

REV.
A

AS5827

FEDERAL SUPPLY CLASS
4730

RATIONALE

AS5827A HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

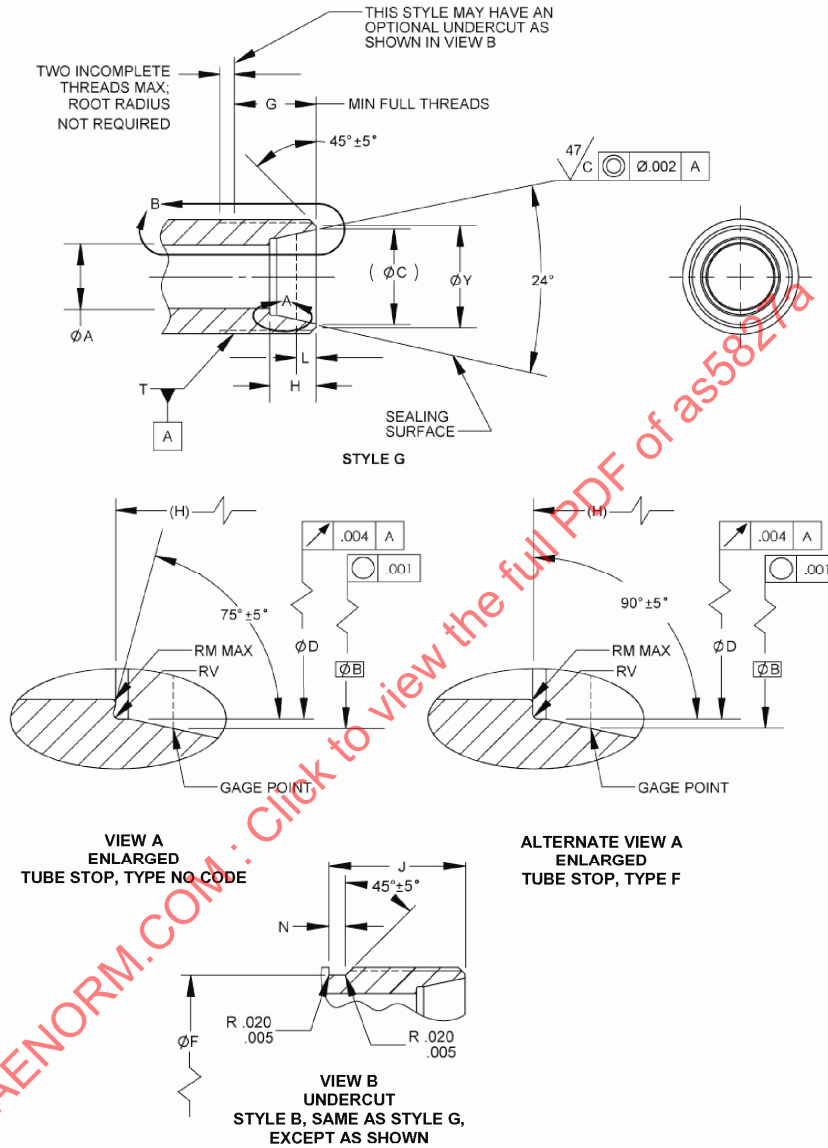
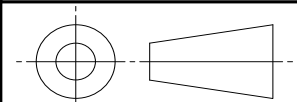


FIGURE 1 - FITTING END DESIGN, STYLE B AND G

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS5827A>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3C

PROCUREMENT SPECIFICATION: NONE /1/



AEROSPACE STANDARD

FITTING END, FLARELESS,
EXTRA FINE THREAD, DESIGN STANDARD

AS5827
SHEET 1 OF 4

REV.
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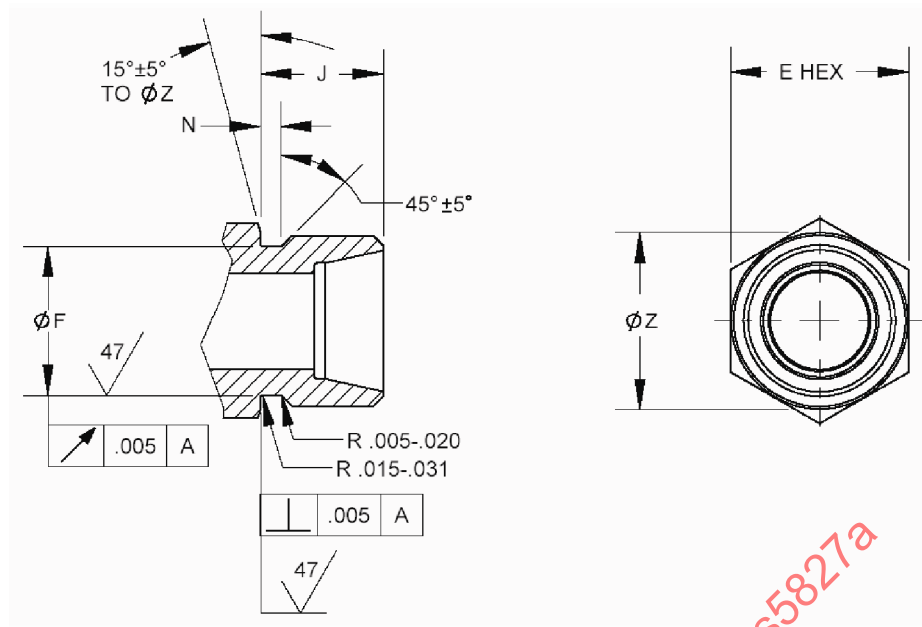


