



Part Number: AP6012J50-RD

Features

- Plenum Rated Cable, Red Jacket
- 1/2", Corrugated, Aluminum Outer Conductor, Jacketed CMP, NFPA-262, UL-444, Canadian CSA 22.2/ FT6

Performance Standards

- NFPA-70, Article 810, Communication Systems, NFPA-72, NFPA-130
- NFPA-262 CMP, Canada CSA 22.2/FT6, 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 and jacketed CMP, the Trilogy cable is compliant with numerous safety and performance standards, including NFPA-262 and UL-444. These certifications guarantee 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 both flexibility and durability, making installation easier while providing robust protection against physical damage and environmental factors.

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
Jacket Color	Red

Mechanical Characteristics

Minimum Bend Radius, in (mm) - Single	2 (50.8)
Minimum Bend Radius, in (mm) - Multiple	5 (127)
Cable Weight, lb (kg)	0.13 (0.20)
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, μH/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
	dB/100 ft	dB/100 m	kW
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