

NAVIGATION

CASED HOLE
OPEN HOLE
SOUR SERVICE
7/32"
1/4"
9/32"
5/16"

GEOHERMAL
GREASELESS
FIBER OPTIC
MECHANICAL WIRELINE

1N22-MP35N

7/32" (5.69 mm)
MONOCONDUCTOR



PROPERTIES

Cable Diameter	0.224" +0.005" - 0.002"	(5.69mm +0.13mm -0.05mm)
Minimum Sheave Diameter	14"	(36 cm)
Cable Stretch Coefficient	2.9 ft/Kft/Klbs	(3.3 m/Km/5KN)

ELECTRICAL

Maximum Conductor Voltage	1,200 VDC	
Conductor AWG Rating	18	
Minimum Insulation Resistance	1,500 MegaΩ/Kft @ 500 VDC	(457 MegaΩ/Km @ 500 VDC)
Armor Electrical Resistance	22.0 Ω/Kft	(72 Ω/Km)

MECHANICAL

Cable Breaking Strength			
Ends Fixed	5,200 lbs	(23.14 KN)	Nominal
Maximum Suggested Working Tension	2,600 lbs	(11.57 KN)	
Number and Size of Wires			
Inner Armor	12 x 0.0310"	(0.787 mm)	
Outer Armor	18 x 0.0310"	(0.787 mm)	
Average Wire Breaking Strength			
Inner Armor	204 lbs	(0.91 KN)	
Outer Armor	204 lbs	(0.91 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
1N22SA-MP35N	500 260	450 232	400 204	PFA	0.0305 0.075	7x0.0159 7x0.404	6.7 22	43 141	0.108 2.743	101 150	84 124

- ▶ While insulation is rated to 1-hour exposure of 500 °F, alloy armor wires may have reduced corrosion resistance at temperatures above 450 °F.
- ▶ The armor wires are made of corrosion resistant alloy steel suitable for extreme 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.