IDC Connectors for Discrete Wires

XG5

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

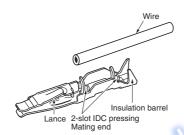
- Two-slot, IDC construction and insulation barrel offer high reliability and large-current (3 A) discrete wiring capability.
- Adaptable to a variety of covers for space-saving and discrete wire termination.
- By using the simple, unique lock-lever system, these Connectors can be locked to either the 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.

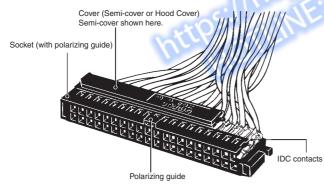
Lance

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

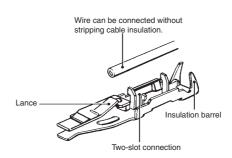
U-slot

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

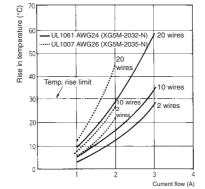


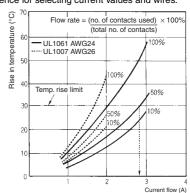
■ Ratings and Characteristics

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-
	(For UL1007)	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 i lug	•	
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
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XG4E IDC Flat Cable Plugs Long Locks	XG4C Flat Cable Box-type Plugs	XG8W/XG8B Double-row Unshrouded Plugs
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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.

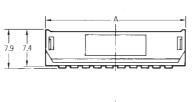
XG5S Semi-covers

■ Dimensions

(Unit: mm)

XG5S-□□01







3.7	6 6 6 6 1	, 22 2

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

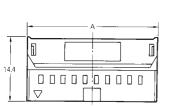
Dimensions

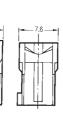
■ Ordering Information

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

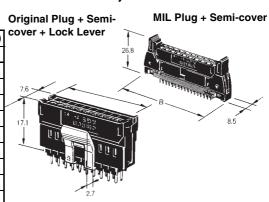
Note: One Semi-cover is used per row. Each XG5M Connector requires two semi-covers.

■ Assembled Dimensions (Socket with Semi-cover)



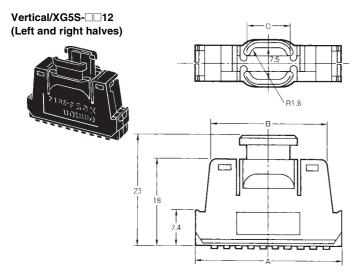


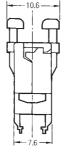
Dimensions			
No. of	Dimensions (mm		
contacts	Α	В	
10	17.3	32.0	
14	22.3	37.1	
16	24.9	39.6	
20	30.0	44.7	
26	37.6	52.3	
30	42.7	57.4	
34	47.7	62.5	
40	55.4	70.1	
50	68.1	82.8	
60	80.8	95.5	
64	85.8	100.6	



XG5S Hood Covers

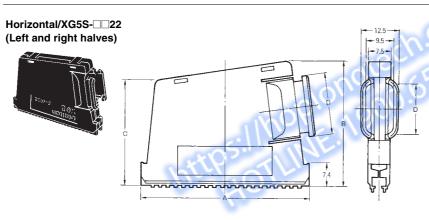
■ Dimensions (Unit: mm)





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	С	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

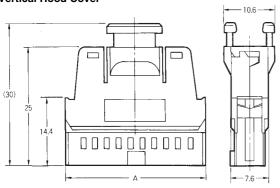
Appearance	Vertical	Horizontal
	1.00g 50 X	100 A 20 A
No. of contacts (double rows)	Model (See note.)	Model (See note.)
20	XG5S-2012	
26	XG5S-2612	
30	XG5S-3012	
34		XG5S-3422
40		XG5S-4022
50		XG5S-5022
60		XG5S-6022

Note: Includes cable tie.

■ Assembled Dimensions (Socket and Hood Cover)

(Unit: mm)

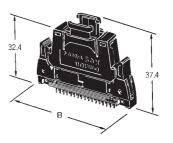
Vertical Hood Cover



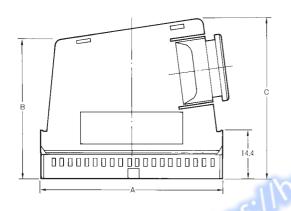
Dimensions

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

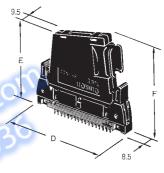
Assembled Unit MIL Plug + Vertical Hood Cover



Horizontal Hood Cover



MIL Plug + Horizontal Hood Cover



Assembled Unit

Dimensions

No. of contacts	Dimensions (mm)					
	Α	В	С	D	Е	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