

Features

- AirCell® non-pressurized air dielectric design for low-loss RF performance
- Plenum-rated CMP jacket for in-building use
- Conforms to NFPA-262, UL-444, and CSA 22.2/FT6 standards
- Suitable for use in Public Safety DAS installations
- Made in the USA



2011/65/EU

Description

The 50 Ohm 1/2" Air Dielectric Plenum Cable is designed for use in Public Safety in-building DAS systems. It features an AirCell® non-pressurized dielectric design and a plenum-rated CMP jacket. The cable conforms to NFPA-262, UL-444, and CSA 22.2/FT6 safety standards. With low VSWR and DC resistance, it provides reliable performance in critical RF applications.

Standard conditions for published attenuation: VSWR 1.0, ambient temperature 20°C (68°F). Average power ratings are based on ambient temperature 40°C (104°F), inner conductor temperature 100°C (212°F), and no solar loading.

Technical Specifications

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)
Cable Materials	• Center Conductor Copper-Clad Aluminum • Outer Conductor Corrugated Aluminum
Jacket Color	Off White
Impedance, Ohms	50±2
Nominal capacitance, pF/m	35 KW
DC Resistance	• Center 0.46 (1.51) Ohms/1,000 ft (1,000m) • Outer 0.51 (1.67) Ohms/1,000 ft (1,000 m)
DC Breakdown	4 kV
Capacitance	75.459 pF/m
Inductance	0.057 (0.187) mH/ft (m)
Jacket Spark	5 kV RMS
VSWR min	1.25 (19.0) (dB)
VSWR typical	1.13 (24.3) 700-960/1700-2200 MHz (dB)
Impedance	50 ± 2 Ohms
Velocity of Propagation	88%
Minimum Bend Radius	• Single 2 (63.5) in (mm) • Multiple 5 (127) in (mm)
Cable Weight	0.13 (0.20) lb/ft (kg/m)
Bending Moment	6.779 N-m
Tensile Strength	790 N
Flat Plate Crush	1.429 kg/mm
Number of Bends	15 minimum
Recommended Temperatures	• Install Temp. '+5° to 194°F (-15° to 90°) • Storage Temp. '+5° to 194°F (-15° to 90°) • Operating Temp. '+5° to 194°F (-15° to 90°)

Ordering Information

Model	Description	Stock No.
50 Ohm Plenum Cable	1/2", Corrugated (6 GHz), Jacketed CMP, Conforms to NFPA-262, UL-444, Canadian CSA 22.2/FT6	3996129