Screened power & VFD / motor supply cables

37-103VFD 2kV LSHF

37-103VFD 2 kV LSHF Marine VFD Cable

Halogen-free SHF2 IEEE 1580 / IEC 60092-353 2 kV VFD cable

IEEE 1580 · IEC 60092-353 | 2,000 V · 90 °C LSHF XLPO | Halogen-Free SHF2 · Foil + TCWB

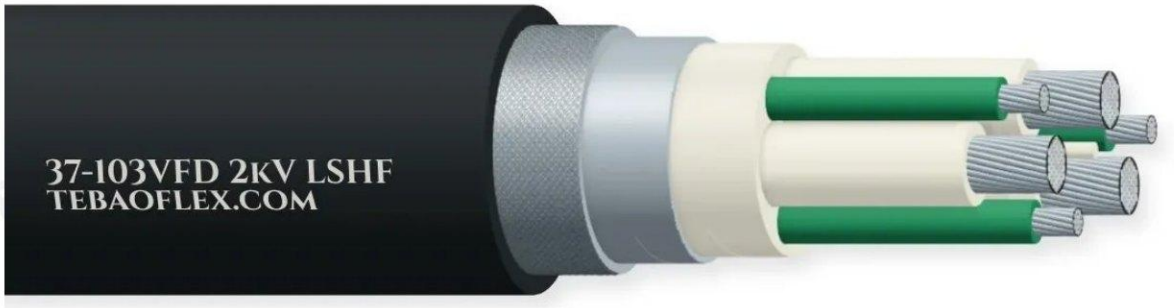


Application

Low-smoke halogen-free (LSHF) 2,000 V symmetrical marine VFD cable built to IEEE 1580 Type P and IEC 60092-353 with flexible tinned copper, 90 °C LSHF-XLPO insulation, Al/PET plus TCWB shield, and thermoset SHF2 sheath.

Typical uses: Cruise, naval & commercial vessels, Offshore accommodation & switchgear rooms, Marine propulsion & HVAC drives, Enclosed offshore platforms & FPSOs, Zero-halogen coastal infrastructure

Construction





Cross-section, not to scale

1	**Conductor**	Extra-flexible stranded tinned annealed copper · IEEE 1580 Table 11 / IEC 60228
2	**Insulation & core ID**	90 °C low-smoke halogen-free cross-linked polyolefin (LSHF XLPO) · Natural numbered phases + 3 × green LSHF grounds
3	**Core wrap**	Halogen-free polyester core binder tape
4	**Foil EMI shield**	Aluminium/polyester foil shield (100% coverage)
5	**Braid EMI shield**	Overall tinned copper wire braid EMI shield
6	**Outer sheath (SHF2)**	Black low-smoke halogen-free thermoset SHF2 outer sheath · IEC 60092-360 SHF2 / IEC 60754

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	**Max. conductor temp.**	+90 °C continuous (LSHF XLPO)
Cold bend / impact	−40 °C bend / −35 °C impact	**Min. bending radius**	6 × OD (unarmored flexible)
Flame test	IEC 60332-3-22 Cat A / IEEE 1202	**Acid gas / halogens**	Halogen-free per IEC 60754-1 & -2
Smoke emission	Low smoke ≥ 60% transmittance	**Sheath compound**	Black thermoset LSHF (SHF2)

Sizes

14 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	16.1	9.070	136	371	97
☐ 3×12 AWG + 3×16 AWG	17.2	5.710	187	465	103
☐ 3×10 AWG + 3×14 AWG	18.6	3.590	267	606	112
☐ 3×8 AWG + 3×12 AWG	21.5	2.260	396	861	129
☐ 3×6 AWG + 3×12 AWG	23.7	1.420	539	1,121	142
☐ 3×4 AWG + 3×12 AWG	27.5	0.892	769	1,566	165
☐ 3×2 AWG + 3×10 AWG	32.0	0.561	1,179	2,299	192
☐ 3×1 AWG + 3×8 AWG	34.1	0.445	1,513	2,838	205
☐ 3×1/0 AWG + 3×8 AWG	36.5	0.353	1,826	3,371	219
☐ 3×2/0 AWG + 3×6 AWG	39.1	0.280	2,352	4,202	235
☐ 3×4/0 AWG + 3×4 AWG	46.1	0.176	3,686	6,383	277
☐ 3×262 kcmil + 3×4 AWG	51.1	0.143	4,406	7,683	307
☐ 3×373 kcmil + 3×2 AWG	57.6	0.101	6,312	10,690	346
☐ 3×535 kcmil + 3×1 AWG	67.9	0.070	8,843	14,948	407

- Conductor max. DC resistance R20 follows IEEE 1580 Table 11 / ASTM B172 flexible tinned copper at 20 °C.
- All insulation, binder tape, and SHF2 outer sheath materials are halogen-free per IEC 60754-1/2 and low-smoke per IEC 61034-2.

Standards and approvals

- IEEE 1580 Type P · UL 1309 Marine (2 kV LSHF)
- IEC 60092-353 & IEC 60092-360 SHF2 Thermoset
- IEC 60754-1/2 Halogen-Free · IEC 61034-2 Low Smoke

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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Typical values for this cable type, based on IEEE 1580 Type P · IEC 60092-353 LSHF · UL 1309 · IEC 60754. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.