

REV.
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AS21939

FEDERAL SUPPLY CLASS
4730

RATIONALE

AS21939A HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

NOTICE

THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S MILITARY STANDARD MS21939D. THIS SAE STANDARD RETAINS THE SAME PART NUMBER ESTABLISHED BY THE ORIGINAL MILITARY DOCUMENT.

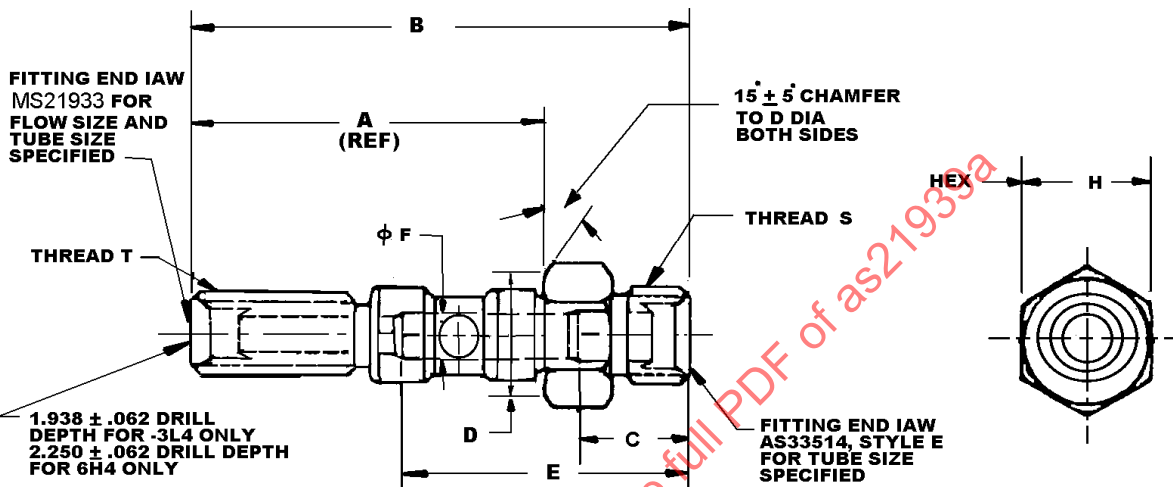


FIGURE 1 - BOLT, CLUSTER FITTING, SINGLE PORT THROUGH, FLARELESS, DIMENSIONS AND CONFIGURATION

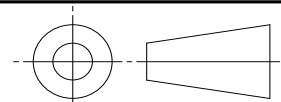
TABLE 1A - BOLT, CLUSTER FITTING, SINGLE PORT, THROUGH, FLARELESS, LOW FLOW, DIMENSIONS (A TO D)

LOW FLOW SIZE DASH NO.	TUBE OD	THREAD S AS8879	TUBE OD	THREAD T AS8879	A REF	B	C ±.062	D +.000 -.015
-3L4	.1875	.3750-24 UNJF-3A	.2500	.4375-20 UNJF-3A	2.072	2.806	THRU	.621
-4L4	.2500	.4375-20 UNJF-3A	.2500	.4375-20 UNJF-3A	2.072	2.869	THRU	.684
-5L4	.3125	.5000-20 UNJF-3A	.2500	.4375-20 UNJF-3A	2.072	2.931	--	.746
-6L4	.3750	.5625-18 UNJF-3A	.2500	.4375-20 UNJF-3A	2.072	2.978	.663	.871
-8L4	.5000	.7500-16 UNJF-3A	.2500	.4375-20 UNJF-3A	2.072	3.071	.656	.996

INACTIVE PART /14/

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS21939A>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS18280 /10/



AEROSPACE STANDARD

(R) BOLT, CLUSTER FITTING,
SINGLE PORT
THROUGH, FLARELESS

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TABLE 1B - BOLT, CLUSTER FITTING, SINGLE PORT, THROUGH, FLARELESS,
LOW FLOW DIMENSIONS (E TO H)

