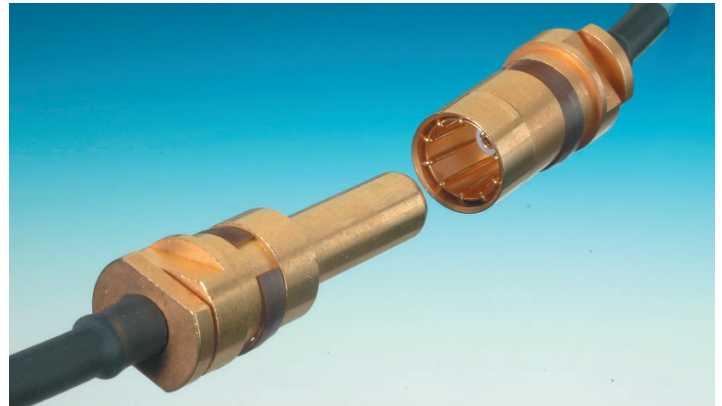


COAXTAC® Coaxial Contacts

Hypertronics has combined its legendary Hypertac® contact technology with RF technology to create the patented COAXTAC coaxial contact, providing greater performance in those applications where high cycle life, low insertion and withdrawal forces, low contact resistance, and exceptional performance under shock and vibration are required. COAXTAC contacts are ideal for those critical applications where the performance parameters of a coaxial contact and ultimate contact reliability are essential. COAXTAC contacts maintain their electrical and mechanical characteristics over the life of the contact.

The uniqueness of the COAXTAC system stems from the double Hypertac configuration within each coaxial contact. By placing one Hypertac contact within another, the high forces typically associated with an industry standard contact are reduced and contact life is extended. Additionally, the combination of the Hypertac technology with that of a coaxial connector design creates an 18 GHz double Hypertac coaxial contact that gives new meaning to the word “performance.” When compared to other coaxial contacts, COAXTAC is able to withstand the harshest conditions and still deliver the performance that is required from a contact system.

COAXTAC contacts can be housed in DIN 411612 insulator cavities or in a variety of standard Hypertronics products. The contacts are MIL-PRF-39012 qualified having met, and in some cases exceeded,



the qualification requirements. Test results prove that even with the slightest wear of the mating surfaces, COAXTAC contacts are able to deliver exceptional performance and are able to withstand conditions that other coaxial contacts cannot.

COAXTAC contacts are currently available in Hypertronics D, L and N Series connectors. Cabling is also available with COAXTAC contacts in the form of RG316 single braided cables.

Technical Information

General Specifications for 3.15mm, 5.5mm, 8.6mm Contacts

- Nominal Impedance: 50 ohms
- Frequency Range: DC to 18 GHz
- Temperature Rating: -55°C to 125°C
- Materials: Brass, copper, beryllium copper, phosphor bronze, PTFE
- Finishes: Gold over nickel over copper

Electrical Parameters (Cable Dependent)

- Voltage Standing Wave Ratio (VSWR): DC to 3 GHz 1.20:1
: 3 GHz to 18 GHz 1.50:1
- RF Transmission Loss: 0.50 dB maximum at 3 GHz
- Insulation Resistance: 5,000 megohms minimum
- Dielectric Withstanding Voltage: 500V RMS

Contact Resistance for 3.15mm, 5.5mm, 8.6mm Contacts

- Inner Contact: 8 milliohms, 4 milliohms, 2 milliohms maximum
- Outer Contact: 2 milliohms, 1 milliohm, 0.5 milliohms maximum

Mechanical Parameters

- Extraction Force: 3 ounces, 10 ounces, 112 ounces average
- Connector Durability: More than 25,000 cycles

Features and Benefits

- 1.20:1 VSWR maximum to 3 GHz
- 1.50:1 VSWR maximum to 18 GHz
- More than 25,000 mating cycles
- 50 Ohm impedance
- 3.15mm version mounts in DIN 41612 insulator cavities
- Available in Hypertronics D, L and N Series connectors
- Hypertac inner and outer contacts
- Non-magnetic versions available (consult factory)

