

Flat Cable Connectors

XG4

The Mainstream of Circuit Board Connectors conforming MIL Standards with Improved Design.

- Our new production system improves reliability.
- Space-saving Box-type Plugs (XG4C) available.
- IDC Plugs (XG4E) can be used for relaying.
- An endless number of combinations can be made using the XG-5 IDC Connectors for discrete wires, XG8 Original Plugs, and the XG2 IDC Connectors for PCBs.
- The Original Plugs (XG8) and the Box-type Plugs (XG4C) can be locked using Lock Levers.
- Conform to MIL standards (MIL-C-83503).
- UL standards (file No. E103202)



■ Ordering Information

Model	XG4M XG4M-U	XG4M XG4T	XG4A	XG4A	XG4E XG4S	XG4C	XG4H
Appear- ance	MIL sockets with strain relief (with lock)	MIL sockets with strain relief	MIL plugs	Plugs with dual ports	IDC plugs with strain relief	Box-type plugs	Board-to-board con- nector sockets
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■ Ratings and Characteristics

Item	MIL Sockets: XG4M Relay Plug: XG4E	MIL Plugs: XG4A Box-type Plugs: XG4C PCB-to-PCB Connectors: XG4H				
Rated current	1 A	3 A (See note 1.)				
Rated voltage	250 VAC	300 VAC				
Contact resistance	ontact resistance 20 mΩ max. (at 20 mV, 100 mA max.)					
Insulation resistance	1,000 MΩ min. (at 500 VDC)	1,000 MΩ min. (at 500 VDC)				
Dielectric strength	500 VAC for 1 min (leakage current:	500 VAC for 1 min (leakage current: 1 mA max.)				
Connector insertion	1.96 N max. per contact	1.96 N max. per contact				
Contact removal	0.39 N min. (with test gauge, t= 0.64 mm)					
Insertion durability	50 times (See note 2.)	50 times (See note 2.)				
Ambient temperature	Operating: -55 to 105°C (with no icing)					

Note

- The rated current will depend on the Socket you are using. It is 1 A using the XG4M for example.
- 2. For standard 0.15-μm gold plating.

■ Materials and Finish

Item		MIL Plugs: XG4A Box-type Plugs: XG4C	Relay Plugs: XG4E (Strain Relief: XG4S)	MIL Sockets: XG4M (Strain Relief: XG4T)	Board-to-board Connector: XG4H		
Housings		Fiber-glass reinforced PBT resin (U	L94V-0)/black				
Covers			Polyamide resin (UL94V-0)/black	Polyamide resin (UL94V-0)/black Fiber-glass reinforced PBT resin (UL94V-0)/black			
Contacts Mating end		Brass/nickel base, 0.15-μm gold plating (See note.)	Phosphor bronze/nickel base, 0.15-	um gold plating (See note.)	•		
	Terminal Press fit	Brass/nickel base, tin plating	Phosphor bronze/nickel base, tin plating				
Strain Reliefs			Polyamide resin (UL94V-0)/black	Fiber-glass reinforced PBT resin (UL94V-0)/black			

Note: For non-standard plating, contact your OMRON representative.

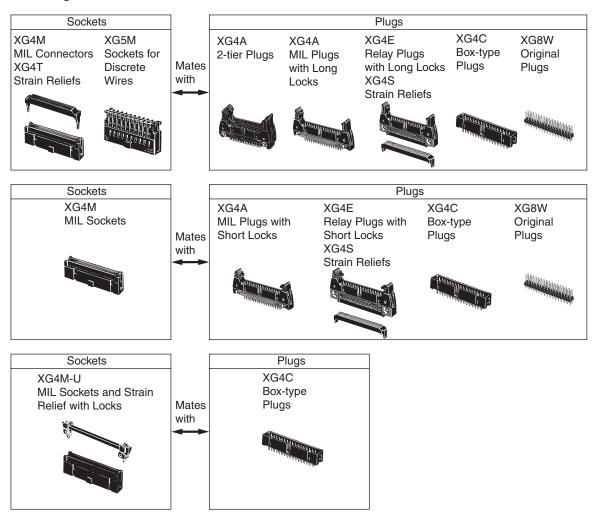
■ Applicable Wires

1.27-mm pitch, 7-strand flat cable

- UL2651(standard cable)
- UL20012 (folding cable)

