

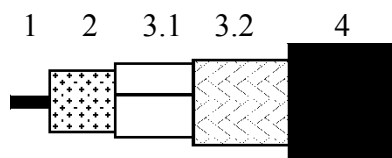
Application

Drop coaxial cable used in HFC / CATV broadband communication networks or SATV

Key features

- All copper conductor material
- High bending flexibility
- Test methods in accordance with European standard EN 50117-1
- Designed according the European Standard EN 50117 operating at frequencies between 5 MHz and 2150 MHz and the International Standard IEC 1196

Construction & Dimensions



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.

1. Inner conductor diameter:	1.0 mm $\pm$ 0.02 mm
2. Dielectric diameter:	4.8 mm $\pm$ 0.15 mm
3. Outer conductor diameter screen:	5.5 mm $\pm$ 0.2 mm
4. Sheath diameter:	6.8 mm $\pm$ 0.2 mm

Mechanical characteristics

Adhesion of dielectric:	7.8 – 78 N at 25 mm
Tensile strength of sheath:	$\geq 12.5 \text{ N/mm}^2$
Elongation of sheath at break:	$\geq 150 \%$
Crush resistance of cable:	$< 1\%$ (load of 700N)
Storage temperature:	-25°C to +70°C
Operating temperature:	-25°C to +70°C
Minimum installation temperature:	-5 °C
Maximum tensile strength of cable:	55 N
Minimum static bend radius:	35 mm
Total weight:	47 g/m



Electrical characteristics

Mean characteristic impedance:	$75 \pm 4 \Omega$
Regularity of impedance:	$> 40 \text{ dB}$
DC loop resistance:	$\leq 45 \Omega/\text{km}$
DC resistance inner conductor:	$\leq 25 \Omega/\text{km}$
DC resistance outer conductor:	$\leq 21 \Omega/\text{km}$
Capacitance:	$55 \text{ pF/m} \pm 2 \text{ pF/m}$
Velocity ratio:	0.84 ± 0.02
Insulation resistance:	$> 10^4 \text{ M}\Omega.\text{km}$
Voltage test of dielectric:	2 kVdc
Screening efficiency 30-1000 MHz:	$\geq 80 \text{ dB}$
Return loss at 5-30 MHz:	$\geq 25 \text{ dB}^*$
30-470 MHz:	$\geq 25 \text{ dB}^*$
470-862 MHz:	$\geq 22 \text{ dB}^*$
862-2400 MHz:	$\geq 20 \text{ dB}^*$

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

Attenuation at	Nominal	Attenuation at	Nominal
5 MHz:	1.6 dB/100m	800 MHz:	20.6 dB/100m
50 MHz:	4.8 dB/100m	1000 MHz:	23.5 dB/100m
100 MHz:	6.9 dB/100m	1350 MHz:	27.6 dB/100m
200 MHz:	9.7 dB/100m	1750 MHz:	32.0 dB/100m
400 MHz:	14.1 dB/100m	2150 MHz:	35.7 dB/100m
600 MHz:	17.6 dB/100m	2400 MHz:	38.2 dB/100m

Maximum attenuation is 5 % higher.

Ordering information

MARKING

Standard text Inkjet printing

BELDEN VENLO HOLLAND YYYY H125 AL PVC

Metermarking: Yes

YYYY: Year of production.

Other marking on request

PACKAGING

Belden code	Delivery length	Remark
46401 xxxx 172	100 m $\pm$ 2%	Carton