

# Enviro-Lite Hybrid™ Greaseless Cable



Forum's new Enviro-Lite Hybrid™ cable utilizes our Enviro-Lite coated cable technology to develop a more robust design, further maximizing your cable run life and substantially reducing costs related to your typical grease and maintenance requirements in the field. The Enviro-Lite Hybrid™ cable is an eco-friendly, electro-mechanical wireline product designed to enable faster running speeds and faster rig-up times, while minimizing maintenance and environmental risks.

## Application

- Cased hole horizontal completions
- Extended reach wells

## Benefits

- Longer run life than conventional cables
- Reduces downtime and maintenance costs with its torque-neutral design
- Eliminates grease costs and mess on location
- Increased running speed in and out of the hole
- Reduced surface tension even on longer deviated wellbore laterals
- Eliminate grease costs and mess on location
- Reduces cable reheading by a factor of 10

## Features

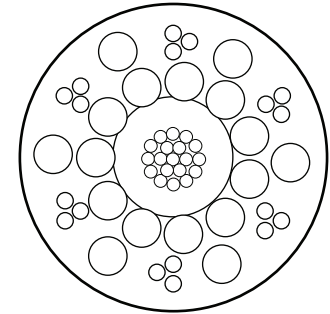
- Conductor consists of a water blocked stranded copper and a high-temperature fluoropolymer dielectric
- Unique armor package design, combined with an "extrude-to-fill" rugged polymer jacket
- Redesigned outer-armor package increases cable durability
- Rated for up to 375° F
- 9,000 lbs break strength

# Enviro-Lite Hybrid Greaseless Cable

## Specifications

- 0.350" (8.89MM) Diameter
- 375°F (190°C) Temperature Rating
- Copper Conductor
- FEP/ETFE Insulation
- GEEIPS Armor / GEIPS for 0.0400" wire
- ETFJ Jacket

Construction Characteristics	English	Metric
Conductor – 15 AWG , 19 x 0.0142"	0.071"	1.80 mm
Wall Thickness	0.033"	0.83 mm
Insulation – OD	0.136"	3.45 mm
Armor – Inner : 11 Wires 0.0455"	0.219"	5.56 mm
Armor – Outer: 6 ea @ 3 x 0.020"	0.302"	7.67 mm
Armor – Outer: 6 ea @ 0.040"	0.302"	7.67 mm
Jacket – OD	0.350"	8.89 mm



Mechanical Characteristics	English	Metric
Weight in Air	169 lbs/kft	252 kg/km
Weight in Water	126 lbs/kft	188 kg/km
Breaking Strength (Ends Fixed)	9,000 lbs	4,082 kg
Working Load (Maximum)	4,500 lbs	2,041 kg
Inner Armor Wire Break Strength	535 lbs	2.38 KN
Outer Armor Wire Break Strength (3 x 0.0200")	292 lbs	1.30 KN
Outer Armor Wire Break Strength (0.0400")	370 lbs	1.65 KN
Temperature Rating ( 8 hrs. Maximum)	375° F	190° C
Suggested Minimum Sheave	26" dia.	660 mm
Outside Diameter	0.350 $\frac{+0.003"}{-0.002"}$	8.89 $\frac{+0.076\text{ mm}}{-0.051\text{ mm}}$
Stretch Coefficient	1.5 ft/kft/klbf	1.7 m/km/5kN

Electrical Characteristics	English	Metric
Voltage Rating	1,500 VDC	1,500 VDC
DC Conductor Resistance at 68°F (20°C)	2.8 Ω/kft	9.2 Ω/km
DC Armor Resistance at 68°F (20°C)	3.4 Ω/kft	11.2 Ω/km
Capacitance Conductor to Armor	56 pF/ft	184 pF/m
Minimum Insulation Resistance	1,500 MΩ*kft	457 MΩ*km

