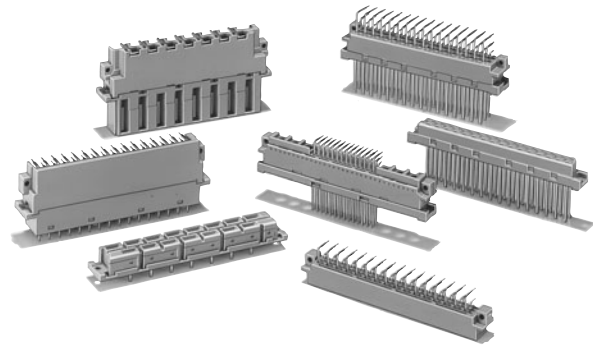


Medium/High-Current Connectors Conform to International Standards.

- DIN 41612 compliance ensures full interchangeability.
- Sufficient creepage distance for medium/high-current and high-voltage circuit applications.
- Mounts in XC5-series Racks.
- The product line also includes M-type (Mixed) DIN Connectors.
- The XC4 conforms to UL standards (No. E103202). (Some models are not included)



RoHS Compliant

Connectors

| Model | XC4A/B | XC4E/F | XC4G/H | XC4K/L | XC4M/N |
|--------------------|--------|--------|--------|--------|----------|
| DIN connector type | F type | E type | D type | H type | M type |
| Appearance | | | | | |
| Page | 2 to 3 | 4 to 5 | 6 to 7 | 8 to 9 | 11 to 12 |

Ratings and Characteristics

| Item | Model | XC4A/B | XC4E/F | XC4G/H | XC4K/L | XC4M/N | Remarks |
|-------------------------------|-------|-------------------------|--------------------|--------|-----------|--------------------|------------------------------------|
| Rated current | | 6 A | | | 15 A | 2 A | |
| Rated voltage | | 380 VAC | 500 VAC | | | 300 VAC | |
| Contact resistance | | 15 mΩ max. | | | 8 mΩ max. | 20 mΩ max. | At 20 mV, 100 mA max. |
| Insulation resistance | | 10 ⁶ MΩ min. | | | | | At 100 VDC |
| Dielectric strength | | 1,550 VAC | | | 3,100 VAC | 1,000 VAC | 1 min (leakage current: 1 mA max.) |
| Total insertion force | | 74 N | 1.23 N per contact | 39 N | 88 N | 0.93 N per contact | Max. value |
| Removal force | | 0.20 N | 0.15 N | 0.20 N | | 0.15 N | Min. value with a test gauge |
| Insertion durability | | 400 times | | | | | |
| Ambient operating temperature | | Operating: -55 to 125°C | | | | | With no icing |

Materials and Finish

| Item | | XC4A/B | XC4E/F | XC4G/H | XC4K/L | XC4M/N (See note 2.) |
|----------|------------|--|---|--------|--|---|
| Housings | Plugs | Fiber-glass reinforced PC resin (UL94V-1)/gray | Fiber-glass reinforced PBT resin (UL94V-0)/gray | | PC resin with glass (UL94V-1)/gray (See note 1.) | Fiber-glass reinforced PBT resin (UL94V-0)/gray |
| | Sockets | | | | | |
| Contacts | Mating end | Plugs | Brass/nickel base, gold plating | | Brass/nickel base, silver plating | Brass/nickel base, gold plating |
| | | Sockets | Phosphor bronze inlay/nickel base, gold plating | | Phosphor bronze/nickel base, silver plating | Phosphor bronze/nickel base, gold plating |
| | Terminal | Plugs | Brass/nickel base, tin plating | | Brass/nickel base, silver plating | Brass/nickel base, tin plating |
| | | Sockets | Phosphor bronze/nickel base, tin plating | | Phosphor bronze/nickel base, tin plating | Phosphor bronze/nickel base, tin plating |

- Note:** 1. The XC4L-1541 is made of fiber-glass reinforced PBT resin (UL94V-0).
2. Connector materials and finishes.

Applicable Wrap Post Wire Sizes

AWG26, AWG24, AWG22, or AWG20
(Solid wire: 0.40 to 0.80 mm dia.)

Wrap Post Length

3 wires

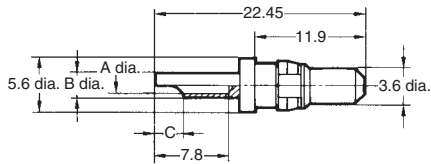
XC4W High-current Contacts for XC4M and XC4N

■ Dimensions

(unit: mm)

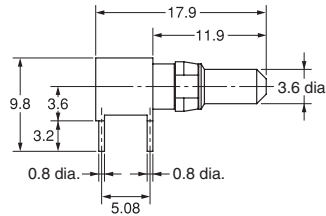
XC4W-0□11

Plugs with Solder-cup Terminals



XC4W-0412

Plugs with Right-angle Solder-DIP Terminals

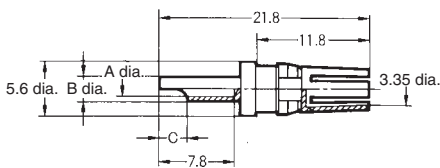


Dimensions (mm)

| Model | A | B | C |
|-----------|-----|-----|-----|
| XC4W-0411 | 4.8 | 5.6 | 5.2 |
| XC4W-0211 | 2.8 | 3.7 | 4 |
| XC4W-0111 | 1.7 | 2.6 | 3 |
| XC4W-1411 | 4.8 | 5.6 | 5.2 |
| XC4W-1211 | 2.8 | 3.7 | 4 |
| XC4W-1111 | 1.7 | 2.6 | 3 |

