

## NAVIGATION

CASED HOLE  
OPEN HOLE  
SOUR SERVICE  
GEOTHERMAL

7/32"

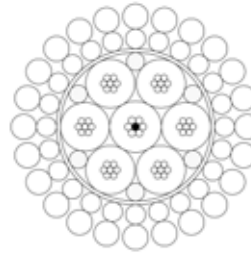
5/16"

15/32"

GREASELESS  
FIBER OPTIC  
MECHANICAL WIRELINE

# 7J46

15/32" (11.79 mm)  
7-CONDUCTOR  
GeoSteam™



## PROPERTIES

Cable Diameter	0.464" +0.005" - 0.002"	(11.79mm +0.13mm -0.05mm)
Minimum Sheave Diameter	26"	(66 cm)
Cable Stretch Coefficient	0.77 ft/Kft/Klbs	(0.87 m/Km/5KN)

## ELECTRICAL

Maximum Conductor Voltage	1,200 VDC	
Conductor AWG Rating	20	
Minimum Insulation Resistance	1,500 MegaΩ/Kft @ 500 VDC	(457 MegaΩ/Km @ 500 VDC)
Armor Electrical Resistance	1.3 Ω/Kft	(4.3 Ω/Km)

## MECHANICAL

Cable Breaking Strength			
Ends Fixed	19,100 lbs	(85.0 KN)	Nominal
Maximum Suggested Working Tension	9,550 lbs	(42.5 KN)	
Number and Size of Wires			
Inner Armor	24 x 0.0390"	(0.991 mm)	
Outer Armor	24 x 0.0495"	(1.257 mm)	
Average Wire Breaking Strength			
Inner Armor	357 lbs	(1.51 KN)	
Outer Armor	575 lbs	(2.56 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	Jacket Type	in Air	in H <sub>2</sub> O
	1 hr. Max Temp	8 hr. Max Temp	Cont. Max Temp									
7J46SGG	600 316	550 288	500 260	ECA	0.0290 0.737	7x0.0128 7x0.325	11.1 36.4	40 131	0.096 2.438	ECA	363 540	300 446

- ▶ 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 and cables are post-tensioned.
- ▶ The Nickel coated copper wires are made of ASTM3555 Class 10 and they are used to increase corrosion protection conductors.
- ▶ Core assembly – Copper strand consists of six wires around one center wire and are “water blocked” to reduce water and gas migration. Conductor resistance is measured at 68 deg. F.
- ▶ The temperature rating assumes a normal gradient for both temperature and weight.
- ▶ Center conductor construction is 6x0.0142" with a non-conductive center member. The typical resistance is reduced by approximately 5 to 10% and the capacitance is increased by approximately 5 to 10% in comparison to the outer conductors.
- ▶ All values shown are nominal or typical values.