

METRIC

MIL-I-24728/4

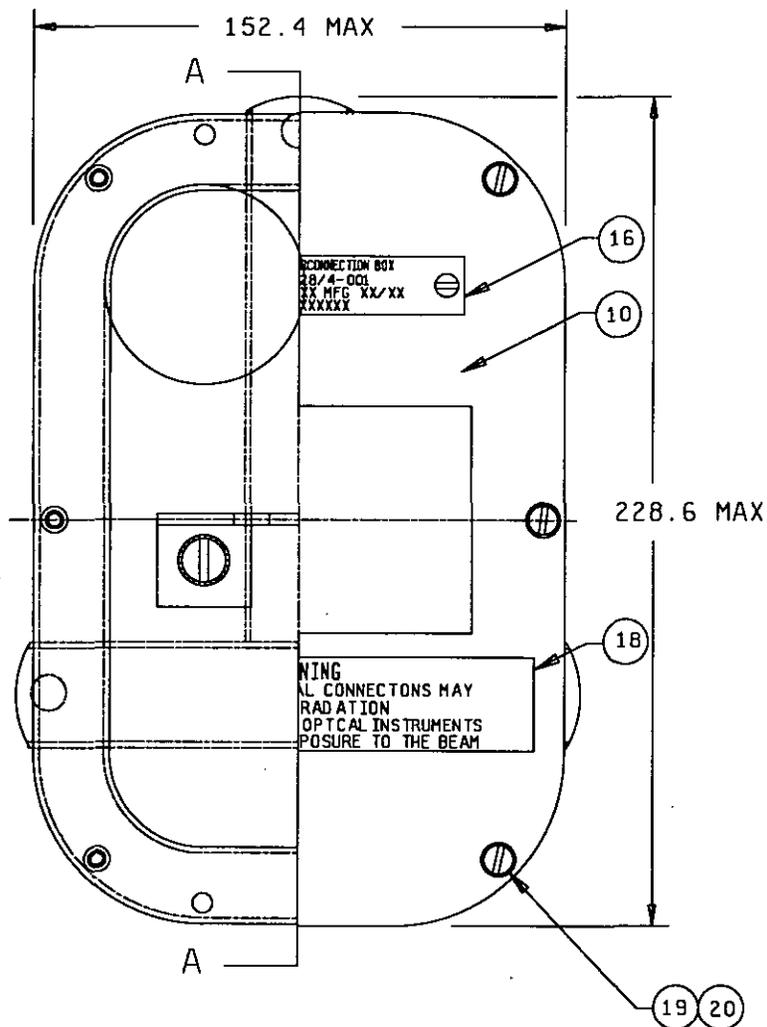
1 June 1995

MILITARY SPECIFICATION SHEET

INTERCONNECTION BOX, FIBER OPTIC, SUBMERSIBLE, 101.6 x 177.8 mm

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 the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-I-24728.



ABOVE COVER SHOWN PARTIALLY REMOVED

FIGURE 1. Enclosure assembly, M24728/4-001.

