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) (All XG4 models except those with XG4U and XG4H)

RoHS Compliant

■ Terminology

MIL standard

Abbreviation for Military Standard. To unify the compatibility and quality assurance condition of each company, MIL-C-83503 (applicable to connectors) was established in 1977.

Open-end cover

An open-end cover has a structure where a flat cable can be pulled out from both sides of the cover when a cable is attached to a connector. (The cover having a structure where a flat cable can be pulled out from only one side of the cover is called a "Closed-end cover.")



Standoff

Part provided for lifting the housing from the board (This part improves airflow at the through-hole for better assembly.)

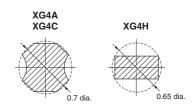
■ Ordering Information

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	20 mΩ max. (at 20 mV, 100 mA max.)			
Insulation resistance	1,000 MΩ min. (at 500 VDC)			
Dielectric strength	500 VAC for 1 min (leakage current: 1 mA max.)			
Total insertion force	1.96 N max. per contact			
Removal force	0.39 N min. (with test gauge, t= 0.64 mm)			
Insertion durability	50 times			
Ambient operating temperature	Operating: -55 to 105°C (with no icing)			

■ Cross-sectional View of Terminal



Note: 1. The rated current will depend on the Socket you are using. It is 1 A using the XG4M for example.

■ Materials and Finish

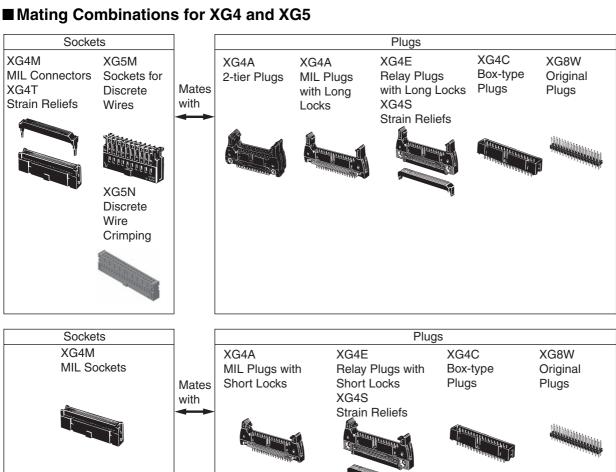
Item		MIL Plugs: XG4A Box-type Plugs: XG4C	Relay Plugs: XG4E (Strain Relief: XG4S)	MIL Sockets: XG4M (Strain Relief: XG4T)	Board-to-board Connector: XG4H	
Housings Fiber-glass reinforced PBT resir			in (UL94V-0)/black			
Covers			Polyamide resin (UL94V-0)/ black	Fiber-glass reinforced PBT resin (UL94V-0)/black		
Contacts	acts Mating end Brass/nickel base, 0.15-μm Phosphor bronze/nickel base, 0.15-μm gold plating gold plating).15-μm gold plating			
Terminal Press fit Brass/nickel base, 2.0-μm tin plating		Phosphor bronze/nickel base, 2.0-μm tin plating				
Strain Reliefs			Polyamide resin (UL94V-0)/ black	Fiber-glass reinforced PBT resin (UL94V-0)/black		

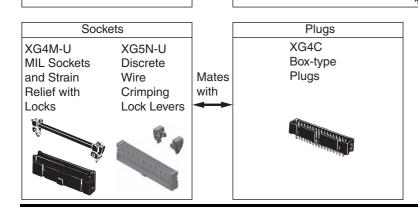
■ Applicable Wires

For pressing

1.27-mm pitch flat cable incorporating AWG28 wires

- UL2651(standard cable)
- UL20012 (folding cable)
- UL20028 (color-coded cable)

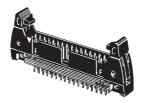


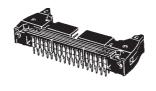


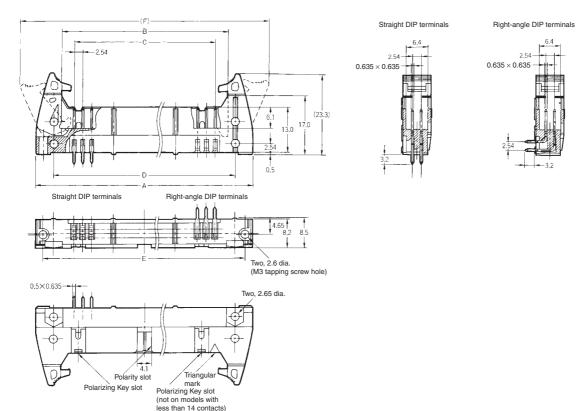
XG4A MIL Plugs with Short Locks

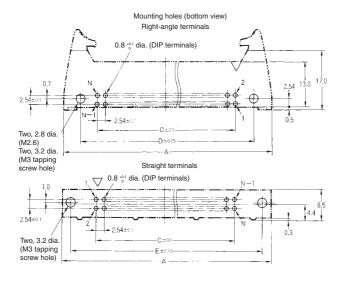
■ Dimensions (Unit: mm)

