SubConn® HF Coax 50 ohm Coax and Coax/Electric

Connector specifications

Voltage rating on electric contacts 300 V DC/AC rms

Current rating on electric contacts 5 A per contact (max 20 A per connector)
Voltage rating on coax insert only 800 V, max nominal voltage acc. to MIL

Frequency* 0.3 GHz 0.6 GHz 0.9 GHz 1.2 GHz 1.5 GHz 1.8 GHz 2.1 GHz 2.4 GHz 2.7 GHz 3.0 GHz Attenuation* 5.0 dB 7.7 dB 9.9 dB 11.6 dB 13.4 dB 15.3 dB 17.3 dB 19.3 dB 21 dB 22.5 dB

Recommended max frequency

3.0 GHz
Insulation resistance

> 200 Mohm

Contact resistance

Contact resistance < 0.01 ohm
Wet matings N/A (dry ma

Wet matings

N/A (dry mating only)

Temperature rating (water)

- 4 to 60°C, 25 to 140°F

Temperature rating (air)

- 40 to 60°C, - 40 to 140°F

Storage temperature rating

- 40 to 60°C, - 40 to 140°F

Qualified pressure tested

600 bar, 8,700 psi

Material specifications

Connector body Chloroprene rubber

Bulkhead body

Power contacts

Brass, stainless steel, titanium or anodised aluminium

Female sockets in gold plated brass UNS - C36000

Male pins in gold plated beryllium copper

RG316 coax and 6 x 20 AWG, 0.52 mm² coloured PTFE

Coax contacts Gold plated contacts

O-rings Nitrile

Locking sleeves POM or stainless steel Snap rings Stainless steel AISI 302

Inline cable (2 ft, 60 cm)

PUR jacket cable with RG58 coax or

RG58 coax and 6 x 20 AWG, 0.52 mm² conductors

Coax bulkhead leads (3.3 ft, 100 cm) RG316 coax

Face view (male)





Coax and 6-contact bulkhead leads (3.3 ft, 100 cm)

Inline cable colour code

1 Black 3 Red 5 Orange 2 White 4 Green 6 Blue

Nominal cable outside diameter (OD)

RG58 PUR cable 0.220", 5.59 mm

RG58 and 6-conductor PUR cable 0.382", 9.70 mm

Additional information

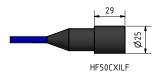
*All frequency and attenuation values are based on a 10 meter cable assembly test including 2 bulkhead connectors (50 ohm). BNC connector for RG316 coax leads use Amphenol 031-315-RFX or equivalent. BNC connector for RG58 coax cable use Amphenol 112116 or equivalent.

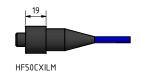
SubConn® Coax connectors are dry mate only, and cannot take open face pressure. Locking sleeves are required. No greasing in the actual coax part. Minimum bending radius on inline cable is 100 mm.

Recommended SMB termination for Coax, see pages 120-121

90 4th edition - 4.2 www.macartney.com





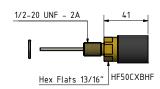


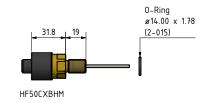






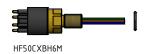


































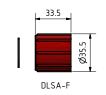


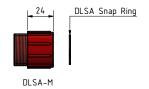














Drawing information

Subject to change without notice. Visit MacArtney.com for latest revision

Dimensions in mm (1 mm = 0.03937 inch) Threads in inches (1 inch = 25.4 mm)