4" Air-Dielectric Coaxial Cable, for Both Outdoor and Indoor Applications

4" low loss air dielectric cable, UV resistant black PVC Jacket, applicable to both outdoor and indoor applications.

FEATURES / BENEFITS

Low Attenuation

The low attenuation of this coaxial cable results in highly efficient signal transfer in your RF system.

· Complete Shielding

The solid outer conductor of this coaxial cable creates a continuous RFI/EMI shield that minimizes system interference.

· Low VSWR

Standard and low VSWR versions of this coaxial cables contribute to low system noise.

Outstanding Intermodulation Performance

Coaxial cable's solid inner and outer conductors virtually eliminate intermods. Intermodulation performance is also guaranteed by the state-of-the-art manufacturing process at the factory.

· High Power Rating

Low attenuation, outstanding heat transfer properties and temperature stabilized dielectric materials enable this cable to provide long operating life at high transmit power levels.

Wide Range of Application

Air cables are good choices for telecom, broadcasting, radar and HF defense applications.

· Plenum Rated

PVC jacket prevents fire from spreading, enables JPLB cables to meet and exceed all applicable plenum standards of flame travel and smoke.

Reinforced Jacket to Sustain Outdoor Applications

Spcial additives in the jacketing compound improve the outdoor durability of the PVC jacket by minimizing the surface degradation caused by sunlight and other UV sources.

External Document Links

Technical features

APPLICATIONS				
Applications		TV & Radio	HF Defense	Cable Solutions
STRUCTURE				
Size			4	
Jacket Option		Black		
Inner Conductor Diameter	mm (in)	34.8 (1.37)		
Inner Conductor Material		Corrugated Copper Tube		
Dielectric Diameter	mm (in)	75.3 (2.96)		
Dielectric Material		Helical Polyethylene Spacer		
Outer Conductor Diameter	mm (in)	85.5 (3.36)		
Outer Conductor Material		Corrugated Copper		
Jacket Diameter	mm (in)	90.5 (3.56)		
Jacket Material		UVR PVC (UltraViolet Resistant PolyVinylChloride)		
Cable Type			Air-Dielectric, Corrugated	
TESTING AND ENVIRONMENTAL				

Fire Performance		Flame Retardant, Plenum Rated
Flame Retardant Jacket Specifications		Meet/Exceeds Steiner Tunnel Test Method UL 910, NEC 820-53 (a) CATVP, NFPA-262
Installation Temperature	°C(°F)	-25 to 60 (-13 to 140)
Storage Temperature	°C (°F)	-60 to 85 (-76 to 185)
Operation Temperature	°C(°F)	-40 to 85 (-40 to 185)

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4" Air Dielectric Coaxial Cable



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Impedance	Ω	50 +/- 0.5
Maximum Frequency	GHz	1.66
Velocity	%	96
Capacitance	pF/m (pF/ft)	70 (21.3)
Inductance	uH/m (uH/ft)	0.175 (0.053)
Peak Power Rating	kW	940
RF Peak Voltage	Volts	9700
Jacket Spark	Volt RMS	8000
Inner Conductor dc Resistance	Ω/1000 m (Ω/1000 ft)	0.43 (0.13)
Outer Conductor dc Resistance	Ω/1000 m (Ω/1000 ft)	0.13 (0.04)
Return Loss (VSWR) Performance		Standard
Min. Return Loss (Max. VSWR)	dB (VSWR)	Typical 20.8dB (1.2 VSWR) or better within the operation bands of most global frequency ranges. Premium also available. Contact factory for options in your specific frequency band
Phase Stabilized		Phase stabilizing, phase matching, and connector assembly services are available upon request.
Temperature & Power		Standard
MECHANICAL SPECIFICATIONS		
Cable Weight, Nominal	kg/m (lb/ft)	3.12 (2.1)
Minimum Bending Radius, Single Bend	mm (in)	380 (15)
Minimum Bending Radius, Repeated Bends	mm (in)	890 (35)
Bending Moment	Nm (lb-ft)	215 (159)
Tensile Strength	N (lb)	1800 (405)
Recommended / Maximum Clamp Spacing	m (ft)	0.8 / 1.2 (2.75 / 4)

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4" Air-Dielectric Coaxial Cable, for Both Outdoor and Indoor Applications

