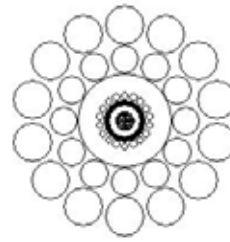


## NAVIGATION

CASED HOLE  
 OPEN HOLE  
 SOUR SERVICE  
 GEOTHERMAL  
 GREASELESS  
 FIBER OPTIC  
   1/4"  
   5/16"  
   .36"  
 MECHANICAL WIRELINE

# 1Q25-F0

1/4" (6.35 mm)  
**MONOCONDUCTOR**  
**FIBER OPTIC**



### PROPERTIES

Cable Diameter	0.249" +0.005" - 0.002"	(6.32mm +0.13mm -0.05mm)
Minimum Sheave Diameter	16"	(41 cm)
Cable Stretch Coefficient	1.8 ft/Kft/Klbs	(2.02 m/Km/5KN)

### ELECTRICAL

Maximum Conductor Voltage	1,000 VDC	
Conductor AWG Rating	19	
Minimum Insulation Resistance	1,500 Mega $\Omega$ /Kft @ 500VDC	(457 Mega $\Omega$ /Km @ 500VDC)
Armor Electrical Resistance	3.3 $\Omega$ /Kft	(10.8 $\Omega$ /Km)

### MECHANICAL

Cable Breaking Strength			
Ends Fixed	6,600 lbs	(29.37 KN)	Nominal
Maximum Suggested Working Tension	3,300 lbs	(14.68 KN)	
Number and Size of Wires			
Inner Armor	12 x 0.0310"	(0.787 mm)	
Outer Armor	14 x 0.0425"	(1.080 mm)	
Average Wire Breaking Strength			
Inner Armor	204 lbs	(0.91 KN)	
Outer Armor	383 lbs	(1.71 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 <sub>2</sub> O
	1 hr. Max Temp	8 hr. Max Temp	Cont. Max Temp							in mm	in mm
<b>1Q25YZ-F0</b>	<b>500</b> 260	<b>450</b> 232	<b>400</b> 204	<b>FEP</b>	<b>0.023</b> 0.584	<b>18x0.0085</b>	<b>8.5</b> 27.9	<b>78</b> 256	<b>0.109</b> 2.770	<b>117</b> 175	<b>97</b> 144

- ▶ Number, type and temperature rating of fiber optic elements is dependent on customer request.
- ▶ While insulation is rated to 1-hour exposure of 500 °F, the fiber optic element in the cable will dictate the maximum operating temperature for the cable.
- ▶ Fiber in metal tube (FIMT): stainless steel OD of 0.046 in. (1.17 mm). Extra fiber length (EFL) is specified by customer request and subject to manufacturing capabilities.
- ▶ Attenuation increase in the fiber optic under loaded conditions may vary.
- ▶ The armor wires are high tensile, Galvanized Extra Improved Plow Steel (GEIPS), and coated with an anticorrosion compound for protection during shipping and storing. Wires are preformed.
- ▶ 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.
- ▶ All values shown are nominal or typical values.