

# Sub-Sea Coaxial Connectors

The Sub-Sea Coaxial cable connectors have been specifically designed to meet the harsh requirements of underwater communications and control while providing high quality electrical interconnections and substantial seals to prevent water ingress to a depth of 3600 meters\*.



## Specification

Body 316 S11 (EN1.4541) Stainless Steel  
 Locking Collar 2870-CZ106 Brass  
 2874-CZ112 Naval Brass (Option).

“O” Ring Nitrile. (Other materials can be used as an option)

Pressure Rating 6000 PSI. (Tested to 10000 PSI).

|                                  | <u>50Ω</u>                       | <u>75Ω</u>                       |
|----------------------------------|----------------------------------|----------------------------------|
| Contact Ø                        | 2mm                              | 0.9mm                            |
| VSWR(f = G Hz)                   | 1.01 +0.27f                      | 1.02 +0.27f                      |
| Test Voltage (KV RMS)            | 2 KV                             | 1.5 KV                           |
| Operating Voltage (KV RMS)       | 0.6 KV                           | 0.5 KV                           |
| Insulation Material              | PTFE                             | PTFE                             |
| Male Contact Material            | Brass (UNS 38500)                | Brass (UNS 38500)                |
| Male Contact Surface Treatment   | CU 0.5µm<br>NI 3.0µm<br>AU 1.5µm | CU 0.5µm<br>NI 3.0µm<br>AU 1.5µm |
| Female Contact Material          | Bronze (UNS C 54400)             | Bronze (UNS C 54400)             |
| Female Contact Surface Treatment | CU 0.5µm<br>NI 3.0µm<br>AU 2.0µm | CU 0.5µm<br>NI 3.0µm<br>AU 2.0µm |
| Male Screen Material             | Brass (UNS 38500)                | Brass (UNS 38500)                |
| Male Screen Surface Treatment    | CU 0.5µm<br>NI 3.0µm<br>AU 2.0µm | CU 0.5µm<br>NI 3.0µm<br>AU 2.0µm |
| Female Screen Material           | Bronze (UNS C 54400)             | Bronze (UNS C 54400)             |
| Female screen Surface Treatment  | CU 0.5µm<br>NI 3.0µm<br>AU 2.0µm | CU 0.5µm<br>NI 3.0µm<br>AU 2.0µm |



**Special Assemblies**, STS Defence ensures that it is able to meet the individual needs of its customers and as such maintains all necessary facilities and trained staff to undertake complete design and manufacture of sub-sea cables and connectors, including research, development, manufacture, back filling, metal to glass seals, pressure and electrical testing

\* Based up 1.61PSi per meter