

50 Ohm Plenum, 1/2" (UL 2196 Test Certified by ETL)

RediComm™ High Temperature Plenum - APH012J50

Description	Product Number
Plenum Rated Cable	
1/2", Corrugated, Copper Outer Conductor, Jacketed CMP, Conforms to NFPA-262, UL-444, Canadian CSA 22.2/FT6	APH012J50
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	Solid Copper
Outer Conductor	Corrugated Copper
Jacket Color	Red
Electrical Characteristics	
Maximum Frequency, GHz	1
Peak Power Rating, KW	40
DC Resistance, Ohms/1,000 ft (1,000 m)	
Center	0.29 (0.96)
Outer	0.39 (1.28)
DC Breakdown, kV	2.5
Jacket Spark, kV RMS	8
VSWR min, (dB)	1.43 (15.0)
Impedance, Ohms	50 ± 2
Velocity of Propagation	88%
Mechanical Characteristics	
Minimum Bend Radius, in (mm)	8 (203.2)
Cable Weight, lb/ft (kg/m)	0.27 (0.40)
Bending Moment, ft lb (N m)	4.0 (5.4)
Tensile Strength, lb (kg)	275 (125)
Flat Plate Crush, lb/in (kg/mm)	110 (2.0)
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 1100° (-15° to 593°)
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	
Regulatory Compliance/Certifications	
RoHS 2011/65/EU Compliant	
TL 9000 H-V - All Cables designed and manufactured under this quality management system	



Attenuation and Average Power			
Frequency, MHz	Attn, Standard dB/100 ft	Additional Attn, After Two Hour UL 2196 Test *	Average Power kW
150	1.59	0.24	4.82
450	3.67	0.74	1.68
700	5.17	1.08	1.46
800	5.80	1.10	1.18

The UL 2196 Conforming Test Assembly Consisted of:

- Trilogy APH012J50 installed inside rigid steel conduit and then wrapped in 3 layers of 3M™ Interam™ Endothermic Mat E-5A-4 per the manufacturer's recommendation.
- The assembly was tested for two hours per ANSI/UL 2196-2017
- The certified results demonstrate the ability of the coaxial cable to maintain RF signal integrity over the duration of the fire test.

* This value is the additional cable attenuation when subjected to the ANSI/UL 2196-2017 fire test after two hours with the temperature reaching 1850°F (1010°C). For system design purposes, this value may be added to the standard cable attenuation.

Trilogy AirCell® Cable

Proud to be 100% Made in the USA

