FEDERAL SUPPLY CLASS
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ISSUED 1999-07 REVISED 1999-12

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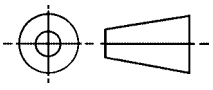

PREPARED BY AIRFRAME CONTROL BEARINGS GROUP

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400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE STANDARD

BEARING, ROLLER, NEEDLE, TRACK ROLLER, INTEGRAL HEAVY STUD, TYPE IX, ANTIFRICTION, INCH

AS21441
SHEET 1 OF 3

REV. A

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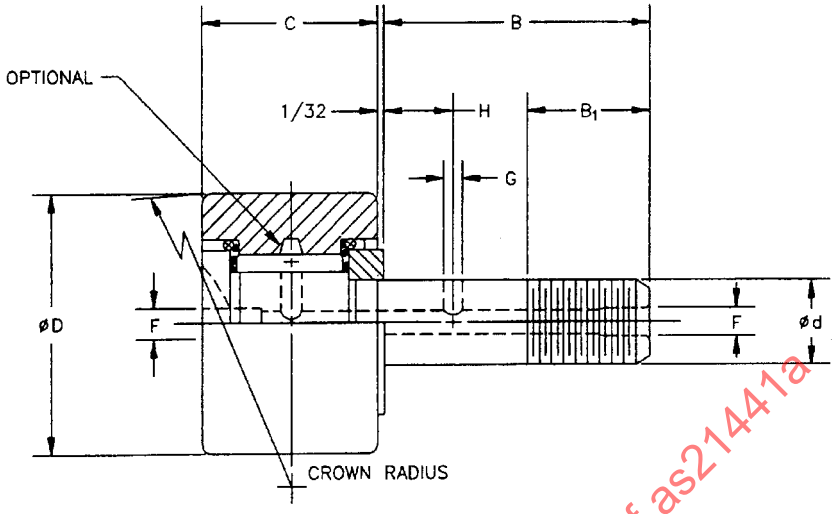

TABLE I. DIMENSIONS

Dash No.	ød Stud Dia.	øD Dia. Outside	C Outer Ring width	B Stud Length	B1 Minimum Perfect Thread Length	Fine Threads UNF	Oil Hole øG Hole Dia.	Oil Hole H Hole Center	F Lub Fitting Size	Crown Radius Ref.	Total Radial Clearance Max.	Clamping Dia. Min.	1/ lbs.-in. max.	Capacity As a Track Roller lbf.	Track Capacity lbf.	Limit Load Rating lbf.	Mass Approx. lbf.
-080	.2500	.5000	.375	0.625	0.2500	1/4-28	–	–	0.125*	7.00	0.0023	0.40	10.0	700	508	1000	0.03
-091	.2500	.5625	.375	0.625	0.2500	1/4-28	–	–	0.125*	7.00	0.0023	0.40	10.0	700	–	1000	0.04
-101	.3125	.6250	.438	0.750	0.3125	5/16-24	–	–	0.125*	8.00	0.0023	0.47	40.0	1100	718	1500	0.05
-111	.3125	.6875	.438	0.750	0.3125	5/16-24	–	–	0.125*	8.00	0.0023	0.47	40.0	1100	–	1500	0.06
-121	.4375	.7500	.500	0.875	0.3750	7/16-20	0.094	0.250	0.188	10.00	0.0023	0.61	150.0	2000	1030	2000	0.09
-141	.4375	.8750	.500	0.875	0.3750	7/16-20	0.094	0.250	0.188	10.00	0.0023	0.61	150.0	2000	1160	2600	0.11
-161	.6250	1.0000	.625	1.000	0.5000	5/8-18	0.125	0.250	0.188	12.00	0.0023	0.78	390.0	2900	1480	3900	0.21
-181	.6250	1.1250	.625	1.000	0.5000	5/8-18	0.125	0.250	0.188	12.00	0.0023	0.78	390.0	2900	1670	3900	0.24
-201	.7500	1.2500	.750	1.250	0.6250	3/4-16	0.125	0.312	0.188	14.00	0.0023	0.97	750.0	4100	2330	5500	0.39
-221	.7500	1.3750	.750	1.250	0.6250	3/4-16	0.125	0.312	0.188	14.00	0.0023	0.97	750.0	4100	2570	5500	0.44
-241	.8750	1.5000	.875	1.500	0.7500	7/8-14	0.157	0.375	0.188	20.00	0.0023	1.10	900.0	5500	3380	7300	0.65
-261	.8750	1.6250	.875	1.500	0.7500	7/8-14	0.157	0.375	0.188	20.00	0.0023	1.10	900.0	5500	3660	7300	0.73
-281	1.0000	1.7500	1.000	1.750	0.8750	1-14	0.157	0.438	0.188	20.00	0.0023	1.30	1350.0	7700	4500	10300	1.02
-301	1.0000	1.8750	1.000	1.750	0.8750	1-14	0.157	0.438	0.188	20.00	0.0023	1.30	1350.0	7700	4828	10300	1.38
-321	1.1250	2.0000	1.250	2.000	1.0000	1 1/8-12	0.188	0.500	0.188	24.00	0.0023	1.45	1650.0	10400	6550	13800	1.59
-361	1.1250	2.2500	1.250	2.000	1.0000	1 1/8-12	0.188	0.500	0.188	24.00	0.0023	1.45	1650.0	10400	7370	13800	1.89
-401	1.2500	2.2500	1.500	2.250	1.1250	1 1/4-12	0.188	0.562	0.188	30.00	0.0023	1.70	2050.0	16200	4250	21600	2.78
-441	1.2500	2.5000	1.500	2.250	1.1250	1 1/4-12	0.188	0.562	0.188	30.00	0.0023	1.70	2050.0	16200	10200	21600	3.21
-481	1.5000	2.7500	1.750	2.500	1.2500	1 1/2-12	0.188	0.625	0.250	30.00	0.0023	2.10	3000.0	24600	13400	32800	4.58
-521	1.5000	3.0000	1.750	2.500	1.2500	1 1/2-12	0.188	0.625	0.250	30.00	0.0023	2.10	3000.0	24600	14500	32800	5.19
-561	1.7500	3.2500	2.000	2.750	1.3750	1 3/4-12	0.188	0.688	0.250	30.00	0.0023	2.44	3000.0	31200	18300	41700	7.13
-641	2.0000	3.5000	2.250	3.500	1.5000	2-12	0.188	0.750	0.250	30.00	0.0023	2.80	3000.0	41000	24100	54700	11.30

* OIL HOLE "F" DRILLED FROM THE FLANGE END OF THE STUD TO THE RADIAL OIL HOLE ONLY.
1/ INSTALLATION TORQUE LUBRICATED THREADS.

TABLE II. TOLERANCE LIMITS

Dimensions in inches

d Basic Stud Diameter		Allowable Deviation From d of Single Mean Dia., d_{mp}		D Basic Outer Ring Outside Diameter		Allowable Deviation From D of Single Mean Dia., D_{mp}		Allowable Deviation From Outer Ring Width,	
Over	Incl.	High	Low	Over	Incl.	High	Low	High	Low
0.1250	1.5000	+0.0015	0.0000	0.4375	4.0000	+0.0020	−0.0005	+0.005	−0.005