Screened power & VFD / motor supply cables

37-102VFD 2kV

37-102VFD 2 kV Type P Symmetrical VFD Cable

Unarmored IEEE 1580 Type P 2 kV dual-shielded VFD cable

IEEE 1580 Type P · UL TC-ER | 2,000 V · 110 °C XLPO | Foil + TCWB · Thermoset CPE

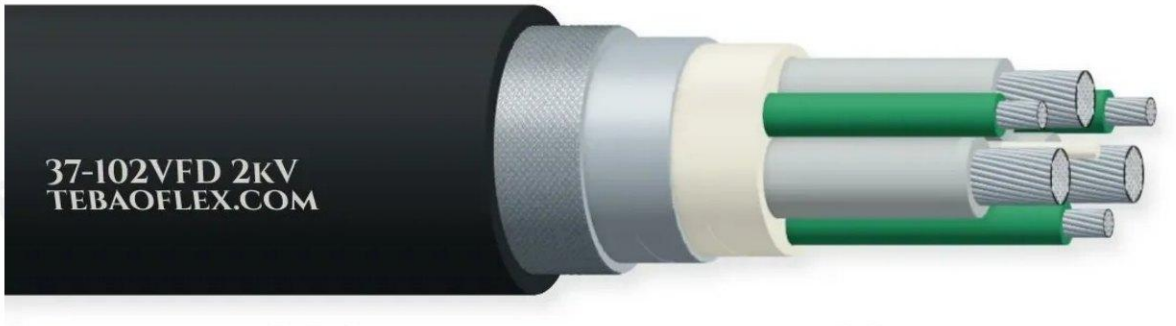


Application

Unarmored 2,000 V extra-flexible symmetrical VFD power cable built to IEEE 1580 Type P, UL 1309, and UL TC-ER with tinned copper conductors, 110 °C low-dielectric XLPO insulation, Al/PET plus TCWB shield, and thermoset CPE sheath.

Typical uses: Marine & offshore vessels, Oil & gas rigs and refineries, Heavy industrial TC-ER drive trays, Mining & mineral processing plants, Petrochemical & paper mills

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 low-dielectric FR XLPO Type P (Grey w/ phase ID) · Grey phase cores + 3 × green XLPO grounds
3	**Core wrap**	Polyester separator wrap over symmetrical 3+3 core
4	**Foil EMI shield**	Aluminium/polyester laminate foil screen (100% coverage)
5	**Braid EMI shield**	Overall tinned copper wire braid (< 50 mΩ at 10 MHz)
6	**Outer protective sheath**	Black oil-, cold- & chemical-resistant thermoset CPE · IEEE 1580 / UL 1309 / UL 1277 TC-ER

Technical data

Typical values

Rated voltage	2,000 V (2 kV) AC	**Conductor class**	IEEE 1580 Table 11 flex tinned Cu
Dual EMI shield	100% Al/PET foil + overall TCWB	**Transfer impedance**	< 50 mΩ at 10 MHz
Max. conductor temp.	+110 °C continuous (Type P XLPO)	**Cold bend / impact**	−40 °C bend / −35 °C impact
Min. bending radius	6 × OD (unarmored flexible)	**Flame test**	IEEE 1202 / IEC 60332-3-22 Cat A
Jacket compound	Thermoset oil/cold-resistant CPE	**Tray & marine ratings**	IEEE 1580 Type P · UL 1309 · TC-ER

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 6×D mm
☐	3×14 AWG + 3×18 AWG	16.0	9.070	136	361	96
☐	3×12 AWG + 3×16 AWG	17.1	5.710	187	453	103
☐	3×10 AWG + 3×14 AWG	18.5	3.590	266	590	111
☐	3×8 AWG + 3×12 AWG	21.4	2.260	396	841	128
☐	3×6 AWG + 3×12 AWG	23.6	1.420	539	1,096	142
☐	3×4 AWG + 3×12 AWG	27.4	0.892	769	1,532	164
☐	3×2 AWG + 3×10 AWG	31.9	0.561	1,178	2,249	191
☐	3×1 AWG + 3×8 AWG	34.0	0.445	1,513	2,778	204
☐	3×1/0 AWG + 3×8 AWG	36.4	0.353	1,826	3,301	218
☐	3×2/0 AWG + 3×6 AWG	39.0	0.280	2,352	4,116	234
☐	3×4/0 AWG + 3×4 AWG	46.0	0.176	3,686	6,254	276
☐	3×262 kcmil + 3×4 AWG	51.0	0.143	4,406	7,528	306
☐	3×373 kcmil + 3×2 AWG	57.5	0.101	6,312	10,476	345
☐	3×535 kcmil + 3×1 AWG	67.8	0.070	8,843	14,651	407
☐	3×777 kcmil + 3×2/0 AWG	77.7	0.049	12,929	20,918	466

- Conductor max. DC resistance R20 follows IEEE 1580 Table 11 / ASTM B172 flexible tinned copper at 20 °C.
- Extra-flexible unarmored build achieves a compact 6 × OD minimum bend radius for tight marine and industrial enclosures.

Standards and approvals

- IEEE 1580 Type P (2,000 V / 110 °C)
- UL 1309 Marine · UL 1277 Type TC-ER
- CSA C22.2 No. 245 · IEEE 1202 / FT4

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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Email
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Web
tebaoflex.com/cables/37-102vfd-2kv-type-p-symmetrical-offshore-vfd-cable

Typical values for this cable type, based on IEEE 1580 Type P · UL 1309 · UL 1277 TC-ER · 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.