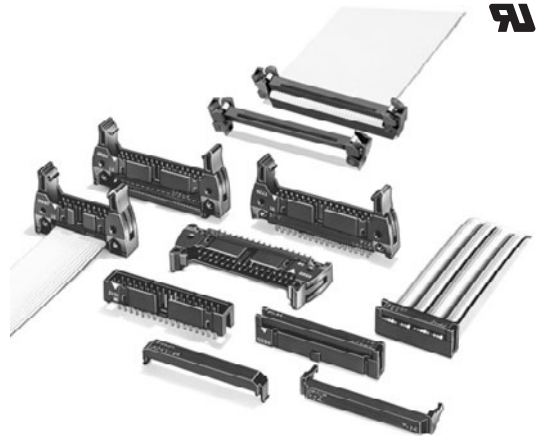


The Mainstream of Circuit Board Connectors conforming MIL Standards with Improved Design.

- 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.)

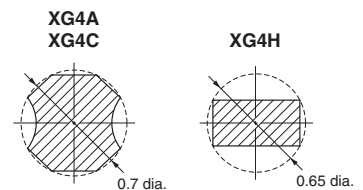
Ordering Information

Model	XG4M XG4M-U	XG4M XG4T	XG4A	XG4A	XG4E XG4S	XG4C	XG4H
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	3	4	5 to 10	11 to 12	13 to 14	15 to 16	17 to 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.)	
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 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- μ m gold plating	Phosphor bronze/nickel base, 0.15- μ m gold plating	
	Terminal Press fit	Brass/nickel base, 2.0- μ m tin plating	Phosphor bronze/nickel base, 2.0- μ m tin plating	
Strain Reliefs	---	Polyamide resin (UL94V-0)/black	Fiber-glass reinforced PBT resin (UL94V-0)/black	---

