OMRON

DIN Fine-fit Connectors with W-shaped Pins

XC5

International DIN standards; Solderless Connection Series (Fine Fit)

- Backplane systems can be designed with ease with XC5 Connectors as conforming with DIN standards.
- Using unique W-shaped pins, these Connectors prevent contacts from being bent or falling out. Ensures highly reliable connections.
- Less damage to the through-holes in circuit boards.
- The XC6-series Connectors can be used as Backplane Connectors.
- Uses highly-reliable Twin-contact Sockets.
- A special Press-fit Tool is available.

RoHS Compliant

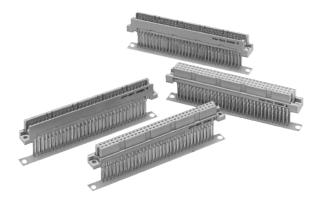
■ Ratings and Characteristics

Rated current	2 A
Rated voltage	300 VAC
Contact resistance	20 m Ω max. (at 20 mV, 100 mA max.)
Insulation resistance	10^6 M Ω min. (at 100 VDC)
Dielectric strength	1,000 VAC for 1 min (leakage current: 1 mA max.)
Total insertion force	0.59 N max. per contact
Removal force	0.15 N max. (with test gauge, t = 0.56 mm)
Insertion durability	200 times
Ambient operating temperature	Operating: -55 to 125°C (with no icing)

Materials and Finish

Туре		Plugs	Sockets	
Housings		Fiber-glass reinforced PBT resin (UL94V-0)/gray		
Contacts (See note.)	Mating end	Copper alloy/nickel base, 0.4-µm g plating		
	Fine fit	Copper alloy/nickel base, gold flash plating		
	Terminal	Copper alloy/nickel base, 0.15- μ m gol plating (See note.)		

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



■ Applicable Wrap Post Wire Sizes

AWG30, AWG28, AWG26, or AWG24 (Solid wire: 0.25 to 0.51 mm dia.)

Wrap Post Length

3 wires for the 13-mm contacts 4 wires for the 17-mm contacts

Ratings for Fine-fit Connectors

Rated current	2 A		
Contact resistance	5 m Ω max. (at 20 mV, 100 mA max.)		
Pressure input	196 N max. per contact		
Holding force	44.1 N min.		
Unit torque durability	0.022 N-m min.		
Vibration	At 10 to 2,000 Hz, 1.52-mm amplitude, or 15 G will not interrupt current for more than 1 μ sec.		
Shock	At 100 G, will not break current for more than 1 μ sec.		

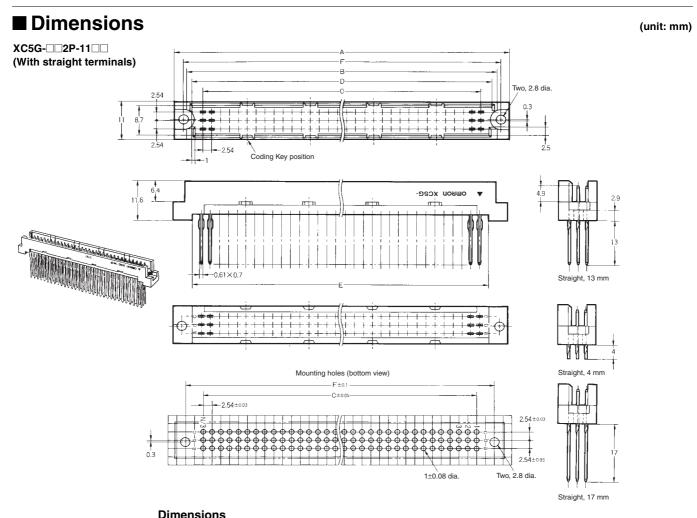
■ Applicable Fine-fit Boards

- Width 1.6 to 3.2 mm
- Through-hole diameter 1.0 ± 0.08 mm (Drill diameter 1.15 ± 0.05 mm)

Plating: Copper 25 μm min., or solder 5 μm min. on a copper base at least 25 μm thick.

• Pitch error: ±0.03 mm max.

XC5G Triple-row Plugs, DIN R-type, Fine-fit, W-shaped Pins



No. of contacts	Dimensions (mm)						Coding Key positions
	Α	В	С	D	E	F	(contact No.)
48	54.1	47.4	38.10	44.6	43.3	49.36	5, 12
64*	94.8	88.0	78.74	85.2	83.9	90.00	6, 13, 20, 27
96	94.8	88.0	78.74	85.2	83.9	90.00	6, 13, 20, 27

■ Ordering Information

Appear- ance					
No. of	Terminal type				
contacts	Straight terminals, 4 mm	Straight terminals, 13 mm	Straight terminals, 17 mm		
48	XC5G-482P-1140	XC5G-482P-1131	XC5G-482P-1132		
64*	XC5G-642P-1140	XC5G-642P-1131	XC5G-642P-1132		
96	XC5G-962P-1140	XC5G-962P-1131	XC5G-962P-1132		

*Has no center row (row b).

Mouser Electronics

Authorized Distributor

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

Omron: XC5G-642P-1140