LOW FLOW SIZE DASH NO.	TUBE OD	THREAD S AS8879	TUBE OD	THREAD T AS8879	E ±.062	F ±.003	H HEX		WT LB EACH APPROX
							MIN	MAX	
-3L4	.1875	.3750-24 UNJF-3A	.2500	.4375-20 UNJF-3A	--	.187	.621	.628	.012
-4L4	.2500	.4375-20 UNJF-3A	.2500	.4375-20 UNJF-3A	1.715	.187	.684	.691	.014
-5L4	.3125	.5000-20 UNJF-3A	.2500	.4375-20 UNJF-3A	1.750	.234	.746	.753	.017
-6L4	.3750	.5625-18 UNJF-3A	.2500	.4375-20 UNJF-3A	1.750	.234	.871	.878	.022
-8L4	.5000	.7500-16 UNJF-3A	.2500	.4375-20 UNJF-3A	1.844	.234	.996	1.003	.030

TABLE 2A - BOLT, CLUSTER FITTING, SINGLE PORT, THROUGH, FLARELESS,
HIGH FLOW, DIMENSIONS (A TO D)

HIGH FLOW SIZE DASH NO.	TUBE OD	THREAD S AS8879	TUBE OD	THREAD T AS8879	A REF	B ±.062	C ±.062	D +.000 -.015
-6H4	.3750	.5625-18 UNJF-3A	.2500	.4375-20 UNJF-3A	2.353	3.259	--	.871
-6H5	.3750	.5625-18 UNJF-3A	.3125	.5000-20 UNJF-3A	2.353	3.259	--	.871
-6H6	.3750	.5625-18 UNJF-3A	.3750	.5625-18 UNJF-3A	2.359	3.265	THRU	.871
-6H8	.3750	.5625-18 UNJF-3A	.5000	.7500-20 UNJF-3A	2.460	3.366	THRU	.871
-8H4	.5000	.7500-16 UNJF-3A	.2500	.4375-20 UNJF-3A	2.353	3.352	--	.996
-8H5	.5000	.7500-16 UNJF-3A	.3125	.5000-20 UNJF-3A	2.353	3.352	--	.996
-8H6	.5000	.7500-16 UNJF-3A	.3750	.5625-18 UNJF-3A	2.359	3.358	--	.996
-8H8	.5000	.7500-16 UNJF-3A	.5000	.7500-16 UNJF-3A	2.460	3.459	THRU	.996
-10H4	.6250	.8750-14 UNJF-3A	.2500	.4375-20 UNJF-3A	2.353	3.415	.812	1.121
-10H5	.6250	.8750-14 UNJF-3A	.3125	.5000-20 UNJF-3A	2.353	3.415	.812	1.121
-10H6	.6250	.8750-14 UNJF-3A	.3750	.5625-18 UNJF-3A	2.359	3.421	.812	1.121
-10H8	.6250	.8750-14 UNJF-3A	.5000	.7500-16 UNJF-3A	2.460	3.522	.812	1.121

TABLE 2B - BOLT, CLUSTER FITTING, SINGLE PORT, THROUGH, FLARELESS,
HIGH FLOW, DIMENSIONS (E TO H)

HIGH FLOW SIZE DASH NO.	TUBE OD	THREAD S AS8879	TUBE OD	THREAD T AS8879	E ±.062	F ±.003	H - HEX		WEIGHT LB EACH APPROX
							MIN	MAX	
-6H4	.3750	.5625-18 UNJF-3A	.2500	.4375-20 UNJF-3A	1.913	.297	.871	.878	.087
-6H5	.3750	.5625-18 UNJF-3A	.3125	.5000-20 UNJF-3A	1.913	.297	.871	.878	.090
-6H6	.3750	.5625-18 UNJF-3A	.3750	.5625-18 UNJF-3A	THRU	.297	.871	.878	.094
-6H8	.3750	.5625-18 UNJF-3A	.5000	.7500-20 UNJF-3A	--	.422	.871	.878	.097
-8H4	.5000	.7500-16 UNJF-3A	.2500	.4375-20 UNJF-3A	2.030	.422	.996	1.003	.099
-8H5	.5000	.7500-16 UNJF-3A	.3125	.5000-20 UNJF-3A	2.030	.422	.996	1.003	.105
-8H6	.5000	.7500-16 UNJF-3A	.3750	.5625-18 UNJF-3A	2.030	.422	.996	1.003	.110
-8H8	.5000	.7500-16 UNJF-3A	.5000	.7500-16 UNJF-3A	THRU	.422	.996	1.003	.116
-10H4	.6250	.8750-14 UNJF-3A	.2500	.4375-20 UNJF-3A	2.055	.422	1.121	1.128	.091
-10H5	.6250	.8750-14 UNJF-3A	.3125	.5000-20 UNJF-3A	2.055	.422	1.121	1.128	.109
-10H6	.6250	.8750-14 UNJF-3A	.3750	.5625-18 UNJF-3A	2.055	.422	1.121	1.128	.125
-10H8	.6250	.8750-14 UNJF-3A	.5000	.7500-16 UNJF-3A	THRU	.422	1.121	1.128	.135



