

TrustLink API Connectors

Subsea connectivity for critical environments



Based on advanced technology, rugged materials and MacArtney connectivity knowhow, all TrustLink connectors are designed and tested for prolonged deployment under harsh marine conditions at depths of up to 4,000 metres.

In addition to this, all connector solutions within the TrustLink API series are fully compliant with relevant American Petroleum Institute (API) standards for use in critical and strictly regulated subsea environments.

With pin counts spanning from 4 to 24 electrical contacts, TrustLink API connectors offer excellent flexibility to operators of subsea systems and equipment.

Trustworthy testing

Connectors are thoroughly tested at every stage of production to ensure integrity and functionality underwater.

During production, both the cable and connectors are pressure tested before completion, and the complete harness cable is pressure tested prior to delivery.

For the API 17E standard, the PBOF cable is as important as the connector. Every element in the assembly is tested individually before construction to ensure that it is entirely intact and can function, even if water ingresses the cable. A special boot fitted behind the connector ensures that any water entering the PBOF cable cannot penetrate it and the connector will continue to work for its intended lifespan even when fully flooded.

Double test ports on the TrustLink API connector itself permit pressure testing of both sections after mating and before the connection is lowered into the water.

Both the CCP and FCR connectors comply with API standard 16D. Together the PBOF cable and connector assembly comply with the requirements of standard 16D and 17E.

Certified API compliance

As an industry unique feature, full API standard compliance is third party certified by DNV.

Highlighted specifications

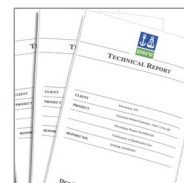
- Voltage rating: 600 V
- Current rating: 10 A per contact (4 pin connector)
- Current rating: 6 A per contact (12 pin connector)
- Current rating: 3 A per contact (24 pin connector)
- Depth rating: 4,000 metres

Features and benefits

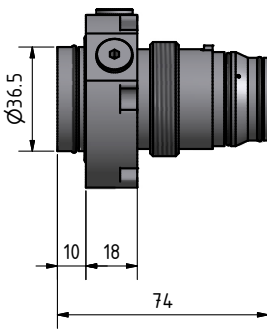
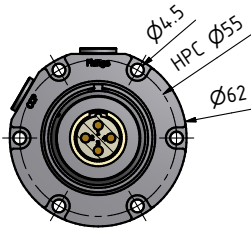
- Designed, tested and approved to the API 17E standard
- Approved to the API 16D standard
- Certified to DNV-OSS-306
- All external parts of the connector assembly are made from stainless steel AISI 316 (other materials available upon request)
- Up to 24 conductor passes
- Full performance even with a flooded cable
- Withstands full back pressure
- FCR is able to withstand full open face pressure
- Excellent performance when deployed in harsh and strictly regulated marine environments

Applications

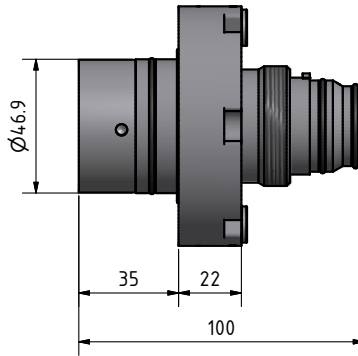
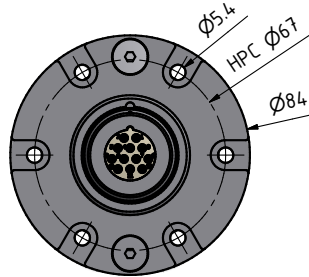
- Riser monitoring systems
- Flexible riser umbilical systems
- Subsea and drilling control systems
- Blow out preventor (BOP) systems
- Intervention and workover systems
- Subsea completion systems
- Connectivity, signal and power supply for subsea installations, systems and equipment



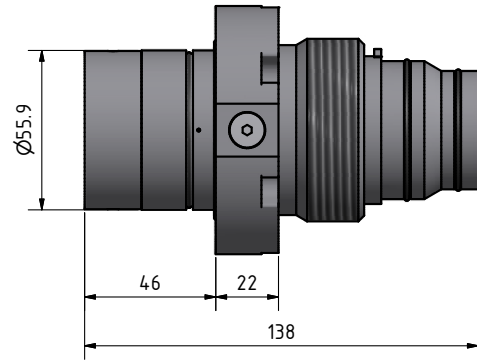
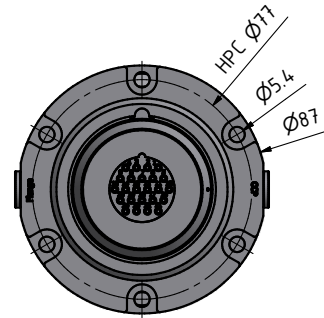
TrustLink API 4 pin connector



TrustLink API 12 pin connector



TrustLink API 24 pin connector



All measurements in millimetres (mm)

Specifications

Material

Metal shell housing:	AISI 316
Dummy pressure cap:	AISI 316
Dummy connector:	POM
Electrical insert:	PEEK
O-ring materials:	FPM-75

Connector (4 pin)

Current rating:	10 A per contact (1-4 passes)
-----------------	----------------------------------

Connector (12 pin)

Current rating:	6 A per contact (1-12 passes)
-----------------	----------------------------------

Connector (24 pin)

Current rating:	3 A per contact (1-24 passes)
-----------------	----------------------------------

Connector (4, 12 and 24 pin)

Voltage rating:	600 V
Depth rating:	4,000 m
Test port interface:	SAE 3/16"

Certifications

Connector:	Certified according to API 16D, API 17E
Documentation:	In accordance with DNV ISO 9001