



# 1N29-S75

9/32" (7.32 mm)  
MONOCONDUCTOR  
CORROSION RESISTANT

## NAVIGATION

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

### PROPERTIES

Cable Diameter	0.288" +0.005" - 0.002"	(7.32mm +0.13mm -0.05mm)
Minimum Sheave Diameter	16"	(41 cm)
Cable Stretch Coefficient	1.88 ft/Kft/Klbs	(2.112 m/Km/5KN)

### ELECTRICAL

Maximum Conductor Voltage	1,500 VDC	
Conductor AWG Rating	16	
Minimum Insulation Resistance	1,500 Mega $\Omega$ /Kft @ 500 VDC	(457 Mega $\Omega$ /Km @ 500VDC)
Armor Electrical Resistance	11.2 $\Omega$ /Kft	(36.8 $\Omega$ /Km)

### MECHANICAL

Cable Breaking Strength			
Ends Fixed	7,800 lbs	(34.7 KN)	Nominal
Maximum Suggested Working Tension	3,900 lbs	(17.35 KN)	
Number and Size of Wires			
Inner Armor	12 x 0.0400"	(1.016 mm)	
Outer Armor	18 x 0.0400"	(1.016 mm)	
Average Wire Breaking Strength			
Inner Armor	302 lbs	(1.34 KN)	
Outer Armor	302 lbs	(1.34 KN)	

Cable Type	Core Description									Cable Weight	
	Temperature Rating °F °C			Plastic Type	Insulation Thickness in mm	Copper Construction in mm	Res Typical $\Omega$ /Kft $\Omega$ /Km	Cap. Typical pf/ft pf/m	O.D. Each in mm	in Air	in H <sub>2</sub> O
	1 hr. Max Temp	8 hr. Max Temp	Cont. Max Temp							lbs/Kft Kg/Km	
1N29WTZ-S75	500 260	450 232	400 204	FEP	0.017 0.432	19x0.0128 19x0.325	4.0 13.1	48 157	0.098 2.489	161 239	133 198
				ETFE	0.019 0.483			0.136 3.454			

- ▶ 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 H<sub>2</sub>S and CO<sub>2</sub> 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.