



1Q25-F0-S75

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

NAVIGATION

CASED HOLE
OPEN HOLE
SOUR SERVICE
GEOTHERMAL
GREASELESS
FIBER OPTIC

1/4"

5/16"

.36"

MECHANICAL WIRELINE

PROPERTIES

Cable Diameter	0.249" +0.005" - 0.002"	(6.32mm +0.13mm -0.05mm)
Minimum Sheave Diameter	16"	(41 cm)
Cable Stretch Coefficient	2.0 ft/Kft/Klbs	(2.3 m/Km/5KN)

ELECTRICAL

Maximum Conductor Voltage	1,000 VDC	
Conductor AWG Rating	19	
Minimum Insulation Resistance	1,500 MegaΩ/Kft @ 500VDC	(457 MegaΩ/Km @ 500VDC)
Armor Electrical Resistance	15.6 Ω/Kft	(51.2 Ω/Km)

MECHANICAL

Cable Breaking Strength			
Ends Fixed	5,900 lbs	(26.25 KN)	Nominal
Maximum Suggested Working Tension	2,950 lbs	(13.13 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	181 lbs	(0.81 KN)	
Outer Armor	341 lbs	(1.50 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	lbs/Kft Kg/Km
1Q25YZ-F0-S75	500 260	450 232	400 204	FEP	0.023 0.584	18x0.0085	9.9 32.5	82 269	0.109 2.770	122 181	101 150

- ▶ 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.
- ▶ 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.
- ▶ All values shown are nominal or typical values.