

# 1/2" With Messenger 75 Ohm Coaxial Cable Indoor/Outdoor Trunk & Distribution

Reference: .500

**PRODUCT DESCRIPTION: (AERIAL CONSTRUCTION)**

SOLID ALUMINUM TUBE (Seamless) SWAGED ONTO DIELECTRIC CORE,  
FULLY BONDED COPPER CLAD CENTER CONDUCTOR MEDIUM DENSITY  
PE JACKET, "FIGURE 8" INTEGRATED MESSENGER  
SERVICE LIFE 20 YEARS

**CENTER CONDUCTOR:**  
COPPER CLAD ALUMINUM  
NOMINAL DIAMETER: 0.109" (2.77 mm)

**DIELECTRIC:**  
MICRO-CELLULAR FOAM PE  
NOMINAL DIAMETER 0.450" (11.43 mm)

**SHIELD:**  
SOLID ALUMINUM TUBE (MUST BE SEAMLESS)  
NOMINAL OUTER CONDUCTOR THICKNESS: 0.024" (0.64 mm)  
NOMINAL DIAMETER: 0.5" (12.7mm)

**JACKET:**  
MEDIUM DENSITY PE  
NOMINAL JACKET DIAMETER: 0.560" (14.22 mm)  
NOMINAL JACKET THICKNESS: 0.020" (0.53 mm)

**MESSENGER:**  
NOMINAL DIAMETER OF STEEL MESSENGER: 0.109" (2.77 mm)  
MINIMUM BREAKING STRENGTH OF MESSENGER: 1,800 lbs. (816 kg)

**MECHANICAL CHARACTERISTICS:**  
MINIMUM BEND RADIUS: STANDARD= 6.0" (15.2 cm)  
MINIMUM BEND RADIUS: BONDED = 3.5" (8.9 cm)  
MAXIMUM PULLING TENSION: 300 lbs. (136 kg)

**ELECTRICAL CHARACTERISTICS:**  
CAPACITANCE: 15.3 ± 1.0 pf/ft. (50 ±3.0 nf/km)  
IMPEDANCE: 75 ± 2 Ohms  
VELOCITY OF PROPAGATION: 87% NOMINAL

ATTENUATION: @ 68°F (20°C)



**STANDARDS:**  
ANSI / SCTE 15 2006.  
ASTM D 1248.  
ASTM D 4565.  
SCTE IPS TP 108.  
SCTE IPS TP 103.

@ Frequency MHz	dB/100 ft. (MAX.)	dB/100 meters (MAX.)
5 MHz	0.16	0.52
55 MHz	0.54	1.77
83 MHz	0.66	2.17
211 MHz	1.09	3.55
250 MHz	1.20	3.92
300 MHz	1.31	4.30
350 MHz	1.43	4.69
400 MHz	1.53	5.02
450 MHz	1.63	5.35
500 MHz	1.73	5.67
550 MHz	1.82	5.97
600 MHz	1.91	6.27
750 MHz	2.16	7.09
865 MHz	2.34	7.68
1000 MHz	2.52	8.27

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(CONTINUATION)

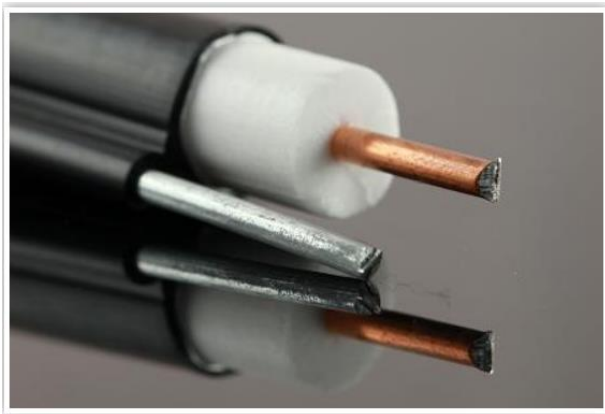
**TEMPERATURE OPERATING RANGE:**

NOMINAL TEMPERATURE OF TESTS:	68°F (20°C)
MAX OPERATING TEMPERATURE:	-31°F (-35°C)
MIN OPERATING TEMPERATURE:	185°F (85°C)
STORAGE TEMPERATURE:	-40°F (-40°C) / 194°F (90°C)
OPERATING HUMIDITY:	< 95%

**RESISTIVE CHARACTERISTICS:**

MAXIMUM DC LOOP RESISTANCE @ 68°F:	1.72 Ohms/1000 ft. (5.64 Ohms/km)
MAXIMUM DC RESISTANCE INTERNAL CONDUCTOR @ 68°F:	1.37 Ohms/1000 ft. (4.5 Ohms/km)
MAXIMUM DC RESISTANCE EXTERNAL CONDUCTOR @ 68°F:	0.39 Ohms/1000 ft. (1.3 Ohms/km)

The .500 cables are designed with strong galvanized steel wire that supports the cable in Outside installations.



In addition, they do not have welding lines, so they are not exposed to problems of porosity, microcracking and cracking. (The .500 cables have a humidity lower than 95%) These characteristics extend the useful life of the product (20 years).The aluminum comes out in one piece, it is a seamless extruded tube.

The .500 cables with messenger can transport content in bandwidth of up to 1 GHz

**ORDERING INFORMATION & PACKING  
REFERENCE .500**

Wooden Spool								
Spec.	H/cm	48CM	D/cm	42CM	d/cm	15CM	T/cm	1.1CM

Carton						
Spec.	a/cm	61CM	b/cm	31CM	h/cm	28.5CM