# SubConn® HF Coax

## 75 Ω Coax/Electric (dry-mate)

### 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 | 600 V, max nominal voltage |

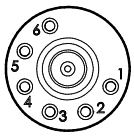
| Frequency* | 0.9 GHz | 1.2 GHz | 1.5 GHz | 1.8 GHz | 2.1 GHz | 2.4 GHz | 2.7 GHz | 3.0 GHz |
|---|---|---|---|---|---|---|---|---|
| Attenuation* | 6.3 dB | 7.4 dB | 8.6 dB | 9.9 dB | 11.3 dB | 12.8 dB | 14.5 dB | 15.7 dB |

| | |
|---|---|
| Recommended max frequency | 3.0 GHz |
| Insulation resistance | > 200 MΩ |
| Contact resistance | < 0.01 Ω |
| 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 (mated) |

### Material specifications

| | |
|---|---|
| Connector body | Chloroprene rubber |
| Bulkhead body | Brass, stainless steel, titanium or anodised aluminium |
| Bulkhead body (RA) | Brass, stainless steel, titanium or anodised aluminium |
| Power contacts | Female sockets in gold plated brass UNS - C36000<br>Male contacts in gold plated beryllium copper |
| Coax contacts | Gold plated contacts |
| O-rings | Nitrile |
| Locking sleeves | POM or stainless steel |
| Locking sleeves (RA) | RADLSA-M (black POM) |
| Snap rings | Stainless steel AISI 302 |
| Inline cable (2 ft, 60 cm) | Mini-RG59 coax and 6 x 20 AWG, 0.52 $mm^2$ conductors |
| Coax and 6-contact bulkhead leads (3.3 ft, 100 cm) | RG179 coax and 6 x 20 AWG, 0.52 $mm^2$ coloured PTFE |

### Face view (male)




### Inline cable colour code

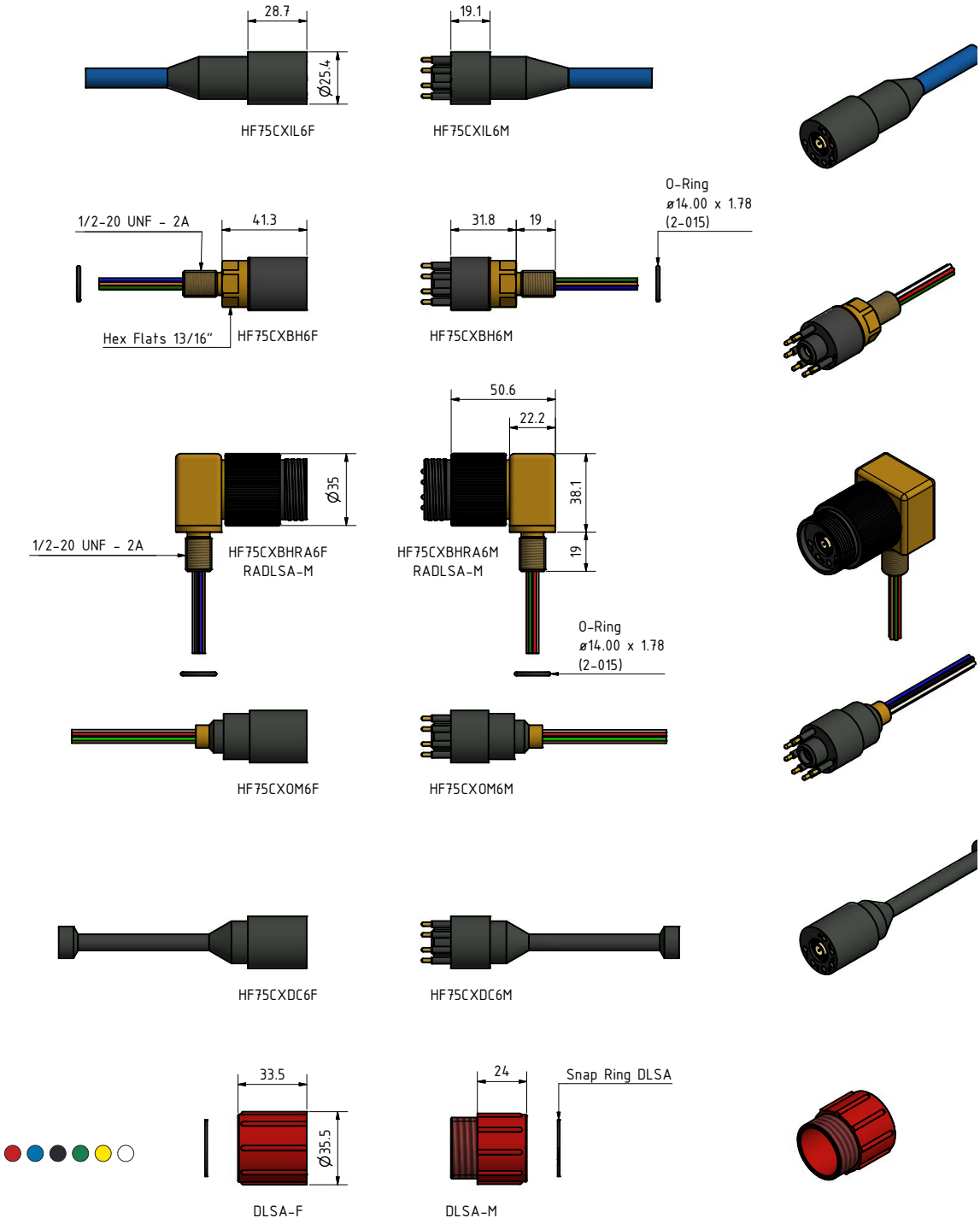
| | | |
|---|---|---|
| 1 Black | 3 Red | 5 Orange |
| 2 White | 4 Green | 6 Blue |

### Additional information

* All frequency and attenuation values are based on a 10 meter cable assembly test including 2 bulkhead connectors (75 Ω).
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, check in Technical Information chapter.

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.




## Drawing information

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

## Cable and wire lead information

Synthetic rubber cables – see page 145. Wire leads – see page 146.
For recommended PUR cables, please refer to the Polyurethane cables section.

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