
-6	9.325	28.575	25.40	22.22	19.05	23.40	4.78	0.6	0.036	17.07	31800	23900	11600	0.104
-8	12.700	34.925	31.75	28.58	25.40	31.75	6.35	0.8	0.036	22.63	55500	41700	18900	0.189
-10	15.875	41.275	38.10	34.92	28.58	38.10	9.51	0.8	0.036	28.17	88700	66700	25100	0.315
-12	19.050	47.625	44.45	41.28	34.92	44.45	9.52	0.8	0.036	32.54	127000	95200	35400	0.49
-14	22.250	53.975	50.80	47.62	41.28	50.80	9.52	0.8	0.038	37.31	171000	129000	47400	0.70
-16	25.400	60.325	57.15	52.04	45.57	53.98	9.52	0.8	0.038	40.08	195000	149000	58700	1.00
-20	31.750	69.850	63.50	58.39	51.92	63.50	9.52	0.8	0.038	46.84	265000	198000	77000	1.41
-24	38.100	76.200	69.85	64.74	58.27	69.85	9.52	0.8	0.038	50.39	318000	238000	94300	1.87
-28	44.450	87.312	76.20	71.09	64.62	80.95	9.52	0.8	0.038	57.94	409000	307000	120000	2.64
-32	50.800	98.425	76.20	71.09	64.62	92.08	9.52	0.8	0.038	65.07	453000	341000	135000	3.18

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 be not 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 L-10 life of 20,000 revolutions.