Armor-Clad, Copper-Shielded Annular Foam-Dielectric Cable

Product Description

- The high performance and low attenuation of this coaxial cable allows it to be used in different RF systems, such as 3G, 4G mobile communication.
- Wide range of applications, such as outdoor/indoor distribution, broadcast, various base stations, wireless cellular, and others.
- Lower VSWR, perfect shielding effectiveness, and extraordinary PIM performance lead to smaller energy loss and interference.

Construction		
Component	**Material**	**Diameter, mm**
Inner conductor	Copper-clad Aluminum	4.80±0.05
Insulation		12.2±0.2 Foam PE
Outer conductor	Annular Corrugated Copper	13.8±0.15
Jacket	LLDPE	15.7±0.2
Armor	Aluminum	24.0±0.5

Mechanical Characteristics	
Weight (Cable & Armor), kg/m	0.164
Minimum Bending Radius, mm	304.8
Tensile Strength, N	112.0
Recommended Maximum Clamp Spacing, m	1.8

Attentuation and Average Power			
Frequency, MHz	Attenuation, dB/100m	Attenuation, dB/100ft	Average Power Rating, kW
100	2.17	0.66	3.94
150	2.67	0.81	3.17
200	3.10	0.94	2.75
280	3.69	1.12	2.27
450	4.74	1.44	1.80
700	6.01	1.83	1.42
800	6.45	1.97	1.33
900	6.87	2.09	1.25
1000	7.28	2.22	1.18
1500	9.08	2.77	0.95
1800	10.05	3.06	0.86
2000	10.66	3.25	0.81
2100	10.96	3.34	0.79
2200	11.24	3.43	0.77
2300	11.54	3.52	0.75
2400	11.80	3.60	0.75
2500	12.08	3.68	0.73
2600	12.36	3.77	0.71
3000	12.39	4.08	0.65
3400	14.40	4.39	0.60
3500	14.66	4.47	0.59
3700	15.12	4.61	0.58
4000	15.82	4.82	0.55
5000	18.01	5.49	0.48
6000	20.05	6.11	0.43
8000	23.83	7.26	0.37
8800	25.25	7.70	0.34

Electrical Properties	
Inner conductor DC resistance, Ω/km	50±2
Outer conductor DC resistance, Ω/km	75.5
Characteristic impedance, Ω	0.19
Capacitance, pF/m	88
Velocity, %	6.0
DC Durable Voltage, kV	>5000
Insulation resistance, MΩ/km	8800

Return Loss, VSWR
800MHz~1000MHz ≤1.10
1700MHz~1900MHz ≤1.13
1900MHz~2200MHz ≤1.13
2200MHz-2500MHz≤1.15
2500MHz~2700MHz ≤1.15

Environmental Properties	
Recommended storage temperature, °C	-20 to 80
Recommended installation temperature, °C	-5 to 60
Recommended operating temperature, °C	-20 to 80

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Ratings/Compliance	
Regulatory Compliance	*NFPA 72 section 12.4.2 Pathway Survivability Level 1 **NEC 330.30(B), (C), (D.3)
2011/California Proposition 65/EU(RoHS)	Compliant
REACH-SVHC	Compliant

Ordering Information		
Description	Part Number	Spool Length, Feet
Armor-Clad, Copper-Shielded Coaxial Foam Core Cable	AC50-PR-1/2	500

Available in Black only
P/N Example: Aluminum-Clad Armored Black Copper Shielded Coaxial Foam Dielectric Cable: AC50-PR-1/2