



1N25

1/4" (6.55 mm)
MONOCONDUCTOR

NAVIGATION

CASED HOLE

1/10"

1/8"

3/16"

7/32"

1/4"

9/32"

5/16"

OPEN HOLE

SOUR SERVICE

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 | 1.9 ft/Kft/Klbs | (2.13 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 | 3.0 Ω /Kft | (9.8 Ω /Km) |

MECHANICAL

| | | | |
|-----------------------------------|--------------|------------|---------|
| Cable Breaking Strength | | | |
| Ends Fixed | 7,300 lbs | (32.48 KN) | Nominal |
| Maximum Suggested Working Tension | 3,650 lbs | (16.24 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 | 286 lbs | (1.27 KN) | |
| Outer Armor | 286 lbs | (1.27+ 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 | | | | | | | | |
| 1N25PP | 300 149 | 275 135 | 250 121 | Poly | 0.032 0.813 | 19x0.0119 19x0.302 | 4.1 13.5 | 50 164 | 0.123 3.124 | 121 180 | 100 149 |
| 1N25PXZ | 420 216 | 375 191 | 325 163 | TPX | 0.130 0.330 | 19x0.0119 19x0.302 | 4.1 13.5 | 53 174 | 0.085 2.159 | 124 185 | 101 151 |
| | | | | ETFE | 0.019 0.483 | | | | 0.123 3.124 | | |
| 1N25PTZ | 500 260 | 450 232 | 400 204 | FEP | 0.013 0.330 | 19x0.0119 19x0.302 | 4.1 13.5 | 53 174 | 0.085 2.159 | 125 186 | 103 154 |
| | | | | ETFE | 0.019 0.483 | | | | 0.123 3.124 | | |

- ▶ The armor wires are high tensile, Galvanized Extra Improved Plow Steel (GEIPS), and coated with anti-corrosion compound for protection during shipping and storing. Wires are preformed.
- ▶ Core assembly – Copper strand consists of a total of nineteen wires. 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.