

RATIONALE

FEDERAL SUPPLY CLASS
4730

NEW STANDARD FOR OPERATING PRESSURES UP TO AND INCLUDING 1500 PSI

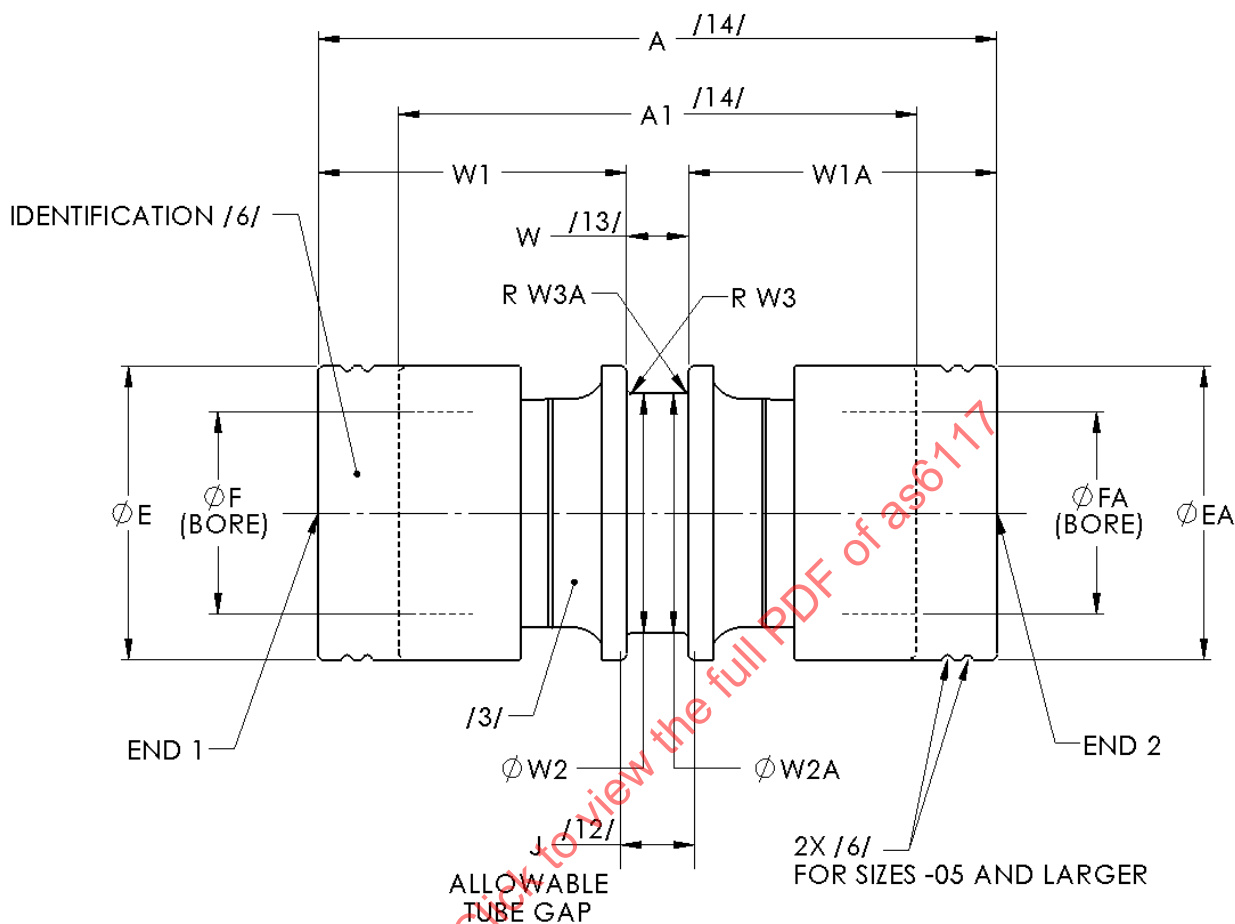
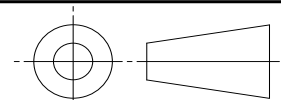


FIGURE 1 - FITTING ASSEMBLY, UNION

SAE values your input. To provide feedback
on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS6117>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS6116

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD
FITTING ASSEMBLY, UNION,
AXIALLY SWAGED, HYDRAULIC, UP TO 1500 PSI

