D-Sub Connectors
XM3

XM3 Series

D-Sub Connectors That Are Ideal for Office Equipment Interfaces

- **Shielded against EMI.**
- **Compact, robust connectors with metal shells.**
- **Anchors and Grounding Fixtures are available.**

RoHS Compliant



Slim Models Join the XM2-L/XM3-L Series

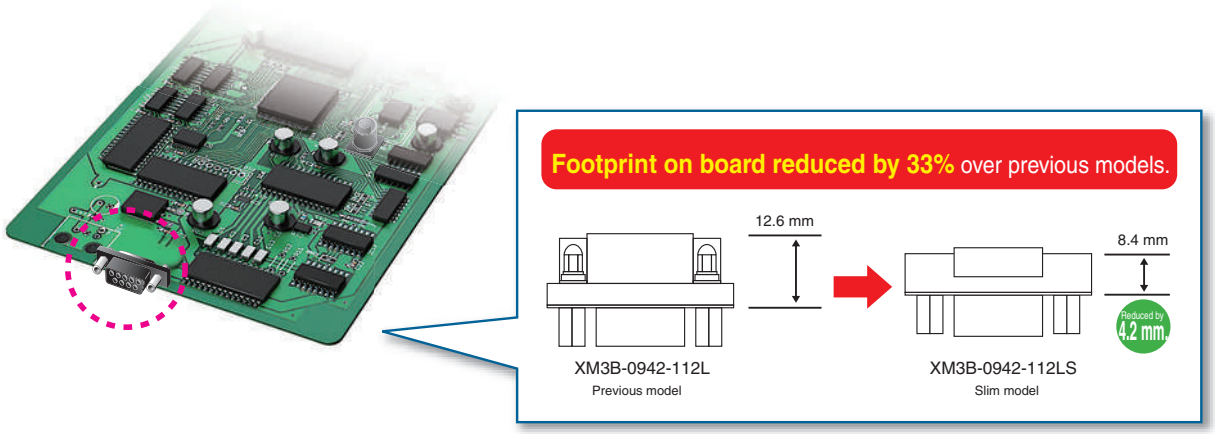
Refer to page 7 for detailed specifications.

XM3B-LS

Space-saving 9-pin Slim D-sub Socket Connectors for Boards

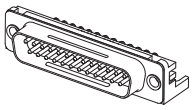
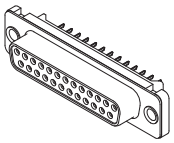
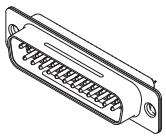
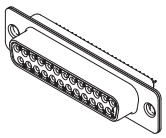
- **Board mounting area is reduced by 33% (compared with previous models) using depth of 8.4 mm.**
- **D-sub sockets with nine right-angle DIP terminals.**
- **Mounting board thickness of either 1.6 mm or 1.0 mm (from difference in lock pin structure).**





XM3 Series

■Connectors

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 

■Ratings and Characteristics

Item \ Model	Plugs with Solder Cup Terminals: XM3A 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-□□□
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)	
Withstand voltage	1,000 VAC for 1 min (leakage current: 1 mA max.)	
Total insertion force	Number of pins × 3.33 N max	
Individual pull-out force	0.29 N min. (for gauge diameter of 0.99 mm)	
Insertion durability	200 times	
Operating temperature	−55°C to 105°C (with no icing)	
Shield effectiveness (electrical field method)	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		XM3C	XM3F	XM3A	XM3D
Housing		Fiber-glass reinforced PBT resin (UL94V-0)/black		Fiber-glass reinforced PBT resin (UL94V-0)/Milky white	
Contacts	Mating end	Phosphor bronze/nickel base, gold plated		Bronze/nickel base, gold plated	Phosphor bronze/nickel base, gold plated
	Terminals	Phosphor bronze/nickel base, tin plated		Bronze/nickel base, tin plated	Phosphor bronze/nickel base, tin plated
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

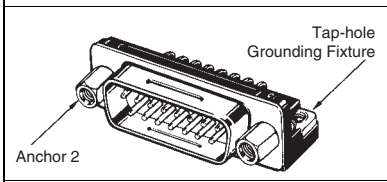
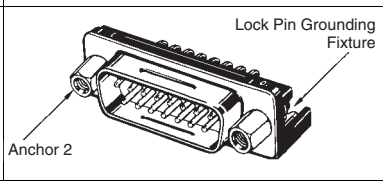
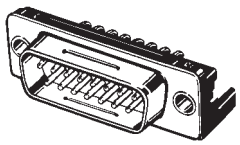
1 Anchor Type
1: Anchor 2
5: No anchors

