

AS4136

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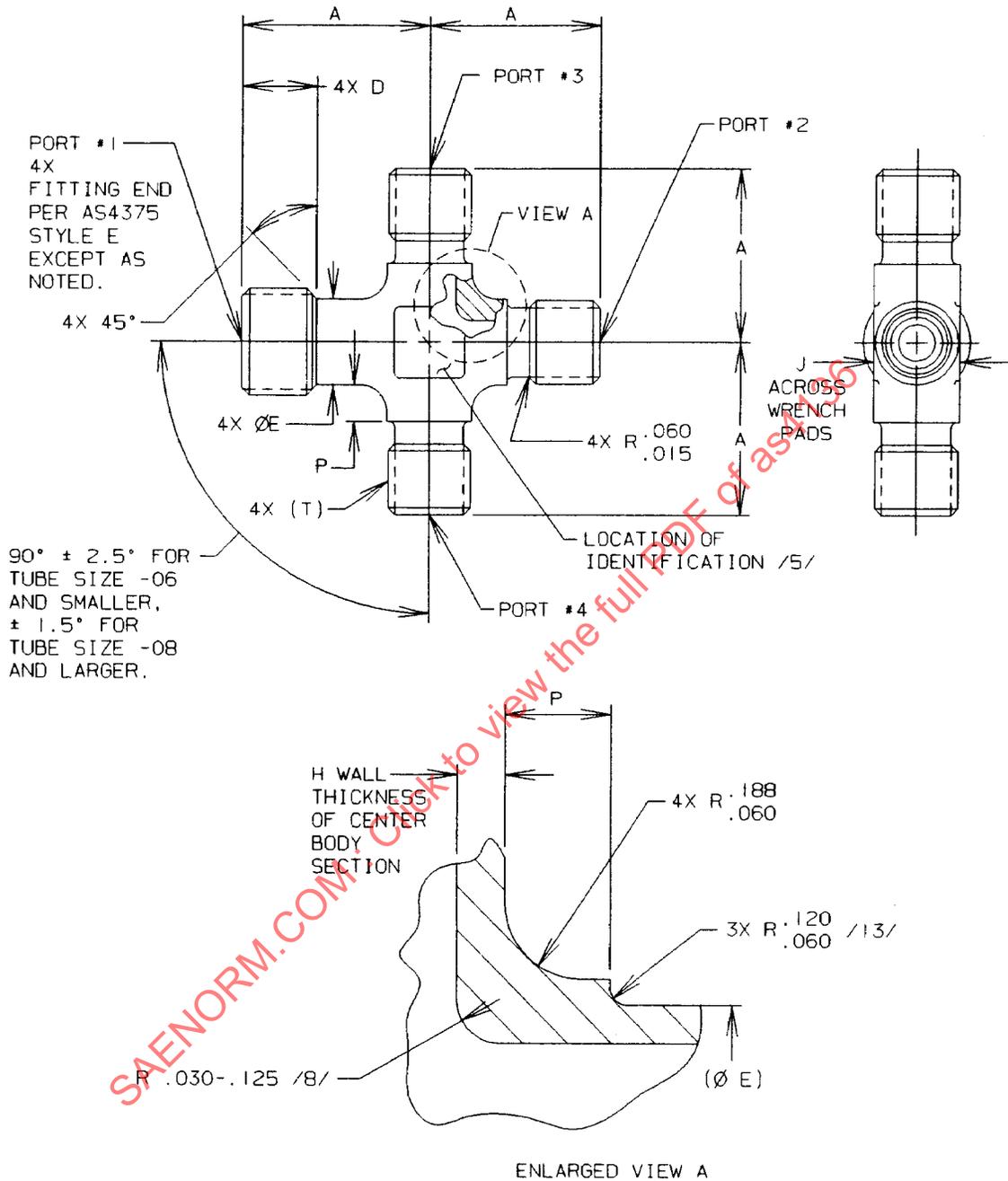
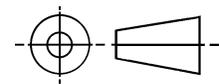


FIGURE 1 - CROSS, REDUCED BODY, FLARELESS

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ MIL-F-18280

SAE The Engineering Society
For Advancing Mobility
Land Sea Air and Space
INTERNATIONAL
400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE STANDARD

CROSS, REDUCED BODY, FLARELESS

AS4136
SHEET 1 OF 4

ISSUED 1992-11 REAFFIRMED 2000-10

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TABLE 1 - DIMENSIONS AND WEIGHTS

BASIC NO. AS4136 /19/ SIZE CODE	H MIN	J	P ±.030	LB/EA MAX CRES	LB/EA MAX TI
04	.050	.390	.030	.072	.040
05	.050	.453	.159	.083	.047
06	.050	.453	.137	.112	.063
08	.050	.577	.140	.217	.122
10	.070	.702	.157	.342	.192
12	.080	.890	.166	.512	.288
16	.090	1.140	.174	.763	.428
20	.110	1.390	.071	1.200	.674
24	.130	1.640	---	1.537	.863

