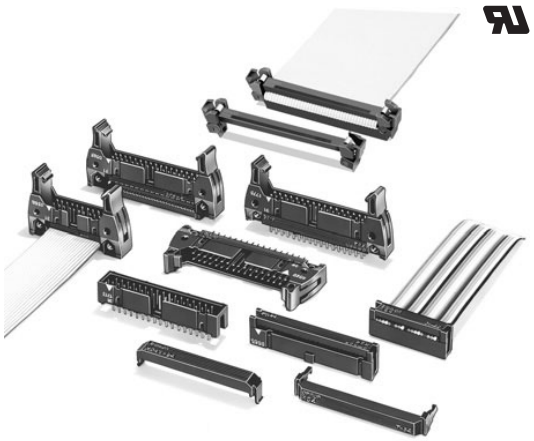
OMRON

Flat Cable Connectors

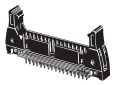
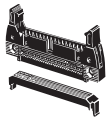
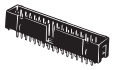
XG4

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
Appearance	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 connector sockets
Page	C-3	C-4	C-5 to C-10	C-11 to C-12	C-13 to C-14	C-15 to C-16	C-17 to C-18

■ 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.)	
Connector insertion	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.)	
Ambient temperature	Operating: –55 to 105°C (with no icing)	

Note:
1. 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 (UL94V-0)/black			
Covers		---	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-µm 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	---

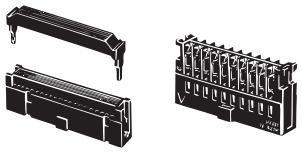
Note: For non-standard plating, contact your OMRON representative.

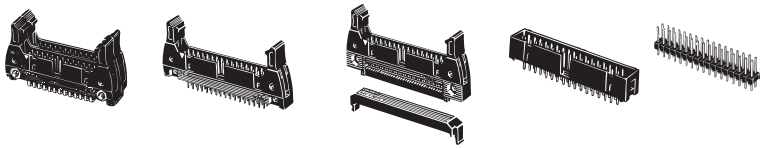
■ Applicable Wires

1.27-mm pitch, 7-strand flat cable
- UL2651(standard cable)
- UL20012 (folding cable)
- UL20028 (color-coded cable)

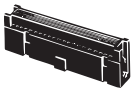
■ Mating Combinations for XG4 and XG5

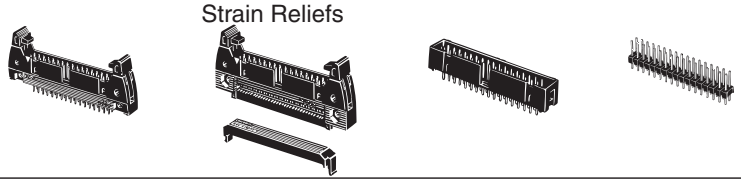
Sockets		Mates with	Plugs				
XG4M MIL Connectors XG4T Strain Reliefs	XG5M Sockets for Discrete Wires		XG4A 2-tier Plugs	XG4A MIL Plugs with Long Locks	XG4E Relay Plugs with Long Locks XG4S Strain Reliefs	XG4C Box-type Plugs	XG8W Original Plugs



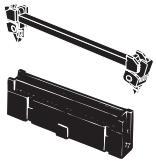


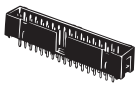
Sockets	Mates with	Plugs			
XG4M MIL Sockets		XG4A MIL Plugs with Short Locks	XG4E Relay Plugs with Short Locks XG4S Strain Reliefs	XG4C Box-type Plugs	XG8W Original Plugs





Sockets	Mates with	Plugs
XG4M-U MIL Sockets and Strain Relief with Locks		XG4C Box-type Plugs