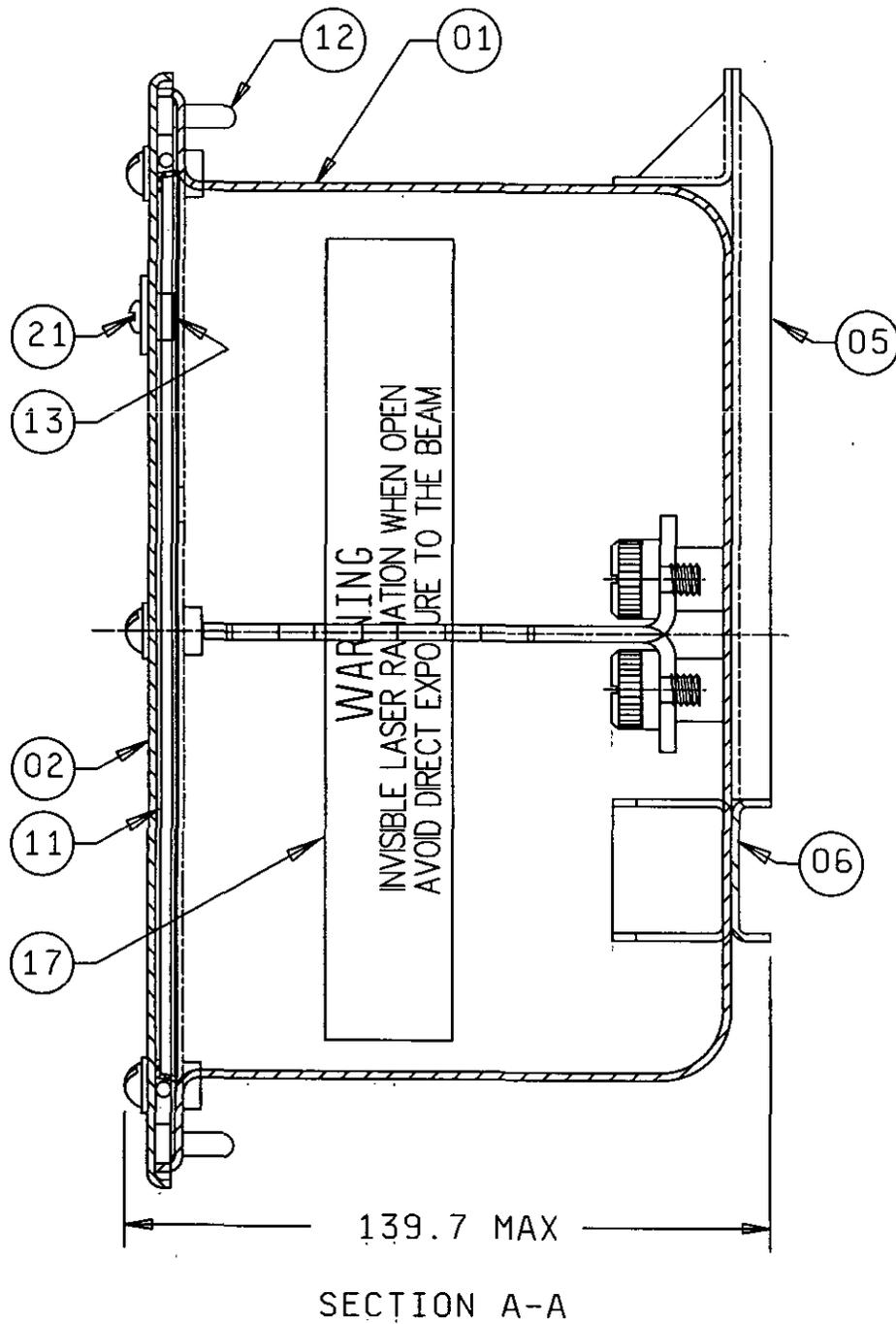
