EMC-screened marine & offshore VFD cable

TP(OBS)N-VFD & XT-125 VFD 2000V

TP(OBS)N-VFD & XT-125 VFD 2000 V IEEE 1580 Type P Bronze-Armoured Offs

IEEE 1580 Type P / UL 1309 · 2,000 V · Emc-screened marine & offshore vfd cable



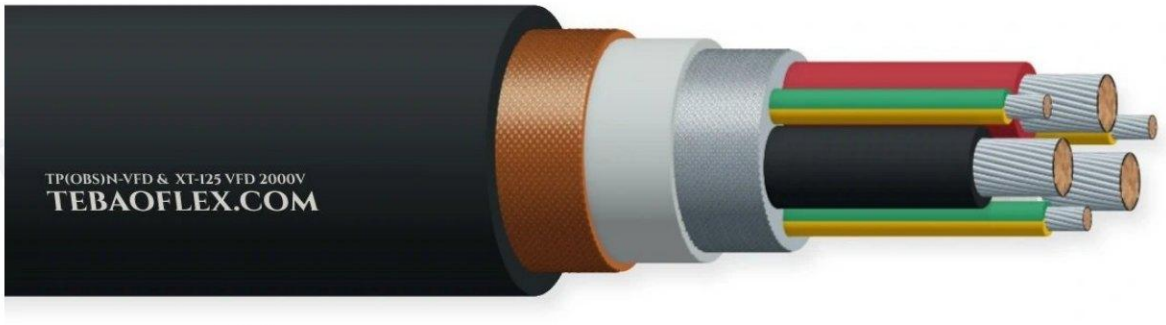
IEEE 1580 Type P / UL 1309 | **2,000 V (-40 to +125 °C)** | **Heavy-Duty XL-CPE Outer Jacket**

Application

TP(OBS)N-VFD & XT-125 VFD 2000 V IEEE 1580 Type P Bronze-Armoured Offshore Rig VFD Power Cable (IEEE 1580 Type P / UL 1309) engineered for 2,000 V service across -40 to +125 °C (min. bend radius 8 × OD).

Typical uses: Marine Azimuth & Tunnel Thruster Drives, Offshore Drilling Drawworks & Mud Pumps, Diesel-Electric & Hybrid Vessel Propulsion, Offshore Deck Winch & Crane Inverter Feeds

Construction





Cross-section, not to scale

1. 2000 V XLPO XT-125 Phase Cores (3×250 MC
2. Symmetrical Tri-Sectional Grounds (3×2 A
3. Dual VFD Shield (OBS: Foil + Tinned Copp
4. Inner Jacket & Bronze Braid Armour
5. Heavy-Duty XL-CPE Outer Jacket

Technical data

Typical values

Rated voltage / transmission duty	2,000 V (IEEE 1580 Type P / UL 1309 / CSA C22.2 No. 245 (2,000 V 125 °C XLPO))	**Core / conductor construction**	2000 V XLPO XT-125 Phase Cores (3×250 MCM) — Electron-beam cross-linked 125 °C XLPO insulation on flexible tinned copper
Primary dielectric / buffering	Symmetrical Tri-Sectional Grounds (3×2 AWG) — Three balanced interstitial ground cores eliminating shaft currents	**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 (2,000 V 125 °C XLPO)	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Heavy-Duty XL-CPE Outer Jacket — Cross-linked chlorinated polyethylene mud- and arctic-resistant sheath	**Minimum bending radius**	8 × OD
Armour, screen & mechanical duty	Inner Jacket & Bronze Braid Armour — Mud/oil-resistant inner sheath + 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 (2,000 V 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 (2,000 V 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 (2,000 V 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
TP(OBS)N-VFD & XT-125 VFD 2000V Construction Schedule (−40…+125 °C) 3 sizes						
☐ **TP(OBS)N-VFD 3×35+3G6 VFD**	**3 × 35 + 3G6 mm² (3+3E EMC)**	**IEC 60228 Class 2/5 Cu/SnCu**	**29.4**	**1,760**	**15.8**	**235**
☐ **TP(OBS)N-VFD 3×70+3G10 VFD**	**3 × 70 + 3G10 mm² (3+3E EMC)**	**IEC 60228 Class 2/5 Cu/SnCu**	**37.8**	**3,190**	**31.5**	**305**
☐ **TP(OBS)N-VFD 3×120+3G16 VFD**	**3 × 120 + 3G16 mm² (3+3E EMC)**	**IEC 60228 Class 2/5 Cu/SnCu**	**46.5**	**5,120**	**54.0**	**375**

– 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 (2,000 V 125 °C XLPO).

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3 × 35 + 3G6 mm² (3+3E EMC)	**0.52**	**2,000 V (138 A VFD)**	**−40…+125 °C**
3 × 70 + 3G10 mm² (3+3E EMC)	**0.27**	**2,000 V (215 A VFD)**	**−40…+125 °C**
3 × 120 + 3G16 mm² (3+3E EMC)	**0.15**	**2,000 V (305 A VFD)**	**−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/tp-obs-n-vfd-xt-125-vfd-2000v

Typical values for this cable type, based on IEEE 1580 Type P / UL 1309 / CSA C22.2 No. 245 (2,000 V 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.