



1N32-S75

5/16" (8.18 mm)
MONOCONDUCTOR
CORROSION RESISTANT

NAVIGATION

- CASED HOLE
- OPEN HOLE
- SOUR SERVICE
 - 7/32"
 - 1/4"
 - 9/32"
 - 5/16"
- GEOTHERMAL
- GREASELESS
- FIBER OPTIC
- MECHANICAL WIRELINE

PROPERTIES

Cable Diameter	0.322" +0.005" - 0.002"	(8.18mm +0.13mm -0.05mm)
Minimum Sheave Diameter	18"	(46 cm)
Cable Stretch Coefficient	1.59 ft/Kft/Klbs	(1.787 m/Km/5KN)

ELECTRICAL

Maximum Conductor Voltage	1,500 VDC	
Conductor AWG Rating	15	
Minimum Insulation Resistance	1,500 MegaΩ/Kft @ 500VDC	(457 MegaΩ/Km @ 500VDC)
Armor Electrical Resistance	9.0 Ω/Kft	(29.5 Ω/Km)

MECHANICAL

Cable Breaking Strength			
Ends Fixed	9,700 lbs	(43.16 KN)	Nominal
Maximum Suggested Working Tension	4,850 lbs	(21.58 KN)	
Number and Size of Wires			
Inner Armor	12 x 0.0445"	(1.130 mm)	
Outer Armor	18 x 0.0445"	(1.130 mm)	
Average Wire Breaking Strength			
Inner Armor	373.4 lbs	(1.66 KN)	
Outer Armor	373.4 lbs	(1.66 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
	°F	°C								in mm	in mm
	1 hr. Max Temp	8 hr. Max Temp	Cont. Max Temp								
1N32WTZ-S75	500	450	400	FEP	0.0245	19x0.0142	3.2	45	0.120	201	166
	260	232	204	ETFE	0.0175	19x0.361	10.5	148	0.155	299	247
					0.622				3.048		
					0.444				3.937		

- ▶ While insulation is rated to 1-hour exposure of 500°F, alloy armor wires may have reduced corrosion resistance at temperatures above 350°F.
- ▶ The armor wires are made of corrosion resistant alloy steel suitable for low level H₂S and CO₂ environments.
- ▶ Conductor has nickel plated wires adhering to ASTM B355 Class 10 for increased corrosion resistance.
- ▶ 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 insulation temperature rating assumes a normal gradient for both temperature and weight.
- ▶ All values shown are nominal or typical values.