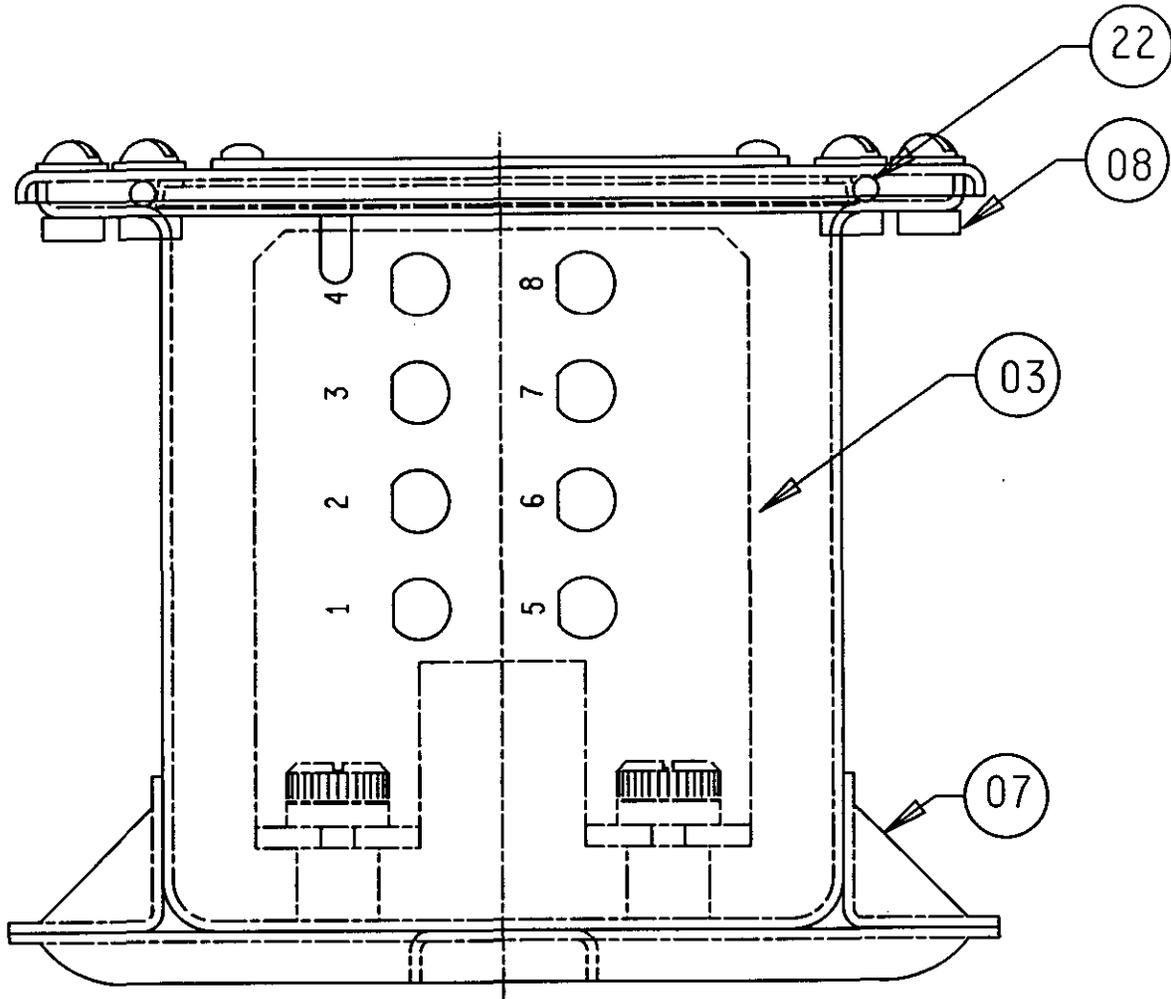


