



1Q36-FO-S77

0.36" (9.068 mm)
MONOCONDUCTOR

NAVIGATION

CASED HOLE
OPEN HOLE
SOUR SERVICE
GEOTHERMAL
GREASELESS
FIBER OPTIC

1/4"

5/16"

.36"

MECHANICAL WIRELINE

PROPERTIES

Cable Diameter	0.357" +0.005" - 0.002"	(9.068mm +0.13mm -0.05mm)
Minimum Sheave Diameter	22"	(56 cm)
Cable Stretch Coefficient	1.27 ft/Kft/Klbs	(1.43 m/Km/5KN)

ELECTRICAL

Maximum Conductor Voltage	1,500 VDC	
Conductor AWG Rating	11	
Minimum Insulation Resistance	1,500 Mega Ω /Kft @ 500 VDC	(457 Mega Ω /Km @ 500 VDC)
Armor Electrical Resistance	8.85 Ω /Kft	(29.05 Ω /Km)

MECHANICAL

Cable Breaking Strength			
Ends Fixed	10,100 lbs	(44.94 KN)	Nominal
Maximum Suggested Working Tension	5,050 lbs	(22.47 KN)	
Number and Size of Wires			
Inner Armor	18 x 0.039"	(0.991 mm)	
Outer Armor	23 x 0.039"	(0.991 mm)	
Average Wire Breaking Strength			
Inner Armor	280 lbs	(1.25 KN)	
Outer Armor	280 lbs	(1.25 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	
1Q36YZ-FO-S77	500 260	450 232	400 204	ETFE	0.032 0.800	14x0.0253 19x0.643	1.43 4.68	144 472	0.208 5.27	233 347	193 287

- ▶ 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 0.094 in. (2.4 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 400°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.