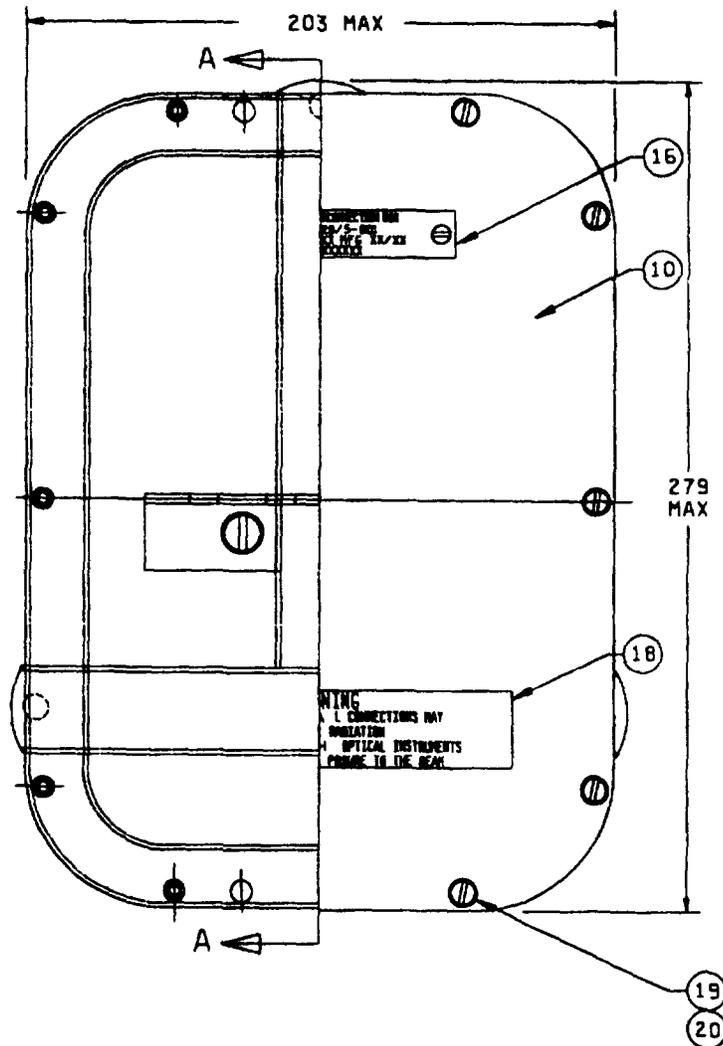


MILITARY SPECIFICATION SHEET

INTERCONNECTION BOX, FIBER OPTIC, SUBMERSIBLE 152 4 x 228 6 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, M24728/5-001

