

PPAIRC50V-E12X

1/2" Plenum Rated Air Dielectric Coaxial Cable

PROSE

- 1/2" Plenum Rated Coaxial Cable
- Corrugated copper outer conductor
- PVC jacket
- This product can be used in the plenum space of a building.

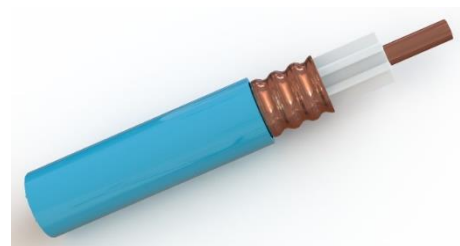


Photo for reference

Part Number

PPAIRC50V-E12	1/2" Plenum rated coaxial cable, Black PVC, Copper outer conductor
PPAIRC50V-E12B	1/2" Plenum rated coaxial cable, Blue PVC, Copper outer conductor
PPAIRC50V-E12W	1/2" Plenum rated coaxial cable, White PVC, Copper outer conductor
PPAIRC50V-E12R	1/2" Plenum rated coaxial cable, Red PVC, Copper outer conductor

Material

Inner conductor material	Copper-Clad Aluminium
Dielectric material	PE spline
Outer conductor material	Corrugated Copper
Jacket material	PVC Compound

Dimensions

Nominal size	1/2"
Inner conductor OD.	Ø 4.8 mm
Dielectric OD.	Ø 11.7 mm
Outer conductor OD.	Ø 13.85 mm
Jacket OD.	Ø 15.7 mm

Reference standard

Reference standard	IEC 61196-1
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Electrical Characteristics

Impedance	50 ± 2 Ω
Mutual Capacitance (reference)	75.5 pF/m
Velocity	88 %

Operating frequency	1 - 8800 MHz
Peak power rating	40 kW
Dielectric Strength (1 minute)	4000 V (No crack)
Jacket Spark Test Voltage	5 kV
Inductance	0.19 μ H/m
Insulation Resistance	$\geq 10000 \text{ M}\Omega\cdot\text{km}$

Environmental Characteristics

Operating Temperature Range	-20°C to +80°C
Installation Temperature Range	-5°C to +60°C
Storage Temperature Range	-20°C to +80°C
RoHS	Compliant
Fire resistance test method	CMP,ETL,UL444,NFPA 262

Mechanical Characteristics

Min. Bending Radius	Single: 70 mm
	Repeated: 127 mm
Number of Bends, minimum	15
Max Tensile force	113 kg
Flat Plate Crush Resistance	2 kg/mm
Bending Moment	3.8 N-m
Approx. weight	250 kg/km

VSWR (Return Loss)

700 ~ 894 MHz	≤ 1.20 (-20.8dB)
806 ~ 960 MHz	≤ 1.20 (-20.8dB)
1700 ~ 2700 MHz	≤ 1.20 (-20.8dB)
3300 ~ 4200 MHz	≤ 1.25 (-19.1dB)
5700 ~ 5900 MHz	≤ 1.36 (-16.3dB)

Attenuation

Frequency (MHz)	Typical Attenuation (dB/100m)	Average Power (kW)
450	4.853	1.57
700	6.176	1.24
800	6.648	1.15

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894	7.070	1.08
960	7.357	1.04
1000	7.526	1.01
1500	9.461	0.81
1800	10.503	0.73
2000	11.163	0.65
2200	11.798	0.65
2500	12.714	0.60
2700	13.303	0.57
3000	14.159	0.54
3400	15.256	0.50
3800	16.311	0.47
4000	16.824	0.45
5000	19.277	0.40
6000	21.581	0.35

1. Typical attenuation at 20°C cable temperature. Maximum value + 5%.

2. Average power rating at 40°C (104°F) ambient temperature.

Marking on cable

XXXXM	DDMMSSYYNNNNN	50Ω	1/2CU	impedance	50Ω	coaxial	plenum	rated	c(ETL)us
5031949	CMP	1X5AWG	75°C	Communications	Cable	PROSE TECHNOLOGIES LLC			
Remark1: Printing Interval: 1m, within ±0.5% accuracy.									
Remark2: DDMMSSYYNNNNN means cable code.									
Remark3: XXXXM means cable meter.									

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