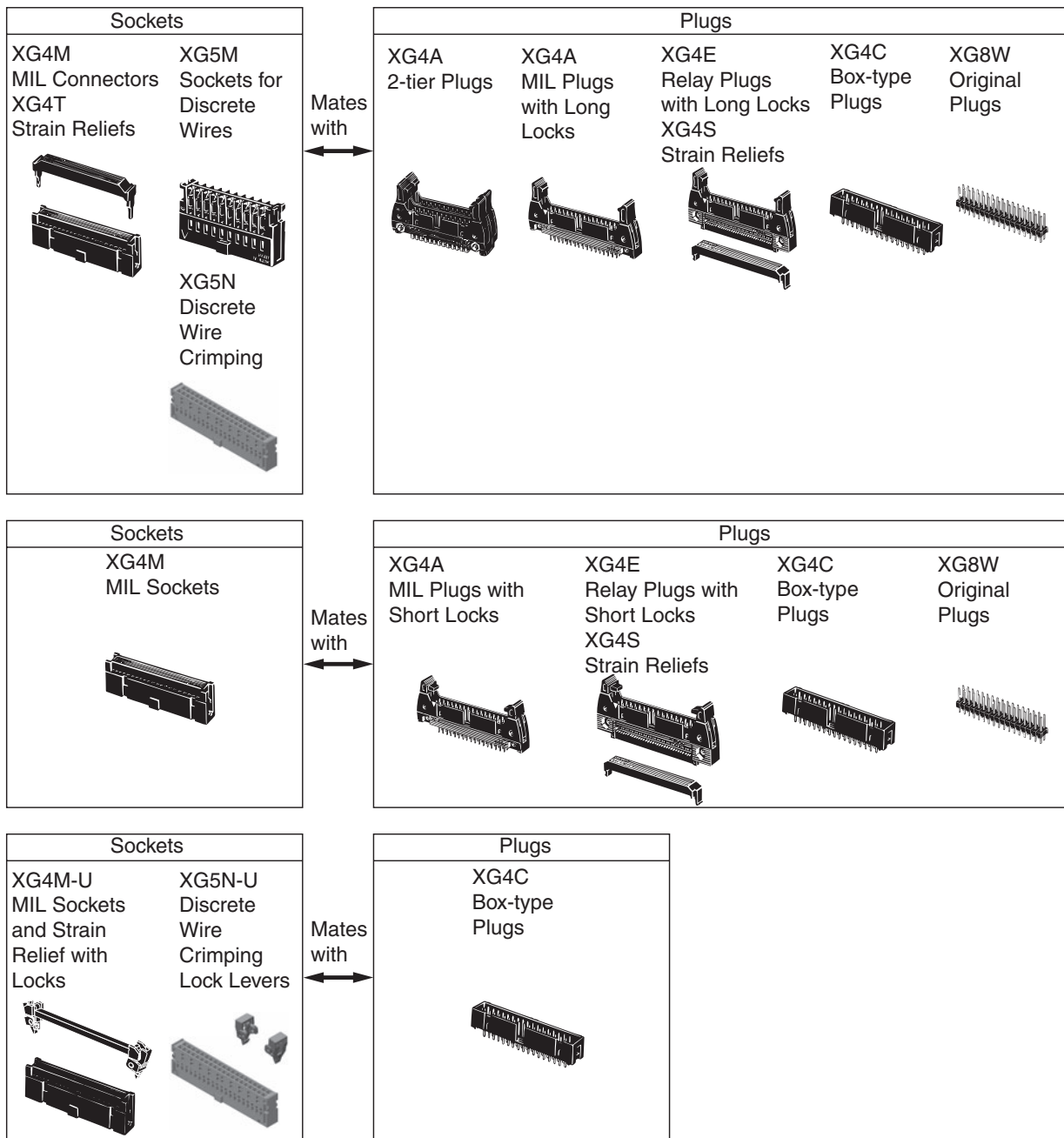
■ Applicable Wires

For pressing

1.27-mm pitch flat cable incorporating AWG28 wires

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

■ Mating Combinations for XG4 and XG5



XG4E Relay Plugs

■ Dimensions

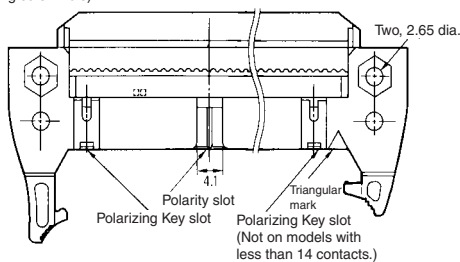
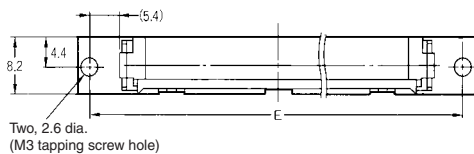
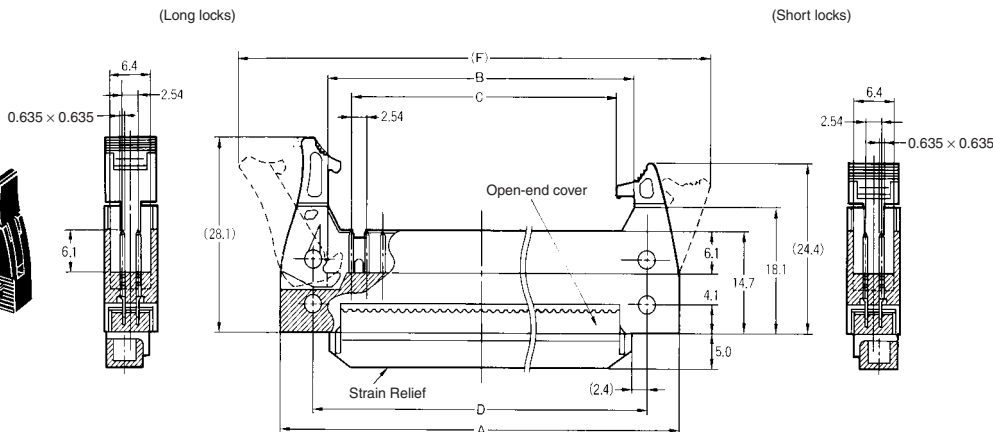
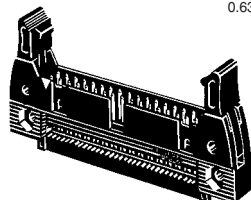
(Unit: mm)

XG4E-□□31/-□□71

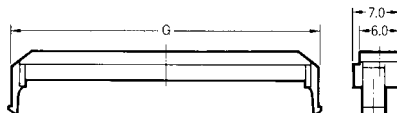
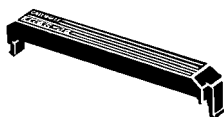
(With long locks)

XG4E-□□32/-□□72

(With short locks)



XG4S-□□04
Strain Relief



Dimensions

No. of contacts	Dimensions (mm)							
	A	B	C	D	E	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	48.0	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	
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	

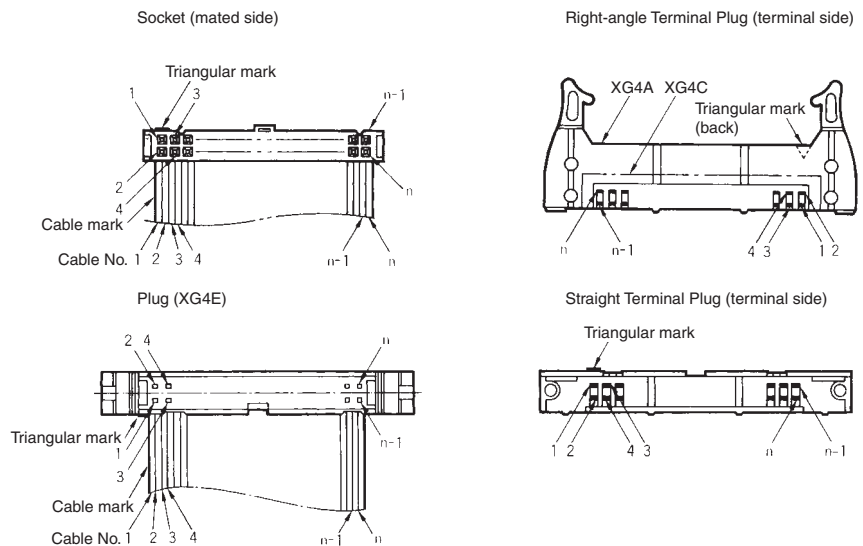
- Note:** 1. Strain Relief sold separately.
 2. Polarity slot pitch is 22.86 mm.

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.



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