

RoHS 2011/65/EU Compliant
TL 9000 H-V
NFPA 72 (2019), Section 12.4.2
NFPA-262
UL-444
Part Number: MR-AP6012J50-RD

Features

- Plenum Rated Cable Inside Metal Raceway
- Metal Raceway, 1/2", Red, Corrugated (6GHz), Jacketed CMP, Conforms to NFPA-262, UL-444, Canadian CSA 22.2/FT6

Performance Standards

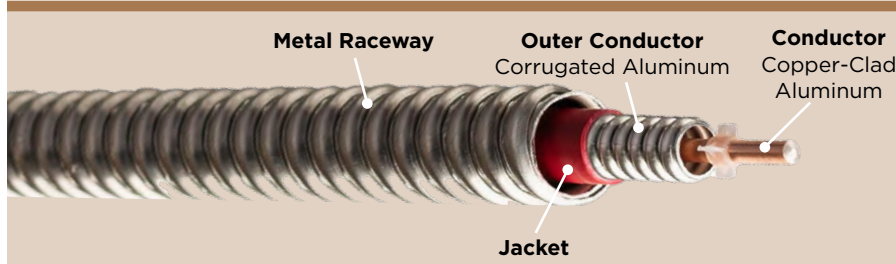
- RoHS 2011/65/EU Compliant
- TL 9000 H-V - All Cables designed and manufactured under this quality management system
- NFPA 72 (2019), Section 12.4.2 - Pathway Survivability Level 1 shall consist of pathways in buildings that are fully protected by an automatic sprinkler system in accordance with NFPA 13 with any interconnecting conductors, cables, or other physical pathways installed in metal raceways.

Scope

Trilogy® Plenum Cable Inside Metal Raceway is the ultimate solution for safety and reliability in high-risk environments. Whether for commercial buildings, data centers, or industrial applications, our fire-rated coax cable meets the highest safety standards, preventing signal loss and maintaining performance when you need it most.

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 (Area (in ²))	0.62 (0.3019)
Inside Diameter of Metal Raceway, in (Area (in ²))	0.852 (0.5701)
Maximum Diameter Over Metal Raceway, in (mm)	1.08 (27.43)
Fill Rate of Metal Raceway	52.95%
Center Conductor	Copper-Clad Aluminum
Outer Conductor	Corrugated Aluminum
Jacket Color	Red
Metal Raceway	Interlocked Aluminum

Mechanical Characteristics	
Minimum Bend Radius, in (mm)	7 (178)
Cable Weight, lb/ft (kg/m)	0.26 (0.39)
Tensile Strength of Metal Raceway, lb (kg)	150 (68)
Crush Strength, lbf	1900
Clamp Spacing, ft (m)	5 (1.52)
Metal Raceway utilizes standard MC/AC 3/4" connectors and hangers	
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°)



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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, 150 / 450 / 698-960 / 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°F (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