

FED. SUP CLASS 4730

15° ±5° CHAMFER TO R DIMENSIONS BOTH SIDES

FITTING END IN ACCORDANCE WITH STANDARD MS21935 FOR FLOW SIZE AND TUBE SIZE SPECIFIED

FITTING END IN ACCORDANCE WITH STANDARD MS33514, STYLE E, FOR TUBE SIZE SPECIFIED

3.146 ±.062 DRILL DEPTH FOR -314 ONLY
3.893 ±.062 DRILL DEPTH FOR -6H8 ONLY

THREAD T
THREAD S

A REF
B
F DIA
D DIA
C
E

H HEX

LOW FLOW SIZE DASH NUMBER	TUBE OD	THREAD S MIL-S-8879	TUBE OD	THREAD MIL-S-8879	A REF	B	C ±.062	D +.000 -.015	E ±.062	F ±.003	H HEX	WT LB MAX
-314	3/16	.3750-24 UNJF-3A		.4375-20 UNJF-3A		3.896	THRU	.621	—	.187	.621 .628	—
-414	1/4	.4375-20 UNJF-3A		.4375-20 UNJF-3A		3.959	THRU	.684	THRU		.684 .691	.019
-514	5/16	.5000-20 UNJF-3A	1/4	.4375-20 UNJF-3A	3.162	4.021	—	.746	2.715		.746 .753	.023
-614	3/8	.5625-18 UNJF-3A		.4375-20 UNJF-3A		4.068	.663	.871	2.725	.234	.871 .878	.050
-814	1/2	.7500-16 UNJF-3A		.4375-20 UNJF-3A		4.161	.656	.996	2.780		.996 1.003	.052

HIGH FLOW SIZE DASH NUMBER	TUBE OD	THREAD MIL-S-8879	TUBE OD	THREAD MIL-S-8879	A REF	B	C ±.062	D +.000 -.015	E ±.062	F ±.003	H HEX	WT LB MAX
-6H4		.5625-18 UNJF-3A	1/4	.4375-20 UNJF-3A			—		3.162			
-6H5		.5625-18 UNJF-3A	5/16	.5000-20 UNJF-3A			—	.871	—	.297	.871 .878	.052
-6H6		.5625-18 UNJF-3A	3/8	.5625-18 UNJF-3A		4.643	THRU	—	THRU			
-6H8		.5625-18 UNJF-3A	1/2	.7500-16 UNJF-3A			THRU	—	—			
-8H4		.7500-16 UNJF-3A	1/4	.4375-20 UNJF-3A			—		—			.050
-8H5		.7500-16 UNJF-3A	5/16	.5000-20 UNJF-3A			—	.996	3.218		.996 1.003	—
-8H6		.7500-16 UNJF-3A	3/8	.5625-18 UNJF-3A		4.736	—	—	—			—
-8H8		.7500-16 UNJF-3A	1/2	.7500-16 UNJF-3A			THRU	—	THRU	.422		.058
-10H4		.8750-14 UNJF-3A	1/4	.4375-20 UNJF-3A			—		—			.054
-10H5		.8750-14 UNJF-3A	5/16	.5000-20 UNJF-3A			—		—			—
-10H6		.8750-14 UNJF-3A	3/8	.5625-18 UNJF-3A		4.799	.812	1.121	3.242		1.121 1.128	—
-10H8		.8750-14 UNJF-3A	1/2	.7500-16 UNJF-3A			—	—	THRU			—

REQUIREMENTS:

1. MATERIAL: ALUMINUM ALLOY - BARS. SEE PROCUREMENT SPECIFICATION.

2. FINISH: SEE PROCUREMENT SPECIFICATION.
 SURFACE FINISH IN ACCORDANCE WITH ANSI B46.1.
 UNLESS OTHERWISE NOTED ALL OUTSIDE MACHINED SURFACES SHALL BE 125 MICROINCHES Ra AND ALL INSIDE SURFACES SHALL BE 250 MICROINCHES Ra.

INACTIVE FOR NEW DESIGN AFTER 31 DEC:1989 (D)

(D) DENOTES CHANGES

P.A. Navy - AS
Other Cont

INTERNATIONAL INTEREST (D)
— SEE NOTE

TITLE
 BOLT, CLUSTER FITTING, DOUBLE PORT, THROUGH, FLAMELESS

MILITARY STANDARD
MS21941

PROUREMENT SPECIFICATION
 MIL-P-16280

SUPERSEDES:

SHEET 1 OF 2

PROJECT NO 4730-0985

APPROVED 15 Feb 54 **REVISED** A 20 Mar 57 B 27 June 69 C 26 June 1961 D 10 June 1989

AMSC N/A
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REVIEW ACTIVITIES: USAF - 11.82
 DLA - CS

USER ACTIVITIES: ARMY - GL, CR, HE, AT
 AF - 11.71
 NAVY - TD

FED. SUP CLASS
4730

NOTES:

1. FITTINGS SHALL BE FREE FROM ALL HANGING BURRS AND SLIVERS.
2. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS: .010, ANGLES: $\pm 1/2^\circ$.
3. PART NUMBERS:
NO CODE LETTER IN PART NUMBER FOR ALUMINUM ALLOY (2024).
ADD W IN PLACE OF DASH FOR ALUMINUM ALLOY (7075).
EXAMPLES OF PART NUMBERS:
MS21941-8H4 - BOLT, 1/2 TUBING TO 1/4 TUBING, HIGH FLOW, ALUMINUM ALLOY (2024).
MS21941W8H4 - BOLT, 1/2 TUBING TO 1/4 TUBING, HIGH FLOW, ALUMINUM ALLOY (7075).
4. INSTALLATION IN ACCORDANCE WITH MS21931.
5. IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS STANDARD AND THE REFERENCES CITED HEREIN, THE TEXT OF THIS STANDARD SHALL TAKE PRECEDENCE.
6. REFERENCED GOVERNMENT (OR NON-GOVERNMENT) DOCUMENTS OF THE ISSUE LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DoDISS) SPECIFIED IN THE SOLICITATION FORM A PART OF THIS STANDARD TO THE EXTENT SPECIFIED HEREIN.

- (D) 7. CERTAIN PROVISIONS (SCREW THREAD, HEXAGON SIZE, AND UNDERCUT DIMENSIONS) OF THIS STANDARD ARE THE SUBJECT OF INTERNATIONAL STANDARDIZATION AGREEMENT ASGC AIR STD 17/15. WHEN REVISION OR CANCELLATION OF THIS STANDARD IS PROPOSED WHICH WILL AFFECT OR VIOLATE THE INTERNATIONAL AGREEMENT CONCERNED, THE PREPARING ACTIVITY WILL TAKE APPROPRIATE RECONCILIATION ACTION THROUGH INTERNATIONAL STANDARDIZATION CHANNELS, INCLUDING DEPARTMENTAL STANDARDIZATION OFFICES, IF REQUIRED.

ARMY - G1, CR, ME, AT
USAF - 11, 71
NAVY - Y0
USER ACTIVITIES:

REVIEW ACTIVITIES: USAF - 11, 82
DLA - C8

ANSC W/A
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P.A. NAVY - AS Other Cust USAF - 99 ARMY - AV	INTERNATIONAL INTEREST (D) SEE NOTE 7	TITLE BOLT, CLUSTER FITTING, DOUBLE PORT, THROUGH, FLARELESS	MILITARY STANDARD MS21941
PROCUREMENT SPECIFICATION MIL-F-18280		SUPERSEDES:	SHEET 2 OF 2