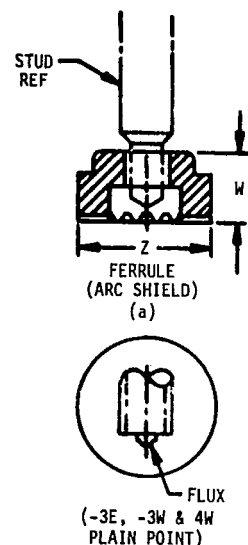
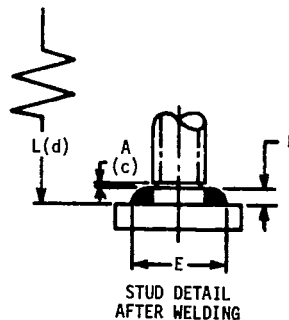
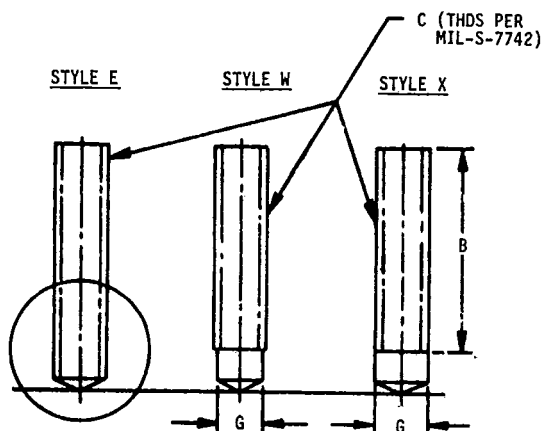




AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.
1250 EYE STREET, N.W.
WASHINGTON, D.C. 20005

THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE
SAME PRODUCT AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS
FROM THE LAST DATE OF APPROVAL SHOWN HEREON.



MATERIAL: LOW CARBON STEEL PER ASTM A108 COMP. 1020 COND. COLD ROLLED.
CORROSION RESISTANT STEEL PER QQ-S-763 CLASS 304L. (UNS S30403)

FINISH: LOW CARBON STEEL - CAD PLATE PER QQ-P-416, TYPE II,
CLASS 2 (EXCEPT WELD AREA).
CRES - PASSIVATE

CODE: STUD - DASH (-) FOLLOWING BASIC PART NUMBER = LOW CARBON STEEL.
LETTER "C" IN PLACE OF FIRST DASH = CORROSION RESISTANT STEEL
1ST DASH NUMBER = THREAD SIZE
LETTER BETWEEN DASH NUMBERS = STYLE
2ND DASH NUMBER = LENGTH IN 1/16 INCREMENTS
FERRULE (ARC SHIELD) - DASH NUMBER AS TABULATED

EXAMPLE OF CODE: NAS1381C12E34 = WELDING STUD, CORROSION RESISTANT STEEL,
STYLE E, 3/4-16UNF-2A, THREADS, 2-1/8 INCHES LONG
NAS1381-12K = FERRULE (ARC SHIELD), FOR 3/4 SIZE STYLE E WELDING STUDS

- NOTES:
- REQUIRED FERRULE (ARC SHIELDS) ARE INCLUDED WITH SHIPMENTS OF WELDING STUDS.
 - FERRULE (ARC SHIELD) PART NUMBER IS FOR SHOP USE ONLY.
 - "A" DIMENSION IS AFTER WELDING.
 - CODER LENGTH IS NET LENGTH AFTER WELDING.
 - MANUFACTURER SHALL ALLOW, FOR 1/2 AND SMALLER, APPROXIMATELY 1/8 INCH AND FOR 5/8 AND LARGER APPROXIMATELY 3/16 INCH FOR LOSS IN WELDING. WELDING STUDS FLUXED PER MIL-S-24149
 - STYLES E AND W ARE FROM L MIN TO MAX LENGTH OF 2-7/8 INCHES AFTER WELD.
 - TOLERANCES: TWO PLACES TOLERANCES = $\pm .03$ UNLESS OTHERWISE SPECIFIED: DIMENSIONS IN INCHES.
 - PLATE THICKNESS TABULATED IS SUFFICIENT TO PERMIT WELDING WITHOUT BURN-THROUGH OR EXCESSIVE DISTORTION. HEAVIER PLATE MAY BE REQUIRED TO DEVELOP FULL STRENGTH OF THE THREADED SECTION.
- INACTIVE FOR NEW DESIGN AFTER JUNE 1, 1991.
NO SUPERSEDING STANDARD.