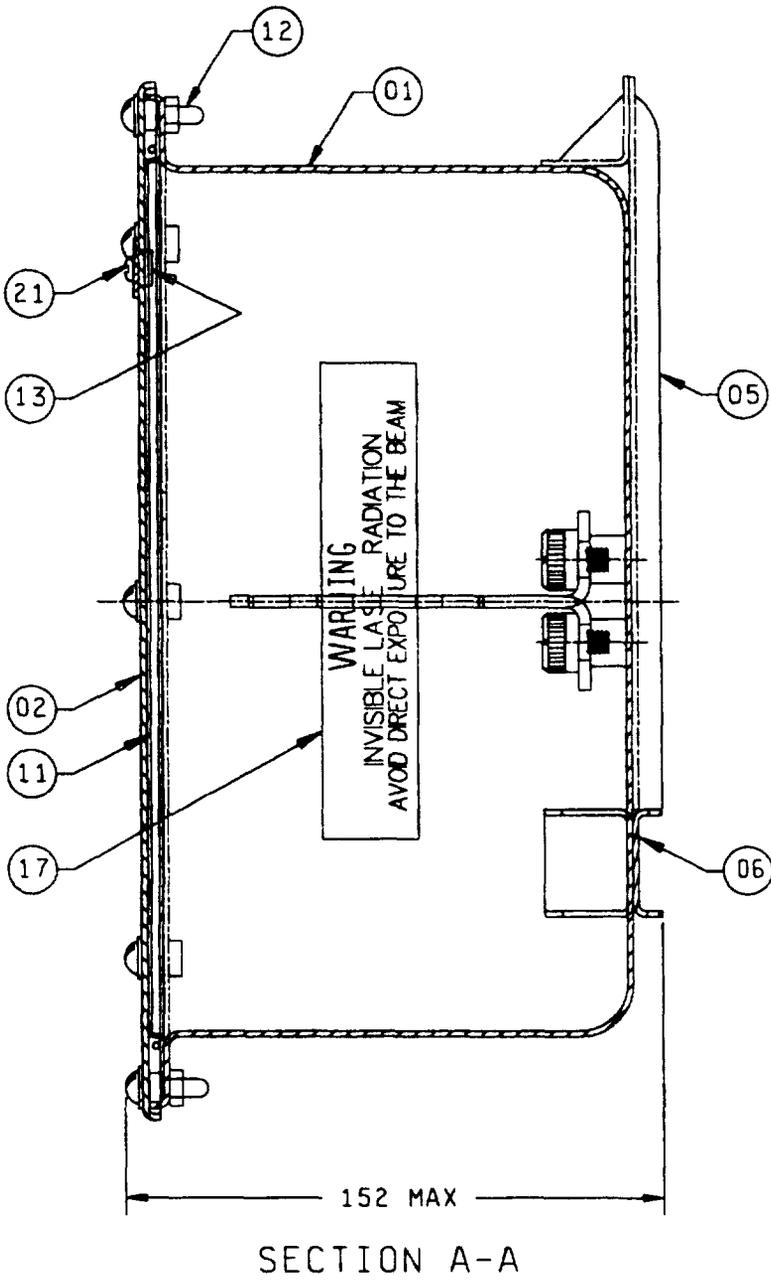
