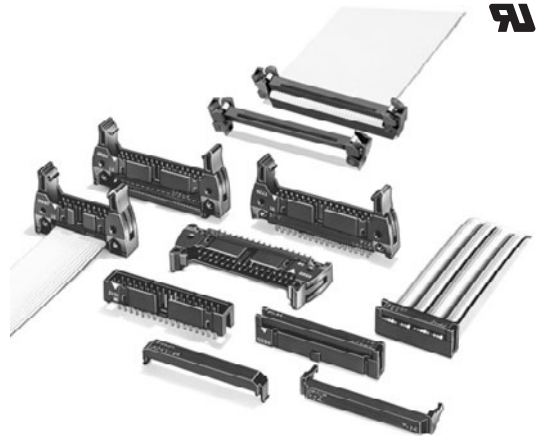


The Mainstream of Circuit Board Connectors conforming MIL Standards with Improved Design.

- 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.



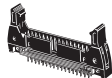


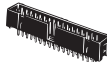

Open-end cover

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.)

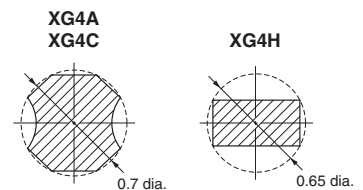
Ordering Information

| 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 | --- |

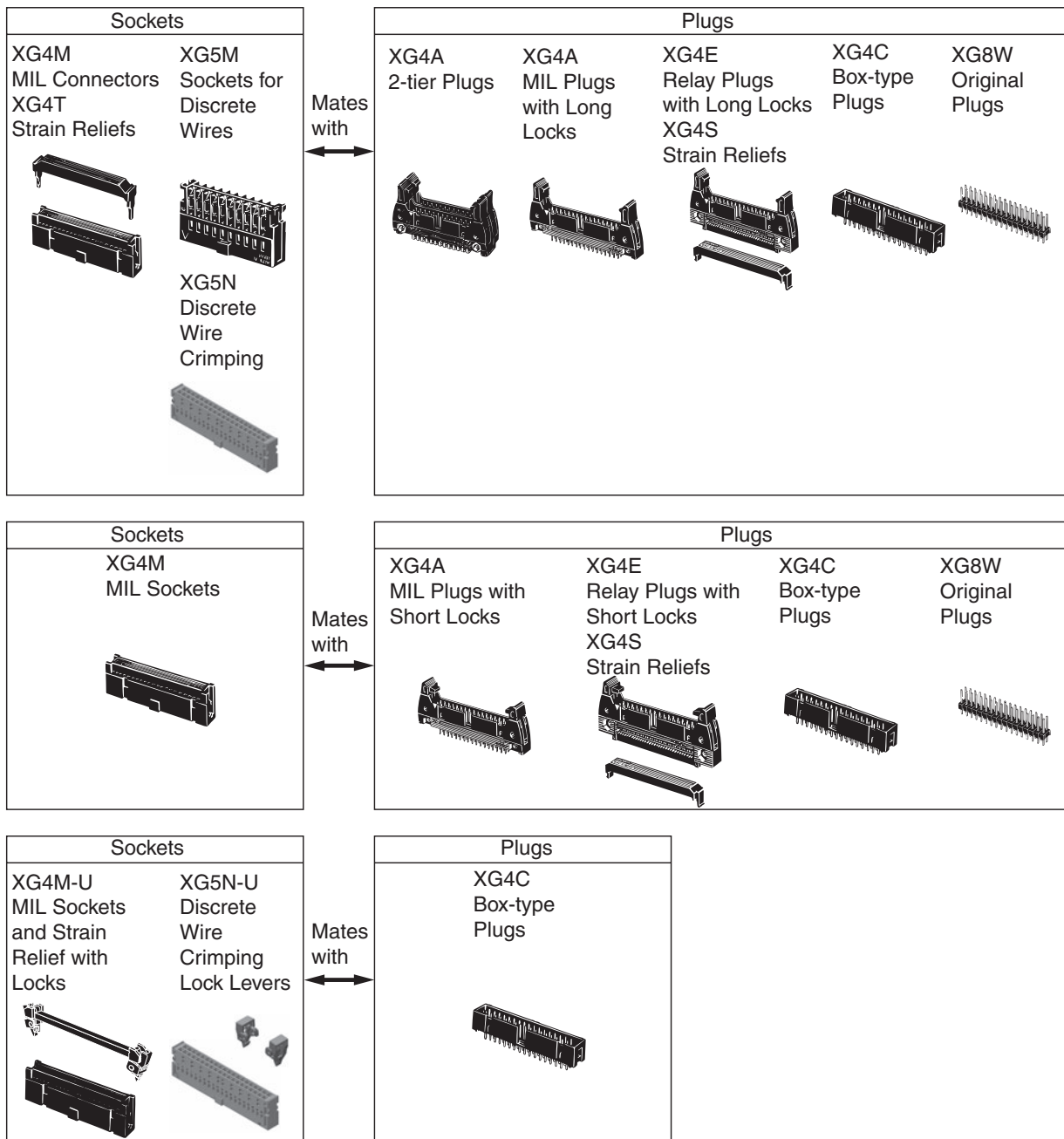
■ Applicable Wires

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

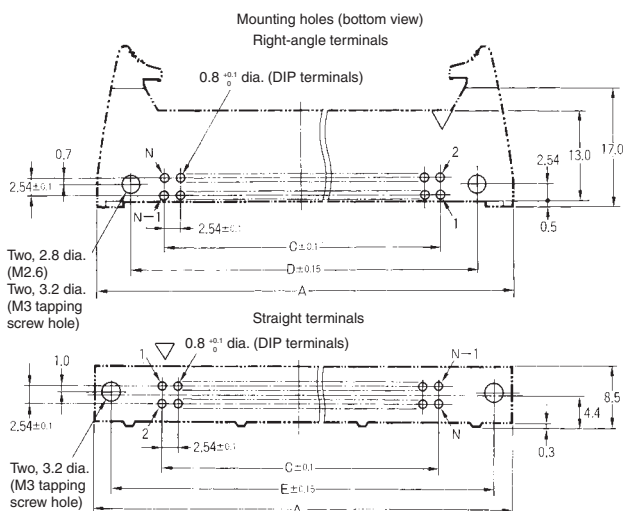
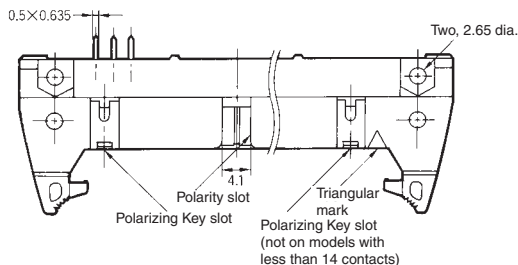
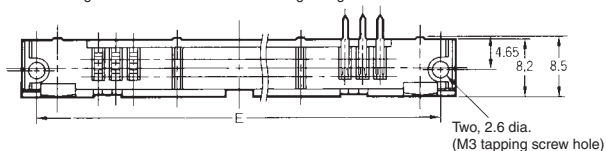
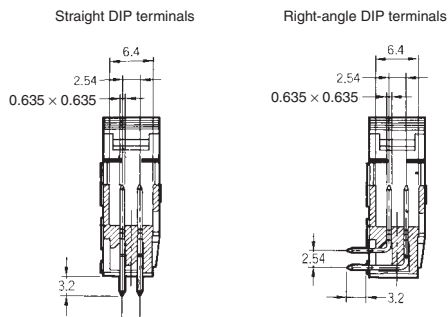
