

# Multimedia-Coaxial Cables SAT 1,0/4,6GH, up to 2400MHz, for digital-tv, double screened, screening efficiency >90dB



used as Type	inner/outer 1.0/4.6 GH-Y	Underground 1.0/4.6 GH-2Y	Safety zones 1.0/4.6 GH-FRNC
Part no.	40176	40177	40178
<b>Cable structure</b>			
Inner conductor diameter mm	1 Copper with skin	1 Copper with skin	1 Copper with skin
Insulation Ø mm	4,6 Cell polyethylene with skin and PIB coating	4,6 Cell polyethylene with skin and PIB coating	4,6 Cell polyethylene with skin and PIB coating
Outer conductor	Polyester foil coated with aluminium on both sides	Polyester foil coated with aluminium on both sides	Polyester foil coated with aluminium on both sides
Outer sheath	PVC	PE	FRNC
Sheath colour	white	black	grey
Outer Ø approx. mm	6,6	6,6	6,6
Approx. bending radius approx. mm	45	45	45
Weight approx. kg / km	40	40	40
<b>Electrical characteristics</b>			
<b>Impedance (Ohm)</b>	<b>75 ± 1</b>	<b>75 ± 1</b>	<b>75 ± 1</b>
Capacitance pF/m	55	55	55
Propagation velocity v/c	0,8	0,85	0,85
Attenuation at 20°C (db/100m)			
100 MHz	5,8	5,8	5,8
200 MHz	7,8	7,8	7,8
450 MHz	12,5	12,5	12,5
600 MHz	14,7	14,7	14,7
800 MHz	17,2	17,2	17,2
1000 MHz	19,1	19,1	19,1
1750 MHz	26,2	26,2	26,2
2050 MHz	28,5	28,5	28,5
2400 MHz	31,3	31,3	31,3
Structural return loss min. (dB) between			
30 and 300 MHz	30	30	30
300 and 600 MHz	32	32	32
600 and 960 MHz	31	31	31
960 and 1750 MHz	26	26	26
1750 and 2400 MHz	30	30	30
<b>DC resistance at 20°C</b>			
Inner conductor max.Ohm/km	18	18	18
Outer conductor max.Ohm/km	20	20	20
Max. nominal voltage (V)	-	-	-
Screening efficiency (dB) ≥	90	90	90
Copper weight kg/km	22,0	22,0	22,0

Dimensions and specifications may be changed without prior notice. (RM01)

## Note

- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers.
- FRNC**=Flame Retardant Non Corrosive, **PEE**= Cell-Polyethylene, **PIB**= Polyisobutylene, **ALPR**=Polyesterfoil coated with Aluminium on both sides  
**F**=Foil, **G**=Braid, **GH**=Braid-covering ca. 88%

## Application

### • Copper inner-conductor 1,02 with skin-effect

Protection against humidity and corrosion / Solid compound of dielectric. No change of position during installation in narrow bending radius.

### • Dielectric 4,6 mm Ø : - special PE-compound, foaming by GAS-INJEKTION

Important improvement of propagation velocity values / Very high transmission speed of individual signals (presumption for Multimedia) / Improvement for the resistance to ageing / Reduction of attenuation-loss by approx. 2dB

### • The over surface of dielectric consists too a skin-coating (smooth over surface)

Protection against humidity and other chemical influences / Minimum impedance tolerance ± 2 Ohm / This coaxial cable is crimpable / Installation in narrow bending radius, no kinking risk / The transmission-loss of signals are hardly measurable to the advance in years / Additionally to the skin-effect, the dielectric contains a gel-coating (special PIB-cmpound) / We therefore offer a **15 years guarantee for attenuation-loss** by installation at 20°C room-temperature

### • Screening

a) AL/PR-foil, polyesterfoil coated with aluminium on both sides or b) Copper braiding of tinned wires, **screening efficiency >90 dB**