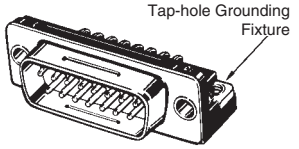
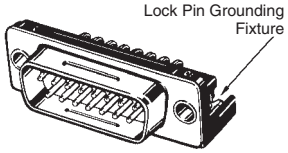
2 Anchor Screw Specifications
1: M2.6 x 0.45 metric screws
3: Inch screws
0: No anchors

3 Grounding Fixture
1: Tap-hole Grounding Fixture
2: Lock Pin Grounding Fixture

Note: If 1, 2, or 3 are omitted in the model number, then no Anchor or Grounding Fixture is included.

■Ordering Information

Appearance / Accessories / No. of contacts	Anchor 2 and Tap-hole Grounding Fixture	Anchor 2 and Lock Pin Grounding Fixture	No Anchor or Grounding Fixture	Minimum ordering quantity (pieces)
Appearance				
Accessories	Anchor 2: XM2Z-0011 (M2.6 x 0.45 metric screws)		---	
No. of contacts	Tap-hole Grounding Fixture	Lock Pin Grounding Fixture	---	
9	**XM3C-0922-111**	**XM3C-0922-112**	**XM3C-0922**	90
15	**XM3C-1522-111**	**XM3C-1522-112**	**XM3C-1522**	70
25	**XM3C-2522-111**	**XM3C-2522-112**	**XM3C-2522**	50
37	**XM3C-3722-111**	**XM3C-3722-112**	**XM3C-3722**	40

Appearance / Accessories / No. of contacts	No Anchor and Tap-hole Grounding Fixture	No Anchor and Lock Pin Grounding Fixture	Minimum ordering quantity (pieces)
Appearance			
Accessories	No anchors		
No. of contacts	Tap-hole Grounding Fixture	Lock Pin Grounding Fixture	
9	**XM3C-0922-501**	**XM3C-0922-502**	90
15	**XM3C-1522-501**	**XM3C-1522-502**	70
25	**XM3C-2522-501**	**XM3C-2522-502**	50
37	**XM3C-3722-501**	**XM3C-3722-502**	40

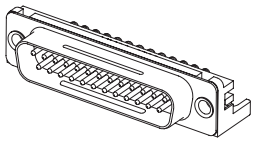
Note: Also available as standard models are the XM3C-□□22-111/-112 with Anchor 2 (M 2.6 x 0.45) and Grounding Fixture, as well as the XM3C-□□22-501/502 with Grounding Fixture and no Anchor.
The enclosed Tap-hole Grounding Fixture is two M3 x 0.5, and the Lock Pin Grounding Fixture is M3 x 0.5 on the Anchor side.

■Dimensions

(Unit: mm)

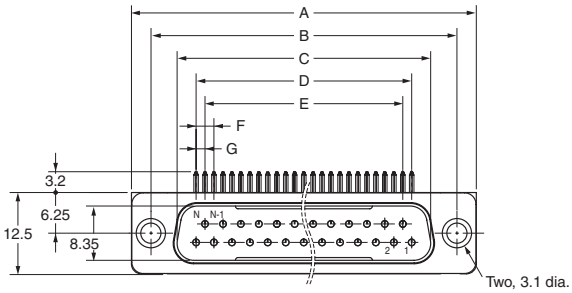
●Right-angle DIP Terminals

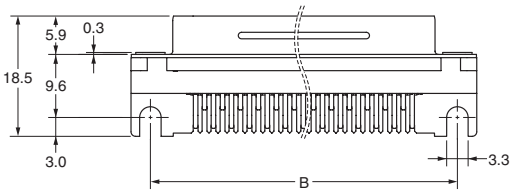
XM3C-□□22 (No Anchor or Grounding Fixture)
XM3C-□□22-501 (No Anchor, Tap-hole Grounding Fixture Included)
XM3C-□□22-502 (No Anchor, Long Pin Grounding Fixture Included)
XM3C-□□22-111 (Anchor 2, Tap-hole Grounding Fixture Included)
XM3C-□□22-112 (Anchor 2, Long Pin Grounding Fixture Included)

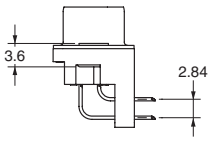


The above illustration is for the 25-pin model (no Anchor or Grounding Fixture).

