

SAE The Engineering
Resource For
Advancing Mobility

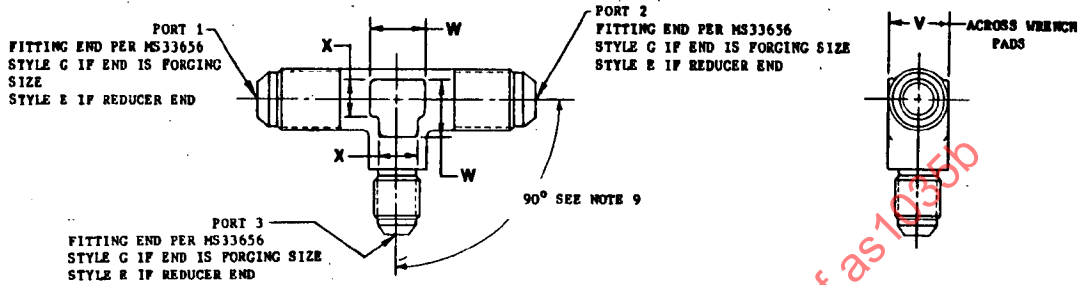
400 COMMONWEALTH DRIVE, WARRENDALE, PA 15096

AEROSPACE STANDARD

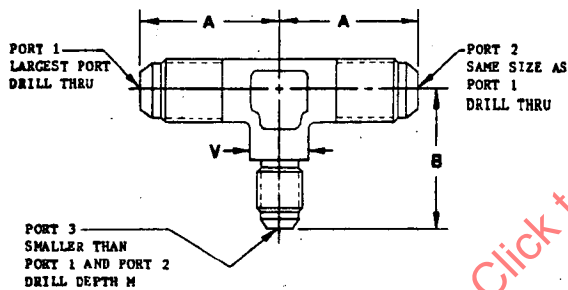
AS 1035B

Issued 8-15-62
Revised 4-4-83

TEE, REDUCER, FLARED TUBE

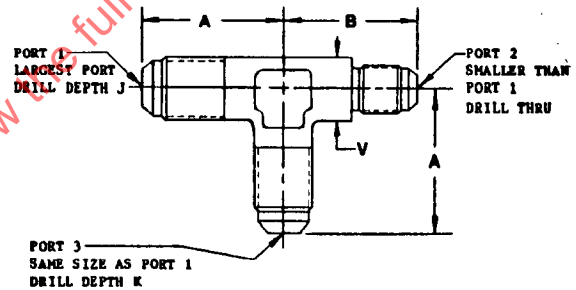


STYLE I
EXAMPLE: AS1035-121206

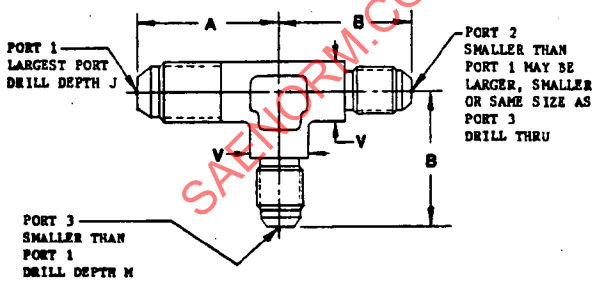


REDUCER COMBINATIONS

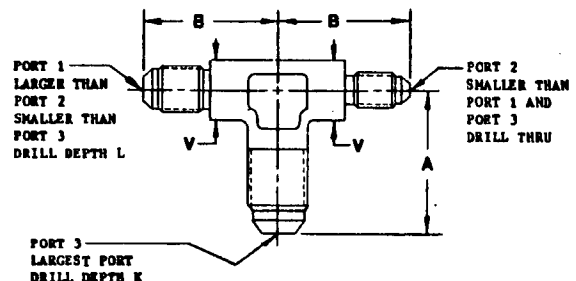
STYLE II
EXAMPLE: AS1035-120612



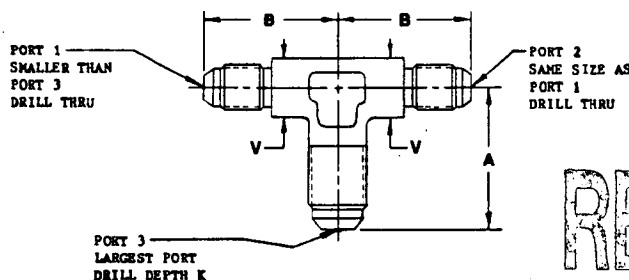
STYLE III
EXAMPLE: AS1035J121008



STYLE IV
EXAMPLE: AS1035K080612



STYLE V
EXAMPLE: AS1035D080812



REAFFIRMED
APRIL 1993

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FORGING SIZE	A ±.015	K ±.015	V ±.015	W APP	X APP
3	.820	.859	.375	.375	.250
4	.882	.922	.438	.375	.250
5	.945	.984	.500	.469	.312
6	1.054	1.094	.563	.500	.312
8	1.242	1.281	.750	.688	.438
10	1.445	1.484	.875	.781	.438
12	1.648	1.688	1.063	.906	.500
16	1.804	1.844	1.313	1.094	.625
20	2.054	2.094	1.625	1.312	.750
24	2.320	2.359	1.875	1.500	.875
32	3.054	3.094	2.563	2.000	1.188

LEG LENGTH B ±.016												
FORGING SIZE												
3	4	5	6	8	10	12	16	20	24	32	SIZE OF REDUCER PORT	
.789	.789	.843	.946	1.033	1.135	1.232	1.341	1.544	1.685	2.169		
	.811	.874	.977	1.064	1.166	1.263	1.372	1.575	1.716	2.200	3	
		.945	1.048	1.135	1.237	1.334	1.443	1.646	1.787	2.271	4	
