SubConn® HF Coax 50 ohm Coax

Connector specifications

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

Insulation resistance Contact resistance Wet matings

Temperature rating (water)
Temperature rating (air)
Storage temperature rating
Qualified pressure tested

Material specifications

Connector body Bulkhead body Coax contacts O-rings

Locking sleeves Snap rings

Inline cable (2 ft, 60 cm)

Coax bulkhead leads (3.3 ft, 100 cm)

3.0 GHz > 200 Mohm < 0.01 ohm

N/A (dry mating only)
- 4 to 60°C, 25 to 140°F
- 40 to 60°C, - 40 to 140°F
- 40 to 60°C, - 40 to 140°F
600 bar, 8,700 psi

Chloroprene rubber

Brass, stainless steel, titanium or anodised aluminium

Gold plated contacts

Nitrile

POM or stainless steel Stainless steel AISI 302

PUR jacket cable with RG58 coax

RG316 coax

Face view (male)



Nominal cable outside diameter (OD)

RG58 PUR cable 0.220", 5.59 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.

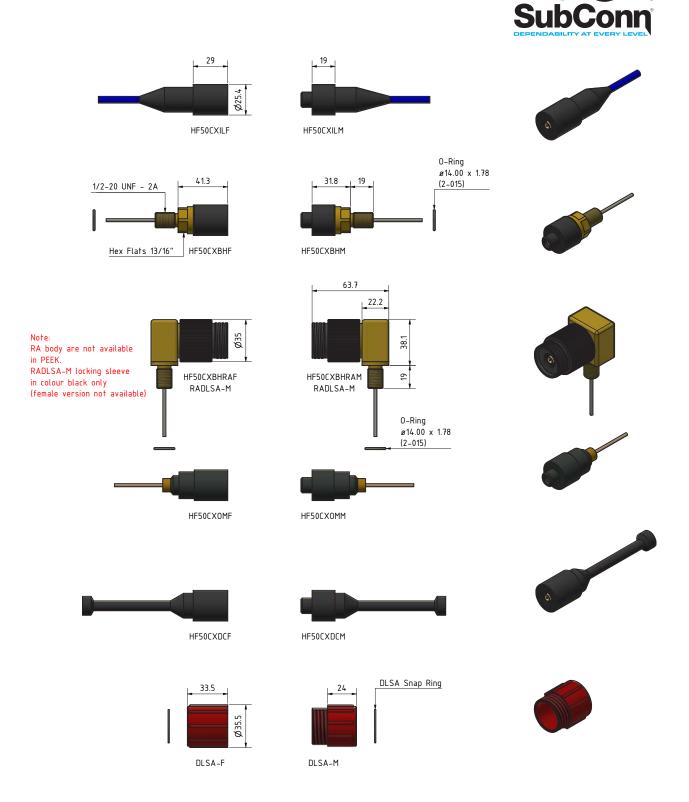
Recommended SMB termination for Coax, see pages 128-129

SubConn® Coax connectors are designed for dry mating only. The Coax series is not suitable for open-face pressure or waterblock applications. Locking sleeves are required. Avoid greasing the actual coax part. The minimum bending radius for inline cables is 100 mm.

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Coax





Drawing information

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SubConn® HF Coax 50 ohm 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 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 < 0.01 ohm

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

Brass, stainless steel, titanium or anodised aluminium

Power contacts

Female sockets in gold plated brass UNS - C36000

Male pins in gold plated beryllium copper

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)

RG58 coax and 6 x 20 AWG, 0.52 mm² conductors

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

RG58 coax and 6 x 20 AWG, 0.52 mm² coloured PTFE

Face view (male)



Inline cable colour code

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

Nominal cable outside diameter (OD)

