

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

REV.
D

AS33515

FEDERAL SUPPLY CLASS
4730

RATIONALE

CORRECTED EDITORIAL ERROR IN TABLE 1, "F" DIMENSION HEADER REFERENCE NOTE /10/.

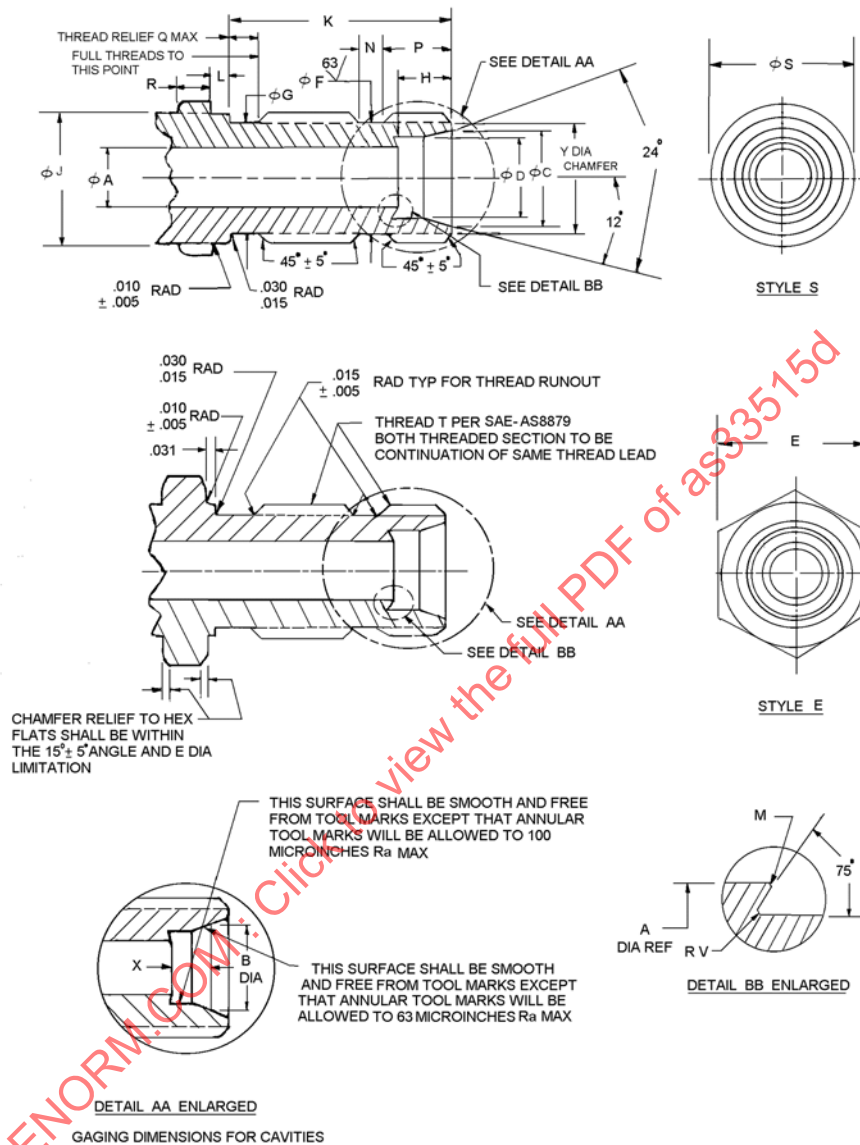


FIGURE 1 - STYLE E AND S

INACTIVE FOR NEW DESIGN /6/

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS33515D>

CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: NONE



AEROSPACE STANDARD

FITTING END, STANDARD DIMENSIONS
FOR BULKHEAD
FLARELESS TUBE CONNECTIONS

AS33515
SHEET 1 OF 3

REV.
D

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 /10/	G +.000 −.005	H ±.003	J	
												MAX	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		1.195	1.188	.415	1.3125	1.3011
20	1.250	1.6250-12 UNJ-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	±.016 ±.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		W MAX	X ±.005	Y ±.010				
										MAX	MIN							
2	.125	.828	.094	.005	.125	.290	.078	.110	.438	.010	.005	.005	.128	.250				
3	.188	.875			.131	.340			.500	.158	.310							
4	.250	.938			.140	.355			.090	.120	.562		.174	.365				
5	.313										.625				.190	.425		
6	.375	.984	.125	.010	.156	.365	.098	.140	.688	.015	.010	.005	.193	.480				
8	.500	1.125			.187	.445	.109	.160	.875				.210	.660				
10	.625	1.266			.219	.495	.122	.170	1.000				.255	.775				
12	.750	1.375			.015	.234	.545	.140	.190				1.187	.025	.020	.008	.253	.945
16	1.000												1.438				.322	1.195
20	1.250			1.750						.325	1.505							
24	1.500			2.000						.390	1.755							
32	2.000	1.578						2.625				.395	2.380					

NOTES:

- 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.
- THREAD AND FACE OF HEX SHALL BE SQUARE WITHIN W WHEN MEASURED AT DIAMETER E.
- SURFACE ROUGHNESS SHALL BE IN ACCORDANCE WITH ASME B46.1.
- 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.
- 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.
- /6/ THIS STANDARD IS INACTIVE FOR NEW DESIGN EFFECTIVE JULY 2008. FOR NEW DESIGN, USE AS4377, "FITTING END, BULKHEAD, FLARELESS, DESIGN STANDARD" OR AS5864, "FITTING END, BULKHEAD, 24° CONE, FLARELESS, FLUID CONNECTION, DESIGN STANDARD". REMOVE ALL BURRS, SLIVERS, AND SHARP EDGES.
- REMOVE ALL BURRS, SLIVERS AND SHARP EDGES.