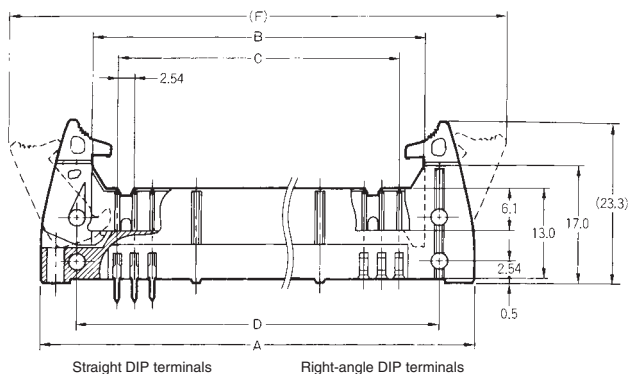
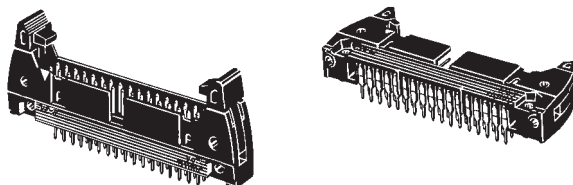


XG4A MIL Plugs with Short Locks

■ Dimensions

(Unit: mm)

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



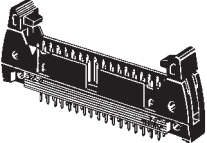
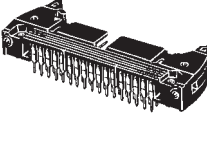
Dimensions

| 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 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 |
| | 2 (See note.) | XG4A-5032 | XG4A-5035 |
| 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

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Omron:

[XG4E-4031-S009](#) [XG4E-1431-S006](#) [XG4E-2031-S005](#) [XG4E-1631-S002](#) [XG4E-6031-S011](#) [XG4E-3431-S008](#)
[XG4E-1031-S001](#) [XG4E-2631-S003](#)