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AS8461™

FEDERAL SUPPLY CLASS
4730

RATIONALE

NEW FITTING BASED ON AS4223 UNION EXCEPT AS85720 ONLY QUALIFICATION REQUIREMENTS (5000 psi).

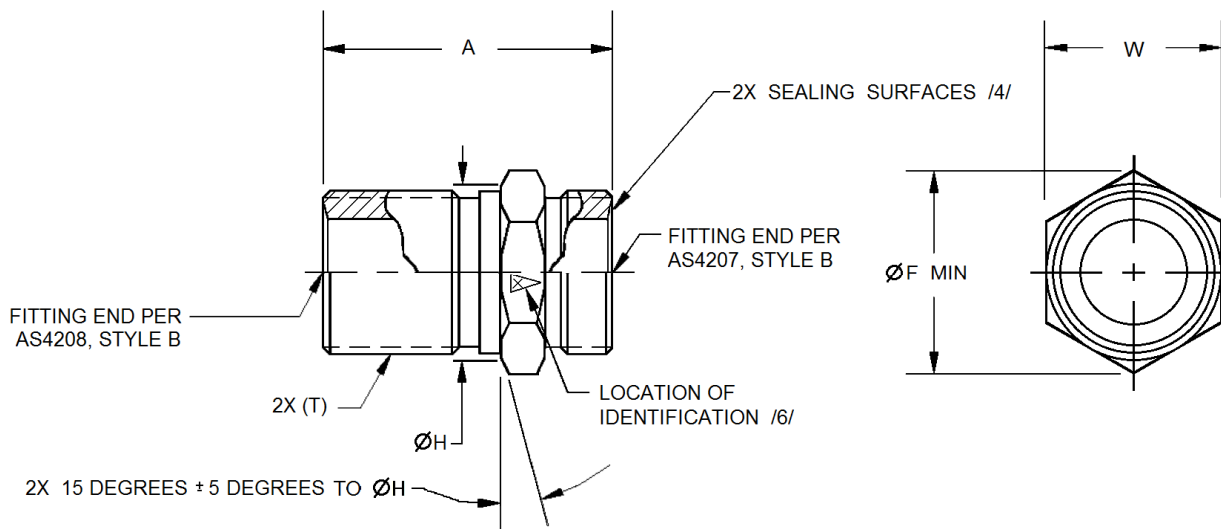


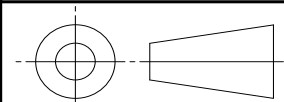
FIGURE 1 - FITTING, UNION, BULKHEAD

TABLE 1A - DIMENSIONS AND WEIGHTS

BASIC NO. AS8461 /13/ SIZE CODE	(NOMINAL TUBE SIZE)	T THREAD PER AS8879 CLASS A	A	F MIN	H ±.010	W	MASS LB/EA APPROX REF CRES	MASS LB/EA APPROX REF TI
03	.188	.3750-28 UNJS	1.019	.706	.605	.615-.628	.0348	.0199
04	.250	.4375-24 UNJS	1.187	.775	.668	.678-.691	.0541	.0309
05	.312	.5000-24 UNJS	1.197	.848	.730	.740-.753	.0684	.0391
06	.375	.5625-20 UNJS	1.302	.919	.792	.802-.815	.0874	.0499
08	.500	.7188-20 UNJS	1.363	1.120	.980	.990-1.003	.136	.0780
10	.625	.8438-18 UNJS	1.572	1.260	1.103	1.113-1.128	.187	.107
12	.750	1.0000-16 UNJ	1.774	1.400	1.228	1.238-1.253	.262	.150
14	.875	1.1250-16 UNJ	1.852	1.540	1.353	1.363-1.380	.325	.186
16	1.000	1.2500-14 UNJS	1.928	1.650	1.478	1.488-1.505	.398	.228
20	1.250	1.5781-14 UNJS	1.971	2.063	1.853	1.863-1.880	.574	.328

