FEDERAL SUPPLY CLASS
4730

RATIONALE

ADDED EFFECTIVE DATE OF INACTIVE FOR NEW DESIGN UNDER NOTES.

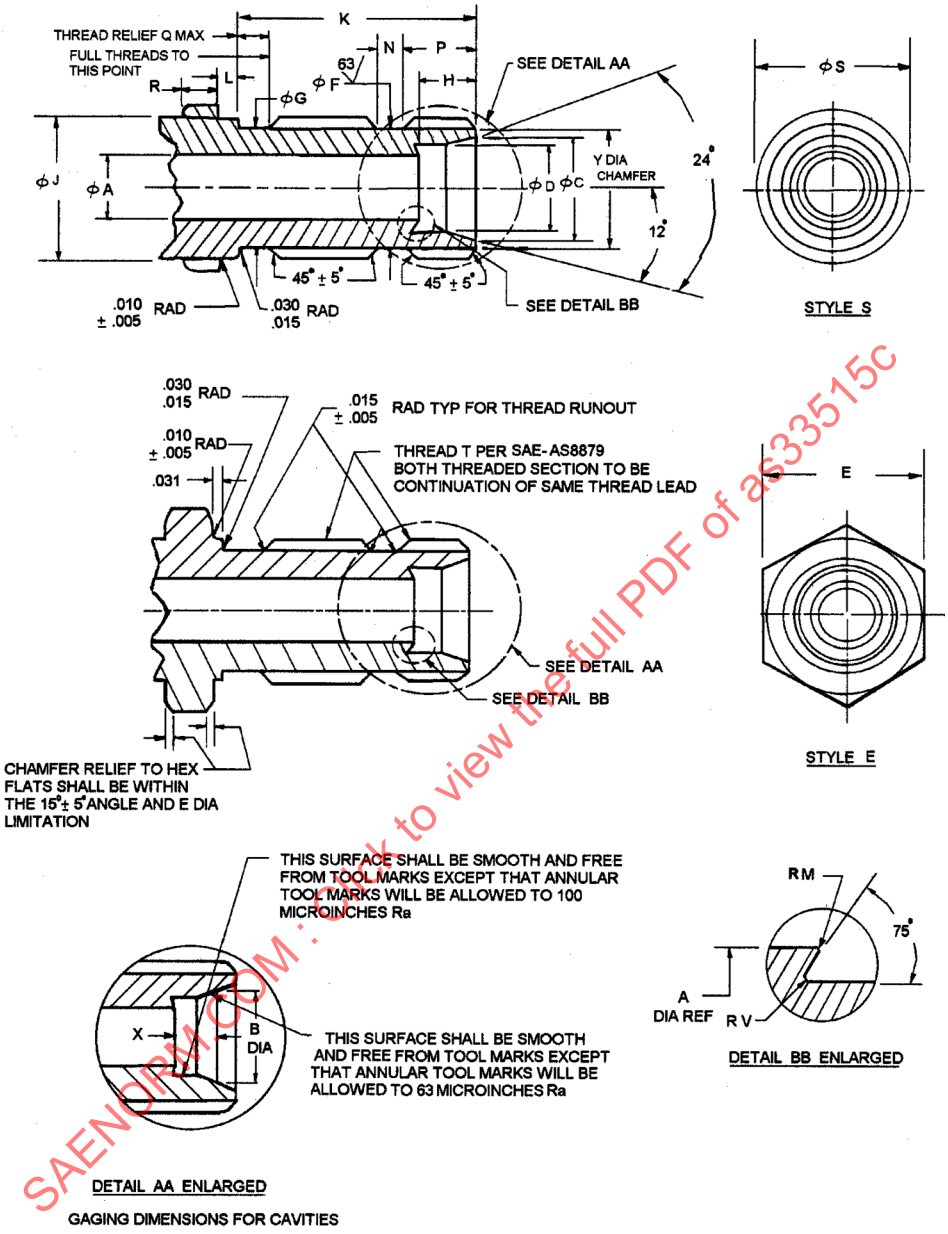
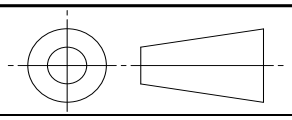


FIGURE 1 - STYLE E AND S

INACTIVE FOR NEW DESIGN /6/

THIRD ANGLE PROJECTION



ISSUED 1998-08 REAFFIRMED 2007-01 REVISED 2008-07

CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: NONE

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

FITTING END, STANDARD DIMENSIONS FOR BULKHEAD FLARELESS TUBE CONNECTIONS

SAE AS33515

SHEET 1 OF 3

REV. C

TABLE 1 - DIMENSIONS DATA (A TO J)