SAE AS6117
SHEET 1 OF 3

TABLE 1A – DIMENSIONS A THROUGH J

BASIC NO. AS6117 /16/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	A MAX	A1 MAX	ØE MAX	ØEA MAX	ØF MIN	ØFA MIN	J /12/ ALLOWABLE TUBE GAP
0404	.250	.250	1.416	1.110	.435	.435	.253	.253	.150 ±.150
0505	.3125	.3125	1.676	1.380	.503	.503	.3155	.3155	.150 ±.150
0604	.375	.250	1.995	1.595	.580	.435	.378	.253	.300 ±.300
0606	.375	.375	1.974	1.520	.580	.580	.378	.378	.150 ±.150
0806	.500	.375	2.477	1.970	.755	.580	.503	.378	.300 ±.300
0808	.500	.500	2.380	1.860	.755	.755	.503	.503	.150 ±.150
1010	.625	.625	2.390	1.910	.929	.929	.629	.629	.150 ±.150
1212	.750	.750	2.670	2.110	1.150	1.150	.754	.754	.150 ±.150
1616	1.000	1.000	3.412	2.652	1.474	1.474	1.004	1.004	.150 ±.150
2020	1.250	1.250	3.960	3.120	1.768	1.768	1.255	1.255	.150 ±.150
2424	1.500	1.500	4.680	3.680	2.070	2.070	1.505	1.505	.150 ±.150

TABLE 1B - DIMENSIONS W THROUGH W3A AND WEIGHTS

BASIC NO. AS6117 /16/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	W MIN	W1 MAX	W1A MAX	ØW2 ±.002	ØW2A ±.002	W3 MAX	W3A MAX	WEIGHT APPROX LB/EA
0404	.250	.250	.185	.604	.604	.320	.320	.020	.020	.008
0505	.3125	.3125	.180	.724	.724	.371	.371	.020	.020	.014
0604	.375	.250	.480	.883	.604	.463	.320	.020	.020	.018
0606	.375	.375	.195	.883	.883	.463	.463	.020	.020	.020
0806	.500	.375	.400	1.076	.883	.595	.463	.020	.020	.034
0808	.500	.500	.210	1.076	1.076	.595	.595	.020	.020	.043
1010	.625	.625	.225	1.076	1.076	.758	.758	.020	.020	.057
1212	.750	.750	.235	1.201	1.201	.903	.903	.025	.025	.100
1616	1.000	1.000	.260	1.566	1.566	1.196	1.196	.035	.035	.210
2020	1.250	1.250	.285	1.829	1.829	1.460	1.460	.035	.035	.322
2424	1.500	1.500	.310	2.178	2.178	1.704	1.704	.035	.035	.552

NOTES:

/1/ MATERIALS:

CODE LETTER "D"

BODY - TYPE 6061-T6 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/8.

RING - TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9.

2. FINISH:

BODY - CHEMICAL CONVERSION COATED PER MIL-DTL-5541 TYPE I CLASS 3.

RINGS - ANODIZE PER MIL-A-8625, TYPE II, CLASS 2, DYED GREEN, SIMILAR TO NO. 14187, 14193, OR 14223 OF FED-STD-595 AND SHALL BE DUPLEX SEALED.

/3/ COATINGS/LUBRICANTS:

BODY

- A. DRY FILM LUBRICANT PER AS5272 TYPE I SHALL BE APPLIED TO THE OD OF THE AXIALLY SWAGED FITTING END. ADDITIONAL LUBRICANT APPLIED SHALL BE SPECIFIED BY MANUFACTURER. THE LUBRICANTS SHALL NOT BE IN CONTACT WITH THE SYSTEM FLUID.
- B. POLYTETRAFLUOROETHYLENE (PTFE) COAT, LIGHT GREEN, SHALL BE APPLIED TO PORTIONS OF ID (BORE) UP TO THE FIRST GROOVE. OVERSPRAY IN GROOVE IS NOT PERMITTED.
- C. A MINIMUM OF TWO GROOVES (END SIZE -.05 AND LARGER) SHALL BE FILLED WITH ELASTOMERIC DIMETHYL SILOXANE COMPOUND. FOR SMALLER SIZE ENDS, A MINIMUM OF ONE GROOVE SHALL BE FILLED WITH THE COMPOUND.