XG4A-\(\Bigcirc 32/-\(\Bigcirc 72\) (With straight DIP terminals)
XG4A-\(\Bigcirc 35/-\(\Bigcirc 75\) (With right-angle DIP terminals)









Dimensions

No. of	Dimensions (mm)						
contacts	Α	В	С	D	Е	F	
10	32.0	17.5	10.16	21.8	27.9	40.4	
14	37.1	22.6	15.24	26.9	33.0	45.5	
16	39.6	25.2	17.78	29.5	35.6	48.0	
20	44.7	30.2	22.86	34.5	40.6	53.1	
26	52.3	37.9	30.48	42.2	48.3	60.7	
30	57.4	42.9	35.56	47.2	53.3	65.8	
34	62.5	48.0	40.64	52.3	58.4	70.9	
40	70.1	55.6	48.26	59.9	66.0	78.5	
50	82.8	68.3	60.96	72.6	78.7	91.2	
60	95.5	81.0	73.66	85.3	91.4	103.9	
64	100.6	86.1	78.74	90.4	96.5	109.0	

Note: See page 16 for details on the availability (10-contact Connectors) and pitch (with 50, 60, or 64-contact Connectors) of polarity slots.

■ Ordering Information

Use in combination with sockets without strain-relief.

No. of contacts	No. of polarizing slots	Plugs with straight DIP terminals	Plugs with right-angle DIP terminals
10	0	XG4A-1072	XG4A-1075
	1	XG4A-1032	XG4A-1035
14	1	XG4A-1432	XG4A-1435
16	1	XG4A-1632	XG4A-1635
20	1	XG4A-2032	XG4A-2035
26	1	XG4A-2632	XG4A-2635
30	1	XG4A-3032	XG4A-3035
34	1	XG4A-3432	XG4A-3435
40	1	XG4A-4032	XG4A-4035
50	1	XG4A-5032	XG4A-5035
	2 (See note.)	XG4A-5072	XG4A-5075
60	1	XG4A-6032	XG4A-6035
	2 (See note.)	XG4A-6072	XG4A-6075
64	1	XG4A-6432	XG4A-6435
	2 (See note.)	XG4A-6472	XG4A-6475

Note: Polarizing slot pitch is 22.86 mm.

Mouser Electronics

Authorized Distributor

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Omron:

XG4C-1034 XG4C-1071 XG4C-1431 XG4C-1434 XG4C-1634 XG4C-3031 XG4C-3034 XG4C-3034 XG4C-3431 XG4C-3434 XG4E-1432 XG4E-1432 XG4E-3431 XG4H-1031 XG4H-3431-1 XG4H-4034 XG4M-1430-U XG4M-2030-T XG4M-2630-U XG4M-4030-U XG4M-5030-T XG4M-5030-U XG4M-6430-T XG4S-3404 XG4U-2004 XG4U-3404 XG4U-5004 XG4C-1031 XG4C-1074 XG4C-1631 XG4C-2031 XG4C-2034 XG4C-2631 XG4C-2634 XG4C-4031 XG4C-4034 XG4C-5014 XG4C-5031 XG4C-5034 XG4C-6434 XG4E-1032 XG4E-1631 XG4E-2031 XG4E-2631 XG4E-2631 XG4E-3031 XG4E-4031 XG4E-4032 XG4E-5071 XG4H-2031 XG4H-3031 XG4H-4031-1 XG4M-1030 XG4M-1030-U XG4M-1030-U XG4M-1031 XG4M-1430 XG4M-1430-T XG4M-1630 XG4M-1630-T XG4M-2030 XG4M-2030-U XG4M-2630 XG4M-2630-T XG4M-3030 XG4M-3430 XG4M-4030-T XG4M-5030 XG4M-6030 XG4M-6431 XG4S-1604 XG4S-4004 XG4S-5004 XG4T-1004 XG4T-1604 XG4T-2004 XG4T-2004 XG4T-3004 XG4T-3004 XG4T-3004 XG4T-4004 XG4T-5004 XG4T-6404 XG4Z-0005 XG4Z-0010 XG4C-5071 XG4C-5074 XG4C-6031 XG4C-6034 XG4C-6071 XG4C-6074 XG4C-6041 XG4C-6471 XG4C-6474 XG4E-1031 XG4E-1071 XG4E-1072 XG4E-1431 XG4E-1632 XG4E-2032 XG4E-2032 XG4E-2032 XG4E-3032 XG4E-3032 XG4E-3032 XG4E-5031 XG4E-5031 XG4E-5032