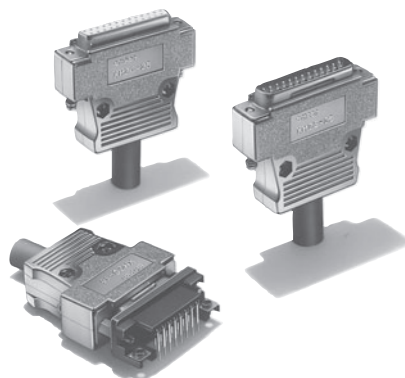


D-sub Connectors

XM2/XM3

D-sub Connectors Are Ideal for Office Automation Interfacing.

- Shielded against EMI.
- Metallized plastic Hood (XM2S) provides excellent noise protection.
- A new line of multi-hole, ferrite-core Connectors (XM3B-F) offers space-saving design and superior noise protection at high frequency.
- Fitted in a rugged, compact metal shell.
- Many kinds of standard Anchors and grounding fixtures available.
- The XM2/XM3 conform to UL standards (No. E103202) (XM2S and some other models are not included)



RoHS Compliant

■ Terminology

● EMI

Abbreviation of ElectroMagnetic Interference (noise)

● Metallization

Here, metallization refers to plating over the plastic hood.

● Shielded connector

Connector having a structure that can be grounded.

● Beating

A processing technique that ensures the contact amongst the shells by beating a part of the shell.

● ESD

Abbreviation of ElectroStatic Discharge

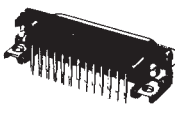
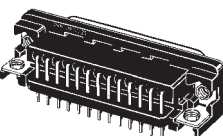
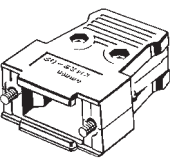
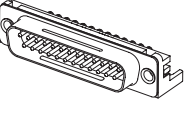
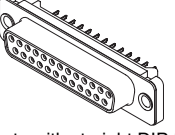
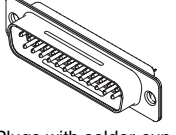
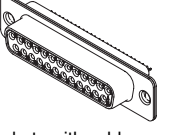
● Grounding structure

Here, grounding structure refers to a structure where an unmetallized hood can be grounded by an grounding plate.

● Shell

Refers to the case covering the connector. Here, the shell refers to the metal parts attached to the mating end.

■ Connectors

Model	XM3B	XM3B-F	XM2S	
Appearance	 Sockets with right-angle DIP terminals	 Sockets with right-angle DIP terminals (with ferrite core)	 Hoods	
Reference page	3 to 4	5	10	
Model	XM3C	XM3F	XM3A	XM3D
Appearance	 Plugs with right-angle DIP terminals	 Sockets with straight DIP terminals	 Plugs with solder-cup terminals	 Sockets with solder-cup terminals
Reference page	6 to 7	8	9	

■ Ratings and Characteristics

Model	Plugs with Solder Cup Terminals: XM3A Socket with right-angle DIP Terminals: XM3B Socket with right-angle DIP Terminals (with ferrite core): XM3B-F Plugs with Right-angle DIP Terminals: All XM3C models except those with 37 pins XM3C-0922-□□□ XM3C-1522-□□□ XM3C-2522-□□□ Sockets with Solder Cup Terminals: XM3D Sockets with Straight DIP Terminals: XM3F	Plugs with Right-angle DIP Terminals: XM3C models with 37 pins XM3C-3722-□□□	Hoods XM2S
Item			
Rated current	5 A	3 A	
Rated voltage	300 VAC		
Contact resistance	15 mΩ max. (at 20 mVDC, 100 mA max.)		
Insulation resistance	1,000 MΩ min. (at 500 V DC)		
Dielectric strength	1,000 VAC for 1 min (leakage current: 1 mA max.)		---
Total insertion force	Number of pins × 3.33 N max		
Removal force	0.29 N min. (for gauge diameter of 0.99 mm)		
Insertion durability	200 times		
Ambient operating temperature	−55°C to 105°C (with no icing)		−25°C to 85°C
Shield performance	Mounted in panel: 25 dB min. (30 to 900 MHz) Mounted on board: 20 dB min. (30 to 300 MHz)		---

■ Materials and Finish

Item	Model	XM3B	XM3B-F	XM3C	XM3F	XM3A	XM3D	XM2S
Housing		Fiber-glass reinforced PBT resin (UL94V-0)/black				Fiber-glass reinforced PBT resin (UL94V-0)/Milky white		ABS resin/nickel plated
Contacts	Mating end	Phosphor bronze/nickel base, gold plated (0.4 μm)			Bronze/nickel base, gold plated (0.4 μm)		Phosphor bronze/nickel base, gold plated (0.4 μm)	---
	Terminals	Phosphor bronze/nickel base, tin plated (2 μm)		Phosphor bronze/nickel base, tin plated (3 μm)		Bronze/nickel base, tin plated (3 μm)	Phosphor bronze/nickel base, tin plated (3 μm)	
Shell		Steel/nickel						

■ Applicable Wires

The applicable wires for solder cup terminals are AWG 22 to 28 (solid or stranded).

XM3C Plugs with Right-angle DIP Terminals

Model Number Legend

XM3C-□□22-□□□
1 2 3

1. Anchor specifications

- 1: With Anchor 2
- 5: No anchors

2. Anchor screw specifications

- 1: M2.6 × 0.45 metric screws
- 3: Inch screws
- 0: No anchors

3. Grounding Fixture

- 1: Tap Hole Grounding Fixture
- 2: Lock Pin Grounding Fixture

Note: Anchors and Grounding Fixtures are not supplied if 1, 2, and 3 are blank.