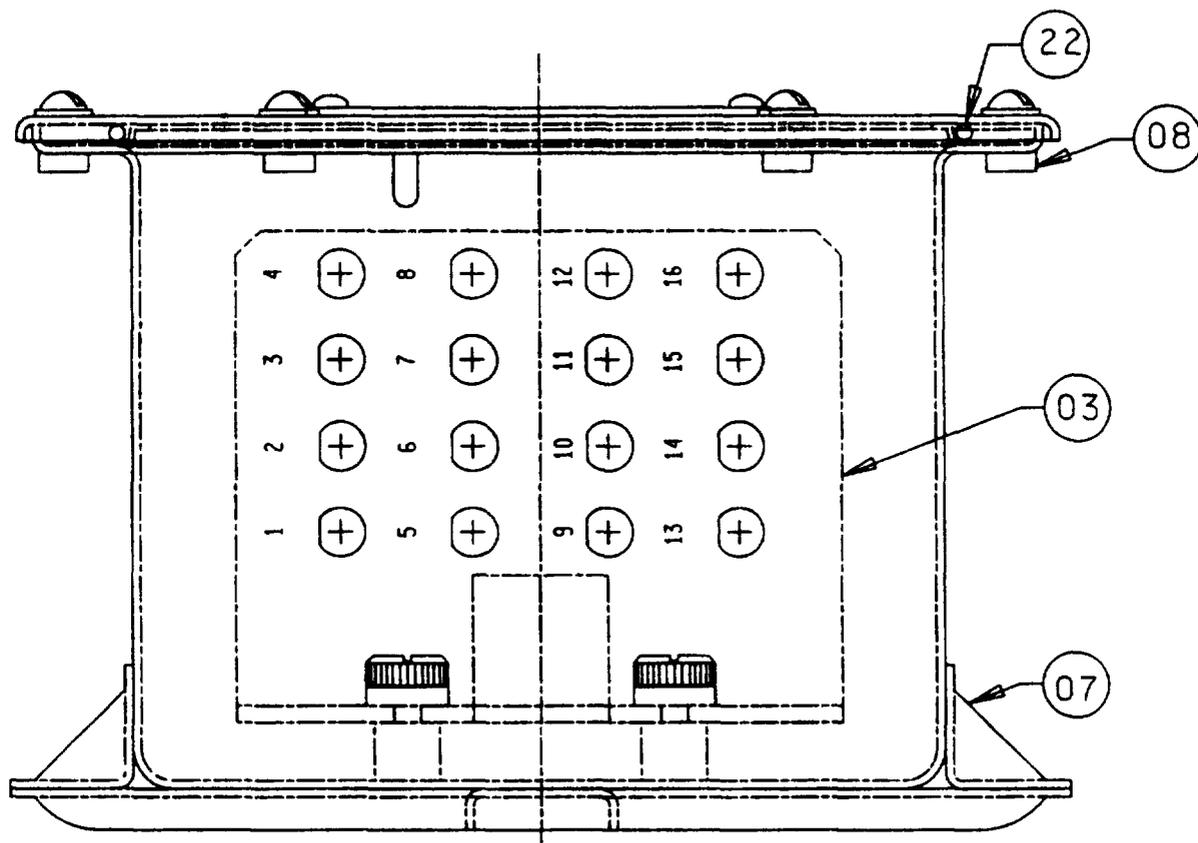


