

NAVIGATION

CASED HOLE

OPEN HOLE

SOUR SERVICE

7/32"

1/4"

9/32"

5/16"

GEOHERMAL

GREASELESS

FIBER OPTIC

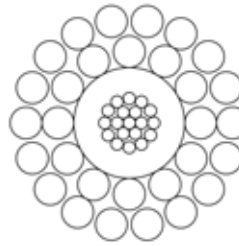
MECHANICAL WIRELINE

1N32-S77

5/16" (8.18 mm)

MONOCONDUCTOR

CORROSION RESISTANT



PROPERTIES

Cable Diameter	0.322" +0.005" - 0.002"	(8.18mm +0.13mm -0.05mm)
Minimum Sheave Diameter	18"	(46 cm)
Cable Stretch Coefficient	1.58 ft/Kft/Klbs	(1.775 m/Km/5KN)

ELECTRICAL

Maximum Conductor Voltage	1,500 VDC	
Conductor AWG Rating	15	
Minimum Insulation Resistance	1,500 Mega Ω /Kft @ 500 VDC	(457 Mega Ω /Km @ 500VDC)
Armor Electrical Resistance	9.1 Ω /Kft	(29.9 Ω /Km)

MECHANICAL

Cable Breaking Strength			
Ends Fixed	10,000 lbs	(44.50 KN)	Nominal
Maximum Suggested Working Tension	5,000 lbs	(22.25 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	388.8 lbs	(1.73 KN)	
Outer Armor	388.8 lbs	(1.73 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
1N32WTZ-S77	500	450	400	FEP	0.0245 0.622	19x0.0142	3.2	45	0.120 3.048	198	163
	260	232	204	ETFE	0.0175 0.444	19x0.361	10.5	148	0.155 3.937	294	243

- ▶ While insulation is rated to 1-hour exposure of 500 °F, alloy armor wires may have reduced corrosion resistance at temperatures above 400 °F.
- ▶ The armor wires are made of corrosion resistant alloy steel suitable for moderate 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 temperature rating assumes a normal gradient for both temperature and weight.
- ▶ All values shown are nominal or typical values.