



1N12

1/8" (3.20 mm)
MONOCONDUCTOR

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

PROPERTIES

Cable Diameter	0.126" +0.004" -0.002"	(3.20mm +0.10mm -0.05mm)
Minimum Sheave Diameter	7"	(18 cm)
Cable Stretch Coefficient	6.5 ft/Kft/Klbs	(7.3 m/Km/5KN)

ELECTRICAL

Maximum Conductor Voltage	300 VDC	
Conductor AWG Rating	24	
Minimum Insulation Resistance	1,500 MegaΩ/Kft @ 500VDC	(457 MegaΩ/Km @ 500VDC)
Armor Electrical Resistance	13.0 Ω/Kft	(42.7 Ω/Km)

MECHANICAL

Cable Breaking Strength			
Ends Fixed	1,600 lbs	(7.1 KN)	Nominal
Maximum Suggested Working Tension	800 lbs	(3.5 KN)	
Number and Size of Wires			
Inner Armor	12 x 0.0175"	(0.444 mm)	
Outer Armor	18 x 0.0175"	(0.444 mm)	
Average Wire Breaking Strength			
Inner Armor	65 lbs	(0.29 KN)	
Outer Armor	65 lbs	(0.29 KN)	

Cable Type	Core Description								Cable Weight		
	Temperature Rating			Plastic Type	Insulation Thickness	Copper Construction	Res Typical	Cap. Typical	O.D. Each	in Air	in H ₂ O
	1 hr. Max Temp	8 hr. Max Temp	Cont. Max Temp							in mm	in mm
1N12RP	300 149	275 135	250 121	Poly	0.0175 0.444	7x0.0085 7x0.216	21.0 69.0	41 134	0.060 1.524	28 42	23 35
1N12RZ	500 250	450 232	400 204	ETFE	0.0175 0.444	7x0.0085 7x0.216	21.0 69.0	48 157	0.060 1.524	29 43	24 36

- ▶ 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.**