

REV.
B

MA2058

FEDERAL SUPPLY CLASS
4730

RATIONALE

MA2058B HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

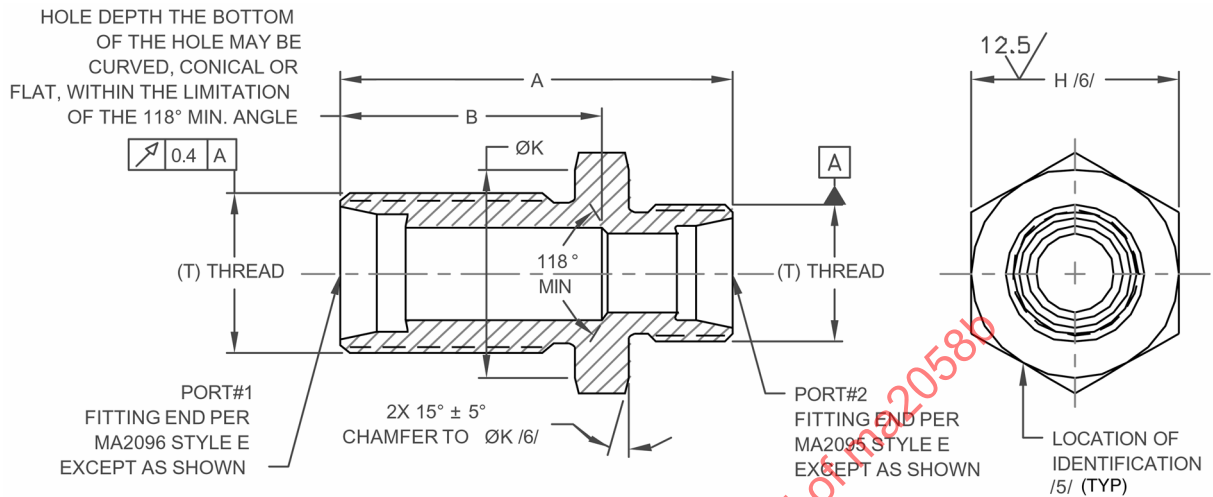


FIGURE 1 - UNION, REDUCER, BULKHEAD, FLARELESS END SHOWN AS REDUCER

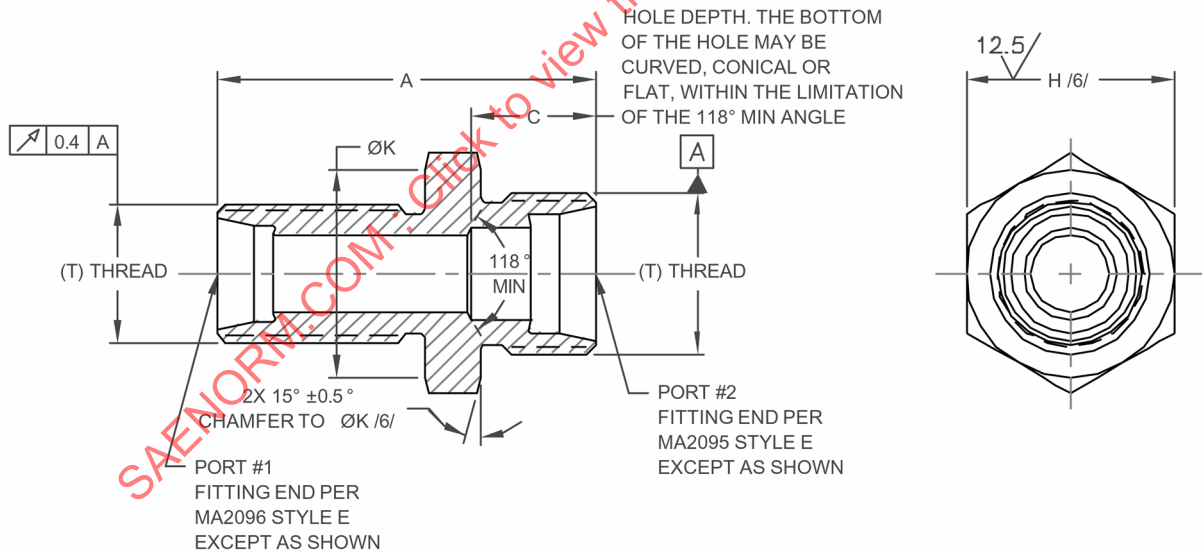
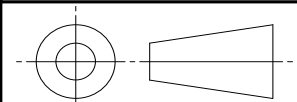


FIGURE 2 - UNION, EXPANDER, BULKHEAD, BULKHEAD END SHOWN AS REDUCER

SAE values your input. To provide feedback
on this Technical Report, please visit
<http://www.sae.org/technical/standards/MA2058B>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: MA2005 /4/ (ISO 7169)



