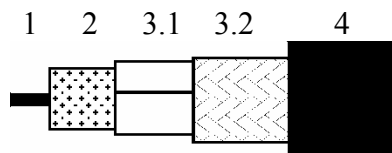


## APPLICATION

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	AL-PET-AL
3.2	Braid	Annealed tinned 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:	0.8 mm ± 0.015 mm
2. Dielectric:	
Diameter:	3.5 mm ± 0.15 mm
Adhesion:	6.3 – 63 N at 25 mm
3. Outer conductor:	
Diameter screen:	4.1 mm ± 0.15 mm
Foil overlap:	≥ 2 mm
Coverage braid:	37 % ± 4 %
4. Sheath:	
Diameter:	5.0 mm ± 0.3 mm
Tensile strength:	≥ 12.5 N/mm <sup>2</sup>
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:	25 mm
Total weight:	24.6 g/m

**TECHNICAL DATA SHEET**EPN **H121A00**vers **V1**date **06-12-02**page **2/2****COAX H121 AL PVC****Electrical characteristics**

Mean characteristic impedance:	75 ± 3 Ω
Regularity of impedance:	> 40 dB
DC loop resistance:	≤ 75 Ω/km
DC resistance inner conductor:	≤ 35 Ω/km
DC resistance outer conductor:	≤ 40 Ω/km
Capacitance:	53 pF/m ± 2 pF/m
Velocity ratio:	0.84 ± 0.02
Insulation resistance:	> 10 <sup>4</sup> MΩ.km
Voltage test of dielectric:	2 kVdc
Screening efficiency 30-1000 MHz:	≥ 85 dB
Return loss at 5-30 MHz:	≥ 20 dB*
30-470 MHz:	≥ 20 dB*
470-862 MHz:	≥ 18 dB*
862-2400 MHz:	≥ 16 dB*

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

Attenuation at	Nominal	Attenuation at	Nominal
5 MHz:	1.7 dB/100m	1000 MHz:	26.1 dB/100m
50 MHz:	5.6 dB/100m	1350 MHz:	30.7 dB/100m
100 MHz:	7.9 dB/100m	1600 MHz:	33.6 dB/100m
200 MHz:	11.3 dB/100m	1750 MHz:	35.3 dB/100m
400 MHz:	16.2 dB/100m	2150 MHz:	39.4 dB/100m
600 MHz:	20.0 dB/100m	2400 MHz:	41.9 dB/100m
800 MHz:	23.2 dB/100m		

Maximum attenuation is 10% higher.

**MARKING**

Text Inkjet printing

BELDEN VENLO HOLLAND YYYY H121 SATV GAS INJECTED

Metermarking: Yes

YYYY: Year of production.

Other marking on request.

**PACKAGING**

Belden code	Delivery length	Remark
46421 xxxx 172	100 m ± 2%	Carton box
46421 xxxx 011	500 m ± 2%	Non returnable reel
xxxx:	Color code	

Other packaging or lengths on request.