Subsea PBOF optical jumper assembly

FA09650 PBOF

Subsea Optical Jumper Assembly

ISO 13628-5 / API Spec 17E · 4 × Single-Mode 9/125 µm · 6,000 m PBOF optical assembly



ISO 13628-5 | 4 × SM 9/125 µm | 6,000 m PBOF

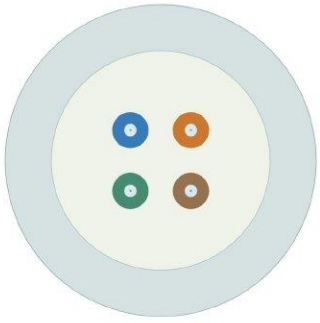
Application

FA09650 PBOF 4-channel single-mode (9/125 µm ITU-T G.652.D / G.657.A1) pressure-balanced oil-filled (PBOF) subsea optical jumper assembly engineered for deep-water ROV intervention, subsea trees and manifold interconnects to 6,000 m water depth.

Typical uses: Subsea ROV, AUV & Towed Array Systems, Offshore Oil, Gas & Subsea Production Umbilicals, Oceanographic Mooring & Deep-Water Telemetry, Naval Defence, Hydrographic & Sonar Arrays

Construction





Cross-section, not to scale

1	4-Channel Single-Mode Optical Fiber Core	ISO 13628-5 / API 17E / G.652.D
2	Color-Coded Polyurethane Optical Sub-Jackets	ISO 13628-5 / API 17E / G.652.D
3	Dielectric Pressure-Balancing Fluid Fill	ISO 13628-5 / API 17E / G.652.D
4	Transparent Polyurethane (PUR) PBOF Hose	ISO 13628-5 / API 17E / G.652.D
5	316L Stainless Steel & Marine Bronze Wet-Mate Terminations	ISO 13628-5 / API 17E / G.652.D

Technical data

Typical values

Rated voltage / transmission duty	Optical (0 V) (ISO 13628-5 / API 17E / G.652.D)	**Core / conductor construction**	4-Channel Single-Mode Optical Fiber Core — Four 9/125 µm ITU-T G.652.D / G.657.A1 single-mode optical fibers with color-coded primary buffers
Primary dielectric / buffering	Color-Coded Polyurethane Optical Sub-Jackets — Individual buffered optical channel sub-jackets (Blue, Orange, Green, Brown) for wet-mate bulkhead termination	**Continuous operating temperature**	−20…+70 °C (subsea immersion & marine deck service)
Storage & transport temperature	−40…+80 °C on marine export reel	**Outer protection / armouring**	316L Stainless Steel & Marine Bronze Wet-Mate Terminations — Straight back-to-back PBOF fittings with fill/vent ports, 316L stainless steel connector shells, and marine bronze coupling nuts
Minimum bending radius	10–15 × OD	**Hydrostatic depth rating**	Up to 6,000 m water depth (60 MPa hydrostatic pressure)
Seawater, hydrolysis & oil resistance	Continuous seawater immersion, hydraulic fluids and marine UV per ISO 13628-5 / API 17E / G.652.D	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	ISO 13628-5 / API 17E / G.652.D		

Sizes

3 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Configuration	Core / stranding	Outer Ø ≈ mm	Weight in air ≈ kg/km	Breaking load kN ≈	Min. bend R mm
FA09650 PBOF Subsea Construction Schedule (−20…+70 °C) 3 sizes						
☐ FA09650 PBOF 4 × SM	4 × SM 9/125 µm	0.9 mm buffered optical cores	9.5	115	6.5	95
☐ FA09650 PBOF 8 × SM	8 × SM 9/125 µm	0.9 mm buffered optical cores	11.2	148	8.0	115
☐ FA09650 PBOF 12 × SM	12 × SM 9/125 µm	0.9 mm buffered optical cores	12.7	185	9.5	130

– Custom core counts, optical fibre counts, armour wire grades and factory-moulded subsea terminations available per ISO 13628-5 / API 17E / G.652.D.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4 × SM 9/125 µm	0.35	≤ 0.22 dB/km @ 1550 nm	−20…+70 °C
8 × SM 9/125 µm	0.35	≤ 0.22 dB/km @ 1550 nm	−20…+70 °C
12 × SM 9/125 µm	0.35	≤ 0.22 dB/km @ 1550 nm	−20…+70 °C

– Every production length undergoes routine conductor DC resistance, high-voltage dielectric, OTDR optical continuity and dimensional verification.

Standards and approvals

- ISO 13628-5 Compliant
- EN 10204 3.1 Factory Test Certificate
- CE, RoHS 2 (2011/65/EU) & REACH

Certifications

Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone
+86 185 9591 3361

Email
info@tebaoflex.com

Web
tebaoflex.com/cables/fa09650-pbof-4-channel-pressure-balanced-oil-filled-optical-assembly

Typical values for this cable type, based on ISO 13628-5 / API 17E / G.652.D. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.