

REV.
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AS1007

FEDERAL SUPPLY CLASS

4730

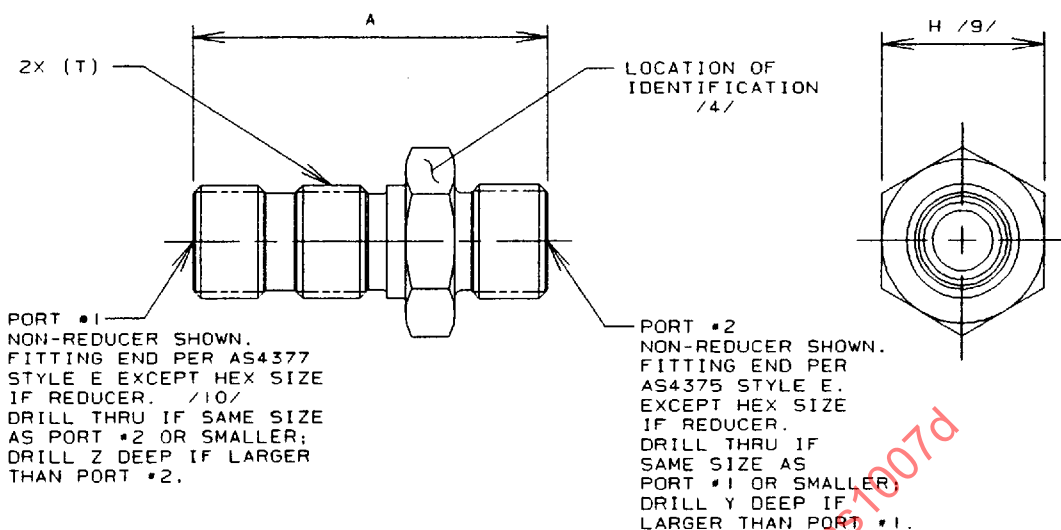
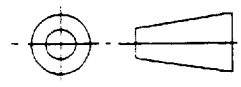


FIGURE 1 - NONREDUCER

TABLE 1 - OVERALL LENGTH A

SIZE OF PORT #2	SIZE OF PORT #2	SIZE OF PORT #3	SIZE OF PORT #4	SIZE OF PORT #5	SIZE OF PORT #6	SIZE OF PORT #8	SIZE OF PORT #10	SIZE OF PORT #12	SIZE OF PORT #14	SIZE OF PORT #16	SIZE OF PORT #20	SIZE OF PORT #24	SIZE OF PORT #32
02	1.484	1.516	1.578	1.609	1.703	1.844	2.000	2.156	2.156	2.156	2.156	2.156	2.422
03	1.516	1.563	1.625	1.656	1.750	1.891	2.047	2.203	2.203	2.203	2.203	2.203	2.469
04	1.547	1.594	1.656	1.688	1.781	1.922	2.078	2.234	2.234	2.234	2.234	2.234	2.500
05	1.578	1.625	1.688	1.688	1.781	1.922	2.078	2.234	2.234	2.234	2.234	2.234	2.500
06	1.641	1.688	1.750	1.750	1.797	1.938	2.094	2.250	2.250	2.250	2.250	5.250	2.516
08	1.734	1.781	1.844	1.844	1.891	2.031	2.188	2.344	2.344	2.344	2.344	2.344	2.609
10	1.813	1.859	1.922	1.922	1.969	2.109	2.250	2.406	2.406	2.406	2.406	2.406	2.672
12	1.922	1.969	2.031	2.031	2.078	2.219	2.360	2.484	2.469	2.469	2.469	2.469	2.734
14	1.922	1.969	2.031	2.031	2.078	2.219	2.360	2.469	2.469	2.469	2.469	2.469	2.734
16	1.922	1.969	2.031	2.031	2.078	2.219	2.360	2.469	2.469	2.469	2.469	2.469	2.734
20	1.922	1.969	2.031	2.031	2.078	2.219	2.360	2.469	2.469	2.469	2.469	2.469	2.734
24	1.922	1.969	2.031	2.031	2.078	2.219	2.360	2.469	2.469	2.469	2.469	2.469	2.734
32	1.984	2.031	2.094	2.094	2.141	2.281	2.422	2.531	2.531	2.531	2.531	2.531	2.734

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /3/ 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