1.5 0.04 0.01 561 1.5 0.04 0.01 457 2 0.05 0.02 395 10 0.11 0.03 175 20 0.16 0.05 123 30 0.19 0.06 100 30 0.25 0.08 77.40 38 0.34 0.10 57.90 100 0.36 0.11 54.10 108 0.38 0.12 52 150 0.45 0.14 44 40 0.48 0.15 40.80 200 0.52 0.16 38 300 0.65 0.20 30.90 300 0.65 0.20 30.90 300 0.76 0.23 26.70 300 0.86 0.26 23.80 312 0.87 0.29 21.80 300 0.103 0.31 20.20 300 <	Frequency, MHz	dB per 100m	dB per 100ft	Power, kW
1.5 0.04 0.01 457 2 0.05 0.02 395 10 0.11 0.03 175 20 0.16 0.05 123 30 0.19 0.06 100 30 0.25 0.08 77.40 38 0.34 0.10 57.90 100 0.36 0.11 54.10 108 0.38 0.12 52 150 0.45 0.14 44 174 0.48 0.15 40.80 200 0.52 0.16 38 200 0.52 0.16 38 200 0.52 0.16 38 200 0.52 0.16 38 200 0.65 0.20 30.90 200 0.76 0.23 26.70 250 0.81 0.25 25.10 260 0.86 0.26 23.60 260 0.87 0.26 23.60 260 0.23 0.27 21.80	0.5	0.03	0.01	792
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10 0.11 0.03 175 20 0.16 0.05 123 30 0.19 0.06 100 30 0.25 0.08 77.40 38 0.34 0.10 57.90 100 0.36 0.11 54.10 108 0.38 0.12 52 150 0.45 0.14 44 40 0.48 0.15 40.80 200 0.52 0.16 38 300 0.65 0.20 30.90 100 0.76 0.23 26.70 150 0.81 0.25 25.10 300 0.86 0.26 23.80 312 0.87 0.26 23.80 360 0.95 0.29 21.80 300 1.03 0.31 20.20 300 1.03 0.31 20.20 300 1.11 0.34 18.90 304	1.5	0.04	0.01	457
20 0.16 0.05 123 30 0.19 0.06 100 30 0.25 0.08 77.40 38 0.34 0.10 57.90 100 0.36 0.11 54.10 108 0.38 0.12 52 150 0.45 0.14 44 40 0.48 0.15 40.80 200 0.52 0.16 38 300 0.65 0.20 30.90 400 0.76 0.23 26.70 450 0.81 0.25 25.10 450 0.86 0.26 23.80 512 0.87 0.26 23.80 512 0.87 0.26 23.60 500 0.95 0.29 21.80 500 1.03 0.31 20.20 500 1.03 0.31 20.20 500 1.03 0.31 20.20 500	2	0.05	0.02	395
80 0.19 0.06 100 50 0.25 0.08 77.40 88 0.34 0.10 57.90 100 0.36 0.11 54.10 108 0.38 0.12 52 150 0.45 0.14 44 4080 0.48 0.15 40.80 200 0.52 0.16 38 300 0.65 0.20 30.90 100 0.76 0.23 26.70 150 0.81 0.25 25.10 300 0.86 0.26 23.80 312 0.87 0.26 23.80 300 0.95 0.29 21.80 300 1.03 0.31 20.20 300 1.11 0.34 18.90 324 1.13 0.34 18.60 394 1.18 0.36 17.80 300 1.19 0.36 17.80 301 1.23 0.38 17.30	10	0.11	0.03	175
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38 0.34 0.10 57.90 100 0.36 0.11 54.10 108 0.38 0.12 52 150 0.45 0.14 44 174 0.48 0.15 40.80 100 0.52 0.16 38 100 0.76 0.23 26.70 150 0.81 0.25 25.10 100 0.86 0.26 23.80 112 0.87 0.26 23.80 100 0.95 0.29 21.80 100 1.03 0.31 20.20 200 1.11 0.34 18.90 324 1.13 0.34 18.60 394 1.18 0.36 18 100 1.19 0.36 17.80 325 1.21 0.37 17.60 360 1.23 0.38 17.30	30	0.19	0.06	100
100 0.36 0.11 54.10 108 0.38 0.12 52 150 0.45 0.14 44 174 0.48 0.15 40.80 200 0.52 0.16 38 300 0.65 0.20 30.90 100 0.76 0.23 26.70 150 0.81 0.25 25.10 300 0.86 0.26 23.80 312 0.87 0.26 23.60 300 0.95 0.29 21.80 300 1.11 0.34 18.90 324 1.13 0.34 18.60 394 1.18 0.36 17.80 300 1.19 0.36 17.80 301 1.23 0.38 17.30	50	0.25	0.08	77.40
