7,000 m ultra-deepwater water-blocked twisted-pair PUR cable

P4TP20#OSWB / P3TP24#OSWB

7,000m Water-Blocked Wet-Mate PUR Cable

7,000m OSWB Penetrator · 600 V · 7,000 m ultra-deepwater water-blocked twisted-pair



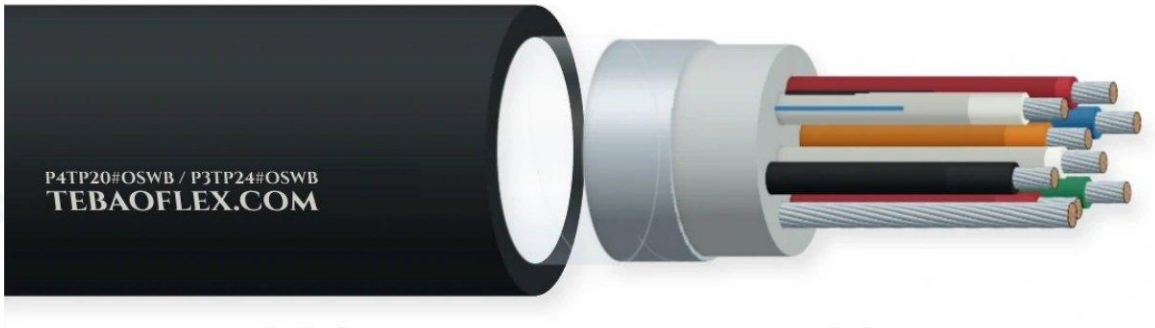
6,000–7,000 m OSWB | 300–600 V Twisted Pairs | Penetrator & Wet-Mate

Application

Wet-Mate 7,000m Ultra-Deepwater Water-Blocked Multi-Pair Twisted Underwater PUR Interconnect & Penetrator Cable (P4TP20#OSWB, P3TP24#OSWB, P7TP22/2C18#) (7,000m OSWB Penetrator, 600 V, -30 to +80 °C, min. bend radius 8 × OD).

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. Twisted Pairs (4×2×20 AWG / 3×2×24 AWG)
2. Longitudinal Water-Blocked Core (7,000 m)
3. Overall Aluminium/Polyester Shield & Drain
4. Polyester Binder & Subsea PUR Jacket

Technical data

Typical values

Rated voltage / transmission duty	600 V (Subsea 6,000–7,000 m Ultra-Deepwater OSWB Penetrator Standard)	**Core / conductor construction**	Twisted Pairs (4×2×20 AWG / 3×2×24 AWG) — Stranded tinned copper with PP (P4TP20#OSWB) or PTFE (P3TP24#OSWB) insulation
Primary dielectric / buffering	Longitudinal Water-Blocked Core (7,000 m) — All core interstices pressure-filled with subsea water-blocking compound	**Continuous operating temperature**	−30…+80 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per Subsea 6,000–7,000 m Ultra-Deepwater OSWB Penetrator Standard	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Polyester Binder & Subsea PUR Jacket — Polyester binder tape + 1.65 mm glossy Black (or 95A Blue) halogen-free PUR jacket	**Minimum bending radius**	8 × OD
Hydrostatic, tensile & crush duty	Overall Aluminium/Polyester Shield & Drain — 100% Aluminium/Polyester tape shield (foil in) + 20/24 AWG stranded tinned Cu drain	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per Subsea 6,000–7,000 m Ultra-Deepwater OSWB Penetrator Standard
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per Subsea 6,000–7,000 m Ultra-Deepwater OSWB Penetrator Standard	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	Subsea 6,000–7,000 m Ultra-Deepwater OSWB Penetrator Standard		

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
P4TP20#OSWB / P3TP24#OSWB Construction Schedule (−30…+80 °C) 3 sizes						
☐ **P4TP20#OSWB Config A (Compact)**	4×2×24 AWG + 2×18 AWG (or 4C)	Stranded tinned Cu (IEC 60228 / ASTM)	10.4	155	4.5	85
☐ **P4TP20#OSWB Config B (Standard)**	4×2×20 AWG + 4×16 AWG (or 8C)	Stranded tinned Cu (IEC 60228 / ASTM)	13.3	265	9.6	110
☐ **P4TP20#OSWB 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 Subsea 6,000–7,000 m Ultra-Deepwater OSWB Penetrator Standard.

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	600 V (45–100 Ω data)	−30…+80 °C
4×2×20 AWG + 4×16 AWG (or 8C)	10.70	600 V (45–100 Ω data)	−30…+80 °C
8×2×20 AWG + 4×12 AWG (or 12C)	5.40	600 V (High-Power Hybrid)	−30…+80 °C

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

Standards and approvals

- ✓ 7,000m OSWB Penetrator 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/p4tp20-oswb-p3tp24-oswb

Typical values for this cable type, based on Subsea 6,000–7,000 m Ultra-Deepwater OSWB Penetrator Standard. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.