SAE values your input. To provide feedback
on this Technical Report, please visit
<http://standards.sae.org/AS8461>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS85720 /5/



AEROSPACE STANDARD

FITTING, UNION, BULKHEAD, BEAM SEAL, 5000 psi

AS8461™
SHEET 1 OF 3

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NOTES:

/1/ MATERIAL:

- a. CODE LETTER P - TYPE 17-4PH CORROSION RESISTANT STEEL BAR PER AMS5643.
- b. CODE LETTER T - TYPE 6AL-4V TITANIUM ALLOY BAR PER AMS4965.
- c. CODE LETTER V - TYPE 15-5PH CORROSION RESISTANT STEEL BAR PER AMS5659.

2. HEAT TREATMENT:

- a. MATERIAL CODE LETTERS P AND V - HEAT TREAT TO CONDITION H 1075 PER AMS2759/3.
- b. MATERIAL CODE LETTERS T - NONE.

3. FINISH:

- a. MATERIAL CODE LETTERS P AND V - PASSIVATE PER AMS2700, TYPE 2 OR 8.
- b. MATERIAL CODE LETTERS T - NONE.

/4/ SOLID FILM LUBRICANT: APPLY SOLID FILM LUBRICANT PER AS5272, TYPE I TO SEALING SURFACE. OVERSPRAY IN BORE IS NOT PERMITTED.

/5/ PROCUREMENT SPECIFICATION: AS85720 FOR OPERATING PRESSURES TO 5000 psi. THIS PART SHALL BE QUALIFIED TO THE PROCUREMENT SPECIFICATION AS APPLICABLE IN A COMPLETE ASSEMBLY. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY THE ACCREDITED MANUFACTURER LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCT LIST (QPL) PRI-QPL-AS85720 AS APPLICABLE FOR THIS STANDARD. SEE www.eAuditNet.com FOR CURRENT QPL ONLINE.

/6/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS478 CLASS C OR D OR METHOD 7A3, 15A3, OR 15B.

- a. FOR SIZES 06 (.375 OD TUBE SIZE) AND SMALLER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, MATERIAL CODE LETTER, AND MAXIMUM PRESSURE RATING. (EXAMPLE: 5K = 5000 psi.)
- b. FOR SIZES 08 (.500 OD TUBE SIZE) AND LARGER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, BASIC PART NUMBER, MATERIAL CODE LETTER, AND MAXIMUM PRESSURE RATING. (EXAMPLE: 5K = 5000 psi.)

7. THIS PART IS DESIGNED FOR USE IN SYSTEMS WITH MAXIMUM OPERATING PRESSURES UP TO 5000 psi. FOR LOWER OPERATING PRESSURES AND LARGER SIZES REFER TO AS4223.

8. INTERPRETATION OF DRAWING PER AS4296.

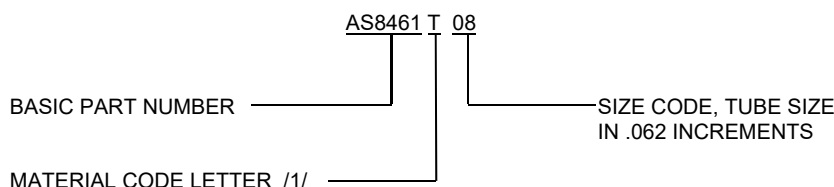
9. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M; REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 MICROINCHES Ra. SURFACES OF HEX FLATS MAY BE 125 MICROINCHES Ra.

10. REMOVE ALL BURRS AND BREAK EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.

11. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1994.

12. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ± 0.015 , ANGULAR DIMENSIONS $\pm 5^\circ$.

/13/ EXAMPLE OF PART NUMBER:



	AEROSPACE STANDARD		AS8461™ SHEET 2 OF 3	
	FITTING, UNION, BULKHEAD, BEAM SEAL, 5000 psi			

