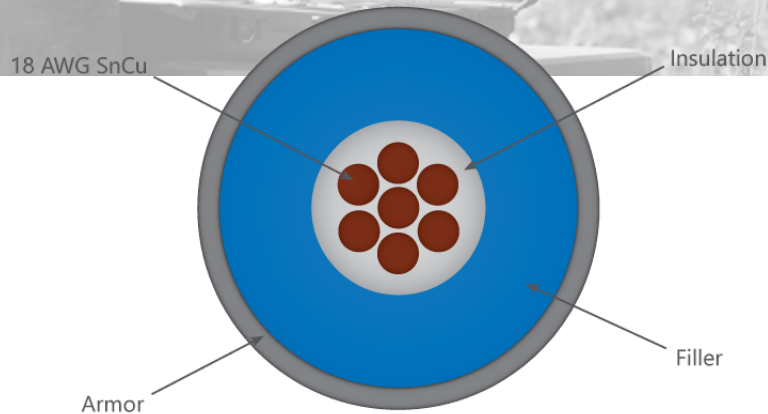


**TEC**



### Application

Datacan's armored cable for artificial lift downhole monitoring systems is suitable for several different types of data acquisition. This includes pressure, temperature, and vibration measurements as well as identification, diagnostics and analysis of operation problems and changes in reservoir conditions.

### Features

- 18 AWG single tinned copper conductor
- Corrosion Resistant Insulation Rated Up To 150°C
- 150°C Rated Blue Polyolefin Filler
- Continuously Welded 316L Stainless Steel Armor

### Dimensional Specifications

	Value (in)	Tolerance (in)
Conductor Diameter	0.0460	+ 1 %, - 5%
Insulated Diameter	0.0980	± 0.002
Insulation Wall	0.0260	± 0.002
Filler Diameter	0.194	
Filler Wall	0.048	
Filler Concentricity	80	
Armor Diameter	0.250	± 0.002
Armor Thickness	0.028	+ 0.0005, - 0.0025
Roundness	0.001	0.002 max
Encapsulation Min. Axis	0.433	± 0.024
Encapsulation Max. Axis	± 0.024	± 0.024

### TEC

#### Dimensional Specifications

	Value	Tolerance
Armor Tensile Strength (psi)	135,000	± 35,000
Armor Yield Strength (psi)	125,000	± 35,000
Armor Elongation	15%	± 10%
Tube Hardness (HRc)	30	35 max
Cable Collapse Pressure (psi)	17,500	± 5,000
Cable Working Pressure (psi)	13,125	
Core Pullout Force (lbf)	10	5 min, 55 max
Filler Stripping Force (lbf)	20	10 min, 30 max
Cable Weight (lb/1000')	146	± 15
Service Temperature Range	100°C	-25°C to 150°C

#### Electrical Specifications

	Temperature	Value	Tolerance
Conductor Resistance ( $\Omega$ /1000')	20°C	7	7 (max)
	150°C	11	11 (max)
Armor Resistance ( $\Omega$ /1000')	20°C	18.5	± 2.0
	150°C	19.1	± 2.0
Capacitance (pF/ft)	20°C	29.9 max	
	150°C	27.5	
Insulation Resistance (M $\Omega$ -1000')		6,500 min	
Velocity of Propagation (%Vel. Light)			
Cutoff Frequency (MHz)		72.2	± 0.2
Effective Impedance ( $\Omega$ )		22,425	± 1,500
Effective Inductance ( $\mu$ H/ft)		0.08	± 0.01
Voltage Rating 3kV 5 min		1,000 V	