

Flexible Communications Transmission Line Coax

UBR-400-SFX APPLICATIONS

- Jumper assemblies in SCADA, wireless, or remote communications systems
- Short antenna leads (WLL, GPS, UBR, & Mobile Antennas)
- · Outdoor and indoor applications that requires reoccurring/frequent flexing

FEATURES

- Stranded center conductor and UV-resistant thermo-plastic elastomer jacket withstands multiple cycles of bending and flexing
- Superior RF shielding-multi-ply bonded foil outer conductor is rated at >90dB vs. 40dB (from single shielded coax)
- Extremely low signal loss, which is comparable to semi-rigid hard line cables
- Designed to resist even the harshest weather condition for over 10 years
- · Pre-terminated cable assemblies available in both standard and custom lengths and sizes

Order#: 01019

CONSTRUCTION SPECIFICATIONS

Description	Material	Inches	Metric
Inner Conductor	Stranded bare copper	0.108"	2.74 mm
Dielectric	Foam polyethylene	0.285"	7.20 mm
Outer Conductor	Multi-ply aluminum tape	0.291"	7.90 mm
Overall Braid	Tinned copper (90% coverage)	0.320"	8.10 mm
Jacket	UV resistant thermoplastic elastomer	0.405"	10.20 mm

ENVIRONMENTAL SPECIFICATIONS

Performance Property	°F	°C
Installation Temp. Range	-40°/+185°	-40°/+85°
Storage Temp. Range	-94°/+185°	-70°/+85°
Operating Temp. Range	-40°/+185°	-40°/+85°

ELECTRICAL SPECIFICATIONS

Performance Property	Units	Value		
Velocity of Propogation	%	86		
Dieletric Constant	na	1.38"		
Time Delay	nS/ft (nS/m)	1.20	(3.92)	
Impedance	ohms	50		
Capacitance	pF/ft (pF/m)	23.9	(78.40)	
Inductance	uH/ft (uH/m)	.060	(.21)	
Shielding Effectiveness	db	92		
Voltage Withstand	Volts DC	2500		
Jacket Spark	Volts RMS	8000		
Peak Power	kW	16		
DC Resistance				
Inner Conductor	ohms/1000ft(km)	1.07	(3.51)	
Outer Conductor	ohms/1000ft(km)	1.65	(5.4)	

MECHANICAL SPECIFICATIONS

Performance Property	Value			
Bend Radius: Installation	1.0"	25.4 mm		
Bend Radius: Repeated	4.0"	101.6 mm		
Bending Moment lb/ft (Nm)	0.375	0.51		
Performance Property	lb/ft	kg/m		
Performance Property Weight	lb/ft .88	kg/m 0.131		
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FREQUENCY BAND (MHZ)	150	220	450	750	900	1500	1800	2000	2500	5800
dB/100ft	1.8	2.2	33	4.3	4.7	6.2	6.8	7.2	8.1	13.0
dB/100m	6.1	7.4	10.7	14.0	15.4	20.2	22.3	23.6	26.6	42.6