6,400 m PBOF subsea Ethernet & 1,000 V Spec 44 wet-mate EFL

DN 309076 EFL

DN 309076 6,400m PBOF Subsea Ethernet & 1,000 V Spec 44 Flying Lead

ISO/IEC 11801 / SPEC 44 · 0.6/1 kV · 6,400 m pbof subsea ethernet & 1,000 v spec 44



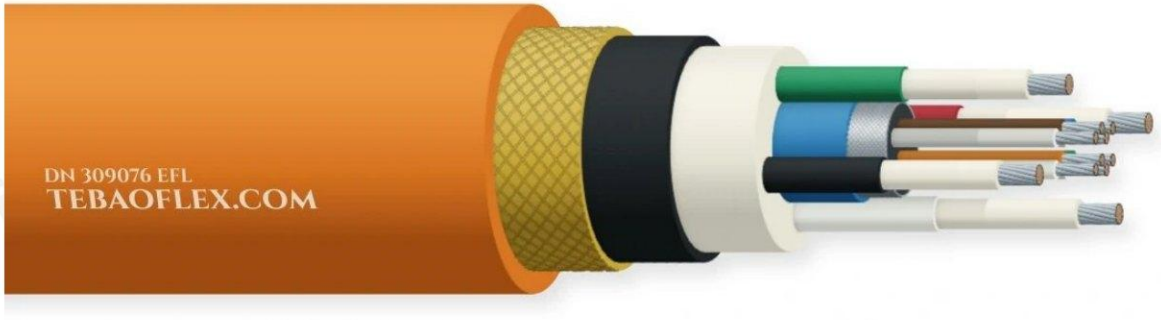
ISO/IEC 11801 + SPEC 44 | 6,400 m PBOF Hybrid EFL | Titanium Wet-Mate Plug

Application

Wet-Mate DN 309076 6,400m Ultra-Deepwater Pressure-Balanced Oil-Filled (PBOF) Wet-Mateable Subsea Ethernet & 1000V Spec 44 Power Hybrid Flying Lead (7-Way & 12-Way EFL) (ISO/IEC 11801 / SPEC 44, 0.6/1 kV, -20 to +70 °C).

Typical uses: Work-Class & Observation ROV Systems, Offshore Wind & Subsea Power Grids, Oceanographic, Sonar & Seismic Survey, Commercial Diving & Subsea Intervention

Construction





Cross-section, not to scale

1. Dual-Barrier Subsea Ethernet Core
2. 1,000 V Spec 44 Power Wires (4×16 AWG)
3. DC 200 Silicone Oil & PBOF Hose Conduit
4. Titanium Wet-Mate Connector

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (ISO/IEC 11801 Class D & SAE AS81044 6,400 m PBOF EFL)	**Core / conductor construction**	Dual-Barrier Subsea Ethernet Core — ISO/IEC 11801 Class D (100 m @ 100 MHz) shielded Ethernet with dual moisture barriers
Primary dielectric / buffering	1,000 V Spec 44 Power Wires (4×16 AWG) — Twisted 16 AWG dual-wall irradiated Spec 44 power wires (620 VAC P-G, 3 A, ≥10 GΩ)	**Continuous operating temperature**	−20…+70 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per ISO/IEC 11801 Class D & SAE AS81044 6,400 m PBOF EFL	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Titanium Wet-Mate Connector — 7-way or 12-way Titanium shell connector with oil-filled bladder & wiper boot (<500 N)	**Minimum bending radius**	10 × OD
Hydrostatic, tensile & crush duty	DC 200 Silicone Oil & PBOF Hose Conduit — High-purity DC 200 silicone fluid (6,400 m / 10,000 psi balanced) + MEG/acid-resistant PBOF hose	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per ISO/IEC 11801 Class D & SAE AS81044 6,400 m PBOF EFL
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per ISO/IEC 11801 Class D & SAE AS81044 6,400 m PBOF EFL	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	ISO/IEC 11801 Class D & SAE AS81044 6,400 m PBOF EFL		

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	Net weight ≈ kg/km	Tensile rating kN ≈	Min. bend R mm
DN 309076 EFL Construction Schedule (−20…+70 °C) 3 sizes						
☐ **DN 309076 EFL Config A (Compact)**	4×2×24 AWG + 2×18 AWG (or 4C)	Stranded tinned Cu (IEC 60228 / ASTM)	10.4	155	4.5	85
☐ **DN 309076 EFL Config B (Standard)**	4×2×20 AWG + 4×16 AWG (or 8C)	Stranded tinned Cu (IEC 60228 / ASTM)	13.3	265	9.6	110
☐ **DN 309076 EFL Config C (Heavy Hybrid)**	8×2×20 AWG + 4×12 AWG (or 12C)	Stranded tinned Cu (IEC 60228 / ASTM)	16.6	420	18.5	140

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per ISO/IEC 11801 Class D & SAE AS81044 6,400 m PBOF EFL.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4×2×24 AWG + 2×18 AWG (or 4C)	28.40	0.6/1 kV (45–100 Ω data)	−20…+70 °C
4×2×20 AWG + 4×16 AWG (or 8C)	10.70	0.6/1 kV (45–100 Ω data)	−20…+70 °C
8×2×20 AWG + 4×12 AWG (or 12C)	5.40	0.6/1 kV (High-Power Hybrid)	−20…+70 °C

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

Standards and approvals

- ISO/IEC 11801 / SPEC 44 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/dn-309076-efl

Typical values for this cable type, based on ISO/IEC 11801 Class D & SAE AS81044 6,400 m PBOF EFL. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.