Medium-voltage symmetrical VFD cable

37-105VFD (MMV-VFD)

8/15 kV Symmetrical VFD Cable

UL 1072 / IEEE 1580 · 8/15 kV (133% EPR) · Extra-flexible symmetrical MV VFD cable



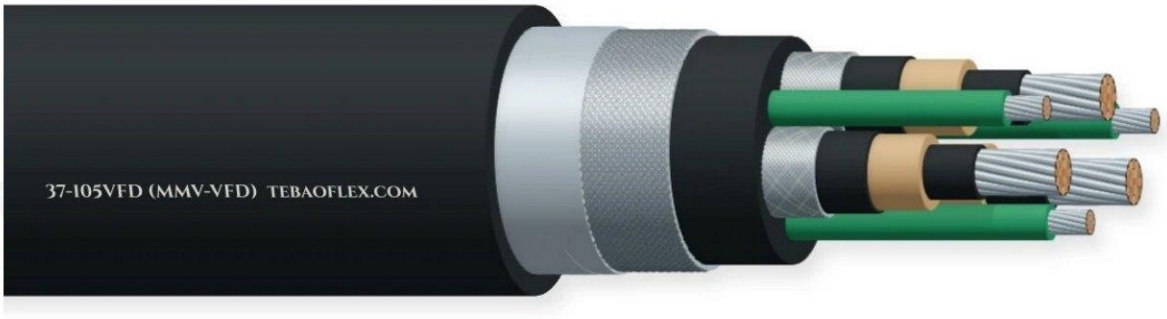
UL 1072 / IEEE 1580 | 8/15 kV (133% EPR) | Symmetrical 3G VFD

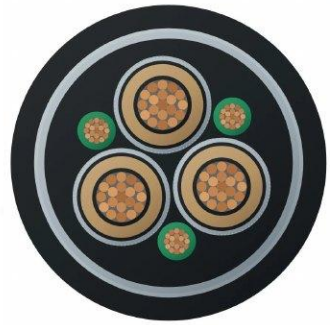
Application

37-105VFD (MMV-VFD) 8 kV and 15 kV (133% insulation) extra-flexible medium-voltage VFD cable per UL 1072 and IEEE 1580, with flexible tinned copper phases, 3 symmetrical XLPO grounds, braid + foil shield and arctic thermoset jacket.

Typical uses: Underground Coal & Hard-Rock Mining, Open-Cast Excavators, Draglines & Shovels, Vertical Mine Shafts, Hoists & Boreholes, Tunneling, Mineral Processing & Slurry Plants

Construction





Cross-section, not to scale

1. MV Phase Conductors (3×2/0 AWG)
2. Individual Phase Shield
3. Symmetrical Grounds (3×8 AWG XLPO)
4. Isolation Jacket & Overall EMI Armor
5. Arctic-Grade Outer Jacket (-J)

Technical data

Typical values

Rated voltage / transmission duty	8/15 kV (UL 1072 / IEEE 1580 / CSA C68.10)	**Core / conductor construction**	MV Phase Conductors (3×2/0 AWG) — Extra-flexible tinned copper + semicon shield + 133% 90 °C EPR insulation
Primary dielectric / buffering	Individual Phase Shield — Strippable semicon layer + composite nylon & tinned copper braid (≥60%)	**Continuous operating temperature**	-40 to +90 °C (mining & industrial service)
Short-circuit / peak thermal rating	Verified thermal stability per UL 1072 / IEEE 1580 / CSA C68.10	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Arctic-Grade Outer Jacket (-J) — Flame-retardant, oil- and sunlight-resistant thermosetting outer jacket	**Minimum bending radius**	8 × OD
Crush, impact & abrasion duty	Heavy-duty mining rock-cut, impact and tensile protection per UL 1072 / IEEE 1580 / CSA C68.10	**Flame retardancy & mine fire safety**	Self-extinguishing / flame-retardant mining jacket per UL 1072 / IEEE 1580 / CSA C68.10
Mine water, oil & chemical resistance	Resistant to acidic mine water, hydraulic oils and abrasion per UL 1072 / IEEE 1580 / CSA C68.10	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	UL 1072 / IEEE 1580 / CSA C68.10		

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
37-105VFD (MMV-VFD) Construction Schedule (-40 to +90 °C) 3 sizes						
☐ **37-105VFD 8 kV 3×1 AWG + 3×8 AWG(G)**	3×1 AWG + 3×8 AWG (G)	Extra-flex tinned Cu	53.8	4,120	19.0	430
☐ **37-105VFD 8 kV 3×2/0 AWG + 3×8 AWG(G)**	3×2/0 AWG + 3×8 AWG (G)	Extra-flex tinned Cu	59.4	5,360	26.8	475
☐ **37-105VFD 15 kV 3×4/0 AWG + 3×6 AWG(G)**	3×4/0 AWG + 3×6 AWG (G)	Extra-flex tinned Cu	71.2	7,890	42.0	570

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per UL 1072 / IEEE 1580 / CSA C68.10.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3×1 AWG + 3×8 AWG (8 kV)	0.43	8 kV 133% (195 A)	-40 to +90 °C
3×2/0 AWG + 3×8 AWG (8 kV)	0.27	8 kV 133% (260 A)	-40 to +90 °C
3×4/0 AWG + 3×6 AWG (15 kV)	0.17	15 kV 133% (345 A)	-40 to +90 °C

– Every production length undergoes routine conductor DC resistance, high-voltage Spark/AC dielectric or OTDR continuity and dimensional verification.

Standards and approvals

- UL 1072 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/37-105vfd-mmv-vfd-8-15kv-symmetrical-shielded-medium-voltage-vfd-cable

Typical values for this cable type, based on UL 1072 / IEEE 1580 / CSA C68.10. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.