FIGURE 1 Enclosure assembly, M24728/5-001 - Continued

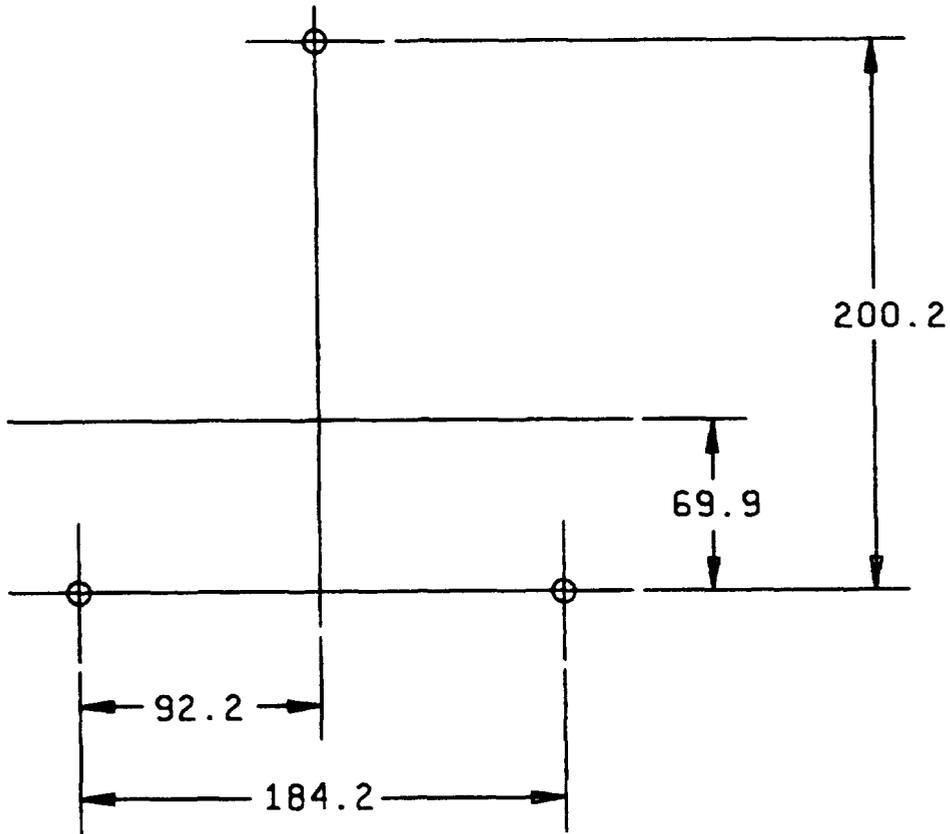


mm	Inches
152	6 0
203	8 0
279	11 0

NOTES

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

FIGURE 1 Enclosure assembly, M24728/5-001 Continued

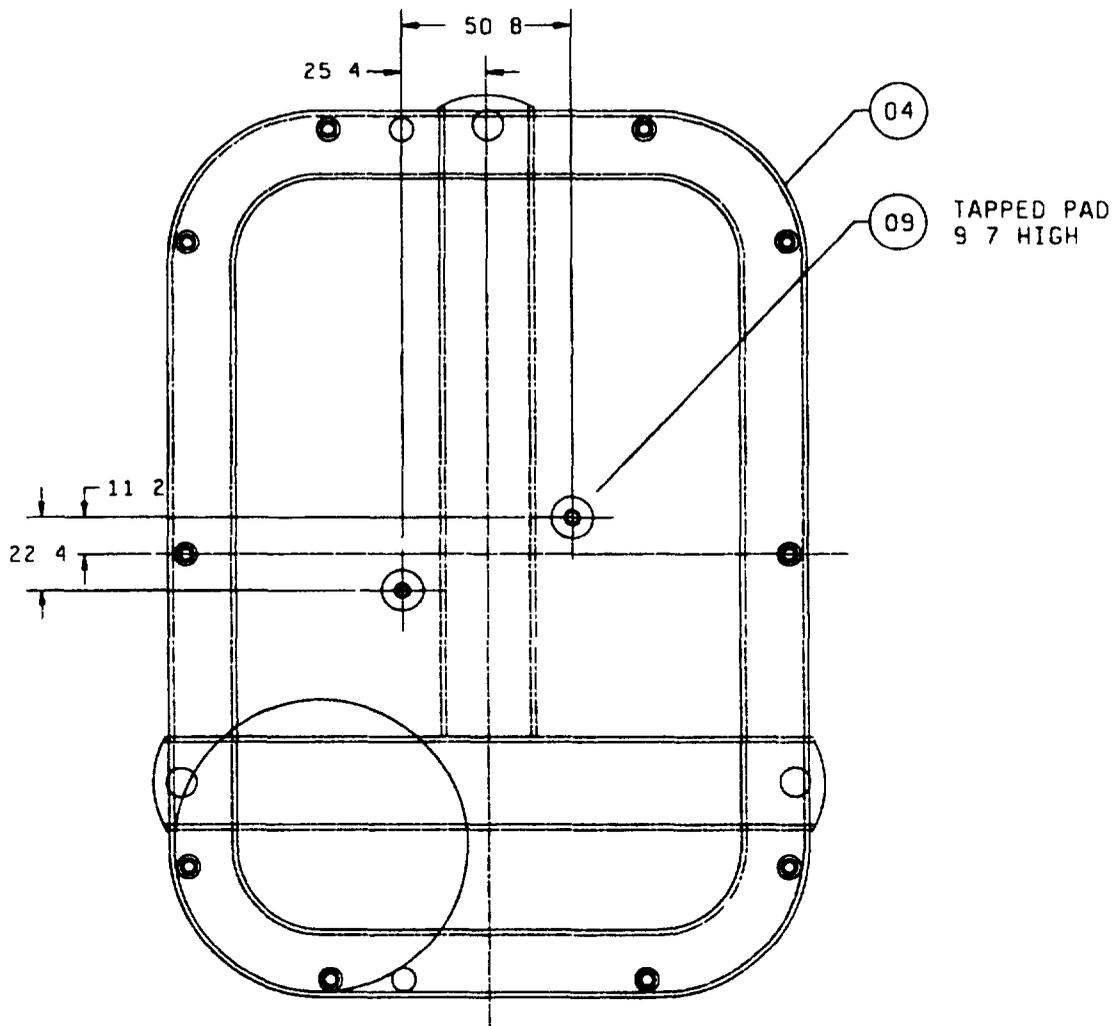


mm	Inches
9.53	3/8
69.9	2.75
92.2	3.63
184.2	7.25
200.2	7.88

NOTES

- 1 Dimensions are in millimeters
- 2 Inch-pound equivalents are given for information only
- 3 Unless otherwise specified, tolerance is  $\pm 0.3$  mm (0.01 inch) for two-place decimals
- 4 Mounting holes shall accommodate M9.53 x 1.59 (3/8 x 1/4) 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  $\pm 2.5$  mm (.1 inch) for one-place decimals,  $\pm 0.3$  mm (.01 inch) for two-place decimals, and  $\pm 0.13$  mm (.005 inch) for three-place decimals. A tolerance of  $\pm 0.8$  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

