EHVAC single-core lead-sheathed submarine export cable

2GM5007 220–400KV EHVAC

2GM5007 220–400 kV Single-Core EHVAC Submarine Power Cable



IEC 62067 · 19/33 kV · Ehvac single-core lead-sheathed submarine export cable

IEC 62067 / CIGRE 490 | **220–400 kV EHVAC** | **Non-Magnetic Cu Armour**

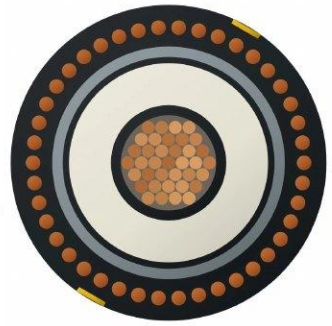
Application

220 kV / 275 kV / 330 kV / 400 kV (Um 245–420 kV) Single-Core XLPE Lead-Alloy Sheathed and Non-Magnetic Copper Wire Armoured EHVAC Submarine Power Transmission Cable (IEC 62067, 19/33 kV, -20 to +90 °C, min. bend radius 20 × OD).

Typical uses: Work-Class & Observation ROV Systems, Offshore Wind & Subsea Power Grids, Oceanographic, Sonar & Seismic Survey, Commercial Diving & Subsea Intervention

Construction





Cross-section, not to scale

1. Water-Blocked EHV Conductor (500–1600 mm²)
2. 220–400 kV Superclean XLPE (23–32 mm)
3. Extruded Lead-Alloy Sheath (2.9–3.1 mm)
4. Non-Magnetic Copper Wire Armour (Ø5.0 mm)
5. Bitumen Polypropylene Yarn Serving

Technical data

Typical values

Rated voltage / transmission duty	19/33 kV (IEC 62067 / CIGRE TB 490 EHVAC Submarine Standard)	**Core / conductor construction**	Water-Blocked EHV Conductor (500–1600 mm²) — Compacted/segmental longitudinally water-blocked copper conductor (Ø 37.9 mm @ 1000 mm²)
Primary dielectric / buffering	220–400 kV Superclean XLPE (23–32 mm) — Triple-extruded conductor screen + EHV XLPE dielectric + insulation screen & swelling tape	**Continuous operating temperature**	−20…+90 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per IEC 62067 / CIGRE TB 490 EHVAC Submarine Standard	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Bitumen Polypropylene Yarn Serving — Two layers of bitumen-impregnated PP yarn with yellow identification stripes	**Minimum bending radius**	20 × OD
Hydrostatic, tensile & crush duty	Non-Magnetic Copper Wire Armour (Ø5.0 mm) — Single layer of round copper armour wires suppressing single-core AC magnetic losses	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per IEC 62067 / CIGRE TB 490 EHVAC Submarine Standard
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per IEC 62067 / CIGRE TB 490 EHVAC Submarine Standard	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 62067 / CIGRE TB 490 EHVAC Submarine Standard		

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
2GM5007 220–400KV EHVAC Construction Schedule (−20…+90 °C) 3 sizes						
☐ 2GM5007 220–400KV EHVAC 3×240 mm² + FO	3 × 240 mm² + 48F FIMT	IEC 60228 Class 2 water-blocked Cu	118.0	26,400	320.0	1,770
☐ 2GM5007 220–400KV EHVAC 3×400 mm² + FO	3 × 400 mm² + 48F FIMT	IEC 60228 Class 2 water-blocked Cu	134.0	34,800	420.0	2,010
☐ 2GM5007 220–400KV EHVAC 3×630 mm² + FO	3 × 630 mm² + 96F FIMT	IEC 60228 Class 2 water-blocked Cu	152.0	46,200	560.0	2,280

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per IEC 62067 / CIGRE TB 490 EHVAC Submarine Standard.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3 × 240 mm² + 48F FIMT	0.08	19/33 kV (560 A)	−20…+90 °C
3 × 400 mm² + 48F FIMT	0.05	19/33 kV (710 A)	−20…+90 °C
3 × 630 mm² + 96F FIMT	0.03	19/33 kV (890 A)	−20…+90 °C

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

Standards and approvals

- IEC 62067 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/2gm5007-220-400kv-ehvac

Typical values for this cable type, based on IEC 62067 / CIGRE TB 490 EHVAC Submarine Standard. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.