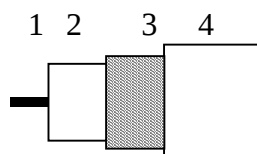


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APPLICATION

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 |

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Electrical characteristics

Mean characteristic impedance:	$75 \pm 3 \Omega$
Regularity of impedance:	$> 40 \text{ dB}$
DC resistance inner conductor:	$\leq 170 \Omega/\text{km}$
Capacitance:	$67 \text{ pF/m} \pm 2 \text{ pF/m}$
Velocity ratio:	nominal 0.66
Insulation resistance:	$> 10^4 \text{ M}\Omega.\text{km}$
Voltage test of dielectric:	2 kVdc

Return loss at	5-30 MHz:	$\geq 20 \text{ dB}^*$
	30-470 MHz:	$\geq 20 \text{ dB}^*$
	470-862 MHz:	$\geq 18 \text{ dB}^*$

*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 $\leq 170 \Omega/\text{km}$ (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.

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