AEROSPACE STANDARD

(R) UNION, REDUCER/EXPANDER BULKHEAD,
FLARELESS TUBE, METRIC

MA2058
SHEET 1 OF 5

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TABLE 1 - PORT SIZES CORRESPONDING THREADS AND HEX SIZES

BASIC NO. MA2058 /13/ SIZE CODE	(NOMINAL TUBE SIZE DN) /1/	T PER MA1370	K ±0.2	H
06	06	MJ12 X 1.25	13.71	16.73-17.00
08	08	MJ14 X 1.50	16.71	16.73-17.00
10	10	MJ16 X 1.50	16.71	18.57-19.00
12	12	MJ18 X 1.50	18.65	21.67-22.00
14	14	MJ20 X 1.50	21.65	23.67-24.00
16	16	MJ22 X 1.50	23.65	29.67-30.00
20	20	MJ27 X 1.50	29.65	35.38-36.00
25	25	MJ33 X 1.50	35.65	40.38-41.00
32	32	MJ42 X 2.00	45.36	49.38-50.00
40	40	MJ50 X 2.00	54.24	59.26-60.00

TABLE 2 - DIMENSION, OVERALL LENGTH

PORT #2 SIZE	A PORT #1 SIZE 05	A PORT #1 SIZE 06	A PORT #1 SIZE 08	A PORT #1 SIZE 10	A PORT #1 SIZE 12	A PORT #1 SIZE 14	A PORT #1 SIZE 16	A PORT #1 SIZE 20	A PORT #1 SIZE 25	A PORT #1 SIZE 32	A PORT #1 SIZE 40
05	-	35.0	37.0	39.0	39.0	40.0	40.0	40.0	41.0	44.0	46.0
06	36.0	-	38.0	40.0	40.0	41.0	41.0	41.0	42.0	45.0	47.0
08	37.0	37.0	-	41.0	41.0	42.0	42.0	42.0	43.0	46.0	48.0
10	39.0	39.0	41.0	-	42.0	43.0	43.0	43.0	44.0	47.0	49.0
12	39.0	39.0	41.0	42.0	-	43.0	43.0	43.0	44.0	47.0	49.0
14	40.0	40.0	42.0	43.0	43.0	-	43.0	43.0	44.0	47.0	49.0
16	40.0	40.0	42.0	43.0	43.0	43.0	-	43.0	44.0	47.0	49.0
20	40.0	40.0	42.0	43.0	43.0	43.0	43.0	-	44.0	47.0	49.0
25	41.0	41.0	43.0	44.0	44.0	44.0	44.0	44.0	-	48.0	50.0
32	42.0	42.0	44.0	45.0	45.0	45.0	45.0	45.0	46.0	-	51.0
40	44.0	44.0	46.0	47.0	47.0	47.0	47.0	47.0	48.0	51.0	-

**AEROSPACE STANDARD**(R) UNION, REDUCER/EXPANDER BULKHEAD,
FLARELESS TUBE, METRIC**MA2058**
SHEET 2 OF 5**REV.**
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TABLE 3 - DIMENSIONS, HOLE DEPTH

PORT #2 SIZE	B +0/-0.5 PORT #1 SIZE 05	B +0/-0.5 PORT #1 SIZE 06	B +0/-0.5 PORT #1 SIZE 08	B +0/-0.5 PORT #1 SIZE 10	B +0/-0.5 PORT #1 SIZE 12	B +0/-0.5 PORT #1 SIZE 14	B +0/-0.5 PORT #1 SIZE 16	B +0/-0.5 PORT #1 SIZE 20	B +0/-0.5 PORT #1 SIZE 25	B +0/-0.5 PORT #1 SIZE 32	B +0/-0.5 PORT #1 SIZE 40
05	-	24.0	25.5	26.5	26.0	26.6	26.0	25.0	25.0	26.0	25.5
06	12.0	-	26.0	26.5	26.0	26.5	26.0	25.5	25.0	26.0	26.0
08	12.5	13.0	-	27.0	26.5	27.0	26.5	26.0	25.5	26.5	26.5
10	13.5	13.5	14.0	-	27.0	27.5	27.0	26.5	26.0	27.0	27.0
12	13.0	13.0	13.5	14.0	-	28.0	27.5	27.0	26.5	27.5	27.5
14	13.5	13.5	14.0	14.5	15.0	-	28.0	27.5	27.0	28.5	28.0
16	13.0	13.0	13.5	14.0	14.5	15.0	-	28.0	27.5	29.0	28.0
20	12.0	12.5	13.0	13.5	14.0	14.5	15.0	-	28.0	30.0	29.5
25	12.0	12.0	12.5	13.0	13.5	14.0	14.5	16.0	-	31.0	31.0
32	11.0	11.0	11.5	12.0	12.5	13.5	14.0	15.0	17.0	-	34.0
40	10.5	11.0	11.5	12.0	12.5	13.0	13.0	14.5	16.0	18.0	-