MINIMUM PLATE THICKNESS

WELD BASE DIAMETER	MIN PLATE THICKNESS
.187	.036
.250	.048
.312	.060
.375	.075
.437	.090
.500	.120
.625	.148
.750	.187
.875	.250
1.000	.375

LIST OF CURRENT SHEETS

NO.	REV.
1	6
2	3

CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE

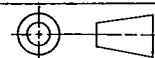
PROCUREMENT
SPECIFICATION

MIL-S-24149

TITLE

STUD, WELDING, EXTERNALLY THREADED

THIRD
ANGLE
PROJECTION



CLASSIFICATION
STANDARD PART

NAS 1381

Documents
SHEET 1 OF 2



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STYLE E FULL THREADED

FIRST DASH NO.	C	L MIN	E WELD HEAD DIA	F WELD HEAD HGT
-3E	10-32UNF-2A	.75	.30	.09
-4E	1/4-28UNF-2A	.75	.36	.11
-5E	5/16-24UNF-2A	.75	.44	.11
-6E	3/8-24UNF-2A	.75	.50	.12
-7E	7/16-20UNF-2A	.87	.59	.14
-8E	1/2-20UNF-2A	.87	.69	.15
-10E	5/8-18UNF-2A	1.12	.87	.19
-12E	3/4-16UNF-2A	1.23	1.06	.19

FERRULE (ARC SHIELD)		
DASH NO.	DIM	
	Z ±.015	W MAX
-3K	.390	.405
-4K	.455	.405
-5K	.578	.405
-6K	.640	.405
-7K	.703	.437
-8K	.795	.453
-10K	1.030	.531
-12K	1.218	.681

STYLE W REDUCED UNTHREADED BASE

FIRST DASH NO.	C	L MIN	G WELD BASE	A WELD BASE	E WELD HEAD	F WELD HEAD
-3W	10-32UNF-2A	.75	.125	.02	.22	.12
-4W	1/4-28UNF-2A	.75	.187	.06	.28	.12
-5W	5/16-24UNF-2A	.75	.275	.12	.42	.11
-6W	3/8-24UNF-2A	.75	.312	.12	.44	.12
-7W	7/16-20UNF-2A	.75	.376	.16	.50	.14
-8W	1/2-20UNF-2A	.87	.437	.16	.61	.16

FERRULE (ARC SHIELD)		
DASH NO.	DIM	
	Z ±.015	W MAX
-3L	.390	.405
-4L	.455	.405
-5L	.578	.453
-6L	.640	.453
-7L	.703	.484
-8L	.795	.484

STYLE X FULL UNTHREADED BASE

FIRST DASH NO.	C	L MIN	G WELD BASE DIA	B THREAD LENGTH	E WELD HEAD DIA	F WELD HEAD HGT
-4X	1/4-28UNF-2A	.75	.25	.50	.36	.11
-5X	5/16-24UNF-2A	.87	.31	.50	.44	.11
-6X	3/8-24UNF-2A	1.00	.37	.75	.50	.12
-7X	7/16-20UNF-2A	1.12	.44	.87	.59	.14
-8X	1/2-20UNF-2A	1.25	.50	1.00	.69	.16
-10X	5/8-18UNF-2A	1.62	.62	1.25	.87	.19
-12X	3/4-16UNF-2A	1.94	.75	1.50	1.06	.25
-14X	7/8-14UNF-2A	2.31	.87	1.75	1.12	.31

FERRULE (ARC SHIELD)		
DASH NO.	DIM	
	Z ±.015	W MAX
-4K	.455	.405
-5K	.578	.405
-6K	.640	.405
-7K	.703	.437
-8K	.795	.453
-10K	1.030	.531
-12K	1.218	.681
-14K	1.408	.738

APPROVAL DATE Dec. 1959 REVISION 1 15 Dec. 1961 2 31 Jan. 1963 3 25 June 1991