Product Specifications

COMMSCOPE®

POWERED BY ANDREW®

PLU030392

Andrew Virtual Air™ Coaxial Cable, corrugated copper, 1-5/8 in, black non-halogenated, fire retardant polyolefin jacket

Construction Materials

Jacket Material	Non-halogenated, fire retardant polyolefin
Outer Conductor Material	Corrugated copper
Dielectric Material	Foam PE
Flexibility	Standard
Inner Conductor Material	Corrugated copper tube
Jacket Color	Black

Dimensions

Nominal Size	1-5/8 in
Cable Weight	0.77 lb/ft | 1.20 kg/m
Diameter Over Dielectric	44.450 mm | 1.750 in
Diameter Over Jacket	51.054 mm | 2.010 in
Inner Conductor OD	18.1610 mm | 0.7150 in
Outer Conductor OD	46.355 mm | 1.825 in

Electrical Specifications

Cable Impedance	50 ohm ±1 ohm
Capacitance	22.0 pF/ft | 72.2 pF/m
dc Resistance, Inner Conductor	0.410 ohms/kft | 1.435 ohms/km
dc Resistance, Outer Conductor	0.160 ohms/kft | 0.525 ohms/km
dc Test Voltage	15000 V
Inductance	0.187 µH/m | 0.057 µH/ft
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	8000 V
Operating Frequency Band	1 – 2700 MHz
Peak Power	302.0 kW
Pulse Reflection	0.5%
Velocity	92%

Environmental Specifications

Installation Temperature	-25 °C to +60 °C (-13 °F to +140 °F)
Operating Temperature	-30 °C to +80 °C (-22 °F to +176 °F)
Storage Temperature	-30 °C to +80 °C (-22 °F to +176 °F)

General Specifications

Product Specifications

COMMSCOPE®

PLU030392

POWERED BY ANDREW®

Brand	HELIAX®

Mechanical Specifications

Bending Moment	47.5 N-m | 35.0 ft lb
Fire Retardancy Test Method	UL 1666/CATVR
Flat Plate Crush Strength	90.0 lb/in | 1.6 kg/mm
Minimum Bend Radius, Multiple Bends	381.00 mm | 15.00 in
Minimum Bend Radius, Single Bend	203.20 mm | 8.00 in
Number of Bends, minimum	15
Number of Bends, typical	50
Smoke Index Test Method	IEC 61034
Tensile Strength	181 kg | 400 lb
Toxicity Index Test Method	IEC 60754-1 | IEC 60754-2

Note

Performance Note	Values typical, unless otherwise stated

Standard Conditions

Attenuation, Ambient Temperature	20 °C | 68 °F
Average Power, Ambient Temperature	40 °C | 104 °F
Average Power, Inner Conductor Temperature	100 °C | 212 °F

Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
680–800 MHz	1.13	24.30
806–960 MHz	1.13	24.30
1700–2170 MHz	1.13	24.30

Product Specifications

PLU030392

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.044	0.013	166.49
1	0.062	0.019	117.56
1.5	0.076	0.023	95.88
2	0.088	0.027	82.96
10	0.197	0.06	36.78
20	0.281	0.086	25.84
30	0.346	0.105	21.00
50	0.45	0.137	16.14
88	0.603	0.184	12.03
100	0.645	0.197	11.26
108	0.672	0.205	10.81
150	0.798	0.243	9.09
174	0.864	0.263	8.41
200	0.93	0.284	7.81
300	1.156	0.352	6.28
400	1.351	0.412	5.37
450	1.441	0.439	5.04
500	1.527	0.465	4.76
512	1.547	0.471	4.69
600	1.689	0.515	4.30
700	1.84	0.561	3.95
800	1.982	0.604	3.66
824	2.016	0.614	3.60
894	2.11	0.643	3.44
960	2.197	0.67	3.30
1000	2.249	0.685	3.23
1250	2.554	0.779	2.84
1500	2.838	0.865	2.56
1700	3.053	0.93	2.38
1800	3.157	0.962	2.30
2000	3.359	1.024	2.16
2100	3.457	1.054	2.10
2200	3.554	1.083	2.04
2300	3.649	1.112	1.99
2500	3.836	1.169	1.89
2700	4.017	1.224	1.81

** Values typical, guaranteed within 5%*

Regulatory Compliance/Certifications

Agency	Classification
UL/ETL Certification	CATVR
RoHS 2011/65/EU	Compliant
China RoHS SJ/T 11364-2006	Below Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system