TABLE 2 - FITTING END

SIZE CODE	TUBE OD	T THREAD PER MIL-S-8879	D	E
04	.250	.4375-20UNJF	.371	.350
05	.313	.5000-20UNJF	.371	.412
06	.375	.5625-18UNJF	.379	.453
08	.500	.7500-16UNJF	.461	.577
10	.625	.8750-14UNJF	.511	.702
12	.750	1.0625-12UNJ	.556	.890
16	1.000	1.3125-12UNJ	.556	1.140
20	1.250	1.6250-12UNJ	.556	1.390
24	1.500	1.8750-12UNJ	.556	1.640

TABLE 3 - LEG LENGTH A

FORGING SIZE	04	05	06	08	10	12	16	20	24
04	.898	---	---	---	---	---	---	---	---
05	.961	.961	---	---	---	---	---	---	---
06	1.039	1.039	1.055	---	---	---	---	---	---
08	1.164	1.164	1.180	1.273	---	---	---	---	---
10	1.258	1.258	1.274	1.367	1.430	---	---	---	---
12	1.351	1.351	1.367	1.460	1.523	1.586	---	---	---
16	1.507	1.507	1.523	1.616	1.679	1.742	1.742	---	---
20	1.663	1.663	1.679	1.772	1.835	1.898	1.898	1.898	---
24	1.788	1.788	1.804	1.897	1.960	2.023	2.023	2.023	2.023

NOTES:

/1/ MATERIAL:

- a. CODE LETTER J: TYPE 304 CORROSION RESISTANT STEEL PER AMS 5639
- b. CODE LETTER T: TYPE 6AL-4V TITANIUM ALLOY PER AMS 4928
- c. CODE LETTER V: TYPE 15-5PH CORROSION RESISTANT STEEL PER AMS 5659

2. HEAT TREATMENT:

- a. MATERIAL CODE LETTER J: NONE
- b. MATERIAL CODE LETTER T: NONE
- c. MATERIAL CODE LETTER V: HEAT TREAT TO CONDITION H-1075 PER AMS 2759/3

/3/ FINISH:

- a. MATERIAL CODE LETTER J: PASSIVATE PER QQ-P-35 TYPE VI OR TYPE VII
- b. MATERIAL CODE LETTER T: FLUORIDE PHOSPHATE CONVERSION COAT PER AMS 2486
- c. MATERIAL CODE LETTER V:

- (1) NO SUFFIX FINISH CODE LETTER: PASSIVATE PER QQ-P-35, TYPE II OR VIII
- (2) SUFFIX FINISH CODE LETTER "P": CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 2

/4/ PROCUREMENT SPECIFICATION: MIL-F-18280 EXCEPT AS SPECIFIED ON THIS STANDARD. THIS PART SHALL BE QUALIFIED TO THE PROCUREMENT SPECIFICATION AS APPLICABLE IN A COMPLETE ASSEMBLY. USERS OF THIS STANDARD ARE ADVISED TO CONTROL SOURCE APPROVAL(S) BY STANDARD PAGE SUPPLEMENT SHEET OR SIMILAR MEANS.

/5/ 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, LETTERS "AS", MATERIAL CODE LETTER AND FORGING MANUFACTURER'S IDENTIFICATION WHEN MADE FROM FORGING
- b. FOR SIZES 08 (.500 OD TUBE SIZE) AND LARGER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, BASIC PART NUMBER, MATERIAL CODE LETTER AND FORGING MANUFACTURER'S IDENTIFICATION WHEN MADE FROM FORGING

6. THIS PART IS INTENDED FOR USE IN SYSTEMS WITH OPERATING PRESSURES AS FOLLOWS:

- a. SIZES -04 THRU -16 AT 4000 psi
- b. SIZES -20 AND -24 AT 2000 psi

7. WHEN MACHINED FROM BAR OR OVERSIZED FORGING, THE CENTER BODY SECTION SHALL CONFORM TO AS1376, TABLE 2.

/8/ RADIUS APPLICABLE TO TITANIUM PARTS ONLY.

9. INSPECTION: CLASSIFICATION OF DEFECTS AS SPECIFIED FOR EQUIVALENT PARTS IN MIL-STD-1655. IN ADDITION, 1.5% AQL FOR THE .030 TO .125 RADIUS AT BORE INTERSECTION.

10. THIS PART IS A REDUCED BODY VERSION OF MS21906 IF NONREDUCER, OR AS1006 IF REDUCER.

/11/ SPECIFY END SIZES IN THIS ORDER: LARGEST END FIRST, OPPOSITE END ON RUN SECOND, LARGEST END ON SIDE THIRD, OPPOSITE END FOURTH.

12. LARGEST END DETERMINES FORGING SIZE.

/13/ APPLICABLE ONLY TO REDUCERS AND SIZE 04 AND 05 NONREDUCERS.

14. INTERPRETATION OF DRAWING PER ARP4296.

15. SURFACE TEXTURE: SYMBOLS PER ANSI Y14.36; REQUIREMENTS PER ANSI/ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 μ in Ra.

16. BREAK EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.