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

Additional information

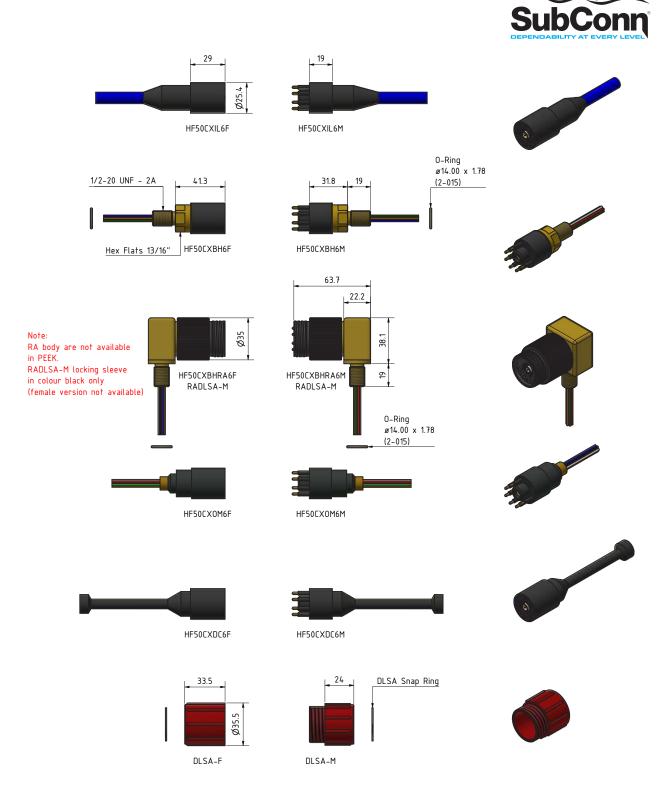
*All frequency and attenuation values are based on a 10 meter cable assembly test including 2 bulkhead connectors (50 ohm). BNC connector for RG316 coax leads use Amphenol 031-315-RFX or equivalent. BNC connector for RG58 coax cable use Amphenol 112116 or equivalent.

Recommended SMB termination for Coax, see pages 128-129

SubConn® Coax connectors are designed for dry mating only. The Coax series is not suitable for open-face pressure or waterblock applications. Locking sleeves are required. Avoid greasing the actual coax part. The minimum bending radius for inline cables is 100 mm.

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SubConn® HF Coax 75 ohm Coax

Connector specifications

Voltage rating on coax insert only 930 V, max nominal voltage acc. to MIL

Frequency* Attenuation* 6.3 dB 7.4 dB 8.6 dB 9.9 dB 11.3 dB 12.8 dB 14.5 dB 15.7 dB

Recommended max frequency 3.0 GHz > 200 Mohm Insulation resistance Contact resistance < 0.01 ohm

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 Brass, stainless steel, titanium or anodised aluminium 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 Mini-RG59 coax Coax bulkhead leads (3.3 ft, 100 cm)

RG179 coax

Face view (male)



Nominal cable outside diameter (OD)

Mini-RG59 PUR cable 0.220", 5.59 mm

Additional information

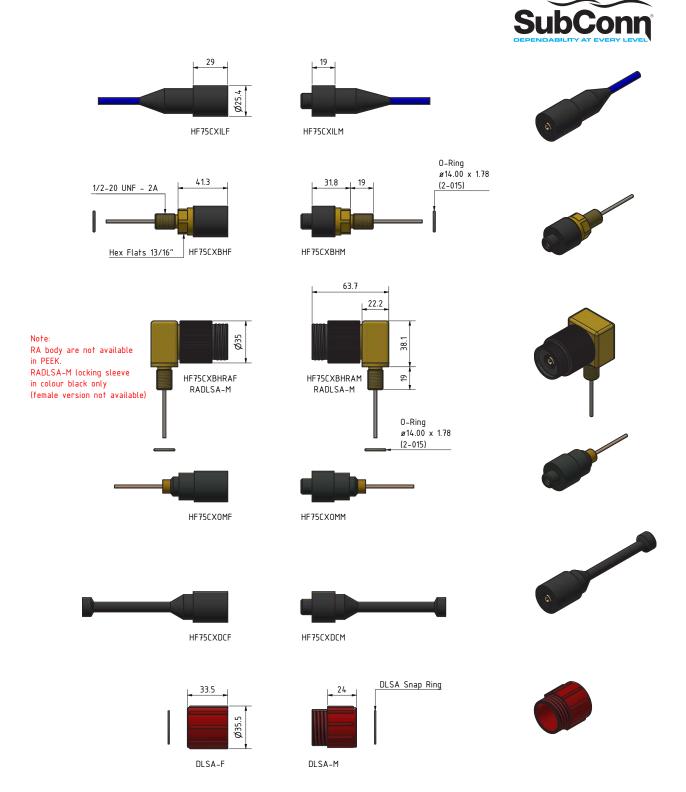
*All frequency and attenuation values are based on a 10 meter cable assembly test including 2 bulkhead connectors (75 ohm). BNC connector for RG179 coax leads use Amphenol 112133 or equivalent. BNC connector for Mini-RG59 coax cable use Belden 1855ABHD3 or equivalent.

