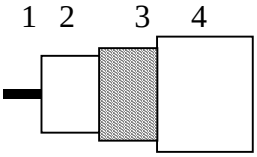
APPLICATION

Coaxial cables used in cabled distribution networks designed according the European Standard EN 50117 operating at frequencies between 5 MHz and 860 MHz and the International Standard IEC 1196.

CONSTRUCTION



1	Inner conductor	Copper clad steel (conductivity 40%)
2	Dielectric	Solid PE
3	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:	0.58 mm ± 0.02 mm
2. Dielectric:	
Diameter:	3.7 mm ± 0.15 mm
3. Outer conductor:	
Diameter screen:	4.3 mm ± 0.2 mm
Coverage braid:	91 % ± 4 %
4. Sheath:	
Diameter:	6.15 mm ± 0.2 mm
Tensile strength:	≥ 12.5 N/mm^2
Elongation at break:	≥ 150 %
5. Cable:	
Crush resistance of cable:	< 1% (load of 700N)
Storage/operating temperature:	-15°C to +70°C
Minimum installation temperature:	-5 °C
Minimum static bend radius:	35 mm

Electrical characteristics

Mean characteristic impedance:	75 ± 3 Ω
Regularity of impedance:	> 40 dB
DC resistance inner conductor:	≤ 170 Ω/km
Capacitance:	67 pF/m ± 2 pF/m
Velocity ratio:	nominal 0.66
Insulation resistance:	> 10^4 MΩ.km
Voltage test of dielectric:	2 kVdc

Return loss at	5-30 MHz:	≥ 20 dB*
	30-470 MHz:	≥ 20 dB*
	470-862 MHz:	≥ 18 dB*

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

Attenuation at	Nominal			
5 MHz:	2.9	dB/100m	1000 MHz:	42.9 dB/100m
50 MHz:	8.0	dB/100m	1350 MHz:	50.0 dB/100m
100 MHz:	11.6	dB/100m	1600 MHz:	54.5 dB/100m
230 MHz:	18.3	dB/100m	1750 MHz:	57.0 dB/100m
300 MHz:	21.2	dB/100m	2150 MHz:	63.0 dB/100m
400 MHz:	25.0	dB/100m		
470 MHz:	27.5	dB/100m		
860 MHz:	39.2	dB/100m		

Maximum attenuation is 10% higher.

REVISIONS

#	Description	Date	Initials
1		2005-08-30	
2		2005-11-07	
3	Conductivity 40% added in text, DC resistance innerconductor changed from ≤79 to ≤170 Ohm/km (mistake in data)	2007-04-10	MJ

Belden declares this product to be in compliance with the environmental regulations EU RoHS (Directive 2002/95/EC, 27 January 2003); this is valid for all material produced after the RoHS compliant date for this product.