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REV.
D

AS21441™

FEDERAL SUPPLY CLASS
3110

RATIONALE

DOCUMENT IS SUBJECT TO FIVE-YEAR REVIEW CYCLE. CLARIFY STUD AND ENDPLATE FINISH. UPDATE FIGURE 1 TO SHOW SCREWDRIVER SLOT. THE DOCUMENT HAS BEEN UPDATED TO CURRENT SAE STANDARDS AND INDUSTRY FEEDBACK.

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS39901.

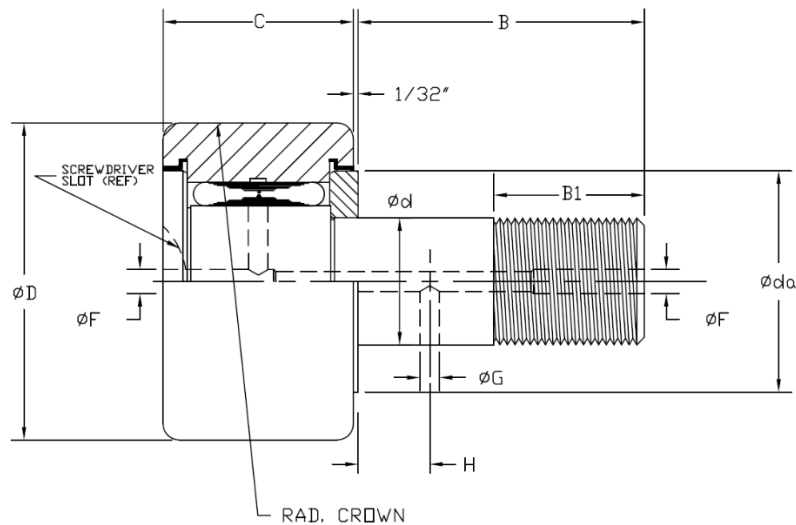
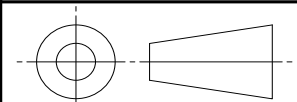


FIGURE 1 - PART CONFIGURATION

For more information on this standard, visit
<https://www.sae.org/standards/content/AS21441D/>

THIRD ANGLE PROJECTION



CUSTODIAN: ACBG

PROCUREMENT SPECIFICATION: AS39901



AEROSPACE STANDARD

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

AS21441™
SHEET 1 OF 4

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TABLE 1A - DIMENSIONS

DASH NO.	Ød STUD DIA	ØD OUTSIDE DIA	C OUTER RING WIDTH	B STUD LENGTH	B ₁ MINIMUM PERFECT THREAD LENGTH	THREADS UNF-3A	OIL HOLE		ØF LUBE FITTING SIZE
							ØG HOLE DIA	H HOLE CENTER	
-080	.2500	.5000	.375	.625	.2500	1/4-28	--	--	.125*
-091	.2500	.5625	.375	.625	.2500	1/4-28	--	--	.125*
-101	.3125	.6250	.438	.750	.3125	5/16-24	--	--	.125*
-111	.3125	.6875	.438	.750	.3125	5/16-24	--	--	.125*
-121	.4375	.7500	.500	.875	.3750	7/16-20	.094	.250	.188
-141	.4375	.8750	.500	.875	.3750	7/16-20	.094	.250	.188
-161	.6250	1.0000	.625	1.000	.5000	5/8-18	.125	.250	.188
-181	.6250	1.1250	.625	1.000	.5000	5/8-18	.125	.250	.188
-201	.7500	1.2500	.750	1.250	.6250	3/4-16	.125	.312	.188
-221	.7500	1.3750	.750	1.250	.6250	3/4-16	.125	.312	.188
-241	.8750	1.5000	.875	1.500	.7500	7/8-14	.157	.375	.188
-261	.8750	1.6250	.875	1.500	.7500	7/8-14	.157	.375	.188
-281	1.0000	1.7500	1.000	1.750	.8750	1-14	.157	.438	.188
-301	1.0000	1.8750	1.000	1.750	.8750	1-14	.157	.438	.188
-321	1.1250	2.0000	1.250	2.000	1.0000	1-1/8-12	.188	.500	.188
-361	1.1250	2.2500	1.250	2.000	1.0000	1-1/8-12	.188	.500	.188
-401	1.2500	2.2500	1.500	2.250	1.1250	1-1/4-12	.188	.562	.188
-441	1.2500	2.5000	1.500	2.250	1.1250	1-1/4-12	.188	.562	.188
-481	1.5000	2.7500	1.750	2.500	1.2500	1-1/2-12	.188	.625	.250
-521	1.5000	3.0000	1.750	2.500	1.2500	1-1/2-12	.188	.625	.250
-561	1.7500	3.2500	2.000	2.750	1.3750	1-3/4-12	.188	.688	.250
-641	2.0000	3.5000	2.250	3.500	1.5000	2-12	.188	.750	.250

* OIL HOLE "F" DRILLED FROM THE FLANGE END OF THE STUD TO THE RADIAL OIL HOLE ONLY.

TABLE 1B - DIMENSIONS

DASH NO.	CROWN RADIUS REF	Ød _s CLAMPING DIA MIN	TORQUE LB-IN MAX 1/	CAPACITY AS A TRACK ROLLER	TRACK CAPACITY HRC 40 LBF	LIMIT LOAD RATING LBF	MASS (APPROX) LB
-080	7	.40	10	700	508	1000	.03
-091	7	.40	10	700	575	1000	.04
-101	8	.47	40	1100	718	1500	.05
-111	8	.47	40	1100	865	1500	.06
-121	10	.61	150	2000	1030	2600	.09
-141	10	.61	150	2000	1160	2600	.11
-161	12	.78	390	2900	1480	3900	.21
-181	12	.78	390	2900	1670	3900	.24
-201	14	.97	750	4100	2330	5500	.39
-221	14	.97	750	4100	2570	5500	.44
-241	20	1.10	900	5500	3380	7300	.65
-261	20	1.10	900	5500	3660	7300	.73
-281	20	1.30	1350	7700	4500	10300	1.02
-301	20	1.30	1350	7700	4828	10300	1.38
-321	24	1.45	1650	10400	6550	13800	1.59
-361	24	1.45	1650	10400	7370	13800	1.89
-401	30	1.70	2050	16200	9250	21600	2.78
-441	30	1.70	2050	16200	10200	21600	3.21
-481	30	2.10	3000	24600	13400	32800	4.58
-521	30	2.10	3000	24600	14500	32800	5.19
-561	30	2.44	3000	31200	18300	41700	7.13
-641	30	2.80	3000	41000	24100	54700	11.3

1/ INSTALLATION TORQUE LUBRICATED THREADS.

TABLE 2 - TOLERANCE LIMITS

Ød BASIC STUD DIAMETER		ALLOWABLE DEVIATION FROM d OF SINGLE MEAN DIA, d _{mp}		ØD BASIC OUTER RING OUTSIDE DIAMETER		ALLOWABLE DEVIATION FROM D OF SINGLE MEAN DIA, D _{mp}		ALLOWABLE DEVIATION FROM OUTER RING WIDTH, C	
OVER	INCL	HIGH	LOW	OVER	INCL	HIGH	LOW	HIGH	LOW
.1250	1.5000	+.0015	-.0000	.4375	3.5000	+.0020	-.0005	+.005	-.005

	AEROSPACE STANDARD	AS21441™ SHEET 2 of 4	REV. D
	BEARING, ROLLER, NEEDLE, TRACK ROLLER, INTEGRAL HEAVY STUD, TYPE IX, ANTIFRICTION, INCH		

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