

NAVIGATION

CASED HOLE

1/10"

1/8"

3/16"

7/32"

1/4"

9/32"

5/16"

OPEN HOLE

SOUR SERVICE

GEOTHERMAL

GREASELESS

FIBER OPTIC

MECHANICAL WIRELINE

1N10

1/10" (2.57 mm)

MONOCONDUCTOR



PROPERTIES

Cable Diameter	0.101" +0.004" -0.002"	(2.57mm +0.10mm -0.05mm)
Minimum Sheave Diameter	6"	(15 cm)
Cable Stretch Coefficient	13.1 ft/Kft/Klbs	(14.72 m/Km/5KN)

ELECTRICAL

Maximum Conductor Voltage	300 VDC	
Conductor AWG Rating	24	
Minimum Insulation Resistance	1,500 Mega Ω /Kft @ 500 VDC	(457 Mega Ω /Km @ 500 VDC)
Armor Electrical Resistance	22.0 Ω /Kft	(72.2 Ω /Km)

MECHANICAL

Cable Breaking Strength			
Ends Fixed	1,000 lbs	(4.5 KN)	Nominal
Maximum Suggested Working Tension	500 lbs	(2.2 KN)	
Number and Size of Wires			
Inner Armor	12 x 0.0140"	(0.356 mm)	
Outer Armor	18 x 0.0140"	(0.356 mm)	
Average Wire Breaking Strength			
Inner Armor	42 lbs	(0.19 KN)	
Outer Armor	42 lbs	(0.19 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	
1N10RP	300 149	275 135	250 121	Poly	0.012 0.305	7x0.0085 7x0.216	21.0 69.0	51 167	0.049 1.244	19 28	15 23

- ▶ 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.
- ▶ **Not for use in oil and gas wells.**