

D-sub Connector Assembly Hood with ESD Protection

XM2S-E

Connector Hood with ESD Protection Simplifies Circuit Design

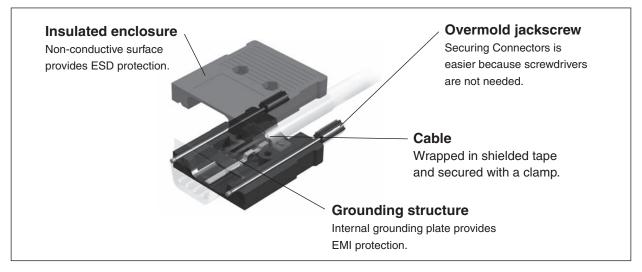
- Non-conductive surface protects against ESD (static electricity).
- Internal grounding provides EMI protection.
- Screwdrivers eliminated by overmold jackscrews.
- See the "Standards certification / conformity list" for information on conformity to certification standards.







■ Structural Diagram (Assembled)



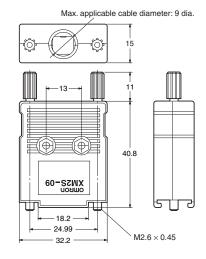
■ Performance, Materials, and Finishes

| Ambient operating temperature | - 25 to 85°C (with no condensation or icing) |
|-------------------------------|--|
| Cover | ABS (UL94 V-0)/black |
| Grounding plate | Phosphor bronze/nickel plating |
| Jackscrew | ABS (UL94 V-0)/black |

■ Dimensions (unit: mm)

XM2S-0911-E D-sub Connector Assembly Hood with ESD Protection





■ Ordering Information

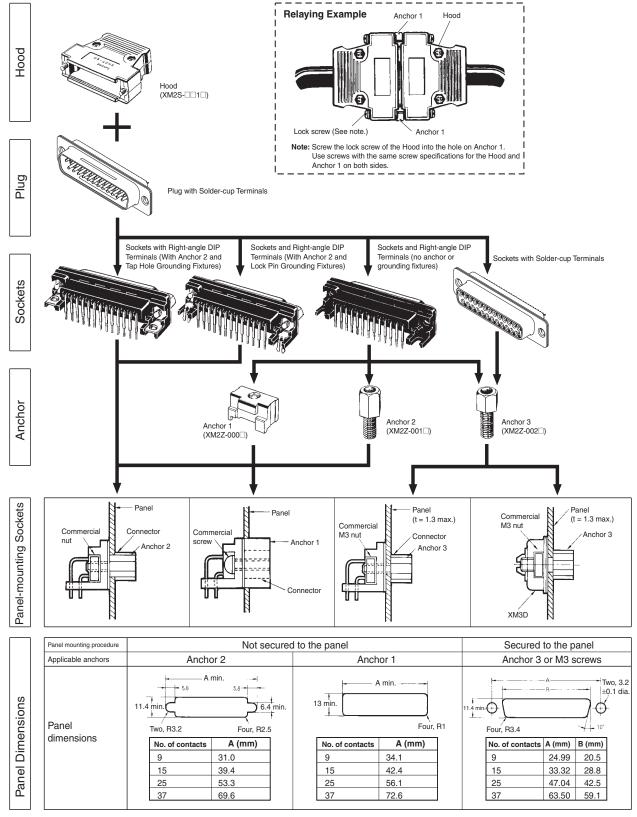
| Туре | Appearance | No. of contacts | Model |
|--|------------|-----------------|-------------|
| D-sub Connector Assembly Hood with ESD protection | | 9 | XM2S-0911-E |

■ Precautions

Correct Use

- \bullet Use a torque of 0.25 N·m to secure the cable clamp to the Hood.
- When you tighten the jack screws, hold the hood and make sure that the Connector is connected straight. If the screws are tightened when the Connector is not connected completely, the Connector may be damaged.
- Always use your fingers to tighten the jack screws. If you use pliers or any other tool to tighten the jack screws, the screws may be damaged.

■ Combination Examples



Note: 1. Two Anchors are required per Connector.