FIGURE 1. Enclosure assembly, M24728/4-001 - Continued.

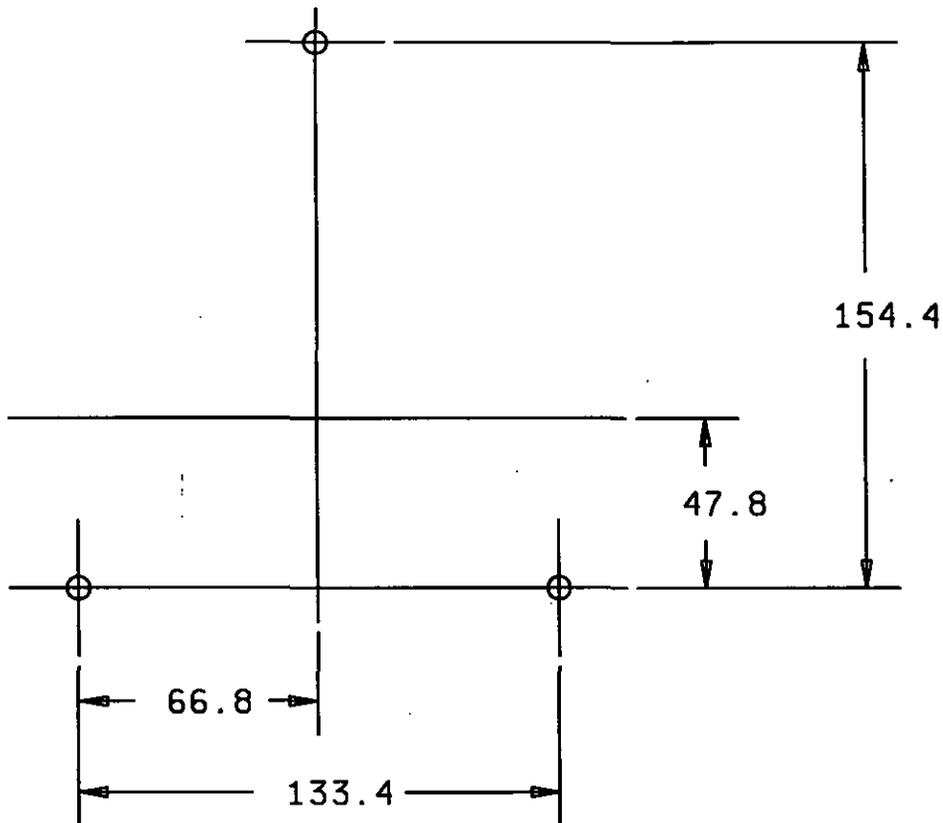


mm	Inches
139.7	5.50
152.4	6.00
228.6	9.00

NOTES:

1. Dimensions are in millimeters.
2. Inch-pound equivalents are given for information only.
3. Unless otherwise specified, tolerance is ± 2.5 mm (.1 inch) for one-place decimals.
4. For identification of subcomponent parts, see table I.

FIGURE 1. Enclosure assembly, M24728/4-001 - Continued.

