

Part Number: AP012U50

Features

- 1/2", Corrugated, Aluminum Outer Conductor, UL-444

Performance Standards

- NFPA-70, UL-444
- TL9000 H-V - All Cables designed and manufactured under this quality management system
- RoHS 2011/65/EU Compliant

Scope

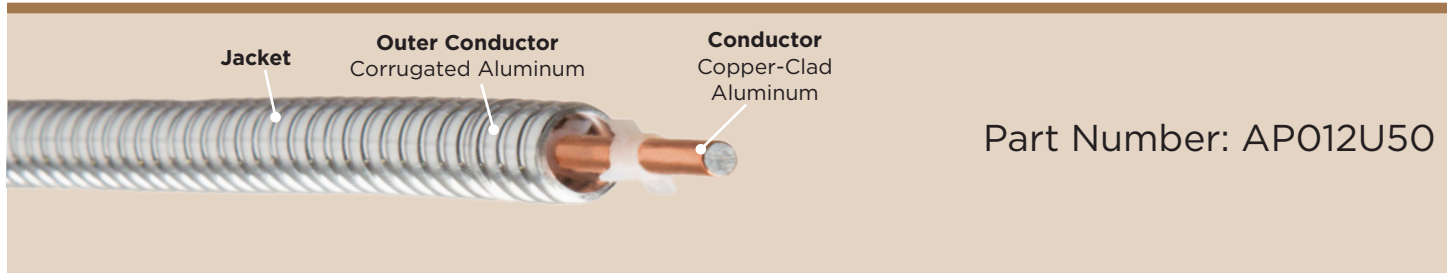
Built with our unique air dielectric design, the Trilogy conduit cable is compliant with the UL-444 safety and performance standard. This certification guarantees that the cable will perform optimally even in the most challenging conditions, such as high-rise buildings and complex industrial settings. The advanced corrugated construction ensures flexibility, making installation easier.

Physical Dimensions

Center Diameter, in (mm)	0.188 (4.78)
Diameter Over Outer Conductor, in (mm)	0.550 (13.97)
Maximum Diameter Over Jacket, in (mm)	0.63 (16.00)
Center Conductor	Copper-Clad Aluminium
Outer Conductor	Corrugated Aluminum

Mechanical Characteristics

Minimum Bend Radius, in (mm) - Single	2 (50.8)
Minimum Bend Radius, in (mm) - Multiple	5 (127)
Cable Weight, lb (kg)	0.082 (0.122)
Tensile Strength, lb (kg)	250 (114)
Flat Plate Crush, lb/in (kg/mm)	78 (1.39)
Number of Bends, minimum	15
Recommended Install Temp., °F (°C)	+5° to 194° (-15° to 90°)
Recommended Storage Temp., °F (°C)	+5° to 194° (-15° to 90°)
Recommended Operating Temp., °F (°C)	+5° to 194° (-15° to 90°)



Electrical Characteristics	
Maximum Frequency, GHz	10
Peak Power Rating, KW	35
Capacitance, pF/ft (m)	22 (72.12)
Inductance, μ H/ft (m)	0.057 (0.187)
VSWR min. (dB)	1.25 (19.0)
VSWR typical, 700-960 / 1700-2200 MHz (dB)	1.13 (24.3)
Impedance, Ohms	50 +/- 2
Velocity of Propagation	94%
Standard Conditions	
For Attenuation: VSWR 1.0, Ambient Temperature 20°C (68°F)	
For Average Power: VSWR 1.0, Ambient Temperature 40°C (104°F), Inner Conductor Temperature 100°C (212°F), No Solar Loading	

Attenuation and Average Power			
Frequency MHz	Attenuation		Average Power kW
	dB/100 ft	dB/100 m	
100	0.70	2.30	3.98
450	1.50	4.92	1.85
500	1.59	5.22	1.75
600	1.75	5.74	1.58
700	1.87	6.14	1.47
800	1.96	6.43	1.37
900	2.14	7.02	1.29
960	2.23	7.32	1.24
1000	2.30	7.55	1.21
1500	2.85	9.35	0.98
1700	3.05	10.01	0.98
1800	3.14	10.30	0.93
1950	3.24	10.63	0.85
2000	3.33	10.93	0.84
2100	3.42	11.22	0.82
2200	3.50	11.48	0.80
2300	3.59	11.78	0.78
2400	3.67	12.04	0.77
2500	3.75	12.30	0.75
2700	3.90	12.80	0.72
3000	4.14	13.58	0.68
3300	4.33	14.21	0.61
3400	4.45	14.60	0.60
4000	4.91	16.11	0.55
4900	5.61	18.41	0.50
5000	5.69	18.67	0.49
5200	5.92	19.42	0.48
5300	6.03	19.78	0.47
5600	6.37	20.90	0.46
5825	6.83	22.41	0.45