FIGURE 2 - FITTING END DESIGN, STYLE E
SAME AS STYLE G EXCEPT AS SHOWN

TABLE 1A - DIMENSIONS A-F

BASIC NO. AS5827 /7/ SIZE CODE	(NOMINAL TUBE SIZE)	T THREAD PER ISO 3161 CLASS 3A	A ±.003	B GAGE	(C)	D +.004/- .000	F +.004/- .003
04	.250	.4375-28 UNJEF	.187	.2930	.319	.261	.379
06	.375	.5625-24 UNJEF	.297	.4160	.441	.386	.497
08	.500	.7500-20 UNJEF	.422	.5600	.601	.514	.674
10	.625	.8750-20 UNJEF	.500	.6860	.727	.641	.799
12	.750	1.0625-18 UNJEF	.656	.8100	.852	.766	.971
16	1.000	1.3125-16 UNJ	.875	1.0620	1.102	1.016	1.221
20	1.250	1.6250-16 UNJ	1.093	1.3160	1.355	1.270	1.533

TABLE 1B - DIMENSIONS G-Y

BASIC NO. AS5827 /7/ SIZE CODE	G	H ±.003	J	L ±.003	M MAX	N +.015/- .000	V	Y
04	.443	.234	.453	.060	.005	.075	.005-.020	.365
06	.459	.250	.469	.057	.010	.083	.005-.020	.480
08	.552	.305	.562	.095	.010	.094	.005-.020	.660
10	.615	.350	.625	.095	.010	.107	.005-.020	.775
12	.678	.350	.688	.097	.010	.125	.005-.020	.945
16	.678	.415	.688	.093	.010	.125	.005-.020	1.195
20	.678	.415	.688	.090	.015	.125	.020-.030	1.505

TABLE 1C – WRENCH PAD DIMENSIONS E-Z

E			Z MIN	WRENCH INCH	BASIC NO. AS5827 /7/ SIZE CODE						
SIZE CODE	DIM	TOL.			04	06	08	10	12	16	20
07	.438	+.003 -.004	.424	7/16	R						
08	.500		.486	1/2	P						
09	.563		.549	9/16	P	R					
10	.625		.611	5/8	P	P					
11	.688		.674	11/16	P	P					
12	.750		.736	3/4	P	P	R				
13	.813		.799	13/16	P	P	P				
14	.875		.861	7/8	P	P	P	R			
15	.938		.924	15/16	P	P	P	P			
16	1.000		.986	1"	P	P	P	P			
17	1.063		1.049	1" 1/16	P	P	P	P	R		
18	1.125		1.111	1" 1/8	P	P	P	P	P		
19	1.188		1.174	1" 3/16	P	P	P	P	P		
20	1.250		1.236	1" 1/4	P	P	P	P	P		
21	1.313		1.299	1" 5/16	P	P	P	P	P	R	
22	1.375		1.361	1" 3/8	P	P	P	P	P	P	
23	1.438		1.424	1" 7/16	P	P	P	P	P	P	
24	1.500		1.486	1" 1/2	P	P	P	P	P	P	
25	1.563		1.549	1" 9/16	P	P	P	P	P	P	
26	1.625	±. 010	1.605	1" 5/8	P	P	P	P	P	P	R
27	1.688		1.668	1" 11/16	P	P	P	P	P	P	P
28	1.750		1.730	1" 3/4	P	P	P	P	P	P	P
29	1.813		1.793	1" 13/16	P	P	P	P	P	P	P
30	1.875		1.855	1" 7/8	P	P	P	P	P	P	P
31	1.938		1.918	1" 15/16	P	P	P	P	P	P	P
32	2.000		1.980	2"	P	P	P	P	P	P	P
R = RECOMMENDED HEX VALUES FOR STANDARD FITTING END AND FOR WEIGHT SAVING P = POSSIBLE HEX VALUES, BUT NOT RECOMMENDED.											

NOTES:

- /1/ THIS FITTING END IS DESIGNED FOR USE WITH FLARELESS FITTINGS IN ACCORDANCE WITH AS4444 OR AS5000. THIS FITTING END MAY BE USED ON UNIONS, ELBOW, CROSSES AND TEES AT PRESSURES UP TO 5080 psi. THIS FITTING END IS NOT INTENDED FOR USE IN BOSS APPLICATIONS.
2. INTERPRETATION OF DRAWING PER AS4296.
3. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M; REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 µin Ra.
4. BREAK EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.
5. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1994.
6. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ±.010, ANGULAR DIMENSIONS ±0°30'.

/7/ EXAMPLE OF DRAWING CALLOUT:

- a. TABULATED PART DRAWING: FITTING END PER AS5827, STYLES B, E OR G AND TYPE NO CODE OR F AND SIZE 07, 08, ..., 32 AS APPLICABLE.



AEROSPACE STANDARD

FITTING END, FLARELESS,
EXTRA FINE THREAD, DESIGN STANDARDAS5827
SHEET 3 OF 4REV.
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