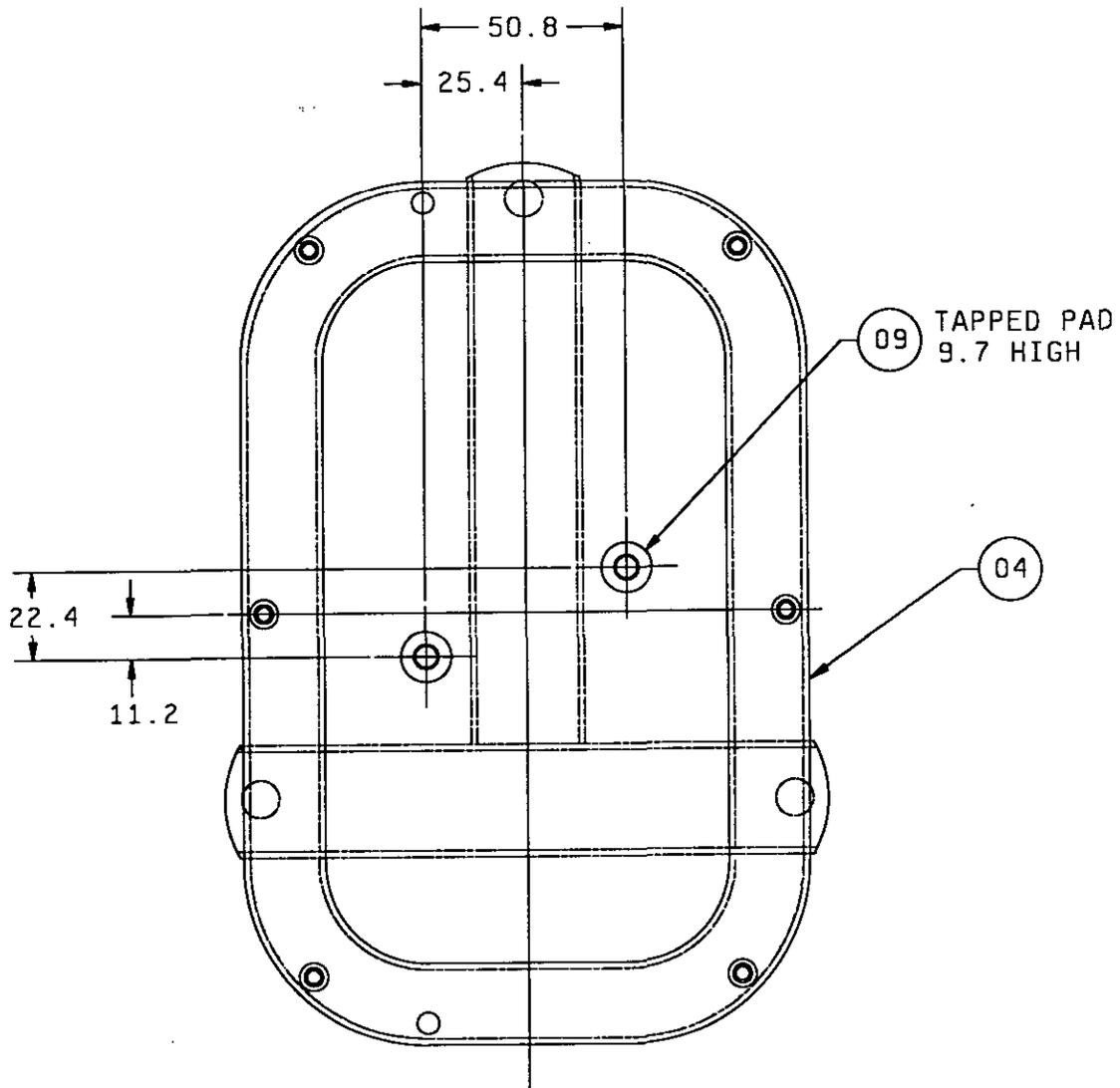


mm	Inches
9.53	.375
47.8	1.88
66.8	2.63
133.4	5.25
152.4	6.00

NOTES:

1. Dimensions are in millimeters.
2. Inch-pound equivalents are given for information only.
3. Unless otherwise specified, tolerance is ± 0.3 mm (.01 inch) for two-place decimals.
4. Mounting holes shall accommodate M9.53 x 1.59 (.375-16) bolts

FIGURE 2. Box mounting dimensions.



mm	inches
6.4	.25
9.7	.38
11.2	.44
22.4	.88
25.4	1.00
50.8	2.00

NOTES:

1. Dimensions are in millimeters.
2. Inch-pound equivalents are given for information only.
3. Unless otherwise specified, tolerance is ± 2.5 mm (.1 inch) for one-place decimals, ± 0.3 mm (.01 inch) for two-place decimals, and ± 0.13 mm (.005 inch) for three-place decimals. A tolerance of ± 0.8 mm (.03 inch) is acceptable on dimensions controlled by welding or brazing, providing that this tolerance does not interfere with the interchangeability of assemblies or parts.
4. Pad to have M6.35 x 1.27 (.25-20) tap.

FIGURE 3. Location of patch panel mounting pads.

