INCH-POUND

MS21950B
15 June 2000
SUPERSEDING
MS21950A
30 September 1975

DETAIL SPECIFICATION SHEET

BOLT, CLUSTER FITTING, SINGLE PORT, THROUGH-FLARE

This specification is approved for use by all Departments and Agencies of the Department of Defense .

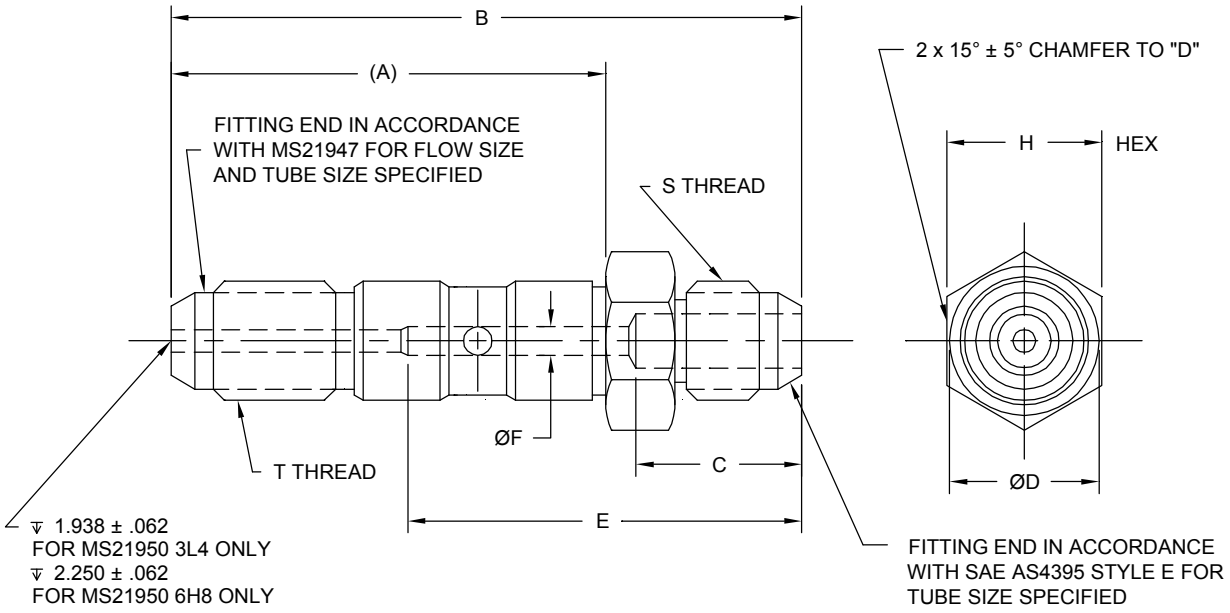


FIGURE 1. Bolt, cluster fitting.

AMSC N/A FSC 4730

TABLE IA. Dimensions for low flow sizes.

Low Flow Size		Tube OD	Thread S SAE AS8879	Tube OD	Thread T SAE AS8879	A	B
Al Alloy 7075	Al Alloy 1/ 2014/2024						
W3L4	-3L4	.187	.375-24UNJF-3A	.250	.4375-20UNJF-3A	2.072	2.863
W4L4	-4L4	.250	.4375-20UNJF-3A	.250	.4375-20UNJF-3A	2.072	2.966
W5L4	-5L4	.312	.500-20UNJF-3A	.250	.4375-20UNJF-3A	2.072	3.028
W6L4	-6L4	.375	.5625-18UNJF-3A	.250	.4375-20UNJF-3A	2.072	3.065
W8L4	-8L4	.500	.750-16UNJF-3A	.250	.4375-20UNJF-3A	2.072	3.166

1/ Aluminum alloy 2014 and 2024 parts are cancelled. Use Aluminum alloy7075 parts for new design. Cancelled parts may be used till stock is exhausted.

TABLE IA. Dimensions for low flow sizes - Continued.

Low Flow		C ±.062	D ±.010	E ±.062	F ±.003	H Hex + .003 - .010
Al Alloy 7075	Al Alloy 1/ 2014/2024					
W3L4	-3L4	—	.605	—	—	.625
W4L4	-4L4	Thru	.668	Thru	.172	.688
W5L4	-5L4	.750	.730	1.812	.203	.750
W6L4	-6L4	.750	.855	1.812	.203	.875
W8L4	-8L4	.750	.980	1.937	.203	1.000

1/ Aluminum alloy 2014 and 2024 parts are cancelled. Use Aluminum alloy 7075 parts for new design. Cancelled parts may be used till stock is exhausted.

TABLE IB. Dimensions for high flow sizes.

