

# SubConn® HF Coax

## 50 ohm Coax and Coax/Electric

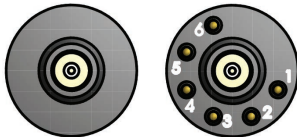
### Connector specifications

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	< 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)	PUR jacket cable with RG58 coax or RG58 coax and 6 x 20 AWG, 0.52 mm <sup>2</sup> conductors
Coax bulkhead leads (3.3 ft, 100 cm)	RG316 coax
Coax and 6-contact bulkhead leads (3.3 ft, 100 cm)	RG316 coax and 6 x 20 AWG, 0.52 mm <sup>2</sup> coloured PTFE

### Face view (male)



### Inline cable colour code

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

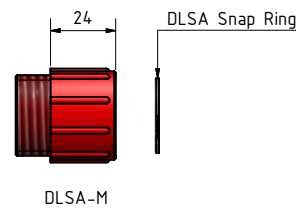
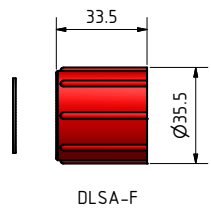
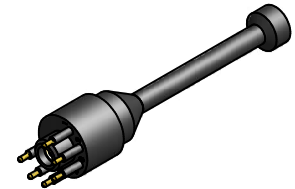
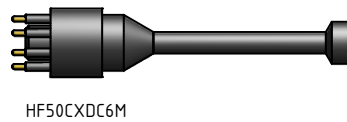
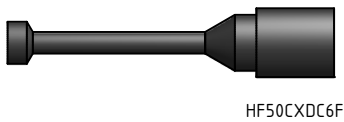
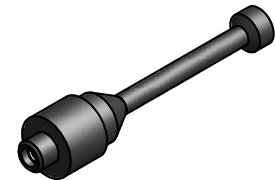
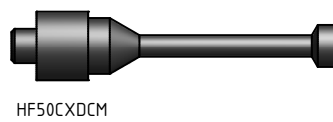
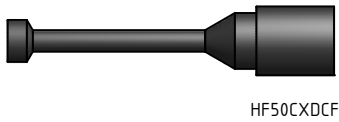
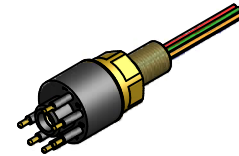
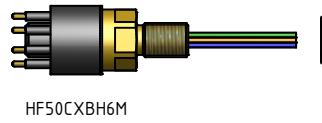
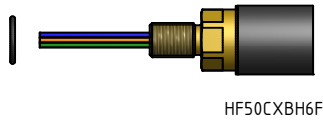
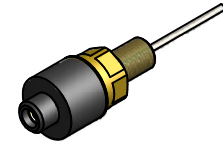
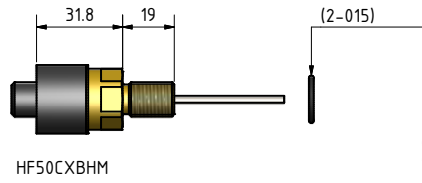
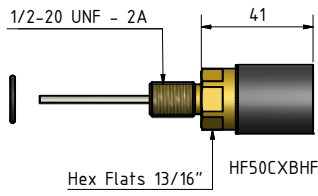
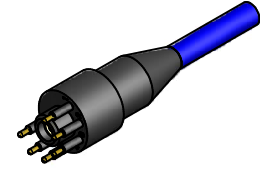
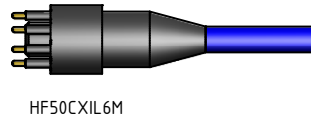
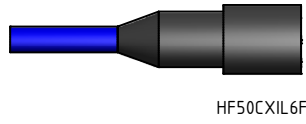
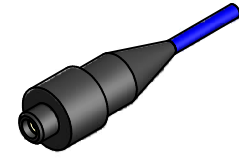
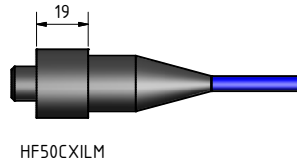
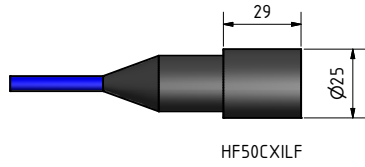
### Nominal cable outside diameter (OD)

RG58 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.



**Drawing information**

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

