marine & naval control cable

TPD & TPD-CW/SB / C14PNBS

TPD, TPD-CW/SB & C14PNBS 600 V (0.6/1 kV) IEEE 1580 Type P Braided Off

IEEE 1580 Type P / UL 1309 · 0.6/1 kV · Marine & naval control cable



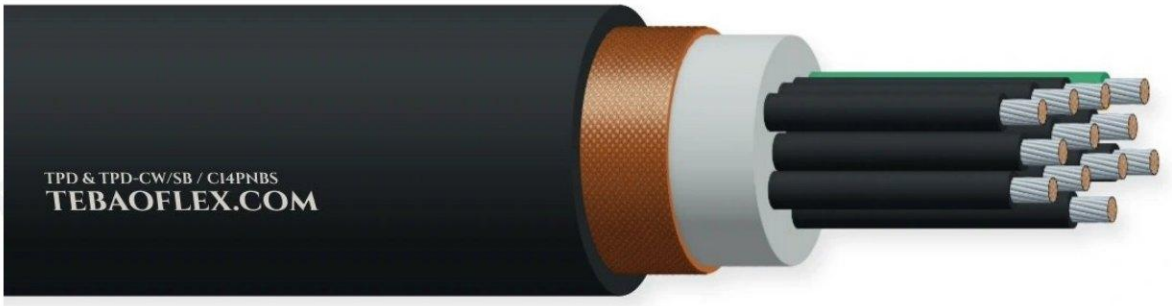
IEEE 1580 Type P / UL 1309 | **0.6/1 kV (-40 to +125 °C)** | **Arctic Type N Mud-Resistant Jacket**

Application

TPD, TPD-CW/SB & C14PNBS 600 V (0.6/1 kV) IEEE 1580 Type P Braided Offshore Rig Control & Power Cable (IEEE 1580 Type P / UL 1309) engineered for 0.6/1 kV service across -40 to +125 °C (min. bend radius 6 × OD).

Typical uses: Naval Frigate, Destroyer & Submarine Systems, Shipboard Propulsion & Auxiliary Control, Offshore Drilling Rig Control Rooms, Marine Switchgear & Console Interconnects

Construction





Cross-section, not to scale

1. Flexible Tinned Copper (12C × 14 AWG)
2. 125 °C XLPO Type P Core Insulation
3. Thermoset Inner Jacket (PN)
4. Bronze Wire Braid Armour (SB / BS)
5. Arctic Type N Mud-Resistant Jacket

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (IEEE 1580 Type P, UL 1309 & CSA C22.2 No. 245 (125 °C XLPO))	**Core / conductor construction**	Flexible Tinned Copper (12C × 14 AWG) — Finely stranded tinned copper conductors (IEEE 1580 / ASTM B33)
Primary dielectric / buffering	125 °C XLPO Type P Core Insulation — Irradiated cross-linked polyolefin with ICEA Method 1/4 identification	**Continuous operating temperature**	−40...+125 °C (shipboard & offshore duty)
Short-circuit / peak thermal rating	Verified thermal stability per IEEE 1580 Type P, UL 1309 & CSA C22.2 No. 245 (125 °C XLPO)	**Storage & transport temperature**	−40...+80 °C on export wooden/steel drum
Outer protection / armouring	Arctic Type N Mud-Resistant Jacket — Heavy-duty thermoset outer sheath rated -40 °C to +110 °C	**Minimum bending radius**	6 × OD
Armour, screen & mechanical duty	Bronze Wire Braid Armour (SB / BS) — High-coverage bronze wire braid mechanical armour	**Flame, fire & smoke performance**	Qualified for marine flame-retardance and low-smoke zero-halogen / fire safety per IEEE 1580 Type P, UL 1309 & CSA C22.2 No. 245 (125 °C XLPO)
Oil, drilling mud & seawater resistance	Resistant to marine fuel/lube oils, salt mist and offshore fluids per IEEE 1580 Type P, UL 1309 & CSA C22.2 No. 245 (125 °C XLPO)	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEEE 1580 Type P, UL 1309 & CSA C22.2 No. 245 (125 °C XLPO)		

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
TPD & TPD-CW/SB / C14PNBS Construction Schedule (−40...+125 °C) 3 sizes						
☐ **TPD 4G2.5 mm²**	**4 × 2.5 mm² (or 4C × 14 AWG)**	**IEC 60228 Class 2/5 Cu/SnCu**	**13.2**	**275**	**1.5**	**80**
☐ **TPD 7G2.5 mm²**	**7 × 2.5 mm² (or 7C × 14 AWG)**	**IEC 60228 Class 2/5 Cu/SnCu**	**15.8**	**415**	**2.6**	**95**
☐ **TPD 12G1.5 mm²**	**12 × 1.5 mm² (or 12C × 16 AWG)**	**IEC 60228 Class 2/5 Cu/SnCu**	**17.4**	**495**	**2.7**	**105**

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per IEEE 1580 Type P, UL 1309 & CSA C22.2 No. 245 (125 °C XLPO).

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4 × 2.5 mm² (or 4C × 14 AWG)	**7.98**	**0.6/1 kV (26 A)**	**−40...+125 °C**
7 × 2.5 mm² (or 7C × 14 AWG)	**7.98**	**0.6/1 kV (21 A)**	**−40...+125 °C**
12 × 1.5 mm² (or 12C × 16 AWG)	**13.30**	**0.6/1 kV (14 A)**	**−40...+125 °C**

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

Standards and approvals

- IEEE 1580 Type P / UL 1309 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/tpd-tpd-cw-sb-c14pnbs

Typical values for this cable type, based on IEEE 1580 Type P, UL 1309 & CSA C22.2 No. 245 (125 °C XLPO). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.