High Flow Size		Tube OD	Thread S SAE AS8879	Tube OD	Thread T SAE AS8879	A	B	C ± .062
Al Alloy 7075	Al Alloy 1/ 2014/2024							
W6H4	-6H4	.375	.5625-18UNJF-3A	.250	.4375-20UNJF-3A	2.353	3.346	—
W6H5	-6H5	.375	.5625-18UNJF-3A	.312	.500-20UNJF-3A	2.353	3.346	—
W6H6	-6H6	.375	.5625-18UNJF-3A	.375	.5625-18UNJF-3A	2.359	3.352	Thru
W6H8	-6H8	.375	.5625-18UNJF-3A	.500	.750-16UNJF-3A	2.460	3.453	—
W8H4	-8H4	.500	.750-16UNJF-3A	.250	.4375-20UNJF-3A	2.353	3.447	—
W8H5	-8H5	.500	.750-16UNJF-3A	.312	.500-20UNJF-3A	2.353	3.447	—
W8H6	-8H6	.500	.750-16UNJF-3A	.375	.5625-18UNJF-3A	2.359	3.453	—
W8H8	-8H8	.500	.750-16UNJF-3A	.500	.750-16UNJF-3A	2.460	3.554	Thru
W10H4	-10H4	.625	.875-14UNJF-3A	.250	.4375-20UNJF-3A	2.353	3.548	.937
W10H5	-10H5	.625	.875-14UNJF-3A	.312	.500-20UNJF-3A	2.353	3.548	.937
W10H6	-10H6	.625	.875-14UNJF-3A	.375	.5625-18UNJF-3A	2.359	3.554	.937
W10H8	-10H8	.625	.875-14UNJF-3A	.500	.750-16UNJF-3A	2.460	3.655	.937

1/ Aluminum alloy 2014 and 2024 parts are cancelled. Use Aluminum alloy 7075 parts for new design. Cancelled parts may be used till stock is exhausted.

TABLE IB. Dimensions for high flow sizes - Continued.

High Flow Size		D ± .010	E ± .062	F ± .003	H Hex
Al Alloy 7075	Al Alloy 1/ 2014/2024				
W6H4	-6H4	.855	2.000	.297	.875 + .003 - .010
W6H5	-6H5		2.000	.297	
W6H6	-6H6		Thru	.297	
W6H8	-6H8		—	—	
W8H4	-8H4	.980	2.125	.391	1.000 + .003 -.010
W8H5	-8H5		2.125	.391	
W8H6	-8H6		2.125	.391	
W8H8	-8H8		Thru	.391	
W10H4	-10H4	1.103	2.188	.422	1.125 + .003 - .012
W10H5	-10H5		2.188	.422	
W10-H6	-10H6		2.188	.422	
W10H8	-10H8		2.188	.422	

1/ Aluminum alloy 2014 and 2024 parts are cancelled. Use Aluminum alloy 7075 parts for new design. Cancelled parts may be used till stock is exhausted.

REQUIREMENTS:

1. The requirements for the acquisition of the product described herein shall consist of this detail specification sheet and SAE AS4875/1.

2. Material: Aluminum alloy bar 7075-T73 per AMS-QQ-A-225/9.

3. Finish: See standard SAE AS4875/1. Aluminum alloy 7075 fittings shall be dyed brown.

4. All outside machined surfaces shall be finished to 125 μin R_a; all inside machined surfaces and hex flats of bar stock shall be finished to 250 μin R_a, unless otherwise specified. Surface finish shall be in accordance with ASME B46.1.

5. Fittings shall be free from burrs and slivers.

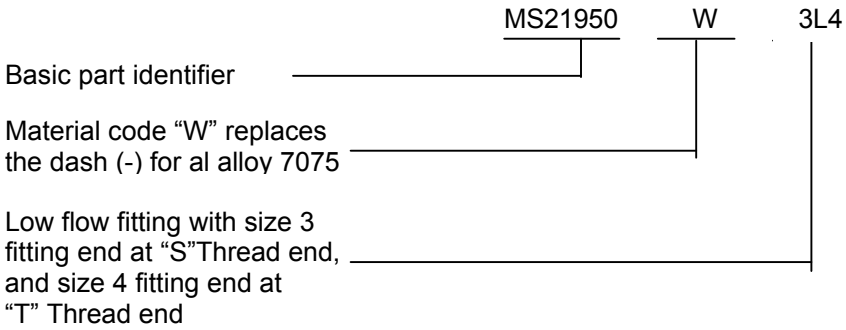
NOTES:

1. Dimensions in inches. Unless otherwise specified, tolerances: decimals ± .010, angles: ± 1/2°.

2. Dimensioning and tolerancing per ASME Y14.5.

3. Part Identification number (PIN)

Example of PIN: MS21950W3L4



Custodians:
Air Force - 99
Navy - AS
DLA - CC

Review activities:
Air Force - 82
Navy - SA

Preparing activity:
DLA - CC

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