REV. A

AS24461

Submitted for recognition as an American National Standard

FEDERAL SUPPLY CLASS 3110

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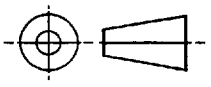

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PREPARED BY AIRFRAME CONTROL BEARINGS GROUP

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AEROSPACE STANDARD

BEARING, ROLLER, NEEDLE, SINGLE ROW, HEAVY DUTY, TYPE I, ANTIFRICTION, INCH

AS24461
SHEET 1 OF 3

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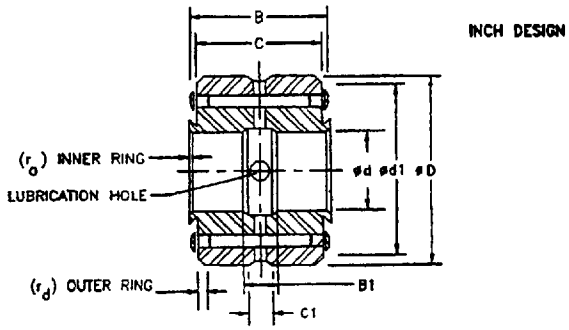

TABLE I

Dimensions in Inches

Dash No.	ød Bore	øD Outer Ring Outside Dia.	øB Over-all Width	c Outer Ring Width	ød1 Washer Outside Dia.	B1 Lubri-cation Groove Width	C1 Lubri-cation 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	69400	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.	ød Bore	øD Outer Ring Outside Dia	øB Over-all Width	c Outer Ring Width	ød1 Washer Outside Dia	B1 Lubri-cation Groove Width	C1 Lubri-cation 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	30 162	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	136000	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	308000	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	393000	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.