UNION, STANDARD
AND REDUCER, BULKHEAD,
FLARELESS TUBE

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SHEET 1 OF 5

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TABLE 2 - DRILL DEPTH Y

SIZE OF PORT #2	SIZE OF PORT #1 24	SIZE OF PORT #1 20	SIZE OF PORT #1 16	SIZE OF PORT #1 14	SIZE OF PORT #1 12	SIZE OF PORT #1 10	SIZE OF PORT #1 08	SIZE OF PORT #1 06	SIZE OF PORT #1 05	SIZE OF PORT #1 04	SIZE OF PORT #1 03	SIZE OF PORT #1 02
32	.656	.578	.562	.485	.516	.469	.469	.469	.469	.469	.438	.453
24	-	.656	.641	.547	.578	.656	.641	.562	.547	.531	.516	.516
20	-	-	.703	.625	.656	.625	.625	.641	.609	.609	.594	.594
16	-	-	-	.688	.719	.688	.688	.703	.672	.672	.656	.656
14	-	-	-	-	.861	.719	.719	.735	.719	.704	.688	.688
12	-	-	-	-	-	.750	.750	.766	.750	.734	.719	.719
10	-	-	-	-	-	-	.672	.703	.672	.672	.656	.656
08	-	-	-	-	-	-	-	.641	.625	.625	.594	.594
06	-	-	-	-	-	-	-	-	.562	.562	.531	.547
05	-	-	-	-	-	-	-	-	-	.516	.500	.500
04	-	-	-	-	-	-	-	-	-	-	.484	.484
03	-	-	-	-	-	-	-	-	-	-	-	.469

TABLE 3 - DRILL DEPTH Z

SIZE OF PORT #2	SIZE OF PORT #1 03	SIZE OF PORT #1 04	SIZE OF PORT #1 05	SIZE OF PORT #1 06	SIZE OF PORT #1 08	SIZE OF PORT #1 10	SIZE OF PORT #1 12	SIZE OF PORT #1 14	SIZE OF PORT #1 16	SIZE OF PORT #1 20	SIZE OF PORT #1 24	SIZE OF PORT #1 32
02	1.016	1.062	1.078	1.156	1.250	1.391	1.500	1.477	1.438	1.375	1.297	1.438
03	-	1.047	1.078	1.141	1.250	1.391	1.500	1.471	1.422	1.375	1.297	1.422
04	-	-	1.094	1.172	1.281	1.406	1.516	1.494	1.453	1.391	1.312	1.453
05	-	-	-	1.172	1.281	1.422	1.531	1.500	1.453	1.391	1.328	1.453
06	-	-	-	-	1.297	1.438	1.547	1.523	1.391	1.422	1.344	1.484
08	-	-	-	-	-	1.453	1.562	1.533	1.484	1.438	1.359	1.391
10	-	-	-	-	-	-	1.562	1.537	1.500	1.438	1.359	1.500
12	-	-	-	-	-	-	-	1.574	1.531	1.468	1.406	1.531
14	-	-	-	-	-	-	-	-	1.566	1.503	1.430	1.559
16	-	-	-	-	-	-	-	-	-	1.516	1.453	1.562
20	-	-	-	-	-	-	-	-	-	-	1.468	1.594
24	-	-	-	-	-	-	-	-	-	-	-	1.672

REV.
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AS1007

TABLE 4 - TUBE SIZE AND CORRESPONDING THREAD

(NOMINAL)		
PORT SIZE	TUBE SIZE)	T THREAD PER MIL-S-8879
02	.125	.3125-24 UNJF
03	.188	.3750-24 UNJF
04	.250	.4375-20 UNJF
05	.312	.5000-20 UNJF
06	.375	.5625-18 UNJF
08	.500	.7500-16 UNJF
10	.625	.8750-14 UNJF
12	.750	1.0625-12 UNJ
14	.875	1.1875-12 UNJ
16	1.000	1.3125-12 UNJ
20	1.250	1.6250-12 UNJ
24	1.500	1.8750-12 UNJ
32	2.000	2.5000-12 UNJ

TABLE 5 - HEX DIMENSION AND WEIGHTS

LARGEST PORT SIZE	H	LB/EA	LB/EA	LB/EA
		MAX ALUM	MAX CRES	MAX TI
02	.559-.566	.011	.031	.017
03	.621-.628	.018	.048	.027
04	.684-.691	.023	.062	.035
05	.746-.753	.029	.078	.045
06	.809-.816	.035	.095	.054
08	.996-1.003	.064	.175	.100
10	1.121-1.128	.090	.244	.140
12	1.371-1.378	.133	.361	.208
14	1.484-1.516	-	-	-
16	1.609-1.641	.202	.552	.318
20	1.859-1.891	.249	.678	.391
24	2.105-2.145	.295	.814	.469
32	2.730-2.770	-	-	-

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NOTES:

/1/ MATERIAL:

- a. DASH AS CODE LETTER - TYPE 1137 STEEL BAR PER ASTM A 108.
- b. CODE LETTER D - 2024T6 ALUMINUM ALLOY BAR PER AMS 4112 OR QQ-A-225/6; OR 2024T851 ALUMINUM ALLOY BAR PER QQ-A-225/6.
- c. CODE LETTER J - 30304 CORROSION RESISTANT STEEL BAR PER AMS 5639 OR 304 CORROSION RESISTANT STEEL BAR PER QQ-S-763.
- d. CODE LETTER K - 30316 CORROSION RESISTANT STEEL BAR PER AMS 5648 OR 316 CORROSION RESISTANT STEEL BAR PER QQ-S-763.
- e. CODE LETTER R - 30321 CORROSION RESISTANT STEEL BAR PER AMS 5645 OR 321 CORROSION RESISTANT STEEL BAR PER QQ-S-763. /7/
- f. CODE LETTER S - 30347 CORROSION RESISTANT STEEL BAR PER AMS 5646 OR 347 CORROSION RESISTANT STEEL BAR PER QQ-S-763. /8/
- g. CODE LETTER T - 6AL4V TITANIUM ALLOY BAR PER AMS 4928.
- h. CODE LETTER W - 7075T7351 ALUMINUM ALLOY BAR PER AMS 4124; OR 7075T73 ALUMINUM ALLOY BAR PER QQ-A-225/9.

2. FINISH:

- a. DASH AS CODE LETTER - CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 2.
- b. MATERIAL CODE LETTER D - ANODIZE PER AMS 2472 OR MIL-A-8625, TYPE II, CLASS 2. DYE GREEN, SIMILAR TO COLOR 14187 OF FED-STD-595.
- c. MATERIAL CODE LETTER J - PASSIVATE PER QQ-P-35, TYPE VI OR VII.
- d. MATERIAL CODE LETTER K - PASSIVATE PER QQ-P-35, TYPE VI OR VII.
- e. MATERIAL CODE LETTER R - PASSIVATE PER QQ-P-35, TYPE VI OR VII.
- f. MATERIAL CODE LETTER S - PASSIVATE PER QQ-P-35, TYPE VI OR VII.
- g. MATERIAL CODE LETTER T - FLUORIDE PHOSPHATE CONVERSION COAT PER AMS 2486.
- h. MATERIAL CODE LETTER W - ANODIZE PER AMS 2472 OR MIL-A-8625, TYPE II, CLASS 2. DYE BROWN, SIMILAR TO COLOR 10080 OF FED-STD-595.

/3/ PROCUREMENT SPECIFICATION: MIL-F-18280 EXCEPT AS SPECIFIED ON THIS STANDARD. THIS PART SHALL BE QUALIFIED TO THE PROCUREMENT SPECIFICATION IN A COMPLETE ASSEMBLY. USERS OF THIS STANDARD ARE ADVISED TO CONTROL SOURCE APPROVAL(S) BY STANDARD PAGE SUPPLEMENT SHEET OR SIMILAR MEANS.

/4/ 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 NUMBER OR TRADEMARK, LETTERS "AS" AND MATERIAL CODE LETTER.
- b. FOR SIZES 08 (.500 OD TUBE SIZE) AND LARGER, MANUFACTURER'S NAME, CAGE NUMBER OR TRADEMARK, BASIC PART NUMBER AND MATERIAL CODE LETTER.

THE PRESENCE OF LETTERS "MS" OR "MS21924" OR COMPLETE MS PART NUMBER OF NONREDUCER FITTINGS SHALL NOT BE CAUSE FOR REJECTION.

5. THIS PART IS DESIGNED FOR USE IN SYSTEMS WITH OPERATING PRESSURES AS SPECIFIED IN THE PROCUREMENT SPECIFICATION EXCEPT SIZE -14 SHALL BE RATED SAME AS SIZE -16. FOR REDUCER CONFIGURATION, PRESSURE RATING IS DETERMINED BY LARGEST PORT.

6. THE NONREDUCER CONFIGURATION IS FUNCTIONALLY EQUIVALENT TO MS21924 FOR THE CORRESPONDING TUBE SIZE.

/7/ 321 CORROSION RESISTANT STEEL SUPERSEDES 347 CORROSION RESISTANT STEEL (MATERIAL CODE LETTER "S"). PARTS IN STOCK MADE FROM 347 CORROSION RESISTANT STEEL MAY BE USED IN LIEU OF PARTS MADE FROM 321 CORROSION RESISTANT STEEL UNTIL STOCK IS DEPLETED.

/8/ INACTIVE FOR NEW DESIGN. USE 321 CORROSION RESISTANT STEEL PARTS.

/9/ DIMENSION H IS DETERMINED BY LARGER TUBE SIZE.

/10/ REDUCER CONFIGURATION (PORT #1 IS LARGER THAN PORT #2): PARTS IN STOCK WITH AS4377, STYLE S FITTING END MAY BE USED UNTIL STOCK IS DEPLETED. PARTS MANUFACTURED AFTER OCTOBER 31, 1992 SHALL HAVE AS4377, STYLE E FITTING END.

11. INTERPRETATION OF DRAWING PER AMS 4296.

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