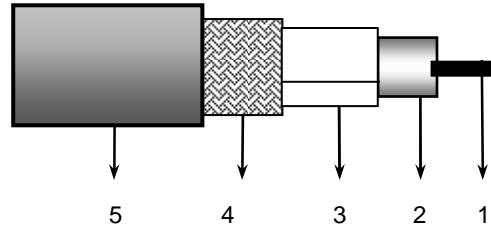


9116E

Infrastructure Cables CATV Drop Cables Coax 9116E AL PVC



Applications

- Coaxial cable used in cable broadband communication networks designed according European Standard EN 50117-1
- Operating frequencies between 5 and 1000 MHz

General Standards

- European standard EN 50117-1 and EN 50117-2-1.
- European standard EN 50290-2-20
- International Standard IEC1196.

Construction & Dimensions

1. Inner conductor	
Material	copper clad steel
Diameter	1.02 mm ± 0.05 mm
2. Dielectric	
Material	Gas injected PE
Diameter	4.6 mm ± 0.2 mm
3. Foil	
Material	AL-PET (bonded)
Foil overlap	≥ 1 mm
4. Braid	
Material	AL
Coverage braid	56% ± 5%
5. Sheath	
Material	PVC
Diameter	6.9 mm ± 0.2 mm

Mechanical characteristics

Parameter	Specification	Unit
Tensile strength of sheath	≥ 12.5	N/mm ²
Elongation at break of sheath	≥ 150	%
Adhesion dielectrical @ 25mm	5 - 80	N
Crush resistance of the cable(load of 700 N)	< 1	%
Storage/operating temperature	-40 to +70	°C
Minimum static bend radius	70	mm
Minimum radius repeated bending	31	mm

Electrical characteristics

Test methods in accordance with European standard EN 50117-1

Parameter	Specification	Unit
Mean characteristic impedance	75 ± 3	Ω
DC resistance inner conductor	≤ 105	Ω/km
DC resistance outer conductor	≤ 51	Ω/km
Nominal Capacitance	54	pF/m
Velocity ratio	82% ± 2%	
Insulation resistance	≥ 10 ⁴	Ω.km
Voltage test of dielectric	>2	kVdc
Screening Attenuation before flexing		
	50-650 MHz ≥ 65	dB
	650-1000 MHz ≥ 75	dB
Return loss at		
	5-470 MHz ≥ 20	dB*
	470-1000 MHz ≥ 18	dB*

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

Attenuation at:	Nominal	Unit
5 MHz:	2.8	dB/100m
50 MHz:	4.9	dB/100m
100 MHz:	6.5	dB/100m
200 MHz:	9.0	dB/100m

Attenuation at:	Nominal	Unit
400 MHz:	13.0	dB/100m
600 MHz:	16.3	dB/100m
800 MHz:	18.9	dB/100m
1000 MHz:	21.8	dB/100m

Maximum attenuation is 10 % higher.



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.