

50 Ohm Radiating Cable, 1-1/4" - AR114FV50-2C

| Description | Product Number |
|--|-------------------------------------|
| Fire Retardant Cable | |
| 1-1/4", Low-Smoke, Non-Halogenated, Fire Retardant Jacket, Conforms to IEC332-1, IEC332-3C, UL1685-12, FT4/IEEE1202 (NFPA-130), CMG-LS | AR114FV50-2C |
| Features & Benefits | |
| 100% Made in the USA (Buy America, Title 49 Compliant) | |
| NFPA-130/NFPA-502 Compliant (2017 Edition) & CMG-LS Listed | |
| No Water Migration 15 Year Warranty | |
| Indication of Slot Alignment | None |
| Recommended Hanger Spacing, ft (m) | 6 (2) |
| Minimum Distance to Wall, in (mm) | 2 (50.8) |
| Jacket Color | Black |
| Physical Dimensions | |
| Center Diameter, in (mm) | 0.589 (14.96) |
| Diameter Over Dielectric, in (mm) | 1.498 (38.05) |
| Diameter Over Outer Conductor, in (mm) | 1.517 (38.53) |
| Maximum Diameter Over Jacket, in (mm) | 1.616 (41.05) |
| Center Conductor | Solid Copper Tube |
| Outer Conductor | Dual Slotted Solid Aluminum Tube |
| Electrical Characteristics | |
| Operating Frequency, MHz | 75 - 1000 |
| Peak Power Rating, KW | 211 |
| DC Resistance, Ohms/1,000 ft (1,000 m) | |
| Center | 0.30 (0.99) |
| Outer | 0.16 (0.52) |
| DC Breakdown, kV | 9 |
| Capacitance, pF/ft (m) | 22.3 (73.16) |
| Inductance, mH/ft (m) | 0.056 (0.184) |
| Jacket Spark, kV RMS | 8 |
| VSWR min., (dB) | 1.38 (16.0) |
| VSWR in-band, (dB) | 1.30 (17.7) |
| Stop Band, MHz | 522 - 563 |
| Impedance, Ohms | 50 ± 2 |
| Velocity of Propagation | 91% |
| Stop Band, MHz | 525 - 565 |
| Mechanical Characteristics | |
| Minimum Bend Radius, in (mm) - Single | 15 (381) |
| Cable Weight, lb/ft (kg/m) | 0.60 (0.90) |
| Bending Moment, ft lb (N m) | 50 (67.5) |
| Tensile Strength, lb (kg) | 1,124 (511) |
| Flat Plate Crush, lb/in (kg/mm) | 122 (2.18) |
| Recommended Install Temp., °F (°C) | -10° to 170° (-23° to 77°) |
| Recommended Storage Temp., °F (°C) | -40° to 170° (-40° to 77°) |
| Recommended Operating Temp., °F (°C) | -40° to 170° (-40° to 77°) |
| Regulatory Compliance/Certifications | |
| RoHS 2011/65/EU Compliant | |
| TL 9000 H-V - All Cables designed and manufactured under this quality management system | |



| Electrical Performance | | | |
|------------------------|-------------|----------|-----------------------|
| Frequency, MHz | Attenuation | | Coupling Loss 95%, dB |
| | dB/100 ft | dB/100 m | |
| 150 | 0.31 | 1.01 | 65 (68) |
| 220 | 0.40 | 1.30 | 65 (68) |
| 300 | 0.48 | 1.57 | 65 (68) |
| 350 | 0.53 | 1.74 | 59 (63) |
| 400 | 0.62 | 2.05 | 62 (65) |
| 450 | 0.67 | 2.19 | 58 (61) |
| 500 | 0.69 | 2.27 | 56 (60) |
| 600 | 1.06 | 3.46 | 63 (66) |
| 700 | 1.19 | 3.89 | 59 (62) |
| 800 | 1.39 | 4.55 | 61 (65) |
| 900 | 1.64 | 5.39 | 64 (68) |
| 960 | 1.93 | 6.33 | 62 (66) |

Notes:

- Coupling Loss and Attenuation Values are measured in accordance with the IEC 61196-4 Free Space Test Method
- Coupling Loss values are measured with a radial (below 330 MHz) or orthogonal (above 330 MHz) orientated dipole antenna
- The Coupling Loss values in parentheses are the mean values of all three spatial orientations (radial, parallel and orthogonal) of dipole antenna
- Coupling Loss Tolerance of ± 10 dB at 6 ft (2m), 95%
- Attenuation Tolerance of ± 10% at 68°F
- As is the case with all radiating cables, performance in RF confined areas may differ from values in a free space.

Trilogy AirCell® Cable

Proud to be 100% Made in the USA

