

NAVIGATION

CASED HOLE

1/10"
1/8"
3/16"
7/32"
1/4"
9/32"
5/16"

OPEN HOLE

SOUR SERVICE

GEOHERMAL

GREASELESS

FIBER OPTIC

MECHANICAL WIRELINE

1L18

3/16" (4.70 mm)

MONOCONDUCTOR



PROPERTIES

Cable Diameter	0.185" +0.004" -0.002"	(4.70mm + 0.10mm -0.05mm)
Minimum Sheave Diameter	14"	(36 cm)
Cable Stretch Coefficient	3.0 ft/Kft/Klbs	(3.37 m/Km/5KN)

ELECTRICAL

Maximum Conductor Voltage	1,000 VDC	
Conductor AWG Rating	20	
Minimum Insulation Resistance	1,500 Mega Ω /Kft @ 500VDC	(457 Mega Ω /Km @ 500VDC)
Armor Electrical Resistance	6.0 Ω /Kft	(19.7 Ω /Km)

MECHANICAL

Cable Breaking Strength			
Ends Fixed	4,000 lbs	(17.8 KN)	Nominal
Maximum Suggested Working Tension	2,000 lbs	(8.9 KN)	Nominal
Number and Size of Wires			
Inner Armor	12 x 0.0220"	(0.559 mm)	
Outer Armor	12 x 0.0358"	(0.909 mm)	
Average Wire Breaking Strength			
Inner Armor	103 lbs	(0.46 KN)	
Outer Armor	272 lbs	(1.21 KN)	

Cable Type	Core Description								Cable Weight		
	Temperature Rating °F °C			Plastic Type	Insulation Thickness in mm	Copper Construction in mm	Res Typical Ω /Kft Ω /Km	Cap. Typical pf/ft pf/m	O.D. Each in mm	in Air	in H ₂ O
	1 hr. Max Temp	8 hr. Max Temp	Cont. Max Temp							lbs/Kft Kg/Km	
1L18RP	300 149	275 135	250 121	Poly	0.019 0.483	7x0.0128 7x0.325	9.4 30.8	53 174	0.076 1.930	65 97	54 80
1L18RZ	500 260	450 232	400 260	ETFE	0.019 0.483	7x0.0128 7x0.325	9.4 30.8	63 207	0.076 1.930	66 99	55 81

- ▶ The armor wires are high tensile, Galvanized Extra Improved Plow Steel (GEIPS), and coated with anti-corrosion compound for protection during shipping and storing. Wires are preformed.
- ▶ Core assembly – Copper strand consists of six wires around one center wire. Conductor resistance is measured at 68° F. Voids in the copper strand are filled with a water-blocking agent to reduce water and gas migration.
- ▶ SUPERSEAL, a special pressure seal agent, is applied between armor layers.
- ▶ The temperature rating assumes a normal gradient for both temperature and weight.
- ▶ All values shown are nominal or typical values.