



**7/16" (10.82mm)
7-CONDUCTOR
7H42**

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	1000 VDC	
Conductor AWG Rating	20	
Minimum Insulation Resistance	1,500 MegΩ/Kft @ 500VDC	(457 MegΩ/Km @ 500VDC)
Armor Electrical Resistance:	1.2 Ω/Kft	(3.9 Ω/Km)

MECHANICAL:
Cable Breaking Strength:

Ends Fixed:	18,000 lbs	(80.1 KN)	Nominal
Maximum Suggested Working Tension:	9,000 lbs	(40.0 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	383 lbs	(1.70 KN)
Outer Armor	726 lbs	(3.23 KN)

Cable Type		Core Description							Cable Weight		
	Temp Rating	Plastic Type	Insulation Thickness	Copper Construction	Res. Typical	Cap. Typical	O.D. Each	Tape Type	in Air	in H2O	Spec. Gravity
	°F °C								in mm	in mm	
7H42RP	300 149	Poly	0.018 0.457	7x0.0128 7x0.325	9.8 32.2	53 174	0.074 1.880	Dacron	310 461	255 379	5.63
7H42RZ	500 260	ETFE	0.018 0.457	7x0.0128 7x0.325	9.8 32.2	62 203	0.074 1.880	Dacron	319 475	264 393	5.80
7H42RA	500 260	PFA	0.98 0.048	7x0.0128 7x0.325	9.8 32.2	53 174	0.074 1.880	Dacron	322 479	266 396	5.83

- * 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.
- * 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 capacitance is decreased by approximately 5 to 10% in comparison to the outer conductors.
- * All values shown are nominal or typical values.