

Aircom®Plus



Aircom®Plus - Low loss and a semi-air spaced dielectric

Aircom Plus is a semi air spaced coaxial cable with excellent electric and mechanical properties. Its low-loss characteristics makes it very suitable for applications up into the microwave range. Aircom Plus features a unique PE-honeycomb expander which retains the correct impedance even when sharply bent. The expander provides a tight seal around the solid center conductor which is made from oxygen free copper, thus ensuring it is protected against moisture and corrosion. Another feature of Aircom Plus is its double shielding which is constructed of overlapping copperfoil plus an additional tightly woven copperbraid resulting in a screening efficiency > 85 dB @ 1 GHz. The copperfoil has an applied PE-coating which prevents foil cracking due to short radius bends and the black PVC sheath of Aircom Plus is UV-stabilized. Aircom Plus is available from stock in the following standard drum sizes: 25 m, 50 m, 100 m, 200 m and 500 m.

Aircom®Plus characteristics

Diameter	10,3 mm
Impedance	50 Ω
Attenuation @ 1 GHz/100m	13,4 dB
fmax	10 GHz



Grounding Clamp for Aircom®Plus, Part.-No. 6810



Aircom®Plus

Technical data

Centre conductor	solid copper wire, OFC
Centre conductor Ø	2,7 mm
Dielectric	semi airspaced PE
Dielectric Ø	7,2 mm
Outer conductor 1	copperfoil, PE-coated
Shielding factor	100 %
Outer conductor 2	copper braid
Shielding factor	75 %
Sheath	black PVC, UV-resistant
Outer diameter Ø	10,3 mm

Weight	150 g/m
Min. Bending radius	55 mm
Temperature range	- 40 bis + 80°C
Pulling strength	5 daN

Electrical specifications

Impedance	50 Ω
Capacity	81 pF/m
Velocity factor	0,83
fmax	10 GHz
Screening efficiency @ 1 GHz	> 85 dB
DC-resistance: Centre conductor	3,1 Ω/km
Outer conductor	6,4 Ω/km
RF peak voltage	1kV

Aircom Plus RG 213/U RG 58/U

Capacity	81 pF/m	101 pF/m	102 pF/m
Velocity factor	0,83	0,66	0,66
Attenuation dB/100 m			
10 MHz	1,2	2,0	5,2
100 MHz	3,8	7,0	17,0
500 MHz	9,0	17,0	39,0
1000 MHz	13,4	22,5	54,6
3000 MHz	25,9	58,5	118

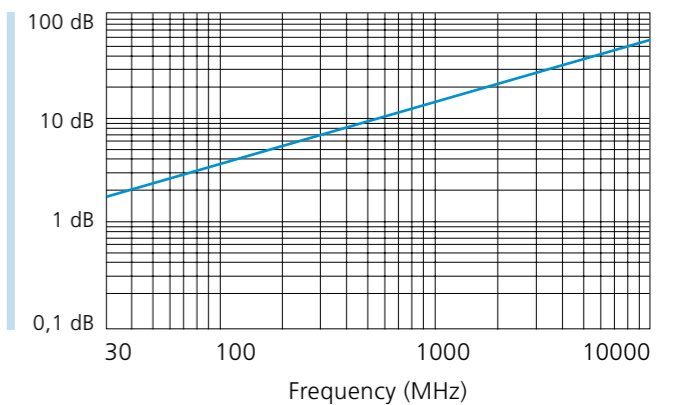
Typ. attenuation (dB/100 m @ 20°C)

5 MHz	0,9	1000 MHz	13,4
10 MHz	1,2	1296 MHz	15,6
50 MHz	2,6	1500 MHz	17,0
100 MHz	3,8	1800 MHz	18,9
144 MHz	4,6	2000 MHz	20,1
200 MHz	5,5	2400 MHz	22,5
300 MHz	6,8	3000 MHz	25,9
432 MHz	8,4	4000 MHz	31,1
500 MHz	9,0	5000 MHz	35,9
800 MHz	11,8	6000 MHz	40,6
		10000 MHz	58,3

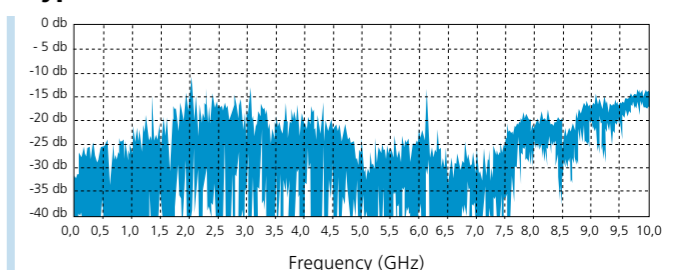
Max. power handling (W @ 40°C)

10 MHz	3980	2000 MHz	180
100 MHz	1210	3000 MHz	150
500 MHz	510	4000 MHz	110
1000 MHz	340		

Typ. Attenuation (dB/100 m) @ 20°C



Typ. Return loss



Due to production tolerances the RTL may have different characteristics.