



instrumentation cable series

Enviro-Lite Hybrid E-Line

Lightweight Hybrid-Armoured E-Line

Smooth polymer-sheathed lightweight hybrid steel/composite slick E-line logging cable



Slick Polymer Outer Ø

35 % Lighter Weight

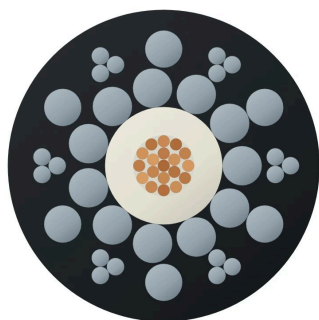
Zero Grease-Head Leak

Application

Enviro-Lite Hybrid E-Line Lightweight Hybrid-Armoured Logging Cable combining an insulated copper + optional optical core, high-tensile galvanized/alloy steel + para-aramid/carbon hybrid strength members, and a smooth wear-resistant.

Typical uses: Zero-Spill Offshore & Urban Well Intervention, Sour Gas (H₂S / CO₂) Live-Well Logging, Extended-Reach Horizontal Tractor Logging, Acid Stimulation & Real-Time Downhole PT/DTS, Lightweight Fly-Away Winch Units

Construction



Cross-section, not to scale

- 1 Copper telemetry core (+ optional optical FIMT)
- 2 High-temperature fluoropolymer dielectric
- 3 Hybrid steel + high-modulus composite armour
- 4 Pressure-extruded smooth slick outer jacket

Rated 600–1,000 V DC
downhole tool supply

Technical data

Typical values

Rated voltage	600 V DC (EL-150) · 1,000 V DC (EL-220 / EL-312)	Conductor DC resistance	42.0 Ω/km (EL-150) · 26.5 Ω/km (EL-220) · 13.8 Ω/km (EL-312)
Return armour resistance	18.0 Ω/km (EL-150) · 11.5 Ω/km (EL-220) · 6.5 Ω/km (EL-312)	Capacitance	130 to 165 pF/m
Operating temp (PVDF/ETFE)	-40 °C to +165 °C (+330 °F)	Operating temp (PEEK HT)	-40 °C to +205 °C (+400 °F)
Rapid gas decompression	Void-free extrusion resists CO ₂ /CH ₄ blistering	Breaking load	14.0 kN (EL-150) · 24.5 kN (EL-220) · 38.0 kN (EL-312)
Weight reduction	30 % to 38 % lighter than bare steel wireline of equal OD	Wellbore friction coeff.	μ ≈ 0.14 vs. 0.28 for bare stranded armour in deviated wells
Min. sheave diameter	250 mm (EL-150) · 330 mm (EL-220) · 400 mm (EL-312)	Sour gas & acid	100 % jacket barrier against H ₂ S, CO ₂ & 15 % HCl acid
Hydrostatic pressure	Up to 105 MPa (15,000 psi)	Environmental compliance	Eliminates hydrocarbon grease discharge at wellhead
Standards	API RP 9B & NACE MR0175 / ISO 15156		

Sizes

4 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Nominal size & core	Smooth Ø mm	Weight in air kg/km	Break load kN	Cond. DC R Ω/km
Smooth Polymer-Jacketed Hybrid E-Line Cables 4 sizes					
☐ Enviro-Lite EL-150	0.150" · 1C Cu · ETFE Slick	3.81	58	14.0	42.0
☐ Enviro-Lite EL-220	7/32" (0.220") · 1C Cu · ETFE Slick	5.59	92	24.5	26.5
☐ Enviro-Lite EL-220-PEEK	7/32" · 1C Cu · +205 °C PEEK Slick	5.59	94	25.0	26.5
☐ Enviro-Lite EL-312-FO	5/16" · 1C Cu + 2F SM · PEEK Slick	7.92	185	38.0	13.8

– Outer diameter is centerless-ground/calibrated to ±0.05 mm (±0.002") for drop-in slickline stuffing-box sealing.

Standards and approvals

- ✓ API RP 9B & NACE MR0175
- ✓ ISO 13628-5 Well Control
- ✓ RoHS 2 & REACH Compliant

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/lightweight-hybrid-armoured-e-line-logging-cable



Typical values for this cable type, based on API RP 9B / ISO 13628-5 / NACE MR0175. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.