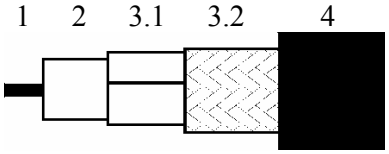
APPLICATION

Coaxial cables used in cabled distribution networks designed according the European Standard EN 50117 operating at frequencies between 5 MHz and 2150 MHz, the International Standard IEC 1196 and the RN-electronics Benchmark RNE678/100-07 2004

CONSTRUCTION



1	Inner conductor	Solid soft annealed copper
2	Dielectric	5 cell semi air spaced PE
3.1	Foil	Copper
3.2	Braid	Annealed copper
4	Sheath	PVC according the European Standard HD 624.

REQUIREMENTS AND TEST METHODS

Test methods in accordance with European standard EN 50117-1.

Mechanical characteristics

1. Inner conductor.	
Diameter:	0.96 mm ± 0.02 mm
2. Dielectric:	
Diameter:	4.7 mm ± 0.15 mm
3. Outer conductor:	
Diameter screen:	5.35 mm ± 0.15 mm
4. Sheath:	
Diameter:	6.65 mm ± 0.2 mm
Tensile strength:	≥ 12.5 N/mm^2
Elongation at break:	≥ 150 %
5. Cable:	
Storage/operation temperature:	-15°C to +70°C
Minimum static bend radius:	35 mm
Total weight:	51 g/m

Electrical characteristics

Mean characteristic impedance:	75 ± 3 Ω
Regularity of impedance:	>40dB or <1%
DC loop resistance:	≤ 41 Ohm/km
DC resistance inner conductor:	≤ 26 Ohm/km
DC resistance outer conductor:	< 15 Ohm/km
Capacitance:	55.0 pF/m ± 2.0 pF/m
Velocity ratio:	0.82 ± 0.02
Screening efficiency before flexing	
30-1000 MHz:	≥ 85 dB
1000 – 2150 MHz:	≥ 75 dB
Screening efficiency after flexing	
30-1000 MHz:	≥ 65 dB
1000 – 2150 MHz:	≥ 65 dB
Flexing with 5 test cycles and 75mm radius	
Return loss at 5-470 MHz:	≥ 23 dB*
470-862 MHz:	≥ 20 dB*
862-2150 MHz:	≥ 18 dB*

*Max. 3 peak values 4 dB lower than specified.

Attenuation at	Maximal	Attenuation at	Maximal
5 MHz:	1.6 dB/100m	860 MHz:	19.5 dB/100m
50 MHz:	4.6 dB/100m	1000 MHz:	21.5 dB/100m
100 MHz:	6.5 dB/100m	1750 MHz:	29.0 dB/100m
200 MHz:	9.5 dB/100m	2150 MHz:	32.5 dB/100m
460 MHz:	15.0 dB/100m		