

INCH-POUND

MS18193F
w/AMENDMENT 1
28 October 2013
SUPERSEDING
MS18193F
5 January 2011

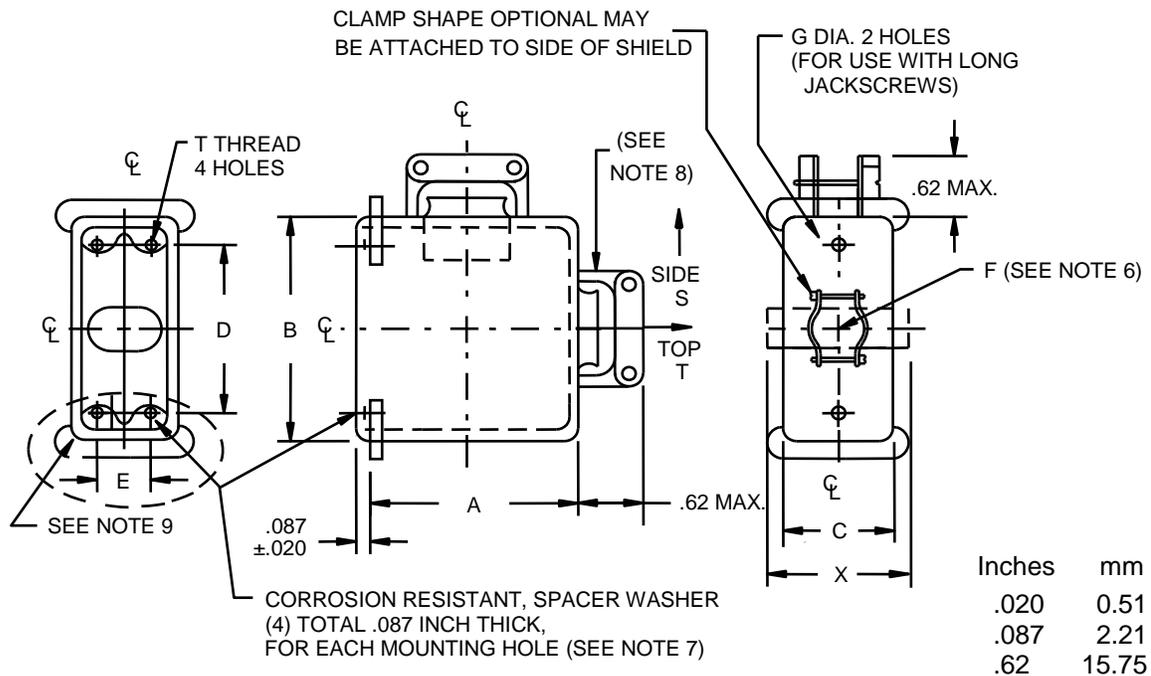
DETAIL SPECIFICATION SHEET

SHIELD, ELECTRICAL CONNECTORS FOR
66 AND 104 CONTACT CONNECTORS

Reinstated after 10 July 2009 and may be used
for new and existing designs and acquisitions.

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

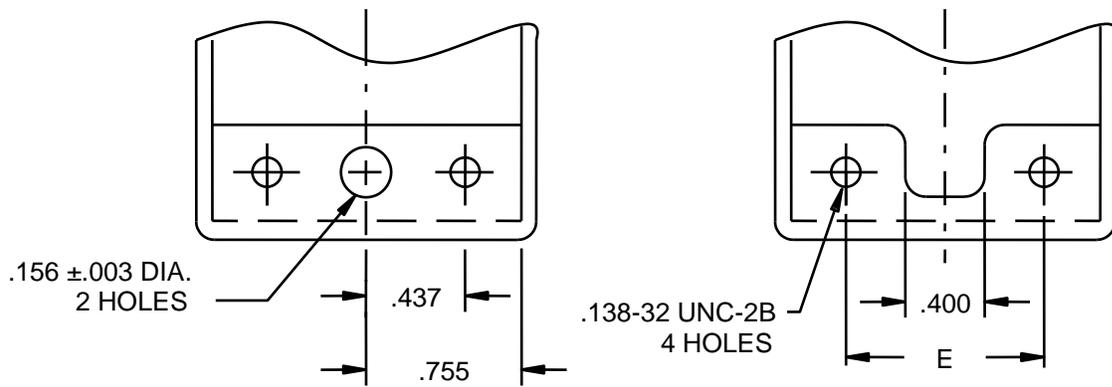
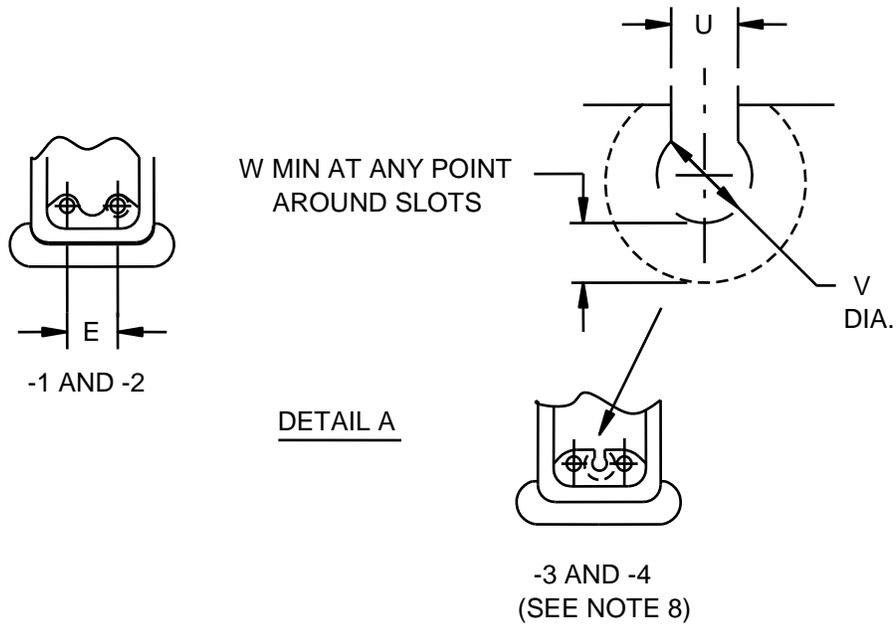
The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-28748.



