

# 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 mm <sup>2</sup> conductors
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)

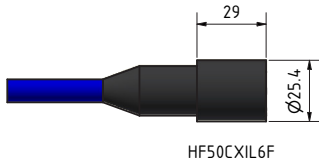
RG58 and 6-conductor PUR cable 0.382", 9.70 mm

### Additional information

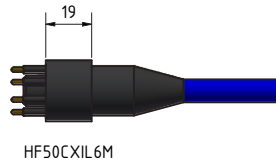
\*All frequency and attenuation values are based on a 10 meter cable assembly test including 2 bulkhead connectors (50 ohm).  
BNC connector for RG316 coax leads use Amphenol 031-315-RFX or equivalent.  
BNC connector for RG58 coax cable use Amphenol 112116 or equivalent.

Recommended SMB termination for Coax, see pages 128-129

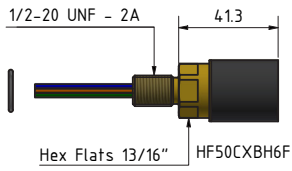
SubConn® Coax connectors are designed for dry mating only. The Coax series is not suitable for open-face pressure or waterblock applications. Locking sleeves are required. Avoid greasing the actual coax part. The minimum bending radius for inline cables is 100 mm.



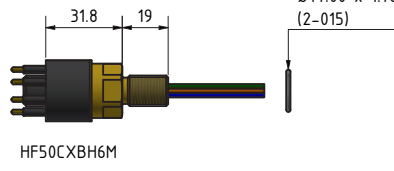
HF50CXIL6F



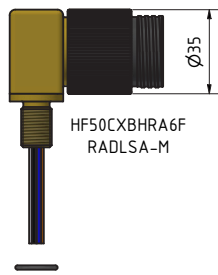
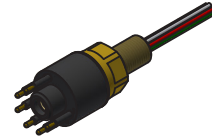
HF50CXIL6M



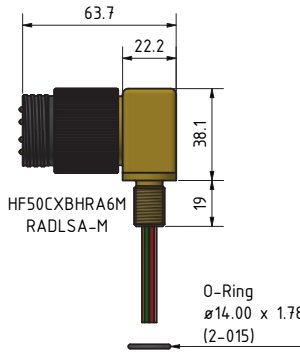
HF50CXBH6F



HF50CXBH6M

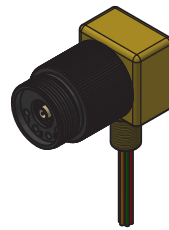


HF50CXBHRA6F  
RADLSA-M

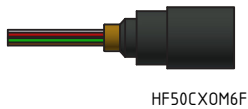


HF50CXBHRA6M  
RADLSA-M

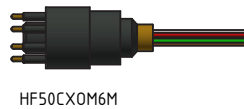
O-Ring  
Ø14.00 x 1.78  
(2-015)



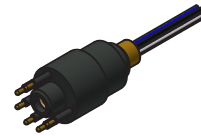
Note:  
RA body are not available  
in PEEK.  
RADLSA-M locking sleeve  
in colour black only  
(female version not available)



HF50CXOM6F



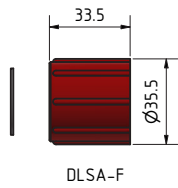
HF50CXOM6M



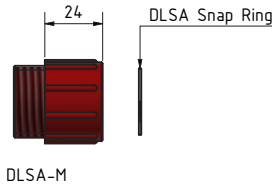
HF50CXDC6F



HF50CXDC6M



DLSA-F



DLSA-M

DLSA Snap Ring



### Drawing information

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