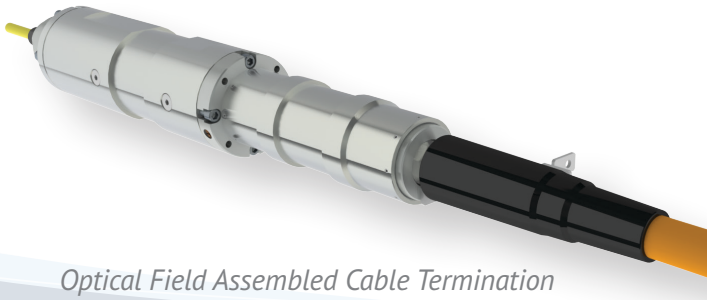
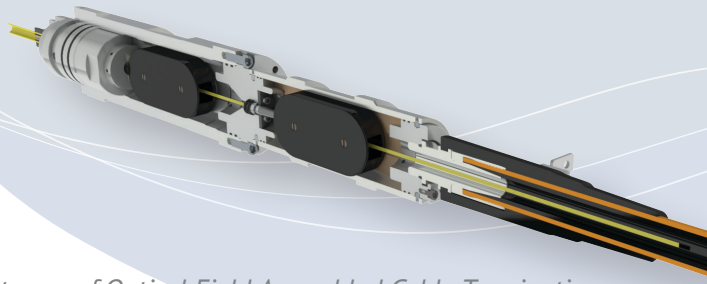
Optical FACT

Optical Field Assembled Cable Terminations for Subsea Applications – Maximum of 8 circuits

The Optical FACT is a key enabling cable termination technology developed to extend the operational depth, and significantly increase the reliability of cable terminations. The Optical FACT is qualified for use at ocean depths up to 14,800 ft(4,500m). The FACT modularized system completely isolates the cable elements from the pressure-balanced dielectric fluid-filled splice chamber and ambient subsea pressure using a high reliability optical penetrator assembly. The FACT approach to cable termination eliminates cable dependent design limitations and common mode/single point failures. The major design elements used are based on fully qualified and field-proven sealing technologies, and draws upon ODI's extensive experience in cable termination. The FACT system is compatible with most existing subsea cables.



Optical Field Assembled Cable Termination



Cutaway of Optical Field Assembled Cable Termination

The FACT penetrator assemblies may be terminated directly to atmospheric enclosures or pressure-balanced dielectric fluid-filled splice canisters. It is ideally suited for a multitude of umbilical termination applications. The FACT penetrator assemblies have been designed with modularity in mind and may be used with ancillary accessories to adapt to a wide array of interfaces. Additionally, the FACT penetrator assemblies can accommodate a wide range of armored and non-armored, optical cables, with or without gel fill, and with a range of fiber tube diameters. A combination of up to six FACT penetrators and/or jumper assemblies, optical connectors can be accommodated in the standard dielectric filled pressure-balanced splice canister. A single entry/exit dielectric fluid-filled pressure-balanced splice canister is also available; either a jumper assembly or connector may be fitted to the splice canister. Robust fiber management ensures the safety of the 250 or 900 micron fiber within the termination and splice canisters.

RELATED PRODUCTS

- **Rolling Seal Connector and APC Rolling Seal Connector**
- **Dry-Mate Optical Connector**
- **Modular Connectorized Distribution Unit (MCDU)**
- **High-Pressure Feed-Through Optical Penetrator**
- **Pressure Balanced Oil Filled (PBOF) Hose**

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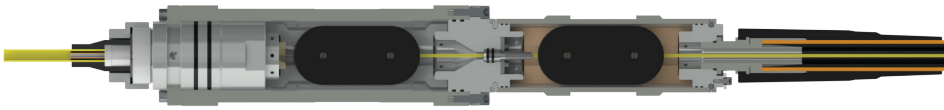

Optical FACT Cutaway

TECHNICAL SPECIFICATIONS

GENERAL SPECIFICATIONS	Operational Temperature	14˚F to 122˚F (-10˚C to +50˚C) *
	Storage Temperature	-40˚F to 140˚F (-40˚C to +60˚C) *
	Maximum Test Pressure	10,000 psi *
	Maximum Operational Pressure	6,600 psi *
	Minimum Cable Diameter	0.3 in (7.62 mm)
	Maximum Cable Diameter	0.7 in (17.78 mm)
	Number of Circuits	8 max
	Material	Titanium GR2 or 316L Stainless Steel
	Design Life	25 Years
ELECTRICAL SPECIFICATIONS	Insertion Loss	⩽ 0.25 dB per penetrator @ 1310/1550/1625 nm ⩽ 0.1 dB per splice @ 1310/1550/1625 nm
	Return Loss	⩾ 50 dB per channel @ 1310/1550/1625 nm (Excluding Connectors)
	Optical Fiber Type	Single Mode (SMF -28e) or Multimode (50 or 62.5 µm)

* Subject to cable performance
**For reference only, see FDS - D/N 336403 for Official Values

Standard optical FACT configuration.

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