Shield designator	Shield and shield clamp location (see note 8)	U ±.003 (0.08)	V +.005 (0.13 mm) -.001 (0.03 mm)	W Min	Connector size (number of contacts)
MS18193-T3 MS18193-S3	top opening side opening	.109 (2.77)	.120 (3.05)	.062 (1.57)	66
MS18193-T4 MS18193-S4	top opening side opening	.133 (3.38)	.150 (3.81)	.110 (2.79)	104

FIGURE 1. Shield for 66 and 104 contact positions.

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ALTERNATE CONFIGURATIONS -2 AND -4

Inches	mm
.003	0.08
.138	3.51
.156	3.96
.400	10.16
.437	11.10
.755	19.18

DETAIL A

FIGURE 1. Shields for 66 and 104 contact positions - Continued.

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Shield designator	Shield and shield clamp location	Connector size (number of contacts)	A ±.03 (0.76 mm)	B ± .016 (0.41 mm)	C ± .016 (0.41 mm)	D ±.005 (0.13 mm)	E ±.005 (0.13 mm)	F Minimum cable opening sq. inch	G +.003 (0.08 mm) -.001 (0.03 mm)	T thread	X max
MS18193-T1 MS18193-S1	top opening side opening	66	1.17 (29.72)	2.366 (60.10)	1.211 (30.76)	1.969 (50.01)	.500 (12.70)	.55 (13.97)	.196 (4.98)	.112-40 UNC-2B	1.37 (34.80)
MS18193-T2 MS18193-S2	top opening side opening	104	2.23 (56.64)	2.835 (72.01)	1.625 (41.28)	2.375 (60.33)	.875 (22.23)	1.10 (27.94)	.229 (5.82)	.138-32 UNC-2B	1.88 (47.75)
MS18193-T3 MS18193-S3	top opening side opening	66	1.17 (29.72)	2.366 (60.10)	1.211 (30.76)	1.969 (50.01)	.500 (12.70)	.55 (13.97)	.196 (4.98)	.112-40 UNC-2B	1.37 (34.80)
MS18193-T4 MS18193-S4	top opening side opening	104	2.23 (56.64)	2.835 (72.01)	1.625 (41.28)	2.375 (60.33)	.875 (22.23)	1.10 (27.94)	.229 (5.82)	.138-32 UNC-2B	1.88 (47.75)

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are ±.016 inch (0.41 mm).
4. Material aluminum alloy in accordance with SAE AMS4016 temper H32 .040 inch (1.02 mm) thick.
5. Finish anodized in accordance with MIL-A-8625, type I or type II.
6. Edges of cable entry hole to be rounded to prevent insulation chafing.
7. Spacer washers (4) used only with shell. Discard otherwise. Aluminum shall be in accordance with SAE AMS4027, T6, anodized in accordance with MIL-A-8625, type I or II.
8. MS18193-T3, S3, T4, S4 are for use with one-piece jackscrews.
9. No crack, chips, or sharp edges on all 4 edges of flange.

FIGURE 1. Shields for 66 and 104 contact positions - Continued.

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Shields for 66 and 104 contact positions. See figure 1.

Qualification: Qualified sources for MIL-DTL-28748/1 through MIL-DTL-28748/6 that meet the qualification testing requirements in MIL-DTL-28748 require no further testing for the hardware.

Qualification of hardware only: the hardware shall be installed in a qualified connector and shall be subjected to the tests below in accordance with MIL-DTL-28748. Sample size, if qualifying all hardware configurations, shall be two connector pairs.

Visual and mechanical inspection

Vibration

Shock

Salt spray

Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Referenced documents. In addition to MIL-DTL-28748, this document references the following:

MIL-A-8625

MIL-DTL-28748/1

MIL-DTL-28748/2

MIL-DTL-28748/3

MIL-DTL-28748/4

MIL-DTL-28748/5

MIL-DTL-28748/6

SAE AMS4016

SAE AMS4027

CONCLUDING MATERIAL

Custodians:

Army - CR

Navy - EC

Air Force - 85

DLA - CC

Preparing activity:

DLA - CC

Review activities:

Army – AM, AR, AT, CR4, MI

Navy – AS, MC, OS

Air Force – 99

(Project 5935-2013-209)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.