OMRON D-sub Connectors

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

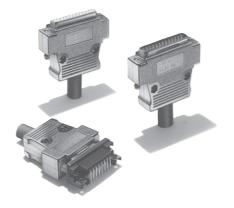
Here, metallization refers to plating over the plastic hood.

• 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

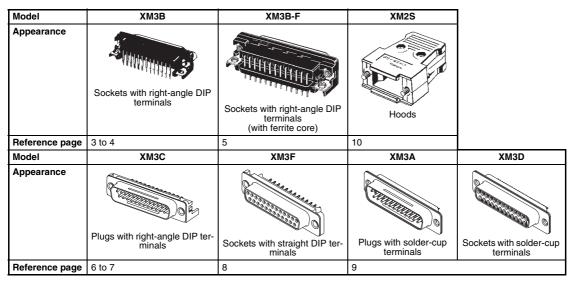
Abbreviation of ElectroStatic Discharge

• 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

XM2/XM3

OMRON

■ 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- Sockets with Solder Cup Terminals: XM3D Sockets with Solder Cup Terminals: XM3F	Plugs with Right-angle DIP Terminals: XM3C models with 37 pins XM3C-3722-	Hoods XM2S
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)		

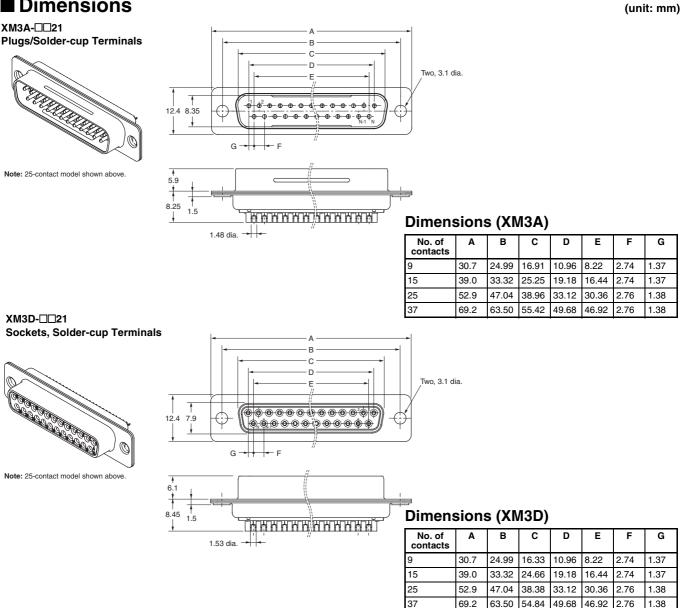
■ Materials and Finish

Item	Model	ХМЗВ	XM3B-F	XM3C	XM3F	ХМЗА	XM3D	XM2S
Housing	using 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 $\mu\text{m})$			Bronze/nickel base, gold plated (0.4 μm)	Phosphor bronze/nickel base, gold plated (0.4 µm)		
	Terminals	Phosphor bronze/r plated (2 μm)	ickel base, tin	Phosphor bronze/r plated (3 μm)	nickel base, tin	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).

XM3A Plugs with Solder-cup Terminals XM3D Sockets with Solder-cup Terminals

Dimensions



Ordering Information

	Plugs	Sockets
Appearance		
No. of contacts		
9	XM3A-0921	XM3D-0921
15	XM3A-1521	XM3D-1521
25	XM3A-2521	XM3D-2521
37	XM3A-3721	XM3D-3721

69.2

63.50

54.84

49.68

46.92

2.76

1.38