SIZE NO.	TUBE OD	THREAD T AS8879	A ±.003	B ±.0001 GAGE	C REF	D +.004 –.000	E		F +.000 –.003 /9/	G +.000 –.005	H ±.003	J MAX	J MIN
2	.125	.3125-24 UNJF-3A	.093	.163	.189	.135	.563	+.003 –.004	.250	.245	.188	.3125	.3053
3	.188	.3750-24 UNJF-3A	.125	.234	.267	.196	.625		.312	.307	.234	.3750	.3678
4	.250	.4375-20 UNJF-3A	.187	.293	.319	.261	.688		.364	.359	.234	.4375	.4294
5	.313	.5000-20 UNJF-3A	.234	.356	.382	.324	.750		.426	.421	.250	.5000	.4919
6	.375	.5625-18 UNJF-3A	.297	.416	.441	.386	.813		.481	.476	.250	.5625	.5538
8	.500	.7500-16 UNJF-3A	.422	.560	.601	.514	1.000		.660	.654	.305	.7500	.7406
10	.625	.8750-14 UNJF-3A	.500	.686	.727	.641	1.125		.773	.767	.350	.8750	.8647
12	.750	1.0625-12 UNJ-3A	.656	.810	.852	.766	1.375		.945	.938	.350	1.0625	1.0511
16	1.000	1.3125-12 UNJ-3A	.875	1.062	1.102	1.016	1.625	±.016	1.195	1.188	.415	1.3125	1.3011
20	1.250	1.6250-12UNJ-3A	1.093	1.316	1.355	1.270	1.875		1.507	1.501	.415	1.6250	1.6136
24	1.500	1.8750-12 UNJ-3A	1.344	1.565	1.604	1.520	2.125	±.020	1.756	1.750	.485	1.8750	1.8636
32	2.000	2.5000-12 UNJ-3A	1.813	2.068	2.108	2.022	2.750		2.381	2.375	.485	2.5000	2.4886

TABLE 1 - DIMENSIONS DATA (K TO Y)

SIZE NO.	TUBE OD	K	L	M MAX RAD	N +.010 –.000	P ±.005	Q MAX	R ±.030	S ±.031 DIA	V RAD MAX	V RAD MIN	W MAX	X ±.005	Y ±.010
2	.125	.828	.094	.005	.125	.290	.078	.110	.438	.010	.005	.005	.128	.250
3	.188	.875			.131	.340			.500	.015	.010		.158	.310
4	.250	.938			.140	.355	.090	.120	.562				.174	.365
5	.313			.010					.625				.190	.425
6	.375	.984			.156	.365	.098	.140	.688				.193	.480
8	.500	1.125	.125		.187	.445	.109	.160	.875				.210	.660
10	.625	1.266			.219	.495	.122	.170	1.000				.255	.775
12	.750	1.375			.234	.545	.140	.190	1.187			.008	.253	.945
16	1.000								1.438				.322	1.195
20	1.250			.015					1.750	.025	.020		.325	1.505
24	1.500								2.000				.390	1.755
32	2.000	1.578							2.625				.395	2.380

NOTES:

1. CONCENTRICITY: D, C, AND T (PITCH DIAMETER) SHALL BE CONCENTRIC TO EACH OTHER WITHIN .008 TOTAL INDICATOR READING (TIR). F AND T (PITCH DIAMETER) SHALL BE CONCENTRIC TO EACH OTHER WITHIN .005 TIR.

2. THREAD AND FACE OF HEX SHALL BE SQUARE WITHIN W WHEN MEASURED AT DIAMETER E.

3. SURFACE ROUGHNESS SHALL BE IN ACCORDANCE WITH ASME B46.1.

4. ON STYLE S FITTING END, THE L DIMENSION PROVIDES FOR A WASHER TO FORM BACKING FACE AGAINST BULKHEAD AND A .031 INCH LAND FOR POSITIONING IN BULKHEAD. ON STYLE E FITTING END NO WASHER IS REQUIRED.

5. CERTAIN PROVISIONS (SCREW THREADS, HEXAGON SIZE AND UNDERCUT DIMENSIONS) OF THIS STANDARD ARE SUBJECT OF INTERNATIONAL STANDARDIZATION AGREEMENT ASCC AIR STANDARD 25/6. WHEN REVISION OR CANCELLATION OF THIS STANDARD IS PROPOSED WHICH WILL AFFECT OR VIOLATE THE INTERNATIONAL AGREEMENT CONCERNED, THE PREPARING ACTIVITY WILL TAKE APPROPRIATE RECONCILIATION ACTION THROUGH INTERNATIONAL STANDARDIZATION CHANNELS, INCLUDING DEPARTMENTAL STANDARDIZATION OFFICES IF REQUIRED.