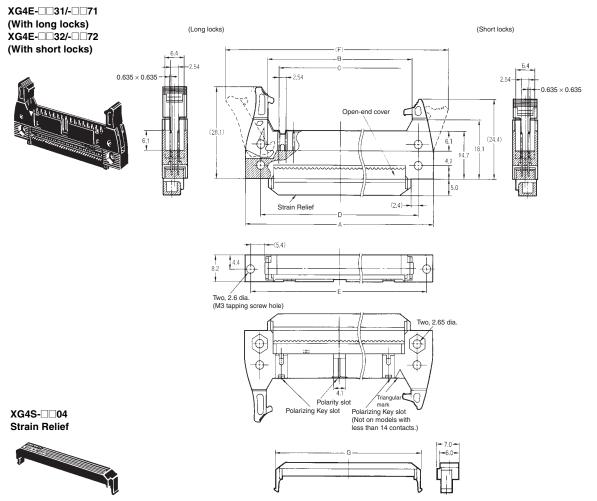
UL20028 (color-coded cable)

■ Mating Combinations for XG4 and XG5



XG4E Relay Plugs

■ Dimensions



Dimensions

No. of	Dimensions (mm)							
contacts	Α	В	С	D	Е	F		G
						Long Lock	Short Lock	
10	32.0	17.5	10.16	21.8	27.9	46.4	40.4	16.9
14	37.1	22.6	15.24	26.9	33.0	51.5	45.5	22.0
16	39.6	25.2	17.78	29.5	35.6	54.1	46.0	24.6
20	44.7	30.2	22.86	34.5	40.6	59.1	53.1	29.6
26	52.3	37.9	30.48	42.2	48.3	66.8	60.7	38.0
30	57.4	42.9	35.56	47.2	53.3	71.8	65.8	42.3
34	62.5	48.0	40.64	52.3	58.4	76.9	70.9	47.4
40	70.1	55.6	48.26	59.9	66.0	84.5	78.5	55.0
50	82.8	68.3	60.96	72.6	78.7	97.2	91.2	67.7
60	95.5	81.0	73.66	85.3	91.4	109.9	103.9	80.4
64	100.6	86.1	78.74	90.4	96.5	115.0	109.0	85.5

Note: See the following page for details on the availability (10-contact Connectors) and pitch (with 50, 60, or 64-contact Connectors) of polarity slots.

■ Ordering Information

Relay Plugs

Use Long-lock Plugs together with Strain-relief Sockets, and use Short-lock Plugs together with Non-strain-relief Sockets.

No. of contacts	No. of polarizing slots	Long-lock Plugs with Open-end Covers (See note 1.)	Short-lock Plugs with Open-end Covers (See note 1.)	Strain Reliefs for XG4E
10	0	XG4E-1071	XG4E-1072	XG4S-1004
	1	XG4E-1031	XG4E-1032	
14	1	XG4E-1431	XG4E-1432	XG4S-1404
16	1	XG4E-1631	XG4E-1632	XG4S-1604
20	1	XG4E-2031	XG4E-2032	XG4S-2004
26	1	XG4E-2631	XG4E-2632	XG4S-2604
30	1	XG4E-3031	XG4E-3032	XG4S-3004
34	1	XG4E-3431	XG4E-3432	XG4S-3404
40	1	XG4E-4031	XG4E-4032	XG4S-4004
50	1	XG4E-5031	XG4E-5032	XG4S-5004
	2 (See note 2.)	XG4E-5071	XG4E-5072	1
60	1	XG4E-6031	XG4E-6032	XG4S-6004
	2 (See note 2.)	XG4E-6071	XG4E-6072]
64	1	XG4E-6431	XG4E-6432	XG4S-6404
	2 (See note 2.)	XG4E-6471	XG4E-6472	1 l

Note: 1. Strain Relief sold separately.

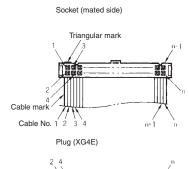
2. Polarity slot pitch is 22.86 mm.

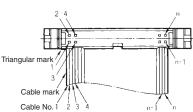
■ Cable Number and Contact Position

Cable and Corresponding Contact Number

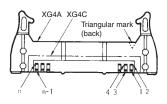
The contact numbers are not marked on the Connector. Use the triangular mark as a guide when wiring and designing circuit boards.

For the cable number, count starting from the cable mark side as shown on the right.





Right-angle Terminal Plug (terminal side)



Straight Terminal Plug (terminal side)