AEROSPACE STANDARD

(R) BOLT, CLUSTER FITTING,
SINGLE PORT
THROUGH, FLARELESS

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NOTES:

1. MATERIALS: ALUMINUM ALLOY 7075 SEE PROCUREMENT SPECIFICATION.
2. FINISH: SEE PROCUREMENT SPECIFICATION.
3. REMOVE BURRS AND SHARP EDGES.
4. INSTALLATION IN ACCORDANCE WITH MS21931.
5. SURFACE FINISH IN ACCORDANCE WITH ASME B46.1. UNLESS OTHERWISE SPECIFIED ALL OUTSIDE MACHINED SURFACE SHALL BE 125 μ in Ra AND ALL INSIDE SURFACE SHALL BE 250 μ in Ra.
6. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED TOLERANCES: DECIMALS $\pm$.010, ANGLES $\pm$.5°.
7. DIMENSIONING AND TOLERANCING IN ACCORDANCE WITH ASME Y14.5M-1994.
8. PART NUMBERS:

LETTERS "L" AND "H" IN PART NUMBER INDICATE LOW FLOW AND HIGH FLOW RESPECTIVELY

CODE "W" FOLLOWING BASIC PART NUMBER MS21939 SPECIFIES 7075 ALUMINUM ALLOY

NO CODE LETTER FOR ALUMINUM ALLOY 2014/2024 ARE CANCELLED SUPERSEDED BY CODE "W" 7075 ALUMINUM. 2014/2024 PARTS ARE NO LONGER AVAILABLE FOR PROCUREMENT AFTER 2006.

EXAMPLES OF PART NUMBERS:

MS21939W8L4 - BOLT, .5000 TO .2500 TUBING, LOW FLOW, 7075 ALUMINUM ALLOY

MS21939W10H5 - BOLT, .6250 TO .3125 TUBING, HIGH FLOW, 7075 ALUMINUM ALLOY

9. SEE TABLE 3 FOR CANCELLED AND SUPERSEDED DOCUMENT AND PART NUMBERS.

TABLE 3 - CANCELLED AND SUPERSEDED DOCUMENT AND PART NUMBERS

CANCELLED DOCUMENT NUMBER	PREVIOUS PART NUMBERS	SUPERSEDING DOCUMENT NUMBER	RETAINING PART NUMBERS
MS21939	MS21939-3L4	AS21939	MS21939W3L4
MS21939	MS21939W3L4	AS21939	MS21939W3L4
MS21939	MS21939-4L4	AS21939	MS21939W4L4
MS21939	MS21939W4L4	AS21939	MS21939W4L4
MS21939	MS21939-5L4	AS21939	MS21939W5L4
MS21939	MS21939W5L4	AS21939	MS21939W5L4
MS21939	MS21939-6L4	AS21939	MS21939W6L4
MS21939	MS21939W6L4	AS21939	MS21939W6L4
MS21939	MS21939-8L4	AS21939	MS21939W8L4
MS21939	MS21939W8L4	AS21939	MS21939W8L4
MS21939	MS21939-6H4	AS21939	MS21939W6H4
MS21939	MS21939W6H4	AS21939	MS21939W6H4
MS21939	MS21939-6H5	AS21939	MS21939W6H5
MS21939	MS21939W6H5	AS21939	MS21939W6H5
MS21939	MS21939-6H6	AS21939	MS21939W6H6
MS21939	MS21939W6H6	AS21939	MS21939W6H6
MS21939	MS21939-6H8	AS21939	MS21939W6H8
MS21939	MS21939W6H8	AS21939	MS21939W6H8