Wet-mate 1/0 AWG 250 A power & PTFE/PP multicore control cable

P8C20# & P1C1/0# SERIES

P8C20# & P1C1/0# (250 A) Subsea Multicore High-Current Wet-Mate Cable

Doc. 2013012SC Power/Ctrl · 0.6/1 kV · Wet-mate 1/0 awg 250 a power & ptfe/pp



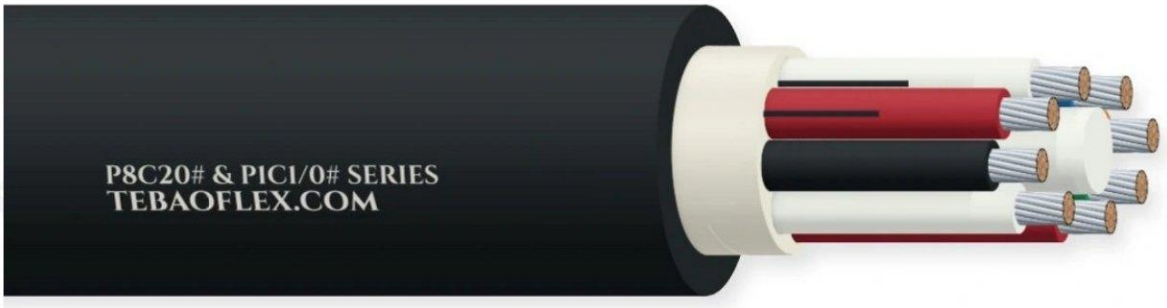
600 V – 1,000 V (250 A) **PTFE/PP Control & 1/0 AWG** **Wet-Mate Overmoldable**

Application

Wet-Mate Unscreened Single-Core 1/0 AWG 250A High-Current Power (P1C1/0#) & PTFE/PP Multicore Control (P8C20# / P22C20#/3C18#) Underwater PUR Connector Cable Family (Doc. 2013012SC Power/Ctrl, 0.6/1 kV, -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. Conductors (8×20 AWG / 1×1/0 AWG)
2. Type E PTFE / PP Core Insulation
3. Central Polypropylene Rod Filler
4. Clear Polyester / Non-Woven Binder Tape
5. Black Halogen-Free PUR Jacket

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (Subsea Doc. 2013012SC Unscreened Multicore & 250 A Power)	**Core / conductor construction**	Conductors (8×20 AWG / 1×1/0 AWG) — Silver-plated Cu (P8C20#), tinned Cu (P2C20#–P22C20#) or ≥1000-strand 53.5 mm² Cu (P1C1/0#)
Primary dielectric / buffering	Type E PTFE / PP Core Insulation — 600 V Type E PTFE (P8C20#) or polypropylene (PP) color-coded core insulation	**Continuous operating temperature**	−30…+80 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per Subsea Doc. 2013012SC Unscreened Multicore & 250 A Power	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Black Halogen-Free PUR Jacket — 1.02–3.00 mm black polyurethane sheath vulcanizable to Wet-Mate connectors	**Minimum bending radius**	8 × OD
Hydrostatic, tensile & crush duty	Clear Polyester / Non-Woven Binder Tape — Helically lapped overall clear Polyester tape (or non-woven barrier on P1C1/0#)	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per Subsea Doc. 2013012SC Unscreened Multicore & 250 A Power
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per Subsea Doc. 2013012SC Unscreened Multicore & 250 A Power	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	Subsea Doc. 2013012SC Unscreened Multicore & 250 A Power		

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
P8C20# & P1C1/0# SERIES Construction Schedule (−30…+80 °C) 3 sizes						
☐ **P8C20# Config A (Compact)**	4×2×24 AWG + 2×18 AWG (or 4C)	Stranded tinned Cu (IEC 60228 / ASTM)	10.4	155	4.5	85
☐ **P8C20# Config B (Standard)**	4×2×20 AWG + 4×16 AWG (or 8C)	Stranded tinned Cu (IEC 60228 / ASTM)	13.3	265	9.6	110
☐ **P8C20# 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. 2013012SC Unscreened Multicore & 250 A Power.

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)	−30…+80 °C
4×2×20 AWG + 4×16 AWG (or 8C)	10.70	0.6/1 kV (45–100 Ω data)	−30…+80 °C
8×2×20 AWG + 4×12 AWG (or 12C)	5.40	0.6/1 kV (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. 2013012SC Power/Ctrl 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/p8c20-p1c1-0-series

Typical values for this cable type, based on Subsea Doc. 2013012SC Unscreened Multicore & 250 A Power. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.