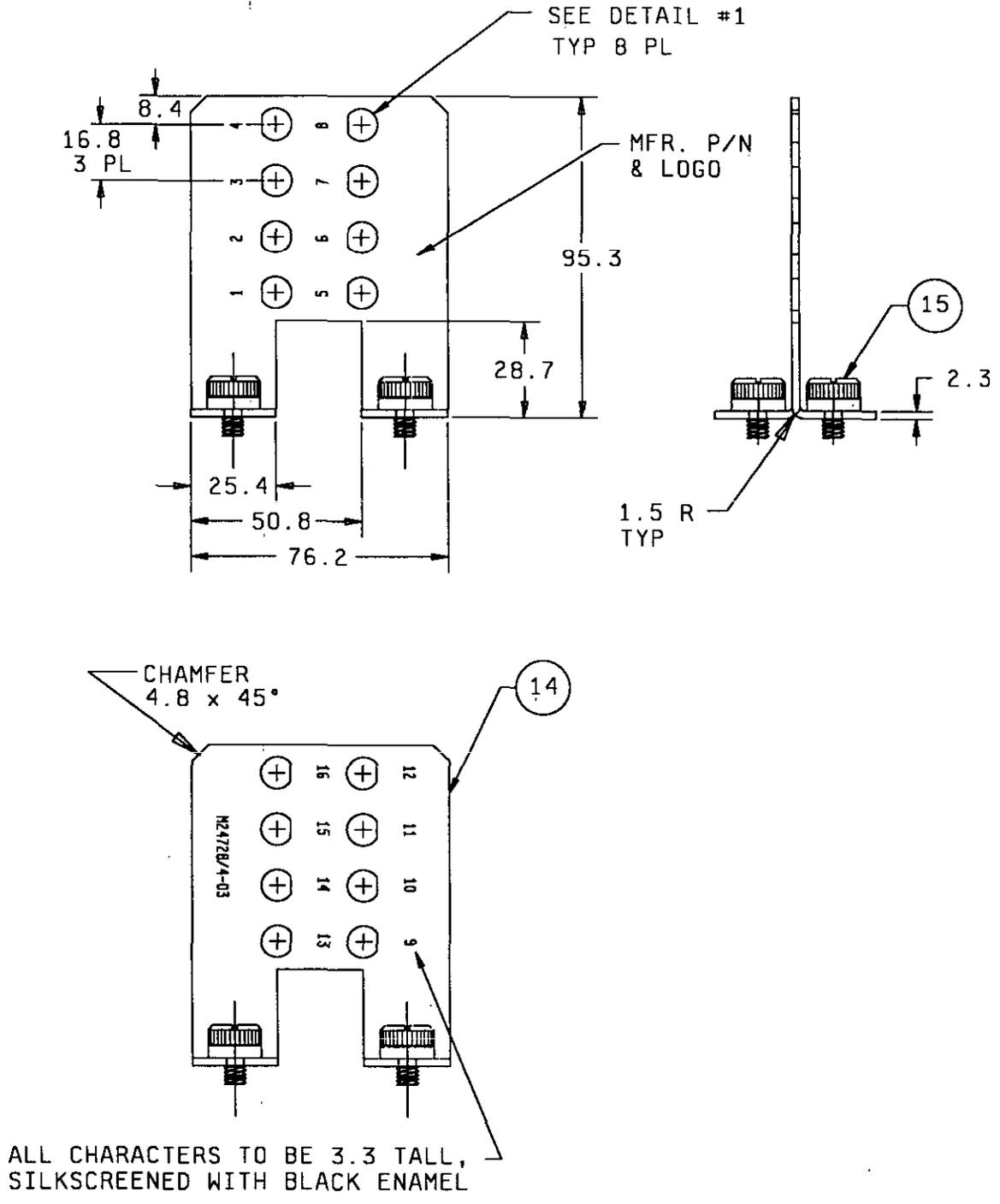
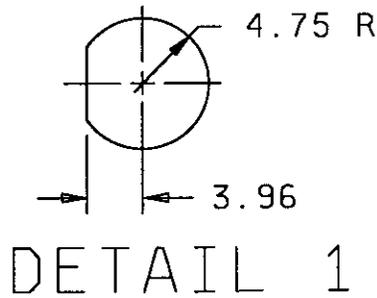
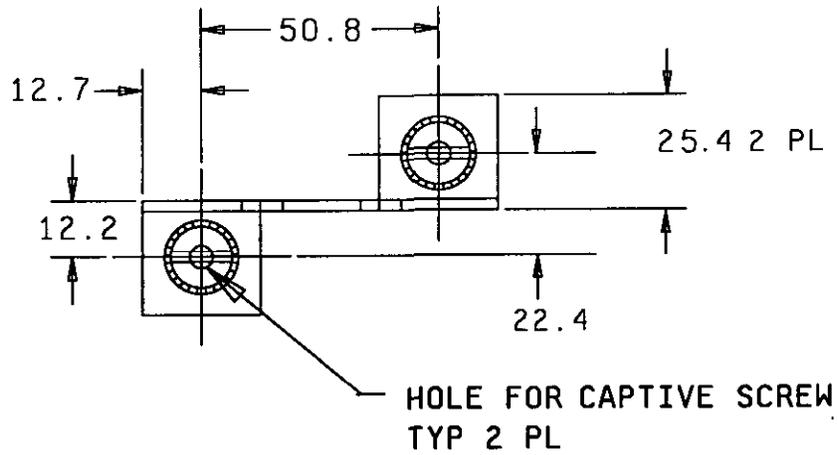


FIGURE 4. Patch panel assembly.

