

TrustLink API Fibre Optic Connector

Subsea fibre optics for critical environments



Highlighted specifications

- Optical passes: One to four fibres 9/125 μm , 50/125 μm or 62,5/125 μm
- Attenuation: 1.0-1.5 (typical) - 2.5 dB (max)
- Back reflection: 30 dB (typical) - 28 dB (max)
- Operation depth: 6,000 metres

Features and benefits

- Designed and tested to the API 16D standard
- Double test ports
- Standard depth rating 6,000 metres
- One to four fibre passes
- Low attenuation
- Low back reflection
- Unlimited number of matings
- Excellent performance when deployed in harsh and strictly regulated marine environments

Applications

- Fibre optic video and data multiplexers
- Fibre optic riser monitoring systems
- Subsea control systems
- Drilling control systems
- Connectivity, data and signal transfer for subsea installations, systems and equipment

Based on advanced technology, rugged materials and MacArtney connectivity knowhow, all TrustLink connectors are designed and tested for prolonged deployment under harsh marine conditions. In addition to this, all connector solutions within the TrustLink API series are fully compliant with relevant API standards for use in critical and strictly regulated subsea environments.

The TrustLink API fibre optic connector is specifically designed with API required test ports on the FCR connector for performing integrity checks on the dual O-ring between the FCR and the installation flange. They are also used to check the dual O-ring sealing on the connector pair when mated.

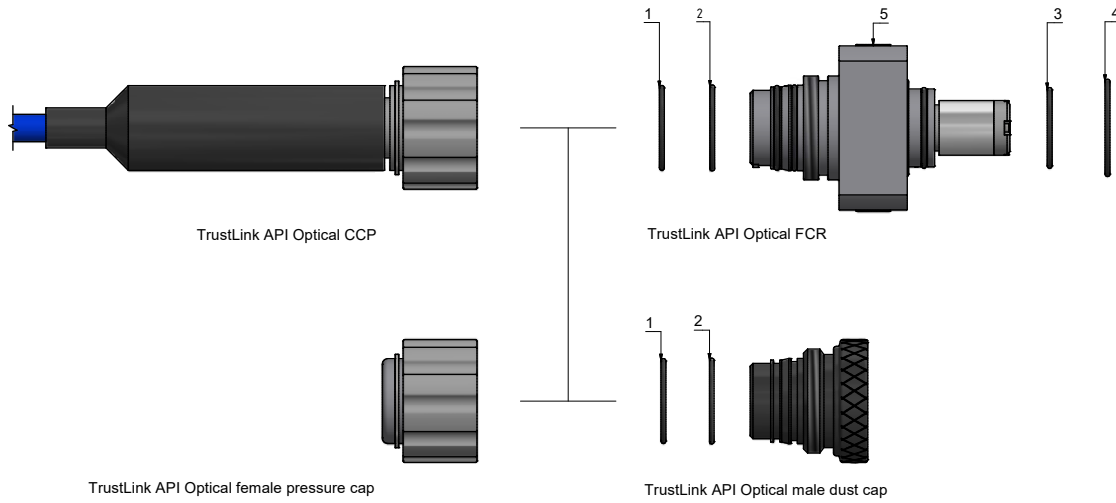
Fibre optic performance

The TrustLink API fibre optic connectors are designed to work with single and multi mode optical fibres offering swift and efficient signal and data transfer for subsea installations, systems and equipment. The connectors are rated to 6,000 metres with shells manufactured from stainless steel AISI 316 with an electro polished surface.

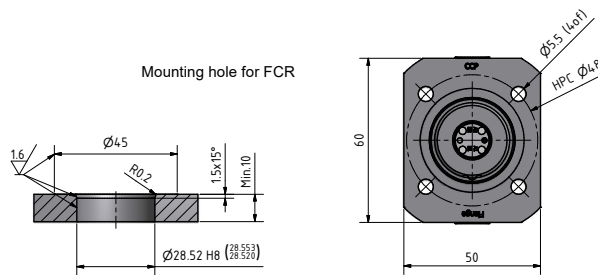
Trustworthy testing

Connectors are thoroughly tested at every stage of production to ensure integrity and functionality under water. During production, both the cable and connector are pressure tested before completion.





- O-rings:
 1. $\varnothing 26.7 \times 1.78$ FPM75 (2-023)
 2. $\varnothing 28.0 \times 1.7$ FPM75
 3. $\varnothing 31.47 \times 1.78$ FPM75 (2-026)
 4. $\varnothing 25.12 \times 1.78$ FPM75 (2-022)
- Blind plug:
 5. 3/16" SAE port (Thread 3/8"-24UNF)



All measurements in millimetres (mm)

Specifications

Material specifications

Metal shell housing:	Stainless steel SS 316
Fibre optic insert:	Arcap
Dummy connector:	Black POM
O-ring materials:	FPM 75
Full pressure dummy:	Stainless steel SS 316

Optical specifications (single mode)

Wavelength:	1,310 and 1,550 nm
Attenuation:	Max 2.5 dB Typical 1.0-1.5 dB (mated pair)
Fibre types:	9/125 μm
Back reflection:	30 dB (typical) -28 dB (max)
Optical passes:	1 to 4 passes

Optical specifications (multi mode)

Wavelength:	850 and 1,300 nm
Attenuation:	Max 2.5 dB Typical 1.5-2.0 dB (mated pair)
Fibre types:	50/125 or 62.5/125 μm
Optical passes:	1 to 4 passes

Connector specifications

Depth rating:	Mated: 6,000 m
Temperature rating:	Storage: -50° C/+85° C Operational: -20° C/+50° C
Mating cycles:	Optical: >1,000
Optical passes:	Single, multi mode or combined