TABLE 4 - PORT SIZE, HOLE DEPTH

PORT #2 SIZE	C +0/-0.5 PORT #1 SIZE 05	C +0/-0.5 PORT #1 SIZE 06	C +0/-0.5 PORT #1 SIZE 08	C +0/-0.5 PORT #1 SIZE 10	C +0/-0.5 PORT #1 SIZE 12	C +0/-0.5 PORT #1 SIZE 14	C +0/-0.5 PORT #1 SIZE 16	C +0/-0.5 PORT #1 SIZE 20	C +0/-0.5 PORT #1 SIZE 25	C +0/-0.5 PORT #1 SIZE 32	C +0/-0.5 PORT #1 SIZE 40
05	-	12.0	12.5	13.5	13.0	13.5	13.0	12.0	12.0	11.0	10.5
06	-	-	13.0	13.5	13.0	13.5	13.0	12.5	12.0	11.0	11.0
08	-	-	-	14.0	13.5	14.0	13.5	13.0	12.5	11.5	11.5
10	-	-	-	-	14.0	14.5	14.0	13.5	13.0	12.0	12.0
12	-	-	-	-	-	15.0	14.5	14.0	13.5	12.5	12.5
14	-	-	-	-	-	-	15.0	14.5	14.0	13.5	13.0
16	-	-	-	-	-	-	-	15.0	14.5	14.0	13.0
20	-	-	-	-	-	-	-	-	16.0	15.0	14.5
25	-	-	-	-	-	-	-	-	-	17.0	16.0
32	-	-	-	-	-	-	-	-	-	-	18.0
40	-	-	-	-	-	-	-	-	-	-	-

**AEROSPACE STANDARD**(R) UNION, REDUCER/EXPANDER BULKHEAD,
FLARELESS TUBE, METRIC**MA2058**
SHEET 3 OF 5**REV.**
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NOTES:

/1/ DN = NOMINAL TUBE OUTSIDE DIAMETER

/2/ MATERIAL:

- a. NO CODE LETTER (USE HYPHEN): TYPE 4130 STEEL BAR PER AMS-S-6758.
- b. CODE LETTER D: (INACTIVE FOR USE): TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS 4112 OR TYPE 2024 T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6.
- c. CODE LETTER J: TYPE 304 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763, CLASS 304.
- d. CODE LETTER K: TYPE 316 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763, CLASS 316.
- e. CODE LETTER R: TYPE 321 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763, CLASS 321.
- f. CODE LETTER S: (INACTIVE FOR USE): TYPE 347 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763, CLASS 347.
- g. CODE LETTER T: TYPE 6AL-4V TITANIUM ALLOY BAR PER AMS 4928.
- h. CODE LETTER W: 7075-T7351 ALUMINUM PER AMS 4124.
- i. CODE S MATERIAL MAY BE USED UNTIL STOCK IS DEPLETED. CODE R MATERIAL MAY BE SUBSTITUTED WHENEVER CODE S MATERIAL IS SPECIFIED.
- j. CODE D MATERIAL MAY BE USED UNTIL STOCK IS DEPLETED. CODE W MATERIAL MAY BE SUBSTITUTED WHENEVER CODE S MATERIAL IS SPECIFIED.

3. FINISH:

- a. NO MATERIAL CODE LETTER (HYPHEN): CADMIUM PLATE PER AMS-QQ-P-416 TYPE II, CLASS 2. DIP IN OIL PER MIL-PRF-6083.
- b. MATERIAL CODE LETTER T: FLUORIDE PHOSPHATE CONVERSION COAT PER AMS 2486 OR ANODIZE PER AMS 2488.
- c. MATERIAL CODE LETTER W: ANODIZE PER AMS 2471, DYED BROWN SIMILAR TO COLOR 10080 OF FED-STD-595.
- d. MATERIAL CODE LETTER J, K, R, AND S: PASSIVATE PER AMS-QQ-P-35, TYPE VI OR VII.

/4/ PROCUREMENT SPECIFICATION: MA2005 (ISO 7169) 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:

- a. MARK PER AS478 CLASS C OR D OR METHOD 7A3, 15A3, OR 15B.
- b. MANUFACTURER'S NAME, TRADEMARK, OR CAGE CODE. BASIC PART NUMBER, AND MATERIAL CODE LETTER.

/6/ THE LARGEST PORT DETERMINES THE HEX SIZE.

	AEROSPACE STANDARD	MA2058 SHEET 4 OF 5	REV. B
	(R) UNION, REDUCER/EXPANDER BULKHEAD, FLARELESS TUBE, METRIC		