2. Applicable panel thickness is 1.3 mm max.

OMRON

Combination of hexagonal anchors for each connector (in post installation)

| Туре | Model | Without panel insertion | With panel insertion | Commercially available nut |
|---------------------|----------------|-------------------------|----------------------|----------------------------|
| Dip L type socket | XM3B-□□22 | XM2Z-001□ | XM2Z-002□ | Necessary |
| | XM3B-□□22-501□ | | | Not necessary |
| | XM3B-□□22-502 | | | |
| Dip L type plug | XM3C-□□22 | XM2Z-001□ | XM2Z-002□ | Necessary |
| | XM3C-□□22-501 | | | Not necessary |
| | XM3C-□□22-502 | | | |
| Dip straight socket | XM3F-□□20 | XM2Z-001□ | XM2Z-002□ | Necessary |

■ Precautions

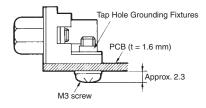
Correct Use

Grounding

To ground, create copper foil around the Connector Attachment hole on the board, assemble the Connector and Grounding Fixtures, and dip in solder as shown below.

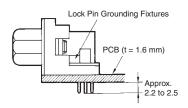
Tap Hole Grounding Fixtures

Insert the Connector into the PCB, tighten the screws, and then dip-solder the Connector terminals to the board.



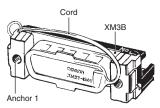
Lock Pin Grounding Fixtures

Insert the connector into the PCB and then simultaneously dip-solder the Connector terminals and lock pin to the board.

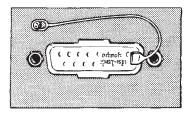


Attaching the Dust Cover

 To attach the cord to the Connector, use Anchor 1 and secure it as shown below.



 To attach the cord to a panel, drill an M3 hole in the panel and secure the cord to it with an M3 screw. If the cord is not required, cut it off. Use commercially available M3 screw.



Tightening Clamp Screws

Use the following torques when tightening cable clamp to hoods.

Terminal Screw Tightening Torque (N·m)

| 9 contacts | 15 contacts | 25 contacts | 37 contacts |
|---------------|----------------|-------------|-------------|
| 0.25 | 0.44 | 0.49 | |

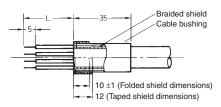
Mating

Do not connect the Connectors in the wrong direction, otherwise it may be damaged.

Shielded Cable Preparation

Refer to the following diagram when soldering shielded cable to the Connector when using a Hood.

| No. of contacts | L (mm) |
|-----------------|--------|
| 9 | 25 |
| 15 | 35 |
| 25 | 40 |
| 37 | 45 |



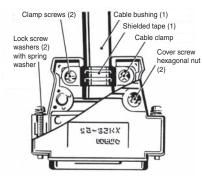
- Fold the unravelled braided shield back over the cable bushing.
- 2. Wrap tape around the folded shield.

Tightening Torque of Anchor and Grounding Fixture

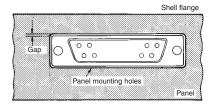
If the anchor is secured to the Connector or the grounding fixture is secured with a screw, be sure to tighten it to a torque of 0.49 N·m. Use a suitable size of tool.

Shield Effects

- When connecting the braided cable shield to a Connector Hood, use the cable clamp to clamp all the braids at once through the shielded tape.
- Mate the lock screw washer and spring washer outside the Connector when assembling the Hood.



- Keep the shell flange of the Connector as far away from the metal panel as possible to maximize the shield effect with a Connector mounted to the panel.
- The ground wire for the Connector will fall into the shell (external metal covering) with Solder-cup Terminals, so connect the ground wire to the panel or to ground on the board.



XM3A/XM3D Connector Insertion and Removal

 Grasp the Connector or the Hood Cover when inserting and removing the Connector. Never try to remove the Connector by pulling the cable.

Soldering

Automated Soldering Conditions (Jet Flow) (XM3B, XM3C, and XM3F)

- 1. Soldering temperature: 250 ±5°C
- 2. Continuous soldering time: Within 5±1 s

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