108 0.38 0.12 52 150 0.45 0.14 44 174 0.48 0.15 40.80 100 0.52 0.16 38 300 0.65 0.20 30.90 100 0.76 0.23 26.70 150 0.81 0.25 25.10 500 0.86 0.26 23.80 512 0.87 0.26 23.60 500 0.95 0.29 21.80 700 1.03 0.31 20.20 300 1.11 0.34 18.90 324 1.13 0.34 18.60 394 1.18 0.36 17.80 305 1.21 0.37 17.60 306 1.23 0.38 17.30	88	0.34	0.10	57.90
150 0.45 0.14 44 174 0.48 0.15 40.80 200 0.52 0.16 38 300 0.65 0.20 30.90 100 0.76 0.23 26.70 150 0.81 0.25 25.10 300 0.86 0.26 23.80 312 0.87 0.26 23.60 300 0.95 0.29 21.80 300 1.11 0.34 18.90 324 1.13 0.34 18.60 394 1.18 0.36 18 300 1.19 0.36 17.80 301 1.23 0.38 17.30	100	0.36	0.11	54.10
174 0.48 0.15 40.80 200 0.52 0.16 38 300 0.65 0.20 30.90 100 0.76 0.23 26.70 150 0.81 0.25 25.10 300 0.86 0.26 23.80 312 0.87 0.26 23.60 300 0.95 0.29 21.80 300 1.03 0.31 20.20 384 1.13 0.34 18.90 394 1.18 0.36 18 300 1.19 0.36 17.80 394 1.18 0.36 17.80 305 1.21 0.37 17.60 306 1.23 0.38 17.30	108	0.38	0.12	52
200 0.52 0.16 38 300 0.65 0.20 30,90 100 0.76 0.23 26,70 150 0.81 0.25 25,10 500 0.86 0.26 23,80 512 0.87 0.26 23,60 500 0.95 0.29 21,80 700 1.03 0.31 20,20 300 1.11 0.34 18,90 324 1.13 0.34 18,60 384 1.18 0.36 18 300 1.19 0.36 17,80 302 1.21 0.37 17,60 305 1.23 0.38 17,30	150	0.45	0.14	44
300 0.65 0.20 30.90 400 0.76 0.23 26.70 150 0.81 0.25 25.10 500 0.86 0.26 23.80 512 0.87 0.26 23.60 500 0.95 0.29 21.80 700 1.03 0.31 20.20 300 1.11 0.34 18.90 324 1.13 0.34 18.60 384 1.18 0.36 18 900 1.19 0.36 17.80 925 1.21 0.37 17.60 960 1.23 0.38 17.30	174	0.48	0.15	40.80
100 0.76 0.23 26.70 150 0.81 0.25 25.10 300 0.86 0.26 23.80 312 0.87 0.26 23.60 500 0.95 0.29 21.80 700 1.03 0.31 20.20 300 1.11 0.34 18.90 324 1.13 0.34 18.60 394 1.18 0.36 17.80 900 1.19 0.36 17.80 925 1.21 0.37 17.60 960 1.23 0.38 17.30	200	0.52	0.16	38
150 0.81 0.25 25.10 500 0.86 0.26 23.80 512 0.87 0.26 23.60 500 0.95 0.29 21.80 700 1.03 0.31 20.20 800 1.11 0.34 18.90 824 1.13 0.34 18.60 894 1.18 0.36 18 900 1.19 0.36 17.80 925 1.21 0.37 17.60 960 1.23 0.38 17.30	300	0.65	0.20	30.90
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700 1.03 0.31 20.20 800 1.11 0.34 18.90 824 1.13 0.34 18.60 894 1.18 0.36 18 900 1.19 0.36 17.80 925 1.21 0.37 17.60 960 1.23 0.38 17.30	512	0.87	0.26	23.60
300 1.11 0.34 18.90 324 1.13 0.34 18.60 394 1.18 0.36 18 900 1.19 0.36 17.80 925 1.21 0.37 17.60 960 1.23 0.38 17.30	600	0.95	0.29	21.80
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000 1.19 0.36 17.80 025 1.21 0.37 17.60 060 1.23 0.38 17.30	824	1.13	0.34	18.60
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	1000	1.26	0.38	17

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