

Subsea Coaxial Connectors

The Subsea Coaxial cable connectors have been specifically designed to meet the harsh requirements of underwater communications and control while providing high quality electrical interconnections.

The connectors comprise commercially available 50Ω and 75Ω triaxial inserts within in-house designed and manufactured housings.

These products have been used for many years in a variety of high reliability applications including the deep water ODAS Buoys for the Met Office.



Standard Specification

Electrical	50Ω	75Ω
Contact diameter	2.0mm	0.9mm
VSWR (f=GHz)	1.01 (+0.27f)	1.02 (+0.27f)
Operating Voltage (KVrms)	0.6	0.5
Test Voltage (KVrms)	2.0	1.5
Rated current (A)	16	6
Body	316 S11 (EN.4541) Stainless Steel	
Locking Collar	2870-CZ106 Brass, (2874-CZ112 Naval Brass Option)	
O Rings	Nitrile, alternatives i.e. Viton, available on request	
Pressure Rating	6,000p.s.i.(tested to 10,000p.s.i.)	



Available as flange or through hole mounted bulkheads, the inline connectors can be supplied terminated to a variety of cables with straight or right angled mouldings

Various other coaxial connector specifications can be provided upon request. Please contact STS Subsea to discuss how this product can be tailored to meet your specific requirements.

STSubsea products are being used in a wide variety of marine and harsh environments, including:-

- Subsea instrumentation, sensors, and control systems
- Autonomous and remotely operated surface and underwater vehicles
- Downhole instrumentation and logging systems
- Military Communication and Control systems
- Meteorological Buoy systems
- Military Sonar systems
- Land and Marine Seismic equipment
- Offshore renewable energy projects

These products are derived from a range of key strengths, capabilities and industry experience:-

- Specialised, bespoke connectors and cables for underwater or harsh environments
- Complete prototyping service, from design to manufacture to electrical and pressure testing.
- Design of electrical, optical, coax /RF, Ethernet or hybrid connectors from unique one-offs to volume applications
- Cost effective, shallow water products
- Incorporating proven, commercially available interconnects into subsea capable solutions
- On-site moulding service and an over-moulding material capability for Polyurethane, Neoprene and Polyethylene components
- Through-hull penetrators, glass-to-metal seals and epoxy waterblocks
- Ceramic transducers and hydrophones
- Potting and encapsulation of switches, sensors, strain gauges and PCBs
- Long established, MetOcean range of metal shell, drymate connectors

STSubsea is a Division of STS Defence, providers of electronic manufacturing and through-life system engineering services; engaging with our customers through experience, expertise and a commitment to quality.

An SME based in Gosport, Hampshire, STS Defence focuses on customer value and satisfaction, working in partnership with customers to develop initial concepts into reality with divisions to match the needs of our customers:

Engineering Services delivers innovative solutions in the integration and support of maritime communication, multimedia and sensors for the UK defence market.

Manufacturing Services has an extensive aerospace, maritime, defence and commercial portfolio of capabilities in box build, PCB assembly, cable and harness manufacture and fabrication.

STSubsea Nuclear provides specialist support and training to civil and defence nuclear sectors.

Recently launched, IntelliMon focuses on intelligent monitoring systems for industrial, maritime and public safety applications.

Along with Primetake, producers of specialist ammunition, STS Defence is part of the Key Technologies group.