Note: The XM3C is produced based on JIS X5101. The pin pitch is in a mixed arrangement of 2.77 mm and 2.74 mm following JIS standards (for 25-pin and 37-pin models). A uniform pitch of 2.76 mm, however, is recommended for the mounting holes. A board processed using a pinch of 2.76 mm will have sufficient margin and pose no practical problems.







Mounting Holes
(t=1.6mm, Bottom View)

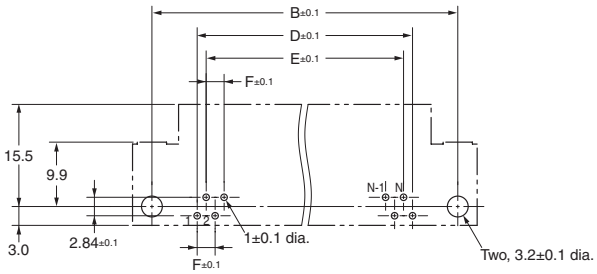
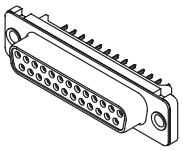
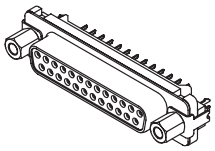


Table of Dimensions

Dimensions (mm) 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

XM3F Sockets with Straight DIP Terminals

■Ordering Information

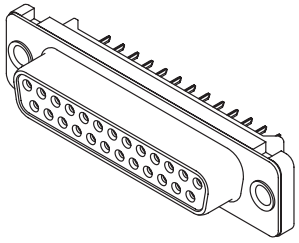
Appearance / No. of contacts	No Anchor or Grounding Fixture	Anchor and Lock Pin Grounding Fixture	Minimum ordering quantity (pieces)
			
9	**XM3F-0920**	**XM3F-0920-112**	90
15	**XM3F-1520**	**XM3F-1520-112**	70
25	**XM3F-2520**	**XM3F-2520-112**	50
37	**XM3F-3720**	**XM3F-3720-112**	40

■Dimensions

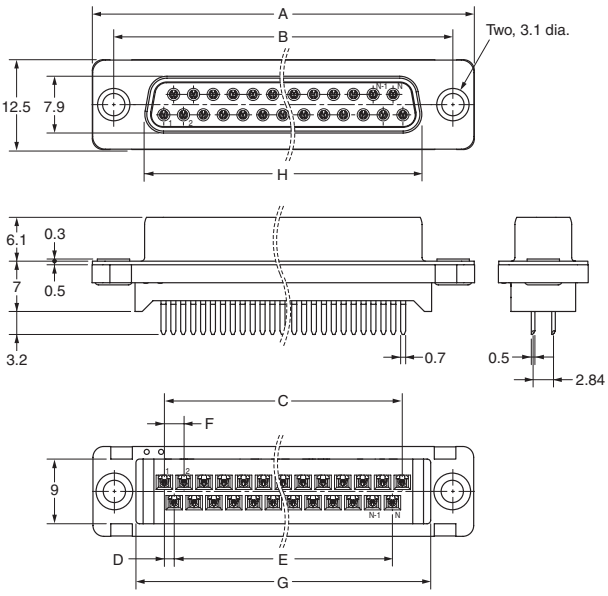
(Unit: mm)

●Straight DIP Terminals

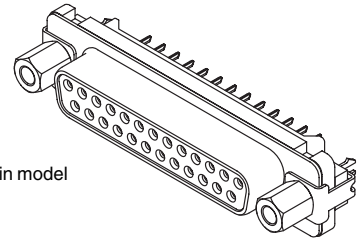
XM3F-□□20
(No Anchor or Grounding Fixture)



The illustration on the left is for the 25-pin model (no Anchor or Grounding Fixture).



XM3F-□□20-112
(Anchor, Long Pin Grounding Fixture Included)



The illustration on the left is for the 25-pin model (Anchor and Grounding Fixture).

