



**0.521" (13.23mm)  
7-CONDUCTOR  
7Q52**

**PROPERTIES:**

Cable Diameter:	0.521" +0.007" - 0.003"	(13.23mm + 0.18mm -0.076mm)
Minimum Sheave Diameter:	26"	(66 cm)
Cable Stretch Coefficient (Nominal):	0.58 ft/Kft/Klbs	(0.65 m/km/5KN)

**ELECTRICAL:**

Maximum Conductor Voltage	1200 VDC	
Conductor AWG Rating	20	
Minimum Insulation Resistance	1,500 MegΩ/Kft @ 500VDC	(457 MegΩ/Km @ 500VDC)
Armor Electrical Resistance:	0.85 Ω/Kft	(2.8 Ω/Km)

**MECHANICAL:**

<b>Cable Breaking Strength:</b>			
Ends Fixed:	26,000 lbs	(115.7 KN)	Nominal

<b>Maximum Suggested Working Tension:</b>	13,000 lbs	(57.8 KN)
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**Number and Size of Wires:**

Inner Armor	16 x 0.0585"	(1.490 mm)
Outer Armor	20 x 0.0655"	(1.664 mm)

**Average Wire Breaking Strength:**

Inner Armor	726 lbs	(3.23 KN)
Outer Armor	910 lbs	(4.05 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	Ω/Kft Ω/Km	pf/ft pf/m	in mm
7Q52RP	300	Poly	0.027	7x0.0128	9.8	40	0.092	Dacron	453	371	5.61					
	149		0.686	7x0.325	32.2	131	2.340		674	553						
7Q52RXZ	420	Camtane	0.016	7x0.0128	9.8	40	0.070	Dacron	459	379	5.74					
	216		0.406	7x0.325	32.2	131	1.778		683	563						
7Q52RTZ	500	FEP	0.011	7x0.0128	9.8	39	0.070	Dacron	470	389	5.87					
			0.279									ETFE	0.092	2.340		
			0.406												700	579
			0.011													
260	0.279	2.340														

- \* 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 6x0.0142" with a non-conductive center member. The typical resistance is 8.7 Ω/Kft and the capacitance is increased by approximately 5 to 10% in comparison to the outer conductors.
- \* All values shown are nominal or typical values.