PTSP series individually foil-screened wet-mate connector cable

P4TSP20# (PTSP SERIES)

P4TSP20# (PTSP Series) 600 V Foil-Screened Twisted-Pair Wet-Mate Cable



Doc. 2013015SC PTSP · 600 V · Ptsp series individually foil-screened wet-mate

600 V DC (Zo ≈ 35 Ω) | 100% Foil-Screened Pairs | PTSP Wet-Mate Series

Application

Wet-Mate Shielded Twisted Pair (PTSP Series: P2TSP20#, P3TSP20#, P4TSP20#, P4TSP18#, P8TSP20#, P3TSP22#/1TSP18#) Individually Foil-Screened PP-Insulated PUR Underwater Connector Cable (Doc. 2013015SC PTSP, 600 V, -30 to +80 °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. Stranded Tinned Copper Pairs (4×2×20 AWG)
2. Pair Color Code
3. Individual Alu/PET Foil & Drain Wire
4. Plastic Fillers & Clear Polyester Binder
5. Black Halogen-Free PUR Jacket (Ø10.4 mm)

Technical data

Typical values

Rated voltage / transmission duty	600 V (Subsea Doc. 2013015SC (PTSP Series) Shielded Pair Connector)	**Core / conductor construction**	Stranded Tinned Copper Pairs (4×2×20 AWG) — 19/32 AWG (0.50 mm²) tinned copper with 600 V DC polypropylene (PP) insulation
Primary dielectric / buffering	Pair Color Code — Pair 1: Black/White · Pair 2: Red/Green · Pair 3: Orange/Blue · Pair 4: Wh-Bk/Rd-Bk	**Continuous operating temperature**	−30…+80 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per Subsea Doc. 2013015SC (PTSP Series) Shielded Pair Connector	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Black Halogen-Free PUR Jacket (Ø10.4 mm) — 1.50 mm moldable polyurethane outer sheath for Wet-Mate connector overmolding	**Minimum bending radius**	8 × OD
Hydrostatic, tensile & crush duty	Plastic Fillers & Clear Polyester Binder — Plastic roundness fillers in center/interstices + overall clear Polyester binder tape	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per Subsea Doc. 2013015SC (PTSP Series) Shielded Pair Connector
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per Subsea Doc. 2013015SC (PTSP Series) Shielded Pair Connector	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	Subsea Doc. 2013015SC (PTSP Series) Shielded Pair Connector		

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
P4TSP20# (PTSP SERIES) Construction Schedule (−30…+80 °C) 3 sizes						
☐ **P4TSP20# Config A (Compact)**	4×2×24 AWG + 2×18 AWG (or 4C)	Stranded tinned Cu (IEC 60228 / ASTM)	10.4	155	4.5	85
☐ **P4TSP20# Config B (Standard)**	4×2×20 AWG + 4×16 AWG (or 8C)	Stranded tinned Cu (IEC 60228 / ASTM)	13.3	265	9.6	110
☐ **P4TSP20# 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 Doc. 2013015SC (PTSP Series) Shielded Pair Connector.

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

- Doc. 2013015SC PTSP 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/p4tsp20-ptsp-series

Typical values for this cable type, based on Subsea Doc. 2013015SC (PTSP Series) Shielded Pair Connector. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.