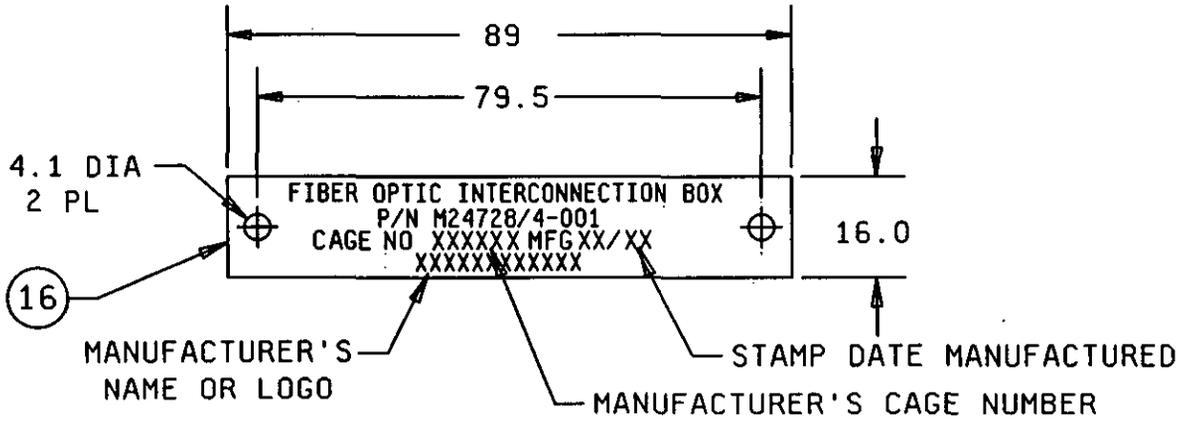


mm	Inches	mm	Inches	mm	Inches
1.5	.06	8.4	.33	28.7	1.13
2.3	.09	12.2	.48	50.8	2.00
3.3	.13	12.7	.50	76.2	3.00
3.96	.156	16.8	.66	95.3	3.75
4.75	.187	22.4	.88		
4.8	.19	25.4	1.00		

NOTES:

1. Dimensions are in millimeters.
2. Inch-pound equivalents are given for information only.
3. Unless otherwise specified, tolerance is ± 0.3 mm (.01 inch) for two-place decimals and ± 0.13 mm (.005 inch) for three-place decimals.

FIGURE 4. Patch panel assembly - Continued.

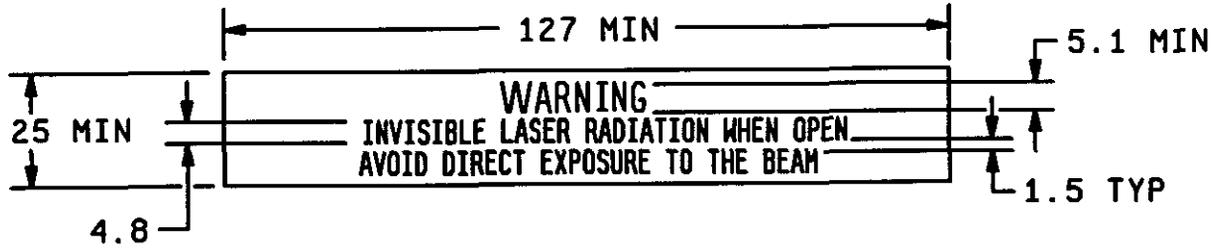


mm	Inches
4.1	.16
16.0	.63
79.5	3.13
89	3.5

NOTES:

1. Dimensions are in millimeters.
2. Inch-pound equivalents are given for information only.
3. Unless otherwise specified, tolerance is ± 2.5 mm (.1 inch) for one-place decimals, and ± 0.3 mm (.01 inch) for two-place decimals.

FIGURE 5. Identification plate.



mm	Inches
1.5	.06
4.8	.19
5.1	.20
25.4	1.00
127	5.00

NOTES:

1. Dimensions are in millimeters.
2. Inch-pound equivalents are given for information only.
3. Unless otherwise specified, tolerance is ± 2.5 mm (.1 inch) for one-place decimals, and ± 0.3 mm (.01 inch) for two-place decimals.

FIGURE 6. Inside warning label.



mm	Inches
1.5	.06
3.3	.13
5.1	.20
25.4	1.00
127	5.00

NOTES:

1. Dimensions are in millimeters.
2. Inch-pound equivalents are given for information only.
3. Unless otherwise specified, tolerance is ± 2.5 mm (.1 inch) for one-place decimals, and ± 0.3 mm (.01 inch) for two-place decimals.