MIL I 24728/5

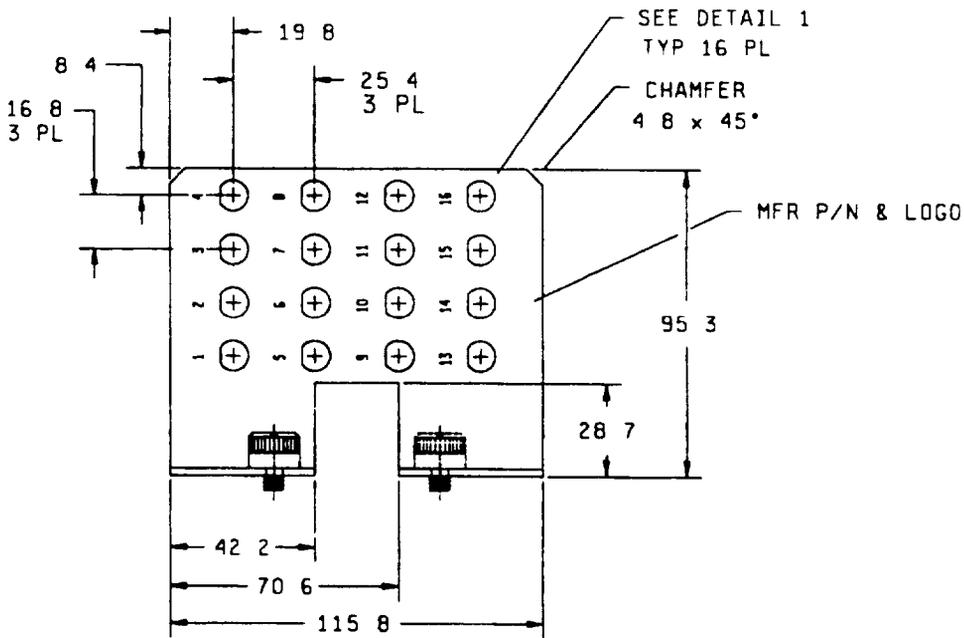
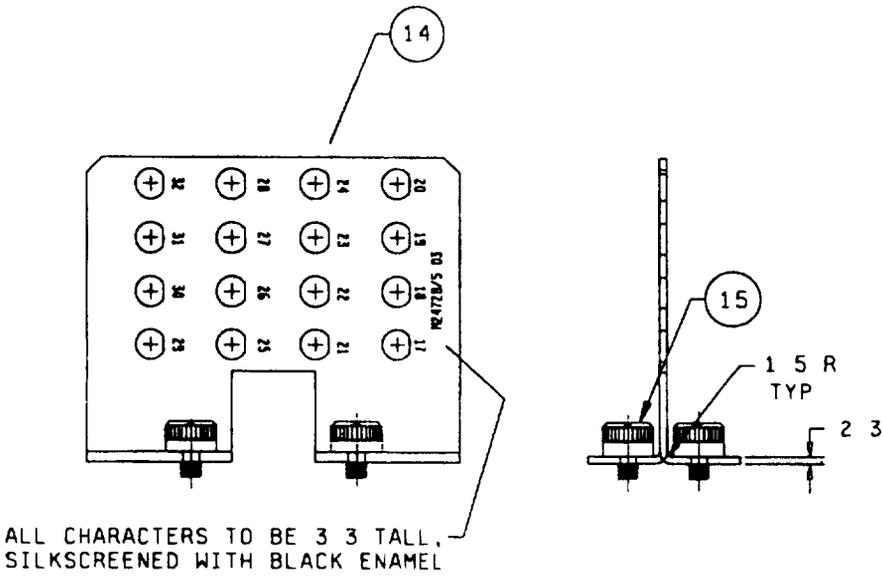
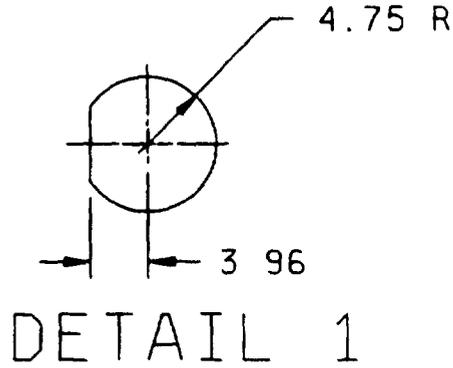
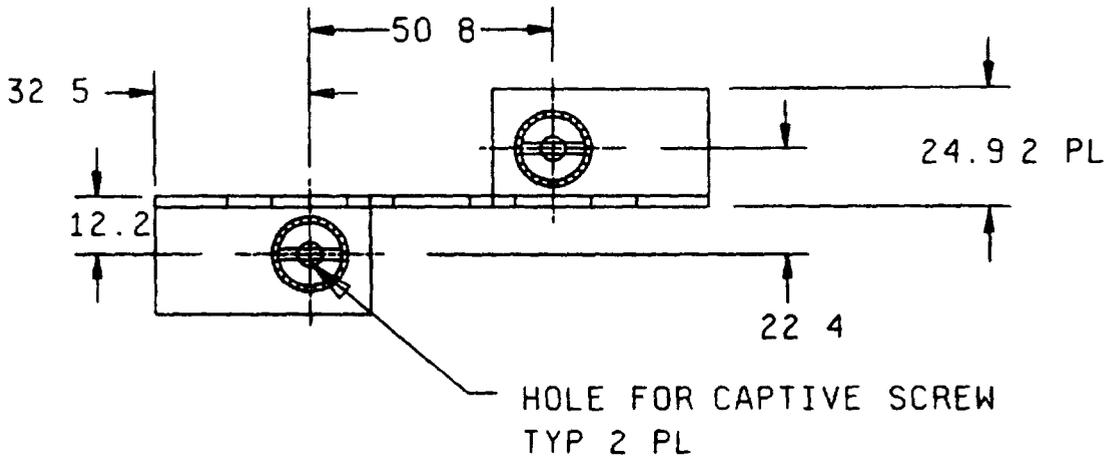


