

AVA5P-50-43B



AVA5-50, HELIAX® Andrew Virtual Air™ Premium Coaxial Cable, corrugated copper, 7/8 in, black PE jacket

Product Classification

Product Type	Coaxial wireless cable
Product Brand	HELIAX®
Product Series	AVA5-50
Ordering Note	CommScope® non-standard product Not available in the United States or Canada

General Specifications

Flexibility	Standard
Jacket Color	Black
Performance Note	Attenuation values typical, guaranteed within 5%

Dimensions

Diameter Over Dielectric	24.13 mm 0.95 in
Diameter Over Jacket	27.991 mm 1.102 in
Inner Conductor OD	9.449 mm 0.372 in
Outer Conductor OD	25.4 mm 1 in
Nominal Size	7/8 in

Electrical Specifications

Cable Impedance	50 ohm ±1 ohm
Capacitance	73 pF/m 22.25 pF/ft
dc Resistance, Inner Conductor	1.435 ohms/km 0.437 ohms/kft
dc Resistance, Outer Conductor	1.116 ohms/km 0.34 ohms/kft
dc Test Voltage	6000 V
Inductance	0.184 µH/m 0.056 µH/ft

AVA5P-50-43B

Insulation Resistance	100000 MOhms-km
Jacket Spark Test Voltage (rms)	8000 V
Operating Frequency Band	1 – 5000 MHz
Peak Power	91 kW
Velocity	91 %

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.113	0.034	74.43
1.5	0.138	0.042	60.73
2.0	0.16	0.049	52.56
10.0	0.359	0.11	23.37
20.0	0.51	0.156	16.46
30.0	0.627	0.191	13.39
50.0	0.814	0.248	10.32
85.0	1.068	0.326	7.86
88.0	1.088	0.332	7.72
100.0	1.162	0.354	7.23
108.0	1.209	0.368	6.95
150.0	1.433	0.437	5.86
174.0	1.548	0.472	5.43
200.0	1.665	0.507	5.05
204.0	1.682	0.513	4.99
300.0	2.059	0.628	4.08
400.0	2.398	0.731	3.5
450.0	2.553	0.778	3.29
460.0	2.583	0.787	3.25
500.0	2.7	0.823	3.11
512.0	2.735	0.834	3.07
600.0	2.977	0.907	2.82
700.0	3.235	0.986	2.6
800.0	3.478	1.06	2.42
824.0	3.534	1.077	2.38
894.0	3.694	1.126	2.27
960.0	3.841	1.171	2.19

AVA5P-50-43B

1000.0	3.927	1.197	2.14
1218.0	4.377	1.334	1.92
1250.0	4.44	1.353	1.89
1500.0	4.912	1.497	1.71
1700.0	5.268	1.605	1.59
1794.0	5.429	1.655	1.55
1800.0	5.439	1.658	1.54
2000.0	5.771	1.759	1.46
2100.0	5.933	1.808	1.42
2200.0	6.091	1.856	1.38
2300.0	6.247	1.904	1.34
2500.0	6.55	1.996	1.28
2700.0	6.845	2.086	1.23
3000.0	7.272	2.217	1.15
3400.0	7.819	2.383	1.07
3600.0	8.083	2.464	1.04
3700.0	8.213	2.503	1.02
3800.0	8.342	2.542	1.01
3900.0	8.47	2.581	0.99
4000.0	8.596	2.62	0.98
4100.0	8.722	2.658	0.96
4200.0	8.846	2.696	0.95
4300.0	8.969	2.734	0.94
4400.0	9.092	2.771	0.92
4500.0	9.213	2.808	0.91
4600.0	9.333	2.845	0.9
4700.0	9.453	2.881	0.89
4800.0	9.572	2.917	0.88
4900.0	9.689	2.953	0.87
5000.0	9.806	2.989	0.86

Material Specifications

Dielectric Material	Foam PE
Jacket Material	PE
Inner Conductor Material	Copper tube

AVA5P-50-43B

Outer Conductor Material Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends 254 mm | 10 in
Minimum Bend Radius, single Bend 127 mm | 5 in
Number of Bends, minimum 15
Number of Bends, typical 30
Tensile Strength 159 kg | 350.535 lb
Bending Moment 19 N-m | 168.164 in lb
Flat Plate Crush Strength 1.3 kg/mm | 72.797 lb/in

Environmental Specifications

Installation temperature -40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature -55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature -70 °C to +85 °C (-94 °F to +185 °F)
Attenuation, Ambient Temperature 68 °F | 20 °C
Average Power, Ambient Temperature 104 °F | 40 °C
Average Power, Inner Conductor Temperature 212 °F | 100 °C
EN50575 CPR Cable EuroClass Fire Performance Fca

Packaging and Weights

Cable weight 0.45 kg/m | 0.302 lb/ft

Regulatory Compliance/Certifications

Agency	Classification
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

