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REV.
B

AS21940™

RATIONALE

FEDERAL SUPPLY CLASS
4730

GRAPHICS REDRAWN FOR BETTER CLARITY. "INACTIVE" REPLACED BY "NOT RECOMMENDED" ON SHEET 1 AND NOTE /13/. REVISE THREAD S SIZES IN TABLE 2A TO COINCIDE WITH TABLE 2B AND SIZES SPECIFIED ON REV NC. TYPO CORRECTED FOR DIM H FOR SIZE -10H. TABLE 3 UPDATED SHOWING PREVIOUS AND CURRENT PART NUMBERS. QPL NOTE UPDATED TO CURRENT VERBIAGE. REFERENCED STANDARDS UPDATED TO CURRENT NOMENCLATURE. NOTE 15, INVENTORY DISPOSITION NOTE ADDED. NOTE 16, PART MARKING NOTE ADDED.

NOTICE

THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S MILITARY STANDARD MS21940D. THIS SAE STANDARD MAY RETAIN THE SAME PART NUMBERS ESTABLISHED BY THE ORIGINAL MILITARY DOCUMENT.

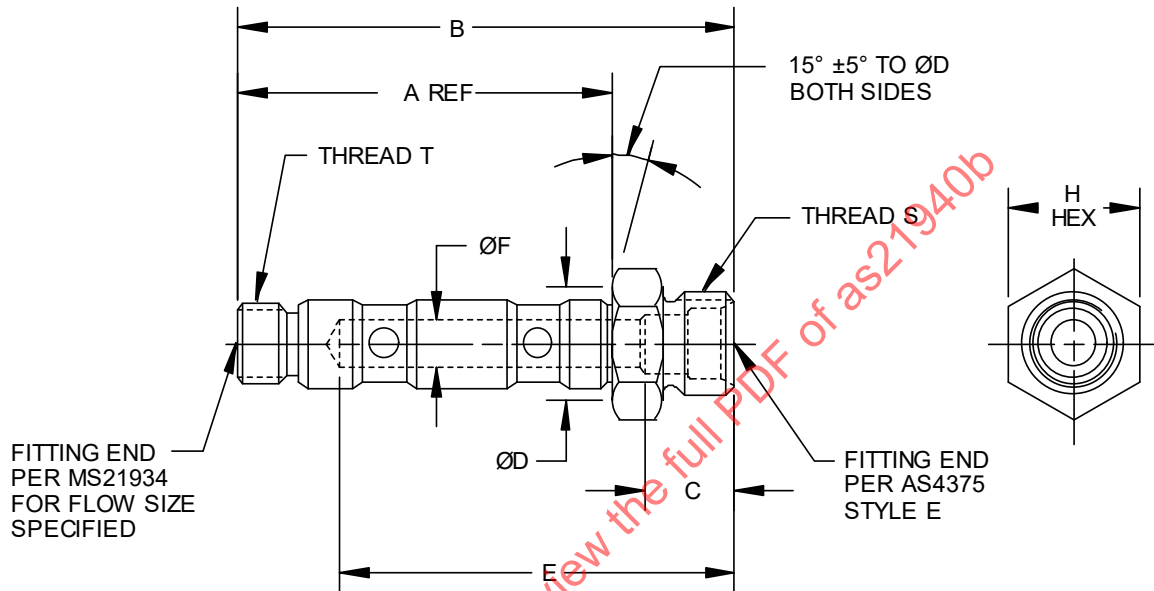


FIGURE 1 - BOLT, CLUSTER FITTING DOUBLE PORT, FLARELESS, DIMENSIONS AND CONFIGURATION

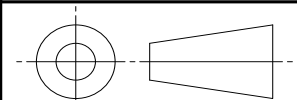
TABLE 1A - BOLT, CLUSTER FITTING, DOUBLE PORT, FLARELESS, LOW FLOW, DIMENSIONS A - D

LOW FLOW SIZE DASH NO.	TUBE OD	THREAD S AS8879 CLASS 3A	THREAD T AS8879 CLASS 3A	A REF	B	C ±.062	D +.000 -.015
-3L	.1875	.3750-24 UNJF	.4375-20 UNJF	2.531	3.265	--	.621
-4L	.2500	.4375-20 UNJF	.4375-20 UNJF	2.531	3.328	--	.684
-5L	.3125	.5000-20 UNJF	.4375-20 UNJF	2.531	3.390	--	.746
-6L	.3750	.5625-18 UNJF	.4375-20 UNJF	2.531	3.437	.663	.871
-8L	.5000	.7500-16 UNJF	.4375-20 UNJF	2.531	3.530	.656	.996

PART NOT RECOMMENDED /13/

For more information on this standard, visit
<https://www.sae.org/standards/content/AS21940B/>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS18280 /9/



AEROSPACE STANDARD

(R) BOLT, CLUSTER FITTING,
DOUBLE PORT
FLARELESS

AS21940™
SHEET 1 OF 4

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TABLE 1B - BOLT, CLUSTER FITTING, DOUBLE PORT, FLARELESS, LOW FLOW, DIMENSIONS E-H

LOW FLOW SIZE DASH NO.	TUBE OD	E ±.062	F ±.003	H - HEX		WT LB EACH APPROX
				MIN	MAX	
-3L	.1875	2.568	.125	.621	.628	.061
-4L	.2500	2.653	.187	.684	.691	.062
-5L	.3125	2.715	.234	.746	.753	.069
-6L	.3750	2.725	.234	.871	.878	.076
-8L	.5000	2.780	.234	.996	1.003	.096

