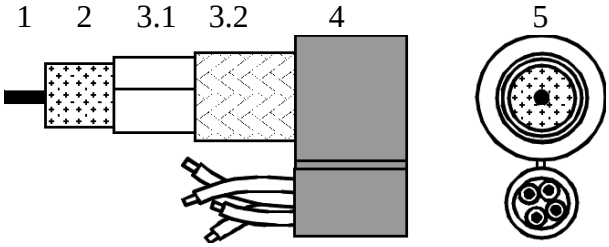
APPLICATION

Coaxial cables used in cabled distribution networks designed according the European Standard EN 50117 operating at frequencies between 5 MHz and 2150 MHz and the International Standard IEC 1196.

CONSTRUCTION



1	Inner conductor	Solid soft annealed copper
2	Dielectric	Gas injected PE
3.1	Foil	Copper
3.2	Braid	Annealed copper
4	Sheath	PVC according the European Standard HD 624.
5	Datapairs	2 pairs with PE insulated wires

REQUIREMENTS AND TEST METHODS

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

Mechanical characteristics

1. Inner conductor.	
Diameter:	1.00 mm ± 0.03 mm
2. Dielectric:	
Diameter:	4.4 mm ± 0.15 mm
Adhesion:	7.8 – 78 N at 25 mm
3. Outer conductor:	
Diameter screen:	5.0 mm ± 0.2 mm
Foil overlap:	≥ 2 mm
Coverage braid:	38 % ± 4 %
4. Sheath:	
Diameter:	5.9 mm ± 0.2 mm
Tensile strength:	≥ 12.5 N/mm^2
Elongation at break:	≥ 150 %
5. Pairs:	
Diameter conductor:	0.51 ± 0.2 mm
Diameter over insulation:	0.9 mm ± 0.1 mm
6. 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:	60 mm
Total weight:	53 g/m

Electrical characteristics

Mean characteristic impedance:	75 ± 3 Ω
Regularity of impedance:	> 40 dB
DC loop resistance:	≤ 45 Ω/km
DC resistance inner conductor:	≤ 23 Ω/km
DC resistance outer conductor:	≤ 22 Ω/km
Capacitance:	53 pF/m ± 2 pF/m
Velocity ratio:	0.84 ± 0.02
Insulation resistance:	> 10^4 MΩ.km
Voltage test of dielectric:	2 kVdc
Screening efficiency 30-1000 MHz:	≥ 75 dB
Return loss at 5-30 MHz:	≥ 23 dB*
30-470 MHz:	≥ 23 dB*
470-862 MHz:	≥ 20 dB*
862-2400 MHz:	≥ 18 dB*

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

Attenuation at	Nominal	Attenuation at	Nominal
5 MHz:	1.9 dB/100m	800 MHz:	18.5 dB/100m
50 MHz:	4.3 dB/100m	1000 MHz:	20.9 dB/100m
100 MHz:	6.1 dB/100m	1350 MHz:	24.7 dB/100m
200 MHz:	8.8 dB/100m	1750 MHz:	28.6 dB/100m
400 MHz:	12.7 dB/100m	2150 MHz:	32.1 dB/100m
600 MHz:	15.8 dB/100m	2400 MHz:	34.2 dB/100m

Maximum attenuation is 10% higher.

REVISIONS

#	Description	Date	Initials
4	Marking and packaging info removed (see BPCS for info)	2008-04-01	RvN

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.