FEDERAL SUPPLY CLASS
3110

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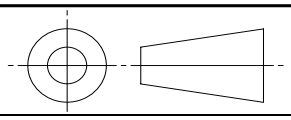
ISSUED 2002-02 REVISED 2005-07

THIRD ANGLE PROJECTION



SAE 100
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CUSTODIAN: AIRFRAME CONTROL BEARINGS GROUP

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

(R) BEARING, ROLLER, NEEDLE,
SINGLE ROW, THIN SHELL,
TYPE II, ANTIFRICTION

AS24462
SHEET 1 OF 4

REV. A

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)** **Tel: 724-776-4970 (outside USA)**
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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: AS39901.

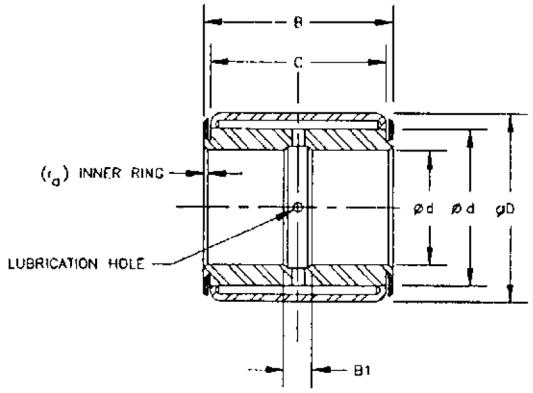

TABLE I

Dimensions in inches

Dash	ød Bore	øD Outer Ring Outside Dia 2/	B Over-all Width	c Outer Ring Width	$ød_1$ Washer Outside Dia	B_1 Lubri-cation Groove Width	r_a 1/ Fillet Max	Radial Internal Clearance Max	Limit Load Rating Lbs 3/	Mass (approx) lb
-3	1900	6250	625	500	.562	None	022	0015	679	040
-4	2500	.6250	.562	.500	.562	None	022	0015	878	.025
-5	3125	6875	625	500	625	None	022	0015	988	050
-6	3750	7500	812	750	688	188	022	0015	1920	060
-7	4375	8125	875	750	750	188	032	0015	2110	090
-8	5000	1.0000	875	.750	.938	.188	032	.0015	2350	.120
-10	6250	1 1250	875	.750	1 062	250	.032	.0015	2690	.150
-12	7500	1 2500	1 125	1 000	1 188	250	032	0015	4480	210
-14	8750	1 3750	1 125	1 000	1 312	375	.032	0015	5000	240
-16	1 0000	1 5000	1 125	1 000	1 438	.375	032	0015	5510	.270
-20	1 2500	1.8750	1 375	1 250	1.812	375	032	0017	8180	300

TABLE II

Dimensions in millimeters

Dash NO	ø d Bore	øD Outer Ring Outside Dia	B Over-all Width	c Outer Ring Width	$ød_1$ Washer Outside Dia.	B1 Lubri-cation Groove Width	r_a1/ Fillet Max.	Radial Internal Clearance Max	Limit Load Rating N	Mass (approx) kg
-3	4 826	15 875	15 88	12 70	14 27	None	6	038	3020	018
-4	6 350	15.875	14 27	12 70	14.27	None	.6	038	3910	011
-5	7.938	17.462	15 88	12 70	15 88	None	6	038	4390	023
-6	9.525	19.050	20.62	19.05	17.48	4.78	6	.038	8540	.027
-7	11 112	20 638	22 22	19.05	19 05	4 78	8	038	9390	041
-8	12.700	25 400	22 22	19 05	23 82	4 78	.8	.038	10500	.055
-10	15 875	28.575	22 22	19.05	26.97	6 35	8	.038	12000	.068
-12	19.050	31 750	28 58	25.40	30 18	6 35	8	038	19900	.095
-14	22.223	34 925	28 58	25 40	33 32	9.52	8	038	22200	109
-16	25.400	38 100	28.58	25.40	36.52	9.52	8	.038	24500	.123
-20	31 750	47.625	34 92	31.75	46.02	9 52	8	043	36400	.136

1/ THE CHAMFER ON BEARINGS MUST CLEAR THE MAXIMUM FILLET RADIUS GIVEN IN THE TABLE. THIS SPECIFICATION DOES NOT CONTROL BEARING CHAMFER CONTOURS

2/ DO NOT MEASURE O D WHEN BEARING IS IN FREE STATE. DIMENSIONS ABOVE ARE FOR BASIC OUTSIDE DIAMETER

TABLE III - TOLERANCE LIMITS

DIMENSIONS IN INCHES

ød BASIC BORE MEAN		ALLOWABLE DEVIATION FROM d OF SINGLE MEAN $ød_{mp}$		ALLOWABLE DEVIATION FROM OVER-ALL WIDTH, B		ALLOWABLE DEVIATION FROM WASHER 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 $øD_{mp}$		ALLOWABLE DEVIATION FROM OUTER RING WIDTH, C	
OVER	INCL	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	OVER	INCL	HIGH	LOW	HIGH	LOW
.1250	1.2500	+ 0000	−.005 −.005	+.0000	− 005	+.010	−.010	+.0000	−.062	.5625	1 8750	+.0005	−.0005	+ 0000	−.010

TABLE IV

DIMENSIONS IN MILLIMETERS

ø d BASIC BORE MEAN		ALLOWABLE DEVIATION FROM d OF SINGLE MEAN $ød_{mp}$		ALLOWABLE DEVIATION FROM OVER-ALL WIDTH, B		ALLOWABLE DEVIATION FROM WASHER OUTSIDE DIA, $ød_1$		ALLOWABLE DEVIATION FROM LUBRICATION GROOVE WIDTH, B_1		ø D BASIC OUTER RING OUTSIDE DIA		ALLOWABLE DEVIATION FROM D OF SINGLE MEAN $øD_{mp}$		ALLOWABLE DEVIATION FROM OUTER RING WIDTH, C	
OVER	INCL	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	OVER	INCL	HIGH	LOW	HIGH	LOW
3 175	31 750	+ 0000	− 013	+ 0000	− 13	+ 25	− 25	+ 0000	−1 60	14 288	47 625	+ 013	− 013	+ 0000	− 25

TABLE V - OIL HOLE DATA

BORE-DASH NO		NUMBER OF HOLES
OVER	INCL	INNER RING
2	5	None
5	10	2
10	20	4

REQUIREMENTS:

1. MATERIAL: STEEL, AMS 6274, FED. STD. NO. 66, AISI/SAE STEEL NO. 50100, 51100 AND 52100.

2. FINISH:

   a. PLATING: ZINC-NICKEL PLATE, AMS 2417, TYPE 2, OR CADMIUM PLATED IN ACCORDANCE WITH AMS-QQ-P-416, TYPE I, CLASS 2, TO A THICKNESS OF .0003 TO .0006 INCHES.

   b. MACHINE FINISH: ANSI/ASME B46.1, SEE PROCUREMENT SPECIFICATION.

3. LUBRICANT: MIL-PRF-81322 OR MIL-PRF-23827. ALL BEARINGS SHALL BE PREPACKED WITH MIL-PRF-81322 UNLESS OTHERWISE SPECIFIED. IF MIL-PRF-23827 IS REQUIRED, ADD THE SUFFIX “G” TO THE MSPART NUMBER.

4. MARKING: THE MARKING SHALL CONSIST OF THE MS PART NUMBER, THE MANUFACTURER’S CAGE CODE MARKED IN ACCORDANCE WITH MIL-STD-130 AND A LOT CONTROL NUMBER IF SPACE IS AVAILABLE.