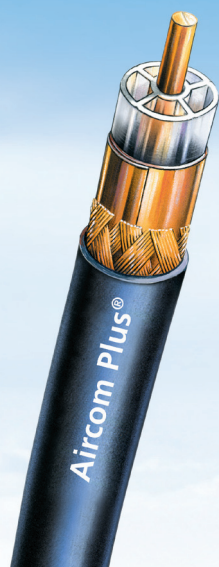


# Aircom®Plus



## 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.

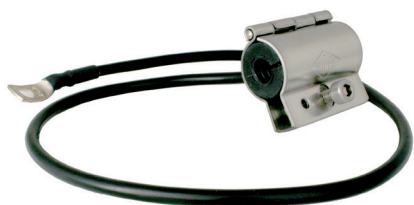
The copperfoil has an applied PE-coating which prevents foil cracking due to short radius bends and the black PVC sheath of Aircom Plus is UV-stabilized.

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 $\Omega$ |
| Attenuation @ 1 GHz/100m ..... | 13,4 dB     |
| fmax .....                     | 10 GHz      |

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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  |

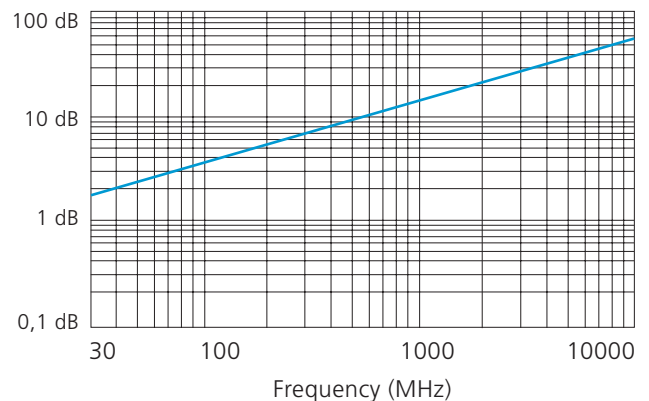
### Typ. attenuation (dB/100 m @ 20°C)

|         |      |           |      |
|---------|------|-----------|------|
| 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 |

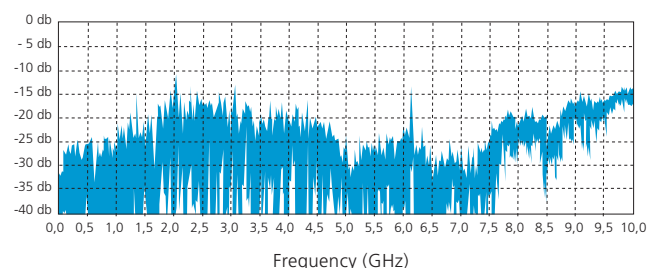
### Max. power handling (W @ 40°C)

|          |      |          |     |
|----------|------|----------|-----|
| 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.