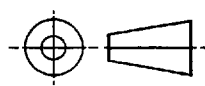


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REV. A

AS24461

Submitted for recognition as an American National Standard		FEDERAL SUPPLY CLASS 3110	
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THIRD ANGLE PROJECTION 		ISSUED 1998-04 REVISED 1998-10	
PREPARED BY AIRFRAME CONTROL BEARINGS GROUP			
	AEROSPACE STANDARD BEARING, ROLLER, NEEDLE, SINGLE ROW, HEAVY DUTY, TYPE I, ANTIFRICTION, INCH	AS24461 SHEET 1 OF 3	REV. A

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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: MIL-B-3990.

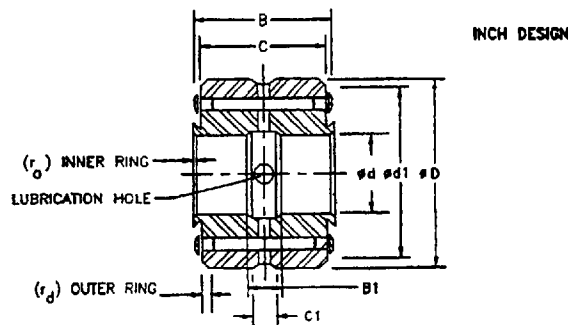


TABLE I

Dimensions in Inches

Dash No.	#d Bore	#D Outer Ring Outside Dia.	#B Over-all Width	c Outer Ring Width	#d1 Washer Outside Dia.	B1 Lubrication Groove Width	C1 Lubrication Groove Width	r _a 1/ Fillet Max.	Total Radial Internal Clearance Max.	Clamp- ing Dia. Min.	Limit Load Rating lbf	Mass (approx) lb
-3	0.1900	0.6875	0.312	0.218	0.625	None	0.062	0.022	0.0017	0.438	1800	0.028
-4	0.2500	0.7500	0.375	0.281	0.687	None	0.093	0.022	0.0017	0.516	2870	0.040
-5	0.3125	0.8125	0.437	0.344	0.750	None	0.093	0.022	0.0017	0.578	4080	0.057
-6	0.3750	0.8750	0.562	0.469	0.812	0.188	0.125	0.022	0.0018	0.641	6330	0.075
-7	0.4375	0.9375	0.625	0.531	0.875	0.188	0.125	0.032	0.0018	0.703	8000	0.097
-8	0.5000	1.1250	0.750	0.656	1.031	0.188	0.125	0.032	0.0018	0.844	11600	0.165
-9	0.5625	1.1875	0.875	0.781	1.094	0.188	0.156	0.032	0.0019	0.891	15000	0.207
-10	0.6250	1.2500	1.000	0.906	1.156	0.250	0.156	0.032	0.0019	0.953	18900	0.252
-12	0.7500	1.3750	1.125	1.000	1.281	0.250	0.156	0.032	0.0019	1.078	23900	0.336
-14	0.8750	1.6250	1.250	1.125	1.500	0.375	0.156	0.032	0.0022	1.250	30500	0.423
-16	1.0000	1.7500	1.250	1.125	1.625	0.375	0.156	0.032	0.0026	1.375	33900	0.51
-20	1.2500	2.0000	1.250	1.049	1.906	0.375	0.156	0.032	0.0026	1.625	37900	0.60
-24	1.5000	2.2500	1.250	1.049	2.156	0.375	0.156	0.032	0.0026	1.875	44200	0.71
-28	1.7500	2.5000	1.250	1.049	2.406	0.375	0.156	0.032	0.0027	2.125	50500	0.78
-32	2.0000	2.7500	1.250	1.049	2.656	0.375	0.156	0.032	0.0028	2.375	56800	0.88
-36	2.2500	3.0000	1.250	1.049	2.906	0.375	0.156	0.032	0.0032	2.625	3.100	0.98
-40	2.5000	3.2500	1.250	1.049	3.156	0.375	0.156	0.032	0.0037	2.875	89400	1.06
-44	2.7500	3.5000	1.250	1.049	3.406	0.375	0.156	0.032	0.0039	3.125	75700	1.15
-48	3.0000	3.7500	1.250	1.049	3.656	0.375	0.156	0.032	0.0039	3.375	82000	1.24
-52	3.2500	4.0000	1.250	1.049	3.906	0.375	0.156	0.032	0.0039	3.641	88300	1.34
-56	3.5000	4.3750	1.250	1.049	4.219	0.375	0.156	0.044	0.0041	3.969	96700	1.73
-60	3.7500	4.6250	1.250	1.049	4.469	0.375	0.156	0.044	0.0041	4.218	103000	1.84
-64	4.0000	4.8750	1.250	1.049	4.719	0.375	0.156	0.044	0.0045	4.468	109000	1.99
-80	5.0000	5.8750	1.250	1.049	5.688	0.375	0.156	0.044	0.0045	5.438	135000	2.75