FIGURE 4 Optical connector patch panel assembly

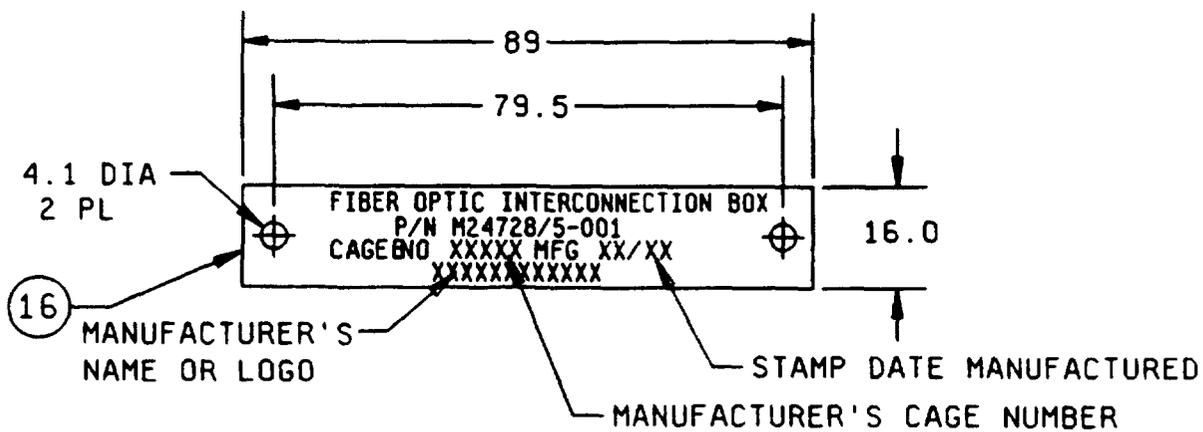


mm	Inches	mm	Inches	mm	Inches
1 5	06	12.2	48	32 5	1.28
2 3	09	16 8	66	50 8	2 00
3 3	13	19 8	78	70 6	2 78
3 96	156	22.4	88	95 3	3 75
4 75	187	24 9	98	115.8	4.56
4 8	19	25 4	1 00		
8 4	33	28 7	1 13		

NOTES

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

FIGURE 4 Optical connector patch panel assembly - Continued

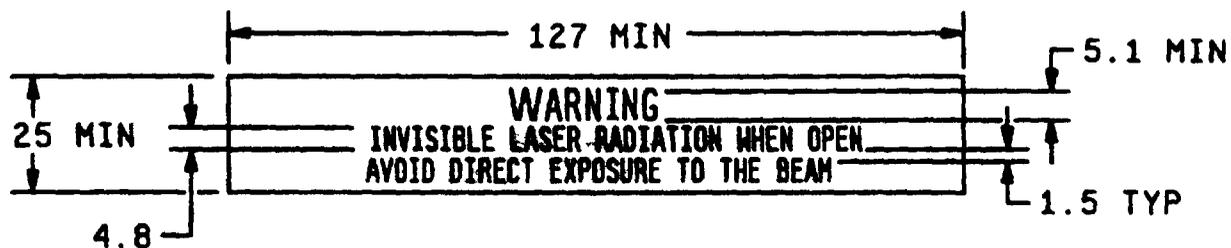


mm	Inches
4.1	.16
16.0	.63
79.5	3.13
89	3.5

NOTES

- 1 Dimensions are in millimeters
- 2 Inch-pound equivalents are given for information only
- 3 Unless otherwise specified, tolerance is  $\pm 2.5$  mm ( .1 inch) for one-place decimals, and  $\pm 3$  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	5.0

NOTES

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

FIGURE 7 Outside warning label

TABLE I Parts list

Subcomponent identification numbers, circled (see figures 1 through 7)	Part name	PIN M24728/5		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 and 4
04 <u>1/ 2/</u>	152 4 X 228 6 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>	Weld nut			10			1
09 <u>1/</u>	Panel mounting pad			2			3
10 <u>1/ 2/</u>	152 4 x 228 6 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	10					1
20 <u>1/</u>	2 5 (#10) flat washer	10					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-24142/3
- 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

MIL I-24728/5

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

M24728/5 001 3.63 kilograms (8 pounds) maximum

Interconnection box mounting See figure 2

Interconnect organization

Fiber optic connector adapters The interconnection box shall organize up to 16 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

M24728/5-001 Box and cover with patch panel assembly

M24728/5-002 Patch panel assembly

Qualification by similarity Manufacturers who produce products for both MIL-I-24728/1 and this specification sheet and are qualified under MIL-I-24728/1 and pass the water pressure test, shock 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.

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 6099-0003-03)