Individually foil-screened triples & hybrid wet-mate PUR cable

P3TST20# / P1TSP20/5C20#

600 V Foil-Screened Triples Wet-Mate Cable

Doc. 2020052SC Wet-Mate · 600 V · Individually foil-screened triples & hybrid wet-mate



600 V (IR ≥ 50 GΩ/kft) | **3×3×20 AWG Foil Triples** | **Wet-Mate Moldable PUR**

Application

Wet-Mate Individually Foil-Screened Twisted Triples & Screened Pair/Multicore Hybrid Underwater PUR Sensor Cable (P3TST20# & P1TSP20/5C20#) (Doc. 2020052SC Wet-Mate, 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. Screened Twisted Triples (3×3×20 AWG)
2. Triple Color Coding
3. Individual Foil Screen & Drain (3×)
4. Overall Binder & Black PUR Jacket

Technical data

Typical values

Rated voltage / transmission duty	600 V (Subsea Doc. 2020052SC & 2014039SC (IR ≥ 50 GΩ/kft) Sensor)	**Core / conductor construction**	Screened Twisted Triples (3×3×20 AWG) — Nine 0.52 mm² (19/32 AWG) tinned copper conductors with ≥50 GΩ/kft PP insulation
Primary dielectric / buffering	Triple Color Coding — Triple 1: Black/White/Red · Triple 2: Green/Orange/Blue · Triple 3: Wh-Bk/Rd-Bk/Gn-Bk	**Continuous operating temperature**	−30…+80 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per Subsea Doc. 2020052SC & 2014039SC (IR ≥ 50 GΩ/kft) Sensor	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Overall Binder & Black PUR Jacket — Roundness fillers + clear polyester tape + 1.03 mm black halogen-free PUR (Ø 10.41 mm)	**Minimum bending radius**	8 × OD
Hydrostatic, tensile & crush duty	Individual Foil Screen & Drain (3×) — Aluminium/Polyester shield (foil in) + 20 AWG tinned Cu drain + clear polyester tape	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per Subsea Doc. 2020052SC & 2014039SC (IR ≥ 50 GΩ/kft) Sensor
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per Subsea Doc. 2020052SC & 2014039SC (IR ≥ 50 GΩ/kft) Sensor	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	Subsea Doc. 2020052SC & 2014039SC (IR ≥ 50 GΩ/kft) Sensor		

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
P3TST20# / P1TSP20/5C20# Construction Schedule (−30…+80 °C) 3 sizes						
☐ **P3TST20# Config A (Compact)**	4×2×24 AWG + 2×18 AWG (or 4C)	Stranded tinned Cu (IEC 60228 / ASTM)	10.4	155	4.5	85
☐ **P3TST20# Config B (Standard)**	4×2×20 AWG + 4×16 AWG (or 8C)	Stranded tinned Cu (IEC 60228 / ASTM)	13.3	265	9.6	110
☐ **P3TST20# 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. 2020052SC & 2014039SC (IR ≥ 50 GΩ/kft) Sensor.

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. 2020052SC Wet-Mate 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/p3tst20-p1tsp20-5c20

Typical values for this cable type, based on Subsea Doc. 2020052SC & 2014039SC (IR ≥ 50 GΩ/kft) Sensor. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.