TABLE II

Dimensions in Millimeters

Dash No.	#d Bore	#D Outer Ring Outside Dia.	#B Over-all Width	c Outer Ring Width	#d1 Washer Outside Dia.	B1 Lubrication Groove Width	C1 Lubrication Groove Width	r _a 1/ Fillet Max.	Total Radial Internal Clearance Max.	Clamp- ing Dia. Min.	Limit Load Rating lbf	Mass (approx) lb
-3	4.826	17.462	7.92	5.54	15.88	None	1.52	0.6	0.043	11.13	8700	0.013
-4	6.350	19.050	9.52	7.14	17.45	None	2.36	0.6	0.043	13.11	12700	0.018
-5	7.935	20.638	11.10	8.74	19.05	None	3.18	0.6	0.043	14.68	18100	0.026
-6	9.525	22.225	14.27	11.91	20.62	4.78	3.18	0.6	0.046	16.28	28100	0.034
-7	11.112	23.812	15.88	13.49	22.22	4.78	3.18	0.8	0.046	17.86	35600	0.044
-8	12.700	28.575	19.05	16.66	26.19	4.78	3.96	0.8	0.046	21.44	51600	0.075
-9	14.288	30.182	22.22	19.84	27.79	6.35	3.96	0.8	0.048	22.63	66700	0.094
-10	15.875	31.750	25.40	23.01	29.36	6.35	3.96	0.8	0.048	24.21	84000	0.115
-12	19.050	34.925	28.58	25.40	32.54	9.52	3.96	0.8	0.048	27.38	106000	0.153
-14	22.225	41.275	31.75	28.57	38.10	9.52	3.96	0.8	0.056	31.75	138000	0.192
-16	25.400	44.450	31.75	26.64	41.28	9.52	3.96	0.8	0.066	34.92	151000	0.23
-20	31.750	50.800	31.75	26.64	48.41	9.52	3.96	0.8	0.066	41.28	169000	0.27
-24	38.100	57.150	31.75	26.64	54.76	9.52	3.96	0.8	0.066	47.62	197000	0.32
-28	44.450	63.500	31.75	26.64	61.11	9.52	3.96	0.8	0.069	53.98	225000	0.35
-32	50.800	69.850	31.75	26.64	67.46	9.52	3.96	0.8	0.071	60.32	253000	0.40
-36	57.150	76.200	31.75	26.64	73.81	9.52	3.96	0.8	0.081	66.66	280000	0.45
-40	63.500	82.550	31.75	26.64	80.16	9.52	3.96	0.8	0.094	73.02	309000	0.48
-44	68.850	88.900	31.75	26.64	86.51	9.52	3.96	0.8	0.099	79.38	337000	0.52
-48	76.200	95.250	31.75	26.64	92.86	9.52	3.96	0.8	0.099	85.72	365000	0.56
-52	82.550	101.600	31.75	26.64	99.21	9.52	3.96	0.8	0.099	92.48	383000	0.61
-56	88.900	111.125	31.75	26.64	107.16	9.52	3.96	1.1	0.104	100.81	430000	0.79
-60	92.250	117.475	31.75	26.64	113.51	9.52	3.96	1.1	0.104	107.14	458000	0.84
-64	101.600	123.825	31.75	26.64	119.86	9.52	3.96	1.1	0.114	113.51	487000	0.90
-80	127.000	149.225	31.75	26.52	144.45	9.52	3.96	1.1	0.114	138.10	600000	1.25

1/ The chamfer on bearings must clear the maximum fillet radius given in the table. This specification does not control bearing chamfer contours.