

NAVIGATION

CASED HOLE

OPEN HOLE

.377"

3/16"

5/16"

3/8"

7/16"

15/32"

.474"

DuraSlam

.49"

.54"

SOUR SERVICE

GEOTHERMAL

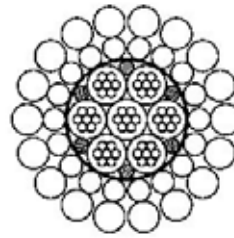
GREASELESS

FIBER OPTIC

MECHANICAL WIRELINE

7H42

7/16" (10.82 mm)
7-CONDUCTOR



PROPERTIES

Cable Diameter	0.426" +0.005" - 0.002"	(10.82mm +0.13mm -0.05mm)
Minimum Sheave Diameter	24"	(61 cm)
Cable Stretch Coefficient	0.75 ft/Kft/Klbs	(0.84 m/Km/5KN)

ELECTRICAL

Maximum Conductor Voltage	1,000 VDC	
Conductor AWG Rating	20	
Minimum Insulation Resistance	1,500 MegaΩ/Kft @ 500 VDC	(457 MegaΩ/Km @ 500 VDC)
Armor Electrical Resistance	1.2 Ω/Kft	(3.9 Ω/Km)

MECHANICAL

Cable Breaking Strength			
Ends Fixed	17,600 lbs	(78.3 KN)	Nominal
Maximum Suggested Working Tension	8,800 lbs	(39.2 KN)	
Number and Size of Wires			
Inner Armor	18 x 0.0425"	(1.080 mm)	
Outer Armor	18 x 0.0585"	(1.490 mm)	
Average Wire Breaking Strength			
Inner Armor	404 lbs	(1.80 KN)	
Outer Armor	765 lbs	(3.40 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	Tape Type	in Air	in H ₂ O
	1 hr. Max Temp	8 hr. Max Temp	Cont. Max Temp								lbs/Kft	Kg/Km
7H42RP	300 149	275 135	250 121	Poly	0.018 0.457	7x0.0128 7X0.325	9.8 32.2	53 174	0.074 1.880	Dacron	309 460	256 380
7H42RZ	500 260	450 232	400 204	ETFE	0.0180 0.457	7x0.0128 7X0.325	9.8 32.2	62 203	0.074 1.880	Dacron	316 471	261 389

- ▶ 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.
- ▶ Core assembly – Conductors are bound with conductive tape and voids are filled with conductive paste and string.
- ▶ Conductors are “Water Blocked” to reduce water and gas migration. Conductor resistance is measured at 68° F.
- ▶ The temperature rating assumes a normal gradient for both temperature and weight.
- ▶ Center conductor construction is 7x0.0128". 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.
- ▶ Dacron® does not withstand temperatures exceeding 300° F. Nomex® is available by customer request at time of order for additional cost.