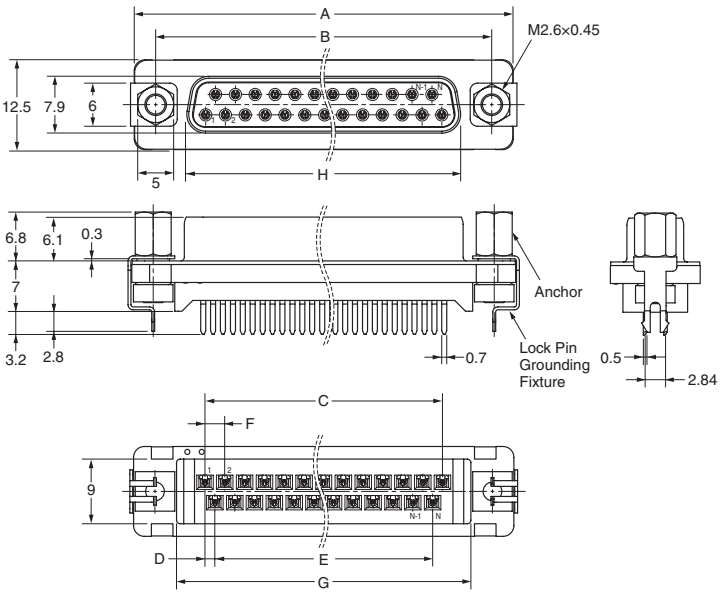
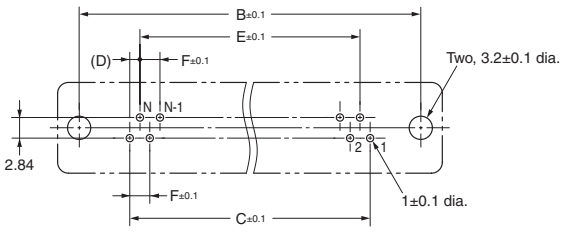


Table of Dimensions

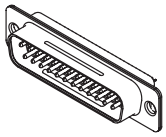
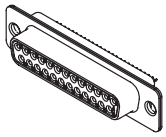
Dimensions (mm) / No. of contacts	A	B	C	D	E	F	G	H
9	30.7	24.99	10.98	1.37	8.22	2.74	19.00	16.33
15	39.0	33.32	19.20	1.37	16.44	2.74	27.12	24.66
25	52.9	47.04	33.12	1.38	30.36	2.76	41.04	38.38
37	69.2	63.50	49.68	1.38	46.92	2.76	57.60	54.84

Mounting Holes
(t=1.6mm, Bottom View)



XM3A Plugs with Solder Cup Terminals
XM3D Sockets with Solder Cup Terminals

■Ordering Information

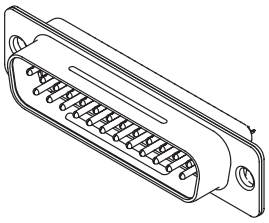
Appearance No. of contacts	Plug 	Socket 	Minimum ordering quantity (pieces)
9	**XM3A-0921**	**XM3D-0921**	50
15	**XM3A-1521**	**XM3D-1521**	
25	**XM3A-2521**	**XM3D-2521**	
37	**XM3A-3721**	**XM3D-3721**	

■Dimensions

(Unit: mm)

●Plugs with Solder Cup Terminals

XM3A-□□21



Note: The illustration above is for a 25-pin model.

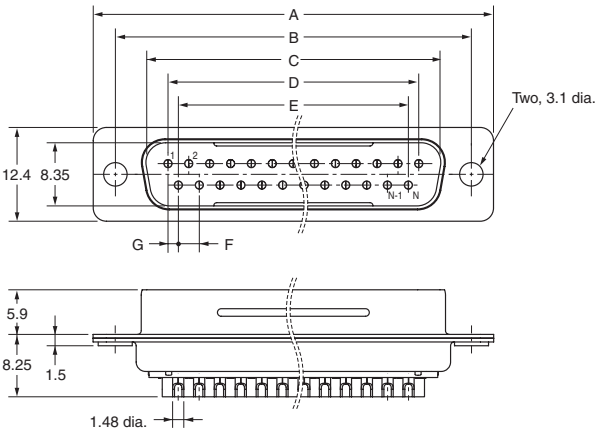
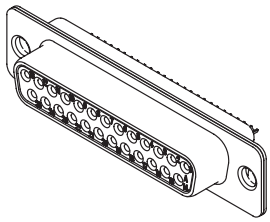


Table of Dimensions (XM3A)

Dimensions (mm) No. of contacts	A	B	C	D	E	F	G
9	30.7	24.99	16.91	10.96	8.22	2.74	1.37
15	39.0	33.32	25.25	19.18	16.44	2.74	1.37
25	52.9	47.04	38.96	33.12	30.36	2.76	1.38
37	69.2	63.50	55.42	49.68	46.92	2.76	1.38

●Sockets with Solder Cup Terminals

XM3D-□□21



Note: The illustration above is for a 25-pin model.

