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**REV.  
A**

**AS24462**

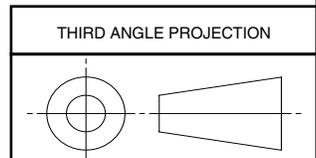
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CUSTODIAN: AIRFRAME CONTROL BEARINGS GROUP



**AEROSPACE STANDARD**

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

**AS24462**  
SHEET 1 OF 4

**REV.  
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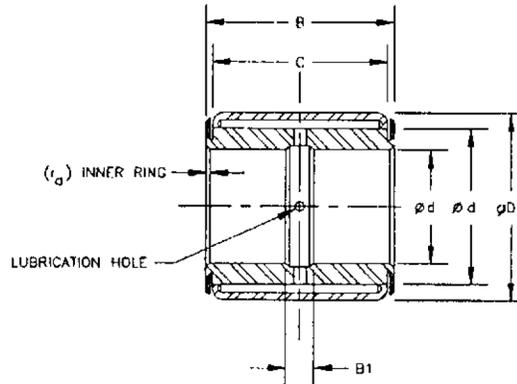


TABLE I

Dimensions in inches

Dash	ød Bore	øD Outer Ring Outside Dia 2/	B Over-all Width	c Outer Ring Width	ød <sub>1</sub> Washer Outside Dia	B <sub>1</sub> Lubri-cation Groove Width	r <sub>a</sub> 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 <sub>1</sub> Washer Outside Dia.	B <sub>1</sub> Lubri-cation Groove Width	r <sub>a</sub> 1/ 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 BLARING 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 <sub>mp</sub>		ALLOWABLE DEVIATION FROM OVER- ALL WIDTH, B		ALLOWABLE DEVIATION FROM WASHER OUTSIDE DIA, ød <sub>1</sub>		ALLOWABLE DEVIATION FROM LUBRI- CATION GROOVE WIDTH, B <sub>1</sub>		øB BASIC OUTER RING OUTSIDE DIA		ALLOWABLE DEVIATION FROM D OF SINGLE MEAN øD <sub>mp</sub>		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					
ød BASIC BORE MEAN		ALLOWABLE DEVIATION FROM d OF SINGLE MEAN ød <sub>mp</sub>		ALLOWABLE DEVIATION FROM OVER- ALL WIDTH, B		ALLOWABLE DEVIATION FROM WASHER OUTSIDE DIA, ød <sub>1</sub>		ALLOWABLE DEVIATION FROM LUBRI- CATION GROOVE WIDTH, B <sub>1</sub>		øD BASIC OUTER RING OUTSIDE DIA		ALLOWABLE DEVIATION FROM D OF SINGLE MEAN øD <sub>mp</sub>		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.