			1.048	1.135	1.237	1.334	1.443	1.646	1.787	2.271	5	
				1.141	1.243	1.340	1.449	1.652	1.793	2.277	6	
					1.344	1.441	1.550	1.753	1.894	2.378	8	
						1.542	1.651	1.854	1.995	2.479	10	
							1.757	1.960	2.101	2.585	12	
								2.007	2.148	2.632	16	
									2.195	2.679	20	
										2.804	24	

DRILL DEPTH L ±.016												
FORGING SIZE												
4	5	6	8	10	12	16	20	24	32	SIZE OF #1 PORT		
.938	1.031	1.172	1.297	1.453	1.609	1.828	2.156	2.406	3.125			
	1.094	1.234	1.375	1.516	1.672	1.906	2.219	2.484	3.203	4		
		1.234	1.375	1.516	1.672	1.906	2.219	2.484	3.203	5		
			1.375	1.516	1.688	1.906	2.234	2.484	3.203	6		
				1.625	1.781	2.016	2.328	2.594	3.312	8		
					1.891	2.109	2.438	2.688	3.406	10		
						2.219	2.531	2.797	3.516	12		
							2.578	2.844	3.562	16		
								2.891	3.609	20		
									3.734	24		

DRILL DEPTH J ±.016												
FORGING SIZE												
3	4	5	6	8	10	12	16	20	24	32	SIZE OF #3 PORT	
.891	.953	1.016	1.125	1.312	1.516	1.719	1.875	2.125	2.391	3.125		
	.984	1.047	1.156	1.344	1.547	1.750	1.906	2.156	2.422	3.156	2	
		1.062	1.172	1.359	1.562	1.766	1.922	2.172	2.438	3.172	4	
			1.203	1.391	1.594	1.797	1.953	2.203	2.469	3.203	5	
				1.422	1.625	1.828	1.984	2.234	2.500	3.234	6	
					1.672	1.875	2.031	2.281	2.547	3.281	8	
						1.922	2.078	2.328	2.594	3.328	10	
							2.141	2.391	2.656	3.391	12	
								2.516	2.781	3.516	16	
									2.891	3.625	20	
										3.750	24	

