

Aircell 7



De aircell 7 is een extreem flexibel coaxial Cable for a frequency up to 6 GHz. The low attenuation in relation to the diameter and the small bending radius of the cable make the use interesting and recommendable for many applications in high-frequency technology.

The low attenuation of Aircell 7 is achieved by a low-loss PE compound dielectric with a gas content of over 70%. The material is also resistant to moisture. The inner conductor, a 19-wire strand made of low-oxygen fibre, allows the extraordinary flexibility of the cable.

To achieve good shield attenuation, the outer conductor of Aircell 7 is designed in two layers: a Cu shielding braid with a degree of coverage of 70% is applied to a thin, overlapping copper foil. The film is PE-coated on the inside and thus protected against cracking with a bending radius that is too small. The black PVC outer jacket of Aircell 7 is UV-stabilised. Aircell 7 is a modern coaxial cable for numerous applications: it is extremely flexible, low attenuation and radiation-proof. Aircell 7 kenmerken

TECHNICAL INFORMATION

Diameter:	7,3mm
Impedance:	50 Ohm
Damping @ 1 GHz /100m	21,52 dB
fmax	6 GHz

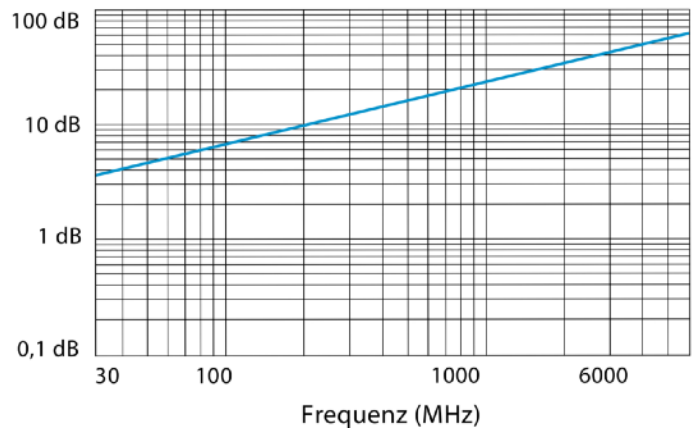
Technical Properties	
Inner conductor	CU-strands, low in oxygen 19 x 0,37mm
Outer conductor Ø	1,85 mm
Dielectric	PE low-loss compound
Dielectric Ø	5,0mm
Outer Conductor 1	CU-foil, PE coated.
Degree of Coverage	100%
Outer Conductor 2	CU braided
Degree of Coverage	70%
Outer Jacket	PVC black UV Stabilized
Outer diameter Ø	7,3 mm
Weight	72 g/m
Min. Bendingradius	25 mm
Temperature Range	-30 °C up to 80 °C
Traction	2 daN

Typ. Damping (dB/100 m @ 20 °C)		
5 MHz	1,6	1000 MHz 21,52
10 MHz	2,2	1296 MHz 24,84
50 MHz	4,52	1500 MHz 27,08
100 MHz	6,28	1800 MHz 30,0
144 MHz	7,6	2000 MHz 31,88
200 MHz	9,04	2400 MHz 35,6
300 MHz	11,2	3000 MHz 40,88
432 MHz	13,6	4000 MHz 49,12
500 MHz	14,72	5000 MHz 57,04
800 MHz	19,0	6000 MHz 64,9

Max. Vermogen (W @ 40 °C)		
10 MHz	2040	1000 MHz 180
100 MHz	620	2000 MHz 120
500 MHz	260	3000 MHz 90

Electrical properties	
Impedance	50 Ohm
Capacity	75 pF / m
Shortening Factor	0,83
fmax	6 GHz
Shielding attenuation	83 dB
DC resistance	
Inner conductor	8,6 Ohm / km
Outer conductor	8,5 Ohm / km
Max. Voltage	0,7 kV

Typ. Längsdämpfung (dB/100 m) @ 20°C



	Aircell 7	RG 213/U	RG 58/U
Capacity	75 pF / m	101 pF/m	102 pF/m
Shortening Factor	0,83	0,66	0,66

Damping dB / 100m	Aircell 7	RG 213/U	RG 58/U
10 MHz	2,2	2,0	5,0
100 MHz	6,28	7,0	17,0
500 MHz	14,72	17	39
1000 MHz	21,52	22,5	54,6
3000 MHz	40,88	58,5	118

Typ. Rückflusdämpfung