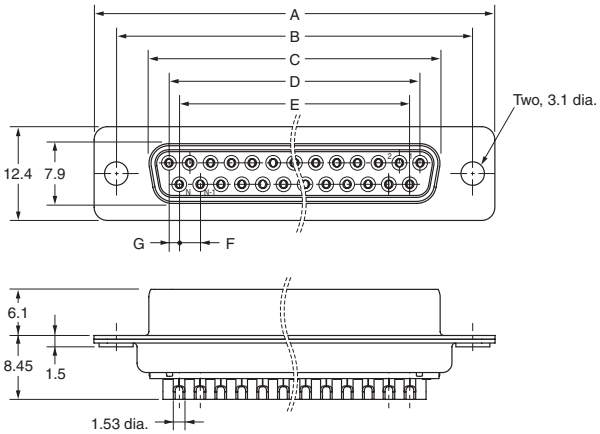


Table of Dimensions (XM3D)

Dimensions (mm) No. of contacts	A	B	C	D	E	F	G
9	30.7	24.99	16.33	10.96	8.22	2.74	1.37
15	39.0	33.32	24.66	19.18	16.44	2.74	1.37
25	52.9	47.04	38.38	33.12	30.36	2.76	1.38
37	69.2	63.50	54.84	49.68	46.92	2.76	1.38

XM3B-LS Sockets with Right-angle DIP Terminals

■Ratings and Characteristics

Rated current	3 A
Rated voltage	300 VAC
Contact resistance	20 mΩ max. (at 20 mVDC, 100 mA max.)
Insulation resistance	1,000 MΩ min. (at 500 VDC for 1 min)
Withstand voltage	1,000 VAC for 1 min (leakage current: 1 mA max.)
Insertion durability	100 times
Operating temperature	–25 to 105°C (with no condensation or icing)

■Ordering Information

No. of contacts	Accessories	Appearance	Minimum ordering quantity (pieces)
			
		Anchors, M2.6 × 0.45	
9		XM3B-0942-112LS	80

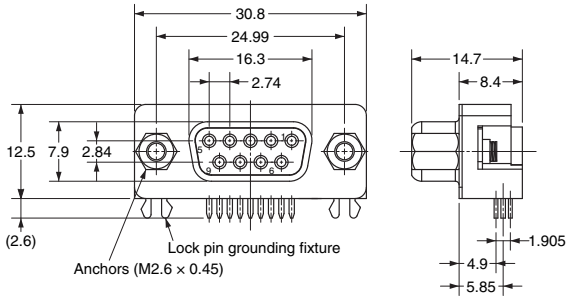
■Materials and Finish

Housing	Fiber-glass reinforced PBT resin (UL94V-0)/ black
Contacts	Phosphor bronze/nickel base, flash gold plated
Shell	Steel/nickel plated
Anchors	Stainless steel
Lock pin grounding fixture	Brass/tin plated

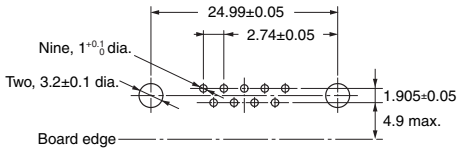
■Dimensions

(Unit: mm)

XM3B-0942-112LS

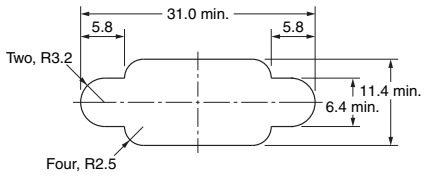


Mounting Holes
(BOTTOM VIEW)



Note: Applicable board thickness: 1.6 or 1.0 mm.

Panel Cutout

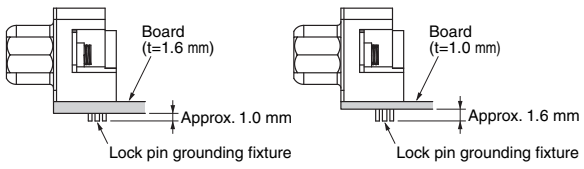


Note: Applicable panel thickness is 1.2 mm max.

■Precautions

Precautions for Correct Use

- Insert the Connector into the board and then simultaneously dip-solder the Connector terminals and lock pins to the board.



●Automatic Soldering

Automated Soldering Conditions (Jet Flow)

(1) Soldering temperature: 250 ±5°C

(2) Continuous soldering time: 5 ±1 s max.

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