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REV.
B

AS85421™/8

FEDERAL SUPPLY CLASS
4730

RATIONALE

CORRECT TYPO, CHANGE AMS2700 TYPE 6 OR 7 TO 2 OR 8. UPDATE PROCUREMENT SPECIFICATION NOTE TO CURRENT QPL VERBIAGE. REVISE OUTDATED SPECIFICATIONS BY CURRENT REPLACEMENT. INVENTORY DISPOSITION NOTE 17 ADDED.

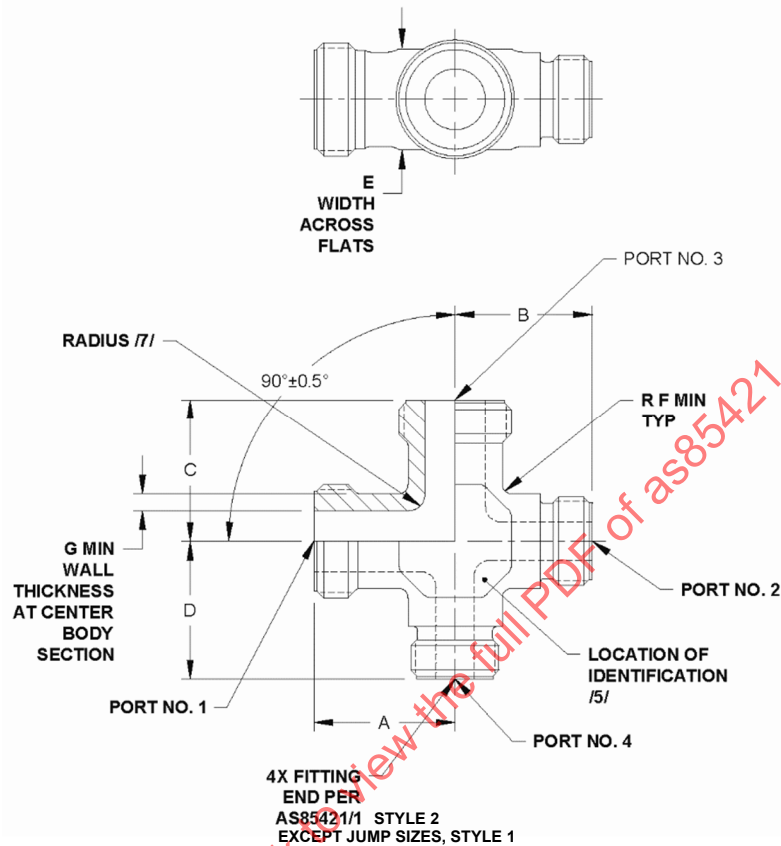


FIGURE 1 - FITTING, CROSS, REDUCER

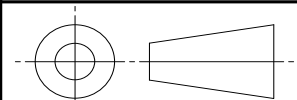
TABLE 1 - DIMENSIONS A-F AND WEIGHTS

BASIC NO. AS85421/8	PORT NO. 1 SIZE CODE	PORT NO. 2 SIZE CODE	PORT NO. 3 SIZE CODE	PORT NO. 4 SIZE CODE	A	B	C	D	E	F	MASS LB/EA APPROX REF TI	MASS LB/EA APPROX REF CRES
001	06	04	04	04	.704	.684	.704	.684	.486-.502	.042	.057	.101
002	06	04	06	04	.704	.684	.704	.684	.485-.502	.042	.056	.099
003	08	06	06	06	.824	.811	.811	.811	.547-.565	.070	.090	.160
004	08	06	08	06	.824	.811	.824	.811	.547-.565	.070	.091	.161
005	10	08	08	08	.955	.891	.891	.891	.673-.691	.070	.134	.237
006	10	08	10	08	.955	.891	.955	.891	.673-.691	.070	.133	.236
007	12	10	10	10	1.062	1.022	1.022	1.022	.860-.878	.098	.200	.354
008	12	10	12	10	1.062	1.022	1.062	1.022	.860-.878	.098	.197	.349
009	16	12	12	12	1.246	1.198	1.198	1.198	1.120-1.128	.098	.342	.606
010	16	12	16	12	1.246	1.198	1.246	1.198	1.120-1.128	.098	.333	.590

For more information on this standard, visit

<https://www.sae.org/standards/content/AS85421/8B/>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS85421 /4/



AEROSPACE STANDARD

FITTING, CROSS, REDUCER
BEAM SEAL, 3000/4000 PSI,
FOUR MALE ENDS

AS85421™/8
SHEET 1 OF 3

REV.
B

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ISSUED 2005-09 REVISED 2023-03

TABLE 2 - DIMENSION G - MINIMUM WALL THICKNESS

PORT SIZE	G
04	.060
06	.060
08	.065
10	.070
12	.095
16	.110

NOTES:

1/ MATERIAL:

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

2. HEAT TREATMENT:

- a. MATERIAL CODE LETTER P: CONDITION H1075 PER AMS2759/3.
- b. MATERIAL CODE LETTER T: NONE.
- c. MATERIAL CODE LETTER V: CONDITION H1075 PER AMS-H-6875 OR AMS2759/3.

3. FINISH:

- a. MATERIAL CODE LETTER P: PASSIVATE PER AMS2700, TYPE 2 OR 8.
- b. MATERIAL CODE LETTER T: NONE.
- c. MATERIAL CODE LETTER V: PASSIVATE PER AMS2700, TYPE 2 OR 8.

4/ PROCUREMENT SPECIFICATION: AS85421, EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT MANUFACTURED TO THIS STANDARD SHALL MEET THE REQUIREMENTS SPECIFIED HEREIN AND THE PROCUREMENT SPECIFICATION. ORIGINAL COMPONENT MANUFACTURERS (OCM) SHALL BE LISTED IN THE PRI QUALIFIED PRODUCTS LIST (QPL) PRI-QPL-AS85421 FOR THIS STANDARD. SEE www.eAuditNet.com FOR CURRENT QPL ONLINE.

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

- a. FOR SIZES 06 AND SMALLER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, LETTERS "AS" AND MATERIAL CODE LETTER, AND FORGING MANUFACTURER'S IDENTIFICATION, WHEN MADE FROM FORGING.
- b. FOR SIZES 08 AND LARGER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, BASIC PART NUMBER AND MATERIAL CODE LETTER, AND FORGING MANUFACTURER'S IDENTIFICATION, WHEN MADE FROM FORGING.

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

- a. CORROSION RESISTANT STEEL AT 3000 PSI MAX.
- b. TITANIUM ALLOY AT 4000 PSI MAX.

7/ .030 MIN RADIUS, UNLESS QUALIFICATION OF SPECIAL PROCESS WITH SMALLER RADIUS. APPLICABLE FOR TITANIUM ALLOY PARTS ONLY.

8. DRY FILM LUBRICANT: APPLY DRY FILM LUBRICANT PER AS5272, TYPE I TO SEALING SURFACE. OVERSPRAY IN BORE IS NOT PERMITTED.

9. INTERPRETATION OF DRAWING PER AS4296.

10. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 MICROINCHES Ra. FORGED SURFACES MAY BE 250 MICROINCHES Ra.

11. BREAK EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.

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

	AEROSPACE STANDARD	AS85421™/8 SHEET 2 OF 3	REV. B
	FITTING, CROSS, REDUCER BEAM SEAL, 3000/4000 PSI, FOUR MALE ENDS		