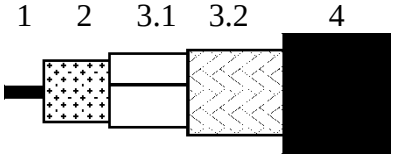
APPLICATION

Coaxial cables used in cabled distribution networks designed according the European Standard EN 50117 operating at frequencies between 5 MHz and 3000 MHz and the International Standard IEC 1196.

CONSTRUCTION



1	Inner conductor	Solid soft annealed copper
2	Dielectric	Gas injected PE
3.1	Foil	AL-PET-AL
3.2	Braid	Annealed tinned copper
4	Sheath	LSNH/FRNC 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:	1.00 mm ± 0.03 mm
2. Dielectric:	
Diameter:	4.57 mm ± 0.15 mm
Adhesion:	7.8 – 78 N at 25 mm
3. Outer conductor:	
Diameter screen:	5.25 mm ± 0.2 mm
Foil overlap:	≥ 1 mm
Coverage braid:	45 % ± 5 %
4. Sheath:	
Diameter:	6.9 mm ± 0.2 mm
Tensile strength:	≥ 9.0 N/mm^2
Elongation at break:	≥ 125 %
Corrosivity	To meet European Standard HD602
LOI	>35%
Resistance to flame propagation:	To meet IEC 60332-3C
5. Cable:	
Crush resistance of cable:	< 1% (load of 700N)
Storage/operating temperature:	-30°C to +70°C
Minimum installation temperature:	-5 °C
Maximum tensile strength of cable:	55 N
Minimum static bend radius:	35 mm

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:	54 pF/m ± 2 pF/m
Velocity ratio:	0.82 ± 0.02
Insulation resistance:	> 10^4 MΩ.km
Voltage test of dielectric:	2 kVdc
Screening efficiency 30-1000 MHz:	≥ 85 dB
Return loss at 5-30 MHz:	≥ 23 dB*
30-470 MHz:	≥ 23 dB*
470-1000 MHz:	≥ 20 dB*
1000-2000 MHz:	≥ 18 dB*
2000-3000 MHz:	≥ 16 dB*

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

Attenuation at	Nominal	Attenuation at	Nominal
5 MHz:	1.8 dB/100m	1000 MHz:	21.1 dB/100m
50 MHz:	4.7 dB/100m	1350 MHz:	24.9 dB/100m
100 MHz:	6.5 dB/100m	1750 MHz:	28.8 dB/100m
200 MHz:	9.8 dB/100m	2150 MHz:	32.3 dB/100m
400 MHz:	13.0 dB/100m	2400 MHz:	34.4 dB/100m
600 MHz:	16.2 dB/100m	3000 MHz:	39.2 dB/100m
800 MHz:	18.7 dB/100m		

Maximum attenuation is 10 % higher.

REVISIONS

#	Description	Date	Initials

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.