Recommended SMB termination for Coax, see pages 128-129

SubConn® Coax connectors are designed for dry mating only. The Coax series is not suitable for open-face pressure or waterblock applications. Locking sleeves are required. Avoid greasing the actual coax part. The minimum bending radius for inline cables is 100 mm.

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Drawing information

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SubConn® HF Coax 75 ohm 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 930 V, max nominal voltage acc. to MIL

Frequency* 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* 6.3 dB 7.4 dB 8.6 dB 9.9 dB 11.3 dB 12.8 dB 14.5 dB 15.7 dB

Recommended max frequency 3.0 GHz
Insulation resistance > 200 Mohm
Contact resistance < 0.01 ohm

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

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)

Mini-RG59 coax and 6 x 20 AWG, 0.52 mm² conductors

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

RG179 coax and 6 x 20 AWG, 0.52 mm² coloured PTFE

Face view (male)



Inline cable colour code

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

Nominal cable outside diameter (OD)

Mini-RG59 and 6-conductor PUR cable 0.382", 9.70 mm

Additional information

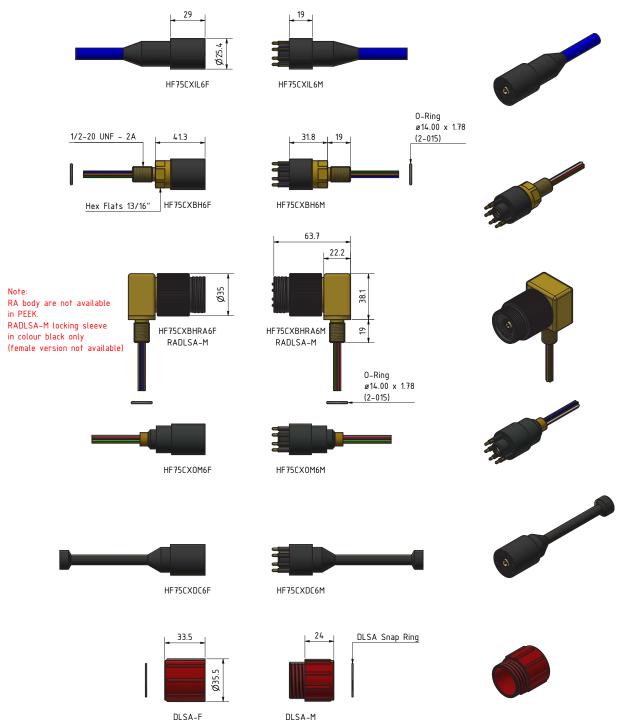
*All frequency and attenuation values are based on a 10 meter cable assembly test including 2 bulkhead connectors (75 ohm). BNC connector for RG179 coax leads use Amphenol 112133 or equivalent. BNC connector for Mini-RG59 coax cable use Belden 1855ABHD3 or equivalent.

Recommended SMB termination for Coax, see pages 128-129

SubConn® Coax connectors are designed for dry mating only. The Coax series is not suitable for open-face pressure or waterblock applications. Locking sleeves are required. Avoid greasing the actual coax part. The minimum bending radius for inline cables is 100 mm.

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