Screened power & VFD / motor supply cables

37-102-TSVFD 2kV

37-102-TSVFD 2 kV Armored Offshore VFD Cable

IEEE 1580 Type P armored 2 kV 3+3 offshore VFD cable



IEEE 1580 Type P · UL 1309 | **2,000 V · 110 °C XLPO**

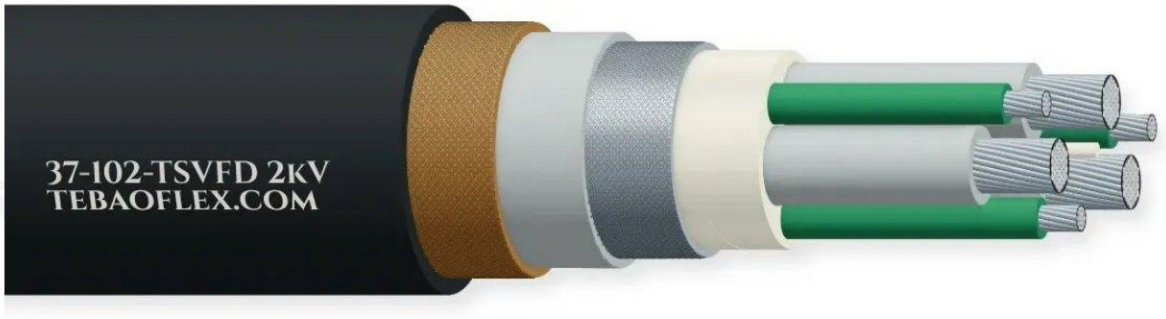
Armored & Sheathed · Mud-Res CPE

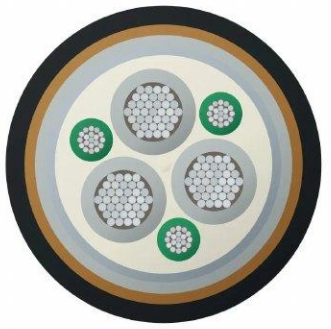
Application

Armored and sheathed 2,000 V IEEE 1580 Type P offshore VFD cable with flexible tinned copper conductors, 110 °C XLPO insulation, Al/PET plus tinned copper braid EMI shield, bronze basket-weave armour, and mud-resistant CPE sheath.

Typical uses: Offshore drilling rigs & semi-submersibles, FPSOs & offshore production platforms, Marine thrusters & propulsion drives, Mud pump & top-drive VFD feeders, Hazardous Zone 1 / Class I Div 1 areas

Construction





Cross-section, not to scale

1	**Conductor**	Extra-flexible stranded tinned annealed copper · IEEE 1580 Table 11 / ASTM B33 & B172
2	**Insulation & core ID**	110 °C flame-retardant XLPO Type P (Grey w/ phase ID) · Black/Red/Blue phase ID + 3 × green XLPO grounds
3	**Core wrap & EMI foil**	Polyester binder tape + Al/PET foil shield (100%) · 100% high-frequency EMI barrier
4	**EMC braid & CPE bedding**	Tinned Cu wire braid + black thermoset CPE inner sheath
5	**Basket-weave armour**	Bronze / tinned copper basket-weave braid armour (≥ 85%) · IEEE 1580 / UL 1309 mechanical protection
6	**Outer protective sheath**	Black mud- & oil-resistant thermoset CPE outer jacket · IEEE 1580 / NEK 606 mud resistant

Technical data

Typical values

Rated voltage	2,000 V (2 kV) AC	**Conductor class**	IEEE 1580 Table 11 flex tinned Cu
EMI shield	100% Al/PET foil + TCWB braid	**Mechanical armour**	Bronze basket-weave braid (≥ 85%)
Max. conductor temp.	+110 °C continuous (Type X110)	**Cold bend / impact**	−40 °C bend / −35 °C impact
Min. bending radius	8 × OD (armored fixed)	**Flame test**	IEEE 1202 / IEC 60332-3-22 Cat A
Mud & oil resistance	NEK 606 mud & oil resistant CPE	**Marine approvals**	IEEE 1580 Type P / UL 1309 Marine

Sizes

15 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

	Phase + 3× Ground (AWG)	Outer Ø ≈ mm	Max. R20 Ω/km	Copper index kg/km	Weight ≈ kg/km	Min. bend R 8×D mm
☐	3×14 AWG + 3×18 AWG	20.0	9.070	183	641	160
☐	3×12 AWG + 3×16 AWG	21.1	5.710	236	763	169
☐	3×10 AWG + 3×14 AWG	22.5	3.590	318	945	180
☐	3×8 AWG + 3×12 AWG	25.4	2.260	452	1,277	203
☐	3×6 AWG + 3×12 AWG	27.6	1.420	599	1,609	221
☐	3×4 AWG + 3×12 AWG	31.4	0.892	835	2,175	251
☐	3×2 AWG + 3×10 AWG	35.9	0.561	1,253	3,093	287
☐	3×1 AWG + 3×8 AWG	38.0	0.445	1,590	3,754	304
☐	3×1/0 AWG + 3×8 AWG	40.4	0.353	1,908	4,415	323
☐	3×2/0 AWG + 3×6 AWG	43.0	0.280	2,438	5,430	344
☐	3×4/0 AWG + 3×4 AWG	50.0	0.176	3,784	8,097	400
☐	3×262 kcmil + 3×4 AWG	55.0	0.143	4,512	9,694	440
☐	3×373 kcmil + 3×2 AWG	61.5	0.101	6,429	13,342	492
☐	3×535 kcmil + 3×1 AWG	71.8	0.070	8,977	18,517	574
☐	3×777 kcmil + 3×2/0 AWG	81.7	0.049	13,080	26,233	654

- Conductor max. DC resistance R20 follows IEEE 1580 Table 11 / ASTM B172 flexible tinned copper at 20 °C.
- Outer diameter and weight include the thermoset CPE inner bedding, bronze basket-weave braid armour, and mud-resistant CPE outer jacket.

Standards and approvals

- IEEE 1580 Type P (2,000 V / 110 °C)
- UL 1309 Type X110 Marine Shipboard Cable
- CSA C22.2 No. 245 · IEEE 1202 / IEC 60332-3-22 Cat A

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.

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info@tebaoflex.com

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tebaoflex.com/cables/37-102-tsvfd-2kv-armored-offshore-type-p-vfd-cable

Typical values for this cable type, based on IEEE 1580 Type P · UL 1309 Type X110 · CSA C22.2 No. 245. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.