DRILL DEPTH M ±.016												
FORGING SIZE												
3	4	5	6	8	10	12	16	20	24	32	SIZE OF #3 PORT	
.828	.828	.875	.984	1.078	1.172	1.266	1.375	1.578	1.719	2.203		
	.844	.906	1.016	1.109	1.203	1.297	1.406	1.609	1.750	2.234	2	
		.984	1.094	1.172	1.281	1.375	1.484	1.688	1.828	2.312	4	
			1.094	1.172	1.281	1.375	1.484	1.688	1.828	2.312	5	
				1.172	1.281	1.375	1.484	1.688	1.828	2.312	6	
					1.375	1.484	1.594	1.797	1.938	2.422	8	
						1.578	1.688	1.891	2.031	2.516	10	
							1.797	2.000	2.141	2.625	12	
								2.047	2.188	2.672	16	
									2.234	2.719	20	
										2.844	24	

- SPECIFY END SIZES IN THE FOLLOWING ORDER: (1) LARGEST END ON RUN; (2) OPPOSITE END ON RUN; (3) SIDE END.
- LARGEST TUBE SIZE DETERMINES FORGING SIZE.
- MATERIAL CODING:
 - STEEL 1137 OR 1141 PER QQ-S-637 (OPTIONAL 4130/MIL-S-6758). FINISH CADMIUM PLATE PER QQ-P-416. TYPE II, CLASS 2. COLOR BLACK.
 - CRES TYPE 347. CRES PER QQ-S-763 SURFACE TREAT PER MIL-S-5002.
 - J CRES TYPE 304. CRES PER QQ-S-763 SURFACE TREAT PER MIL-S-5002.
 - K CRES TYPE 316. CRES PER QQ-S-763 SURFACE TREAT PER MIL-S-5002.
 - D ALUMINUM ALLOY 2014-T6 PER QQ-A-367 (OR 2024-T851). ANODIZE PER MIL-A-8625, TYPE II, CLASS 2. DYE BLUE.
 - W ALUMINUM ALLOY 7075-T73 PER QQ-A-225/9 (OPTIONAL: QQ-A-367). ANODIZE PER MIL-A-8625. TYPE II, CLASS 2. DYE BROWN.
 - T TITANIUM ALLOY (6AL-4V) PER AMS 4928. FLUORIDE PHOSPHATE COAT PER AMS 2486.
- PART NUMBER EXAMPLE:

ALUMINUM ALLOY 1.313 WRENCH FLATS			
AS 1035 B 16 08 10	A	B	DRILL DEPTH
MS33656-10		1.651	1.688
MS33656-8		1.550	THRU
MS33656-16	1.804		2.078

- PROC. SPEC. MIL-P-5509, LATEST REVISION, UNLESS OTHERWISE SPECIFIED ON PURCHASE ORDER BY PURCHASER.
- REMOVE ALL BURRS AND BREAK ALL SHARP EDGES.
- THIS STANDARD TAKES PRECEDENCE OVER REFERENCED DOCUMENTS HEREIN.
- MANUFACTURER'S TRADEMARK AND BASIC PART NUMBER (EXCLUSIVE OF SIZE) TO APPEAR PERMANENTLY ON FINISHED PARTS. BASIC PART NUMBER MAY BE REDUCED TO "AS" ON FORGINGS SIZE 6 AND SMALLER. PARTS PREVIOUSLY IMPRESSION STAMPED WITH AN, MS OR PROPRIETARY IDENTIFICATION SHALL BE ACCEPTABLE PROVIDED SUCH IDENTIFICATION IS OBLITERATED BY IMPRESSION STAMPING WITHOUT DAMAGING THE PART.
- TOLERANCE ON 90° ANGLE: ±1/2° FOR TUBE SIZE 6 AND SMALLER, ±1/2° FOR TUBE SIZE 8 AND LARGER.
- WHEN FITTING IS MADE FROM BAR, THE CONTOUR OF THE BODY SECTION SHALL BE PER AS 1376 FOR FORGING SIZES DASH 3 THROUGH DASH 8, AND AS 1376 CODE M FOR SIZES DASH 10 AND LARGER.