TABLE 2A - BOLT, CLUSTER FITTING, DOUBLE PORT, FLARELESS, HIGH FLOW, DIMENSIONS A-D

HIGH FLOW SIZE DASH NO.	TUBE OD	THREAD S AS8879 CLASS 3A	THREAD T AS8879 CLASS 3A	A REF	B	C ±.062	D +.000 -.015
-6H	.3750	.5625-18 UNJF	.5625-18 UNJF	2.969	3.875	--	.871
-8H	.5000	.7500-16 UNJF	.5625-18 UNJF	2.969	3.875	--	.996
-10H	.6250	.8750-14 UNJF	.5625-18 UNJF	2.969	3.875	.812	1.121

TABLE 2B - BOLT, CLUSTER FITTING, DOUBLE PORT, FLARELESS, HIGH FLOW, DIMENSIONS E-H

HIGH FLOW SIZE DASH NO.	TUBE OD	E ±.062	F ±.003	H - HEX		WT LB EACH APPROX
				MIN	MAX	
-6H	.3750	3.162	.297	.871	.878	.164
-8H	.5000	3.218	.422	.996	1.003	.159
-10H	.6250	3.242	.422	1.121	1.128	.166

NOTES:

1. MATERIALS: ALUMINUM ALLOY 7075. SEE PROCUREMENT SPECIFICATION.
2. FINISH: REFER TO PROCUREMENT SPECIFICATION.
3. REMOVE BURRS AND SHARP EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.
4. INSTALLATION IN ACCORDANCE WITH MS21931.
5. SURFACE TEXTURE: REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, ALL OUTSIDE MACHINED SURFACES TO BE 125 MICROINCHES Ra AND ALL INSIDE SURFACES TO BE 250 MICROINCHES Ra.
6. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS ±.010, ANGLES ±0°30'.
7. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1994.

	AEROSPACE STANDARD		AS21940™ SHEET 2 OF 4	REV. B
	(R) BOLT, CLUSTER FITTING, DOUBLE PORT FLARELESS			

8. PART NUMBERS:

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

CODE "W" FOLLOWING BASIC PART NUMBER MS21940 SPECIFIES 7075 ALUMINUM ALLOY.

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

EXAMPLES OF PART NUMBERS:

MS21940W4L - BOLT, .2500 TUBING, LOW FLOW, 7075 ALUMINUM ALLOY

MS21940W10H - BOLT, .8750 TUBING, HIGH FLOW, 7075 ALUMINUM ALLOY

TABLE 3 - CANCELLED AND SUPERSEDED DOCUMENT AND PART NUMBERS

CANCELLED DOCUMENT NUMBER	PREVIOUS PART NUMBERS	SUPERSEDING DOCUMENT NUMBER	RETAINED MIL-F-18280 PART NUMBERS	CURRENT AS18280 PART NUMBERS
MS21940	MS21940-3L	AS21940	--	MS21940W3L
MS21940	MS21940W3L	AS21940	MS21940W3L	--
MS21940	MS21940-4L	AS21940	--	MS21940W4L
MS21940	MS21940W4L	AS21940	MS21940W4L	--
MS21940	MS21940-5L	AS21940	--	MS21940W5L
MS21940	MS21940W5L	AS21940	MS21940W5L	--
MS21940	MS21940-6L	AS21940	--	MS21940W6L
MS21940	MS21940W6L	AS21940	MS21940W6L	--
MS21940	MS21940-8L	AS21940	--	MS21940W8L
MS21940	MS21940W8L	AS21940	MS21940W8L	--
MS21940	MS21940-6H	AS21940	--	MS21940W6H
MS21940	MS21940W6H	AS21940	MS21940W6H	--
MS21940	MS21940-8H	AS21940	--	MS21940W8H
MS21940	MS21940W8H	AS21940	MS21940W8H	--
MS21940	MS21940-10H	AS21940	--	MS21940W10H
MS21940	MS21940W10H	AS21940	MS21940W10H	--

/9/ PROCUREMENT SPECIFICATION: AS18280, EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT MANUFACTURED TO THIS STANDARD SHALL MEET THE REQUIREMENTS SPECIFIED HEREIN AND THE PROCUREMENT SPECIFICATION. ORIGINAL COMPONENT MANUFACTURERS (OCM) SHALL BE LISTED IN THE PRI QUALIFIED PRODUCTS LIST (QPL) PRI-QPL-AS18280 FOR THIS STANDARD. SEE www.eAuditNet.com FOR CURRENT QPL ONLINE.

10. INTERPRETATION OF DRAWING PER AS4296.

11. FLUID PASSAGE HOLE CONTOUR AS4266 (OPTIONAL).

12. IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS STANDARD AND THE REFERENCED CITED HEREIN, THE TEXT OF THIS STANDARD SHALL TAKE PRECEDENCE.

/13/ THESE PARTS ARE NOT RECOMMENDED FOR NEW DESIGN AS OF 31 DECEMBER 1989. FOR NEW DESIGN, SEE STANDARD REDUCER FITTINGS.

14. REVISION INDICATOR: A CHANGE BAR (I) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT, INCLUDING TECHNICAL REVISIONS. CHANGE BARS AND (R) ARE NOT USED IN ORIGINAL PUBLICATIONS, NOR IN DOCUMENTS THAT CONTAIN EDITORIAL CHANGES ONLY.

	AEROSPACE STANDARD	AS21940™ SHEET 3 OF 4	REV. B
	(R) BOLT, CLUSTER FITTING, DOUBLE PORT FLARELESS		