submarine & offshore power composite cable

HYJQF41 10–35kV Submarine

HYJQF41 10–35 kV AC 3-Core XLPE Lead-Sheathed Coarse-Steel-Armoured Su



IEC 60502-2 / JB/T 11167 HYJQF41 · 10 kV – 35 kV · Submarine & offshore power

IEC 60502-2 / JB/T 11167 HYJQF41 | **10 kV – 35 kV (-20 to +90 °C)** | **Polypropylene (PP) Rope Outer Servin**

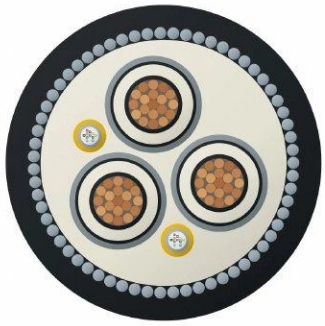
Application

HYJQF41 10–35 kV AC 3-Core XLPE Lead-Sheathed Coarse-Steel-Armoured Submarine Composite Cable (IEC 60502-2 / JB/T 11167 HYJQF41) engineered for 10 kV – 35 kV service across -20 to +90 °C (min. bend radius 15 × OD).

Typical uses: Offshore Wind Inter-Array & Export Submarine Links, Subsea Island & Platform HV/MV Power Interconnects, Offshore Oil & Gas Drilling Rigs & FPSOs, Commercial Vessels, Polar Ships & Marine Propulsion

Construction





Cross-section, not to scale

1. 10-35 kV XLPE Phase Cores (3 Cores)
2. Submarine Optical Fiber Units (1-2 Units
3. Coarse Round Steel Wire Armour (41)
4. Polypropylene (PP) Rope Outer Serving

Technical data

Typical values

Rated voltage / transmission duty	10 kV – 35 kV (IEC 60502-2 & CIGRE TB 490 HYJQF41 10–35 kV 3-Core XLPE Submarine Composite Specification)	**Core / conductor construction**	10-35 kV XLPE Phase Cores (3 Cores) — Compacted round copper + triple-extruded XLPE + lead-alloy sheath
Primary dielectric / buffering	Submarine Optical Fiber Units (1-2 Units) — Interstitial stainless-steel tube optical fiber sub-units	**Continuous operating temperature**	−20...+90 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per IEC 60502-2 & CIGRE TB 490 HYJQF41 10–35 kV 3-Core XLPE Submarine Composite Specification	**Storage & transport temperature**	−40...+80 °C on export wooden/steel winch reel
Outer protection / armouring	Polypropylene (PP) Rope Outer Serving — Abrasion- and corrosion-resistant PP roving outer layer	**Minimum bending radius**	15 × OD
Armour, strength member & mechanical duty	Coarse Round Steel Wire Armour (41) — Heavy-duty coarse galvanized round steel wire armour	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per IEC 60502-2 & CIGRE TB 490 HYJQF41 10–35 kV 3-Core XLPE Submarine Composite Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per IEC 60502-2 & CIGRE TB 490 HYJQF41 10–35 kV 3-Core XLPE Submarine Composite Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 60502-2 & CIGRE TB 490 HYJQF41 10–35 kV 3-Core XLPE Submarine Composite Specification		

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	Breaking / tensile kN ≈	Min. bend R mm
HYJQF41 10–35kV Submarine Construction Schedule (−20...+90 °C) 3 sizes						
☐ **HYJQF41 10–35kV Submarine Config A**	**3×25–50 mm² (or 3P+FO Composite)**	**Compacted / Class 5 Cu/SnCu + FO**	**32.0**	**1,850**	**85.0**	**380**
☐ **HYJQF41 10–35kV Submarine Config B**	**3×95–150 mm² (or Heavy EOM)**	**Compacted / Class 5 Cu/SnCu + FO**	**48.5**	**4,280**	**130.0**	**580**
☐ **HYJQF41 10–35kV Submarine Config C**	**3×240–400 mm² (or Trunk HV/MV)**	**Compacted Cu + Lead/Armour + FO**	**78.0**	**9,650**	**210.0**	**950**

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per IEC 60502-2 & CIGRE TB 490 HYJQF41 10–35 kV 3-Core XLPE Submarine Composite Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3×25–50 mm² (or 3P+FO Composite)	**0.49**	**10 kV – 35 kV (Subsea/MV)**	**−20...+90 °C**
3×95–150 mm² (or Heavy EOM)	**0.19**	**10 kV – 35 kV (Subsea/MV)**	**−20...+90 °C**
3×240–400 mm² (or Trunk HV/MV)	**0.07**	**10 kV – 35 kV (Trunk/HV)**	**−20...+90 °C**

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

Standards and approvals

- IEC 60502-2 / JB/T 11167 HYJQF41 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/hyjqf41-10-35kv-submarine-composite-cable

Typical values for this cable type, based on IEC 60502-2 & CIGRE TB 490 HYJQF41 10–35 kV 3-Core XLPE Submarine Composite Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.