EMC-screened marine & offshore VFD cable

IEEE 1580 Type P VFD

IEEE 1580 Type P 0.6/1 kV & 2,000 V Symmetrical 3+3 Dual-EMC Bronze-Ar

IEEE 1580 Type P VFD / UL 1309 · 0.6/1 kV – 2,000 V · Emc-screened marine & offshore



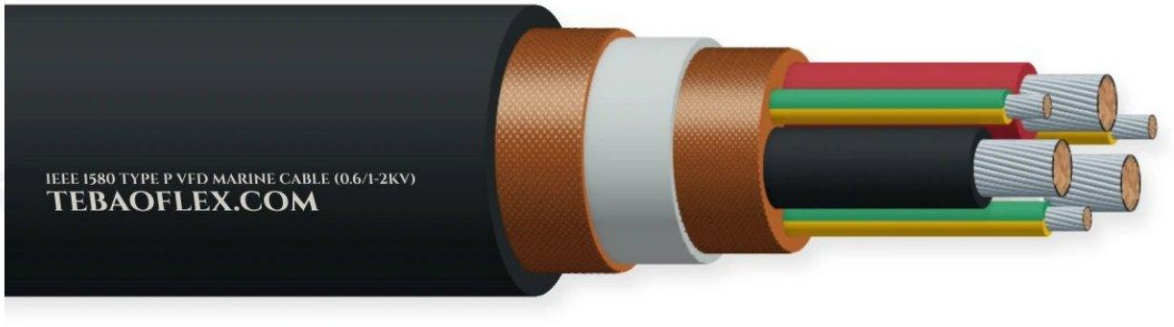
IEEE 1580 Type P VFD / UL 1309 | **0.6/1 kV – 2,000 V (-40 to +125 °C)** | **Bronze Wire Braid Armour & CPCS/LSZH**

Application

IEEE 1580 Type P 0.6/1 kV & 2,000 V Symmetrical 3+3 Dual-EMC Bronze-Armoured Marine VFD Cable (IEEE 1580 Type P VFD / UL 1309) engineered for 0.6/1 kV – 2,000 V service across -40 to +125 °C (min. bend radius 8 × OD).

Typical uses: Marine Azimuth & Dynamic Positioning (DP) Thrusters, Offshore Drilling Drawworks, Top Drives & Mud Pumps, Oceanographic & Subsea Winch VFD Drives, Diesel-Electric & Hybrid Vessel Propulsion

Construction





Cross-section, not to scale

1. 125 °C EPR Main Phase Conductors (3 Core
2. Symmetrical Split Earth Conductors (3 Co
3. Copper Tape + Tinned Cu Braid Dual EMC S
4. Bronze Wire Braid Armour & CPCS/LSZH Jac

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV – 2,000 V (IEEE Std 1580 Type P 0.6/1–2 kV Symmetrical 3+3 Dual-Screen Bronze-Armoured VFD Specification)	**Core / conductor construction**	125 °C EPR Main Phase Conductors (3 Cores) — Flexible tinned copper phase cores rated 0.6/1 kV and 2,000 V
Primary dielectric / buffering	Symmetrical Split Earth Conductors (3 Cores) — Three balanced interstitial ground cores eliminating shaft currents	**Continuous operating temperature**	−40...+125 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per IEEE Std 1580 Type P 0.6/1–2 kV Symmetrical 3+3 Dual-Screen Bronze-Armoured VFD Specification	**Storage & transport temperature**	−40...+80 °C on export wooden/steel winch reel
Outer protection / armouring	Bronze Wire Braid Armour & CPCS/LSZH Jacket — Braided bronze armour + mud- and oil-resistant outer sheath	**Minimum bending radius**	8 × OD
Armour, strength member & mechanical duty	Copper Tape + Tinned Cu Braid Dual EMC Shield — 100% copper tape plus high-coverage tinned copper braid shield	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per IEEE Std 1580 Type P 0.6/1–2 kV Symmetrical 3+3 Dual-Screen Bronze-Armoured VFD Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per IEEE Std 1580 Type P 0.6/1–2 kV Symmetrical 3+3 Dual-Screen Bronze-Armoured VFD Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEEE Std 1580 Type P 0.6/1–2 kV Symmetrical 3+3 Dual-Screen Bronze-Armoured VFD Specification		

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	Breaking / tensile kN ≈	Min. bend R mm
IEEE 1580 Type P VFD Construction Schedule (−40...+125 °C) 3 sizes						
☐ **IEEE 1580 Type P VFD 3×35+3G6 VFD**	**3 × 35 + 3G6 mm² (3+3E EMC)**	**IEC 60228 Class 5 SnCu**	**29.4**	**1,760**	**15.8**	**235**
☐ **IEEE 1580 Type P VFD 3×70+3G10 VFD**	**3 × 70 + 3G10 mm² (3+3E EMC)**	**IEC 60228 Class 5 SnCu**	**37.8**	**3,190**	**31.5**	**305**
☐ **IEEE 1580 Type P VFD 3×120+3G16 VFD**	**3 × 120 + 3G16 mm² (3+3E EMC)**	**IEC 60228 Class 5 SnCu**	**46.5**	**5,120**	**54.0**	**375**

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per IEEE Std 1580 Type P 0.6/1–2 kV Symmetrical 3+3 Dual-Screen Bronze-Armoured VFD Specification.

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**	**0.6/1 kV – 2,000 V (138 A VFD)**	**−40...+125 °C**
3 × 70 + 3G10 mm² (3+3E EMC)	**0.27**	**0.6/1 kV – 2,000 V (215 A VFD)**	**−40...+125 °C**
3 × 120 + 3G16 mm² (3+3E EMC)	**0.15**	**0.6/1 kV – 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 VFD / 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/ieee-1580-type-p-vfd-marine-cable-0-6-1-2kv

Typical values for this cable type, based on IEEE Std 1580 Type P 0.6/1–2 kV Symmetrical 3+3 Dual-Screen Bronze-Armoured VFD Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.