FIGURE 7. Outside warning label.

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TABLE I. Parts list.

Subcomponent identification numbers. circled (see figures 1 through 7).	Part name	PIN M24728/4-		Subassembly number			Remarks and reference figures
		001	002	01	02	03	
01	Box assembly	1		1			1 and 3
02	Cover assembly	1			1		1
03	Patch panel assembly	1	1			1	1 and 4
04 <u>1/ 2/</u>	101.6 X 177.8 box			1			1
05 <u>1/ 3/</u>	Mounting leg			1			1
06 <u>1/ 3/</u>	Mounting leg			1			1
07 <u>1/ 4/</u>	Gusset			3			1
08 <u>1/ 5/</u>	Flange pad			6			1
09 <u>1/</u>	Panel mounting pad			2			3
10 <u>1/ 2/</u>	101.6 x 177.8 cover				1		1
11 <u>1/ 2/</u>	Gasket retainer				1		1
12 <u>1/ 2/</u>	Dowel pin				2		1
13 <u>1/</u>	M3.5 x .79 (6-32) pad				2		1
14 <u>1/</u>	Patch panel		1			1	4
15 <u>6/ 8/</u>	M6.35 x 1.27 (.25-20) captive screw		2			2	4
16 <u>1/</u>	Identification plate	1					5
17 <u>7/</u>	Warning label (inside)	1					6
18 <u>7/</u>	Warning label (outside)	1					7
19 <u>1/ 2/</u>	M2.5 x 1.06 (10-24) X 12.7 RHMS	6					1
20 <u>1/</u>	2.5 (#10) flat washer	6					1
21 <u>1/</u>	M3.5 x .79 (6-32) X 6.35 RHMS	2					1
22 <u>2/</u>	Gasket	1					1

1/ Brass alloy C26000 in accordance with ASTM-B-36.

2/ In accordance with MIL-E-24142/4.

3/ In accordance with MIL-E-24142, figure 3.

4/ In accordance with MIL-E-24142, figure 7.

5/ In accordance with MIL-E-24142, figure 10.

6/ CRES.

7/ In accordance with MIL-P-15024, type G, adhesive-backed, metal foil.

8/ In accordance with MIL-I-24728/6.

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REQUIREMENTS:

Design and construction: See figures 1 through 7, and table I.

The interconnection box shall be in accordance with MIL-E-24142.

Enclosure assemblies shall be class 1A conversion coated in accordance with MIL-C-5541 before being epoxy powder coated.

Enclosure assemblies shall be stress relieved in accordance with MIL-E-24142.

Mass:

M24728/4-001: 2.27 kilograms (5 pounds) maximum.

Interconnection box mounting: See figure 2.

Interconnect organization:

Fiber optic connector adapters: The interconnection box shall organize up to 8 MIL-C-83522/17 connector adapters.

Cable retention: Not applicable.

Cable seal flexing: Not applicable.

Cable twist: Not applicable.

Compression resistance: Not applicable.

Impact: Not applicable.

Flammability: Not applicable.

Salt spray: Not applicable.

Flame spread: Not applicable.

Fungus test shall be conducted only on polymeric materials.

The operating temperature range shall be -54°C to +65°C and the storage temperature range shall be -62°C to +85°C.

Part or Identifying Number (PIN): See table I

M24728/4-001: Box and cover with patch panel assembly.

M24728/4-002: Patch panel assembly.

Qualification by similarity: Manufacturers who produce products for both MIL-I-24728/5 and this specification sheet and are qualified under MIL-I-24728/5 and pass the water pressure test and size inspection specified herein, are qualified under this slash sheet.

The US Government preferred system of measurement is the metric SI system. However, this item was originally designed using inch-pound units of measurement. In the event of conflict between the metric and inch-pound units, the inch-pound units shall take precedence.

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CONCLUDING MATERIAL

Custodians:
Army - CR
Navy - SH
Air Force - 85
NASA - NA

Review activities:
Army - AR, MI
Navy - AS, CG, EC, MC, YD
Air Force - 17, 19, 80, 99
DLA - ES

Preparing activity:
Navy - SH

Agent:
DLA - ES

(Project 6099-0003-02)