4.3-10 RF Connector Solutions for the Wireless Industry

Molex 4.3-10 RF Connector System and Cable Assemblies meet the performance needs of next-generation mobile network equipment, in a small form factor with best-in-class passive intermodulation (PIM) and less torque than current interfaces.

Features and Benefits

- 30% smaller than DIN 7/16 connectors
  Decreases operational expenditures by reducing tower loading

- Low-PIM performance (160dBc @ 2x43dBm)
  Enables wireless service providers to build networks capable of superior performance

- Patent-pending weatherproof boots
  Protects connection in harsh weather, ideal for outdoor cellular sites

- Three mating options for right-angle and vertical plugs (hand tight, quick lock and wrench tight)
  Provides design flexibility, depending on application needs, without compromising electrical performance

- Serialized cables mean 100% data traceability
  Enables quality assurance

- Interface already adapted by radio and antenna OEMs
  Base station equipment will be deployed with new 4.3-10 connectors

- Custom, factory-made low-PIM cable jumper assemblies (12.7mm [1/2"] coaxial cable, 9.53mm [3/8"] coaxial cable)
  Eliminates a vendor and the need for the customer to assemble

Applications

Telecommunications/Networking
(Wireless Service Providers)
- Network radio OEMs
- Base station antennas
- Signal optimization equipment

Patent-pending weatherproof boots
Protects connection in harsh weather, ideal for outdoor cellular sites

Serialized cables means 100% data traceability
Enables quality assurance
### Specifications

**REFERENCE INFORMATION**
Packaging: Tray, Carton
UL File No.:
CSA File No.:
Mates with: series 73162 4.3/10 Plugs mate with series 73162 Jacks
Use with: Coaxial or Fit Cable: 12.7mm (0.5") foam or flexible models
Designed in: Millimeters
RoHS: Yes

**ELECTRICAL**
Voltage: 1800Vrms @ sea level
Frequency (max.):
  - DC to 12 GHz (Panel-Mount Jack)
  - 0 to 6 GHz (Plug)
Impedance: 50 Ohms
Dielectric Withstanding Voltage:
  - 2500V AC @ 0.5mA
Contact Resistance:
  - Center Contact: \(\leq 1\) milliohm
  - Outer Contact: \(\leq 1\) milliohm
Insulation Resistance: \(\geq 5000\) Megohms
VSWR Ratio:
  - \(\leq 1.03\) DC to 4 GHz
  - \(\leq 1.05\) 4 to 6 GHz
RF Insertion Loss: \(\leq 0.05 \times \sqrt{f}\) (GHz) dB
Center Contact Resistance: \(\leq 1\) milliohmns
Outer Contact Resistance: \(\leq 1\) milliohms
PIM3 (Typical): \(-166\)dBc (2x43dBm)

**MECHANICAL**
Mating Torque: 5 to 8nm
Coupling Proof Torque: 8nm
Coupling Nut Retention Force: \(\geq 450\)N
Engagement Force (Quick Lock): 100N
Disengagement Force (Quick Lock): 80N
Durability: 100 Cycles
Sealing: IP68

**PHYSICAL**
Housing: Brass
Contact: Phosphor Bronze
Plating:
  - Contact Area — Silver
Insulator: Teflon
O-Ring: Silicone Rubber
Operating Temperature: -55 to +90°C

### Ordering Information

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<thead>
<tr>
<th>Series No.</th>
<th>Component</th>
<th>Mating Options</th>
<th>Orientation</th>
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<tbody>
<tr>
<td>73162</td>
<td>4.3-10 Plugs and Jacks</td>
<td>Hand Tight, Quick Lock and Torque</td>
<td>Straight, Right Angle</td>
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<table>
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<tr>
<th>Custom Product</th>
<th>Description</th>
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<tr>
<td>Contact Molex</td>
<td>4.3-10 Cable Jumper Assembly</td>
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www.molex.com/link/4.3-10.html