Dimensions

(unit: mm)

DIP Terminals

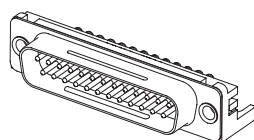
XM3C-□□22 (No Anchors or Grounding Fixtures)

XM3C-□□22-501 (No Anchors, with Tap Hole Grounding Fixtures)

XM3C-□□22-502 (No Anchors, with Lock Pin Grounding Fixtures)

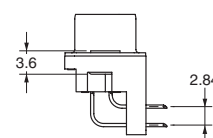
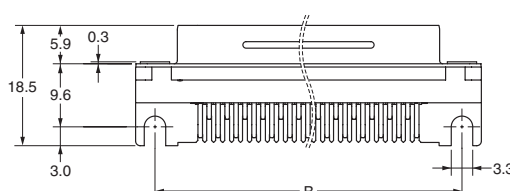
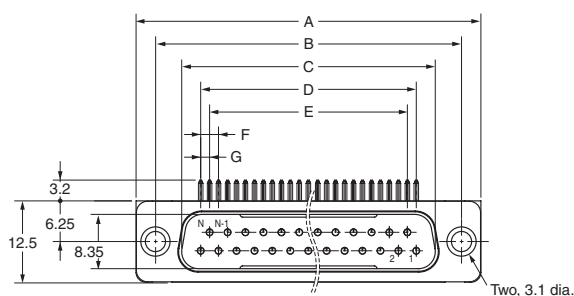
XM3C-□□22-111 (With Anchor 2 and Tap Hole Grounding Fixtures)

XM3C-□□22-112 (With Anchor 2 and Lock Pin Grounding Fixtures)



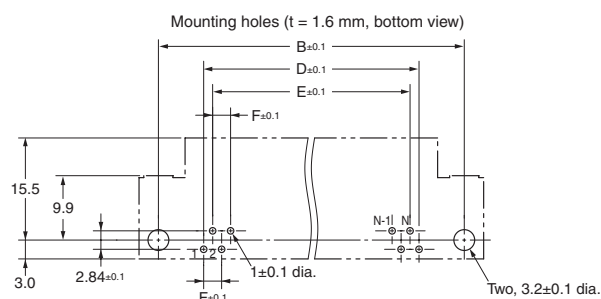
25-contact model shown above.
(No Anchor or Grounding Fixtures)

Note: XM3C Terminals were manufactured in accordance with JIS X 5101. Terminal pitches are a mixed arrangement of 2.77- and 2.74-mm contacts on 25- and 37-contact models as specified in the JIS standard. A pitch of 2.76 mm is recommended for the mounting holes because of the more advanced numerical control available today. This is sufficient to avoid any problems.

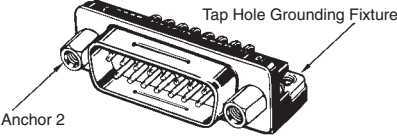
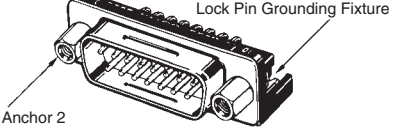
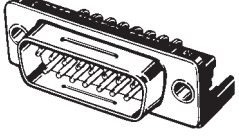


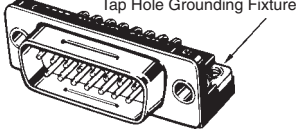
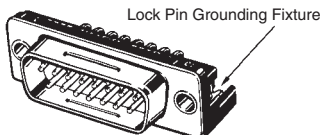
Dimensions

No. of contacts	A	B	C	D	E	F	G
9	30.8	24.99	16.91	10.96	8.22	2.74	1.37
15	39.1	33.32	25.25	19.18	16.44	2.74	1.37
25	53.0	47.04	38.96	33.12	30.36	2.76	1.38
37	69.3	63.50	55.42	49.68	46.92	2.76	1.38



■ Ordering Information

	Anchor 2 and Tap Hole Grounding Fixtures	Anchor 2 and Lock Pin Grounding Fixtures	No anchors or Grounding Fixtures
Appearance			
Accessories	XM2Z-0011 Anchor 2 (M2.6 × 0.45 metric screws)		---
No. of contacts	Tap Hole Grounding Fixtures	Lock Pin Grounding Fixtures	---
9	XM3C-0922-111	XM3C-0922-112	XM3C-0922
15	XM3C-1522-111	XM3C-1522-112	XM3C-1522
25	XM3C-2522-111	XM3C-2522-112	XM3C-2522
37	XM3C-3722-111	XM3C-3722-112	XM3C-3722

	No anchors, with Tap Hole Grounding Fixtures	No anchors, with Lock Pin Grounding Fixtures
Appearance		
Accessories	No anchors	
No. of contacts	Tap Hole Grounding Fixtures	Lock Pin Grounding Fixtures
9	XM3C-0922-501	XM3C-0922-502
15	XM3C-1522-501	XM3C-1522-502
25	XM3C-2522-501	XM3C-2522-502
37	XM3C-3722-501	XM3C-3722-502

Note: The XM3C-□□22-111/-112 with Anchor 2 (M2.6 × 0.45) and Grounding Fixtures as well as the XM3C-□□22-501/-502 with Grounding Fixtures and no Anchor are available as standard models. Two M3 × 0.5 Tap Hole Grounding Fixtures and an M3 × 0.5 Lock Pin Grounding Fixture for the Anchor side are provided.
Contact your OMRON representative for other anchor and grounding fixture specifications. See Accessories (Sold Separately) of XM2/XM3 for details on accessories.