



1N25-S75

1/4" (6.55 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	0.258" +0.005" - 0.002"	(6.55mm +0.13mm -0.05mm)
Minimum Sheave Diameter	14"	(36 cm)
Cable Stretch Coefficient	2.28 ft/Kft/Klbs	(2.562 m/Km/5KN)

ELECTRICAL

Maximum Conductor Voltage	1,200 VDC	
Conductor AWG Rating	16	
Minimum Insulation Resistance	1,500 Mega Ω /Kft @ 500VDC	(457 Mega Ω /Km @ 500VDC)
Armor Electrical Resistance	13.9 Ω /Kft	(45.6 Ω /Km)

MECHANICAL

Cable Breaking Strength			
Ends Fixed	6,200 lbs	(26.7 KN)	Nominal
Maximum Suggested Working Tension	3,100 lbs	(13.8 KN)	
Number and Size of Wires			
Inner Armor	12 x 0.0358"	(0.909 mm)	
Outer Armor	18 x 0.0358"	(0.909 mm)	
Average Wire Breaking Strength			
Inner Armor	242 lbs	(1.10 KN)	
Outer Armor	242 lbs	(1.10 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
1N25WA-S75	500 260	450 232	400 204	PFA	0.032 0.813	19x0.0119 19x0.302	4.6 15.1	53 174	0.123 3.124	131 194	108 161

- ▶ 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.