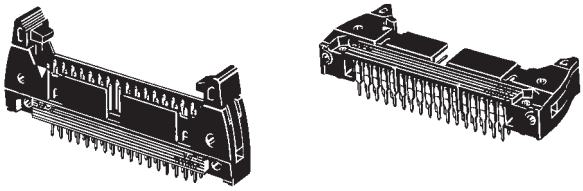


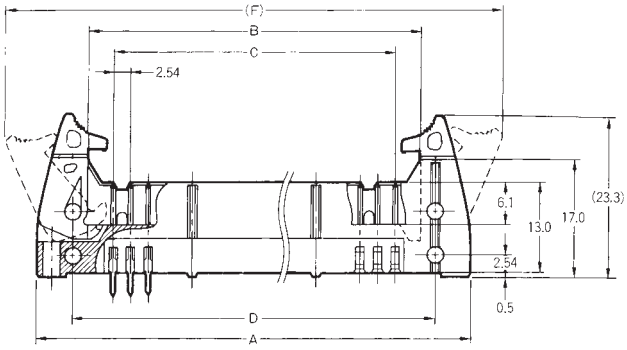


XG4A MIL Plugs with Short Locks

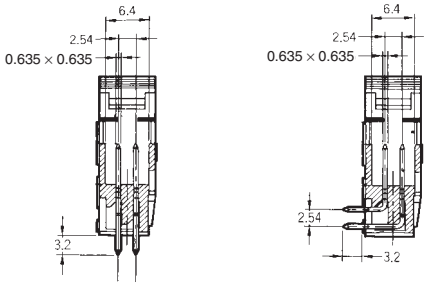
■ Dimensions

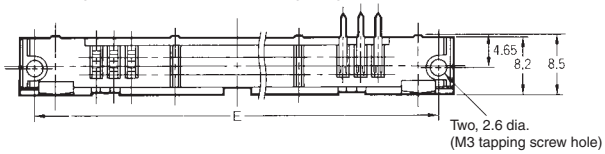
XG4A-□□32/-□□72 (With straight DIP terminals)
XG4A-□□35/-□□75 (With right-angle DIP terminals)

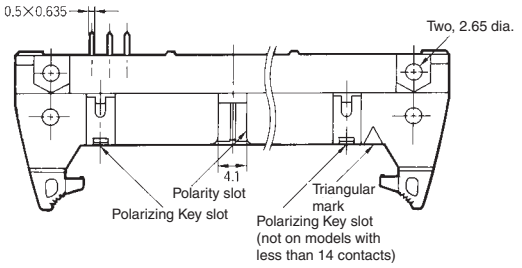


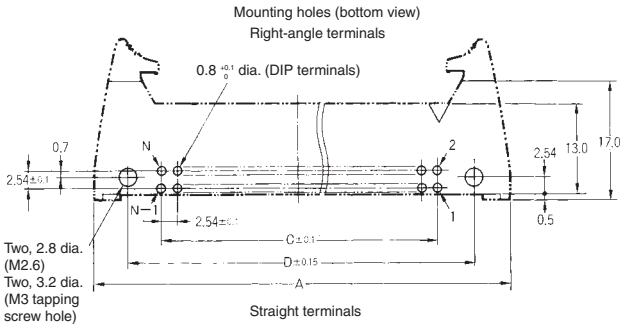


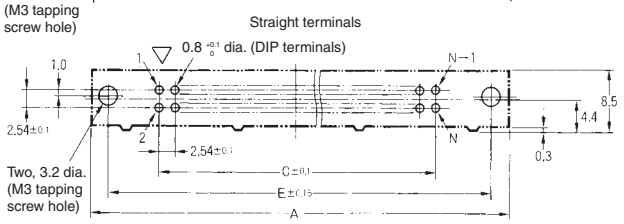
Straight DIP terminals Right-angle DIP terminals









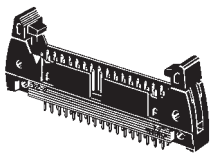
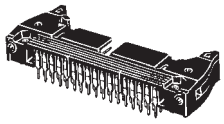


Dimensions

No. of contacts	Dimensions (mm)					
	A	B	C	D	E	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 C-16 for details on the availability (10-contact Connectors) and pitch (with 50, 60, or 64-contact Connectors) of polarity slots.

■ Ordering Information

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.