IDC Connectors for Discrete Wires

XG5

Al

Trouble-free discrete-wire termination with IDC Sockets that accommodate MIL Plugs.

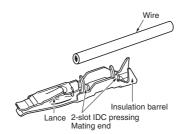
- Two-slot, IDC construction and insulation barrel offer high reliability and large-current (3 A) discrete wiring capability.
- Adaptable to a variety of covers for space-saving and discrete wire termination.
- By using the simple, unique lock-lever system, these Connectors can be locked to either the XG8B/XG8W Unshrouded Plugs (with right-angle terminals) or XG4C Box-type Plugs.
- Conforms to UL standards (file no. E103202). (Except XG5S models)



■ Terminology

Insulation barrel

Refers to the part of a contact that crimps the insulating sheath of a wire.



Insulation height

Refers to the height of the insulation barrel after crimping or IDC pressing.

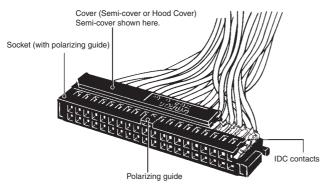
I ance

Refers to the lance-like projections arranged on a contact to secure it in the housing.

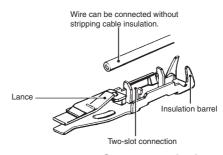
• II-slot

Refers to the part where the wire and the contact connect to each other. It is called a U-slot because of its shape.

■ Construction



Solderless Contact

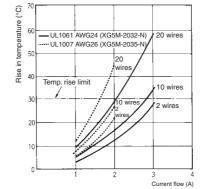


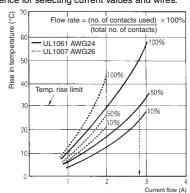
■ Ratings and Characteristics

| Rated current | 1 A (AWG28), 2 A (AWG26), 3 A (AWG24) |
|-------------------------------|--|
| Rated voltage | 300 VAC |
| Contact resistance | 20 m Ω max. (at 20 mV, 100 mA max.) |
| Insulation resistance | 1,000 M Ω min. (at 500 VDC) |
| Dielectric strength | 650 VAC for 1 min (leakage current: 1 mA max.) |
| Total insertion force | 1.96 N max. per contact |
| Removal force | 0.29 N min. (with test gauge, 0.64 x 0.64 mm) |
| Insertion durability | 50 times |
| Ambient operating temperature | Operating: -55 to 85°C (with no icing) |

■ Current and Temperature Characteristics

Use the temperature data shown below as a reference for selecting current values and wires.





■ Materials and Finish

| Housing | | Fiber-glass reinforced PBT resin (UL94V-0)/black | |
|-----------|------------|--|--|
| Contacts | Mating end | Phosphor-bronze/nickel base, 0.15-μm gold plating | |
| | Terminals | Phosphor-bronze/nickel base, 2.0-μm solder plating | |
| Cover | | Fiber-glass reinforced polyamide resin (UL94V-0)/black | |
| Cable tie | | Polyamide resin (UL94V-0)/natural | |

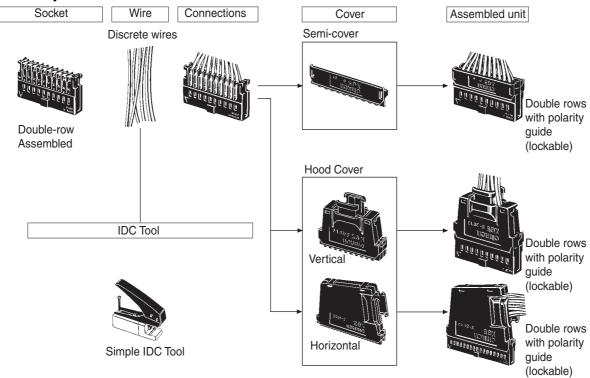
■ Applicable Wires and Contact Sizes

| Size #1 | - (, | Insulation outside diame- |
|---------|------------------|--|
| Size #2 | AVVGZ8 OF AVVGZ8 | ter: 1.1 to 1.3 mm Core structure: 7 strands or more |

Note: The contact numbers are marked on the contact insulation

■ Configuration

Assembly



■ Applicable Plugs

| = Applicable 1 lugs | | | | |
|--|--|---|--|--|
| XG4A Flat Cable MIL Plugs with Long Locks | XG4A Flat Cable Plugs without Lock Lever (Lock Levers mounted later) | XG4A Flat Cable Double-row Plugs | | |
| A MARIAN MARIANA MARIA | THE PROPERTY OF SECTION AND ADDRESS OF SECTION ADDRESS OF SECTION AND ADDRESS OF SECTION ADDRESS OF SECTI | | | |
| XG4E IDC Flat Cable Plugs Long Locks | XG4C Flat Cable Box-type Plugs | XG8W/XG8B Double-row Unshrouded Plugs | | |
| | Obstrate heart of the state of | | | |

Note: 1. Plug dimensions are listed on the Plug's page.

2. When using the XG4A or XG4C, the number of XG4A or XG4C's slots must be the same as the number of XG5M-N polarity guides.

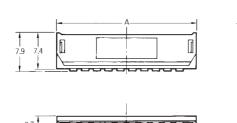
XG5S Semi-covers

■ Dimensions

(Unit: mm)

XG5S-□□01







| No. of | Dimensions (mm) | | |
|----------|-----------------|--|--|
| contacts | Α | | |
| 5 | 17.3 | | |
| 7 | 22.3 | | |
| 8 | 24.9 | | |
| 10 | 30.0 | | |
| 13 | 37.6 | | |
| 15 | 42.7 | | |
| 17 | 47.7 | | |
| 20 | 55.4 | | |
| 25 | 68.1 | | |
| 30 | 80.8 | | |
| 32 | 85.8 | | |

Dimensions

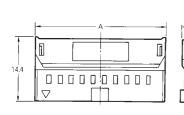
■ Ordering Information

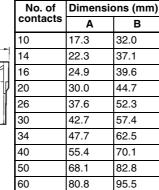
| No. of contacts | Model | Applicable Connector |
|-----------------|-----------|----------------------|
| 5 | XG5S-0501 | XG5M-103□-N |
| 7 | XG5S-0701 | XG5M-143□-N |
| 8 | XG5S-0801 | XG5M-163□-N |
| 10 | XG5S-1001 | XG5M-203□-N |
| 13 | XG5S-1301 | XG5M-263□-N |
| 15 | XG5S-1501 | XG5M-303□-N |
| 17 | XG5S-1701 | XG5M-343□-N |
| 20 | XG5S-2001 | XG5M-403□-N |
| 25 | XG5S-2501 | XG5M-503□-N |
| 30 | XG5S-3001 | XG5M-603□-N |
| 32 | XG5S-3201 | XG5M-643□-N |

Note: One Semi-cover is used per row. Each XG5M Connector requires two semi-covers.

■ Assembled Dimensions (Socket with Semi-cover)

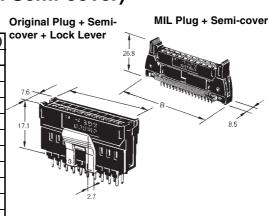
Dimensions





85.8

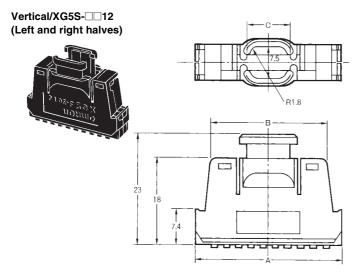
100.6

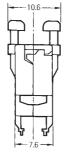


64

XG5S Hood Covers

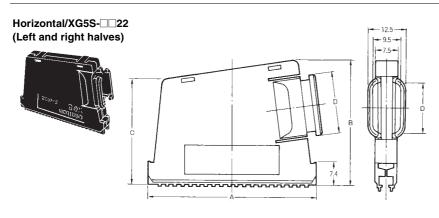
■ Dimensions (Unit: mm)





Dimensions

| No. of | Dimensions (mm) | | | |
|----------|-----------------|------|------|--|
| contacts | Α | В | С | |
| 20 | 30.0 | 23.8 | 8.8 | |
| 26 | 37.6 | 31.4 | 11.4 | |
| 30 | 42.7 | 36.5 | 15.1 | |



Dimensions

| No. of | Dimensions (mm) | | | |
|----------|-----------------|------|------|------|
| contacts | Α | В | C | D |
| 34 | 47.7 | 38.7 | 32.0 | 14.6 |
| 40 | 55.4 | 40.7 | 34.0 | 16.6 |
| 50 | 68.1 | 44.1 | 39.4 | 20.0 |
| 60 | 80.8 | 47.4 | 42.8 | 23.4 |

■ Ordering Information

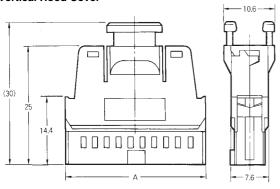
| Appearance | Vertical | Horizontal |
|-------------------------------|-------------------|-----------------------|
| | Table sold | 2502 30.1 10011110 |
| No. of contacts (double rows) | Model (See note.) | Model (See note.) |
| 20 | XG5S-2012 | |
| 26 | XG5S-2612 | |
| 30 | XG5S-3012 | |
| 34 | | XG5S-3422 |
| 40 | | XG5S-4022 |
| 50 | | XG5S-5022 |
| 60 | | XG5S-6022 |

Note: Includes cable tie.

■ Assembled Dimensions (Socket and Hood Cover)

(Unit: mm)

Vertical Hood Cover

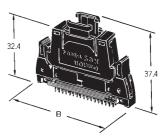


MIL Plug + Vertical Hood Cover

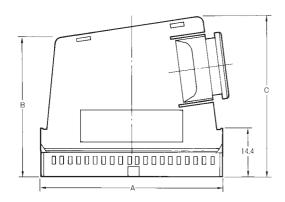
Assembled Unit

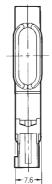
Dimensions

| No. of | Dimensions (mm) | | |
|----------|-----------------|------|--|
| contacts | Α | В | |
| 20 | 30.0 | 44.7 | |
| 26 | 37.6 | 52.3 | |
| 30 | 42.7 | 57.4 | |

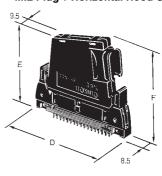


Horizontal Hood Cover





Assembled Unit
MIL Plug + Horizontal Hood Cover



Dimensions

| No. of | Dimensions (mm) | | | | | |
|----------|-----------------|------|------|------|------|------|
| contacts | S A B C D | | | | | F |
| 34 | 47.7 | 39.0 | 45.7 | 62.5 | 46.4 | 53.1 |
| 40 | 55.4 | 41.0 | 47.7 | 70.1 | 48.4 | 55.1 |
| 50 | 68.1 | 46.4 | 51.1 | 82.8 | 53.8 | 58.5 |
| 60 | 80.8 | 49.8 | 54.4 | 95.5 | 57.2 | 61.8 |