XC4W-1□11

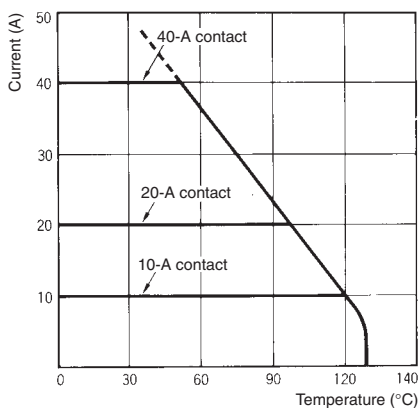
Receptacle with Solder-cup Terminals



■ Ordering Information

| Classification | Allowable current | Terminal type | Model |
|----------------|-------------------|----------------------------------|-----------|
| Plugs | 40 A | Solder-cup terminals | XC4W-0411 |
| | 20 A | | XC4W-0211 |
| | 10 A | | XC4W-0111 |
| | 40 A | Right-angle solder-DIP terminals | XC4W-0412 |
| Receptacles | 40 A | Solder-cup terminals | XC4W-1411 |
| | 20 A | | XC4W-1211 |
| | 10 A | | XC4W-1111 |

■ High-current Contact Characteristics

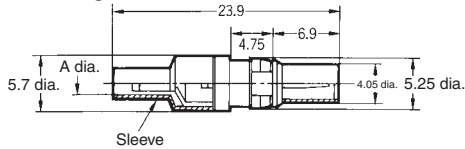


XC4W Coaxial Contacts for XC4M and XC4N

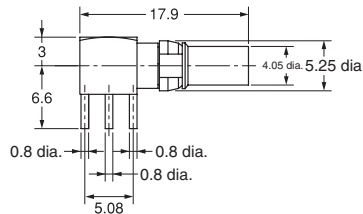
■ Dimensions

(unit: mm)

XC4W-2111 (2.2 dia.)
XC4W-2211 (3.2 dia.)
Plug Side with Straight Cable-
connecting Contact



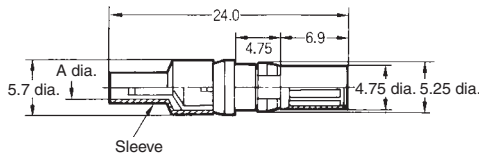
XC4W-2014
Plug Side with Right-angle Solder-DIP
Terminals



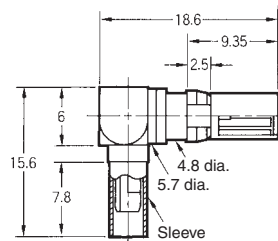
Dimensions (mm)

| Model | A |
|-----------|-----|
| XC4W-2111 | 2.2 |
| XC4W-2211 | 3.2 |
| XC4W-3111 | 2.2 |
| XC4W-3211 | 3.2 |
| XC4W-3112 | 2.2 |
| XC4W-3212 | 3.2 |

XC4W-3111 (2.2 dia.)
XC4W-3211 (3.2 dia.)
Socket Side with Straight Cable-
connecting Contact



XC4W-3112 (2.2 dia.)
XC4W-3212 (3.2 dia.)
Socket Side with Right-angle Cable-
connecting Contact



■ Ordering Information

| | Contact form | Sleeve diameter (mm) | Model |
|--------|--|----------------------|-----------|
| Plug | Straight cable-connecting contacts (solder and IDC) | 2.2 dia. | XC4W-2111 |
| | | 3.2 dia. | XC4W-2211 |
| | Right-angle solder DIP contacts | | XC4W-2014 |
| Socket | Straight cable-connecting contacts (solder and IDC) | 2.2 dia. | XC4W-3111 |
| | | 3.2 dia. | XC4W-3211 |
| | Right-angle cable-connecting contacts (solder and IDC) | 2.2 dia. | XC4W-3112 |
| | | 3.2 dia. | XC4W-3212 |

Note: The coaxial contact was designed for a 50-Ω cable, but a 75-Ω cable may be used at some frequencies.

■ Applicable Coaxial Cables

| Sleeve diameter (mm) | Model | Characteristic impedance | |
|----------------------|-----------|--------------------------|----------|
| | | 50 Ω | 75 Ω |
| 2.2 dia. | XC4W-2111 | RG178B/U | |
| | XC4W-3111 | RG196A/U | |
| | XC4W-3112 | | |
| 3.2 dia. | XC4W-2211 | RG188A/U | RG179B/U |
| | XC4W-3211 | RG316U | RG187A/U |
| | XC4W-3212 | RG174A/U | |

■ Coaxial Cable Characteristics

| 50-Ω coaxial cable | | 75-Ω coaxial cable | |
|--------------------|--------------------------|--------------------|--------------------------|
| Frequency (GHz) | Reflection factor (max.) | Frequency (MHz) | Reflection factor (max.) |
| Up to 1 | 0.05 | Up to 100 | 0.015 |
| 1 to 4 | 0.07 | 100 to 200 | 0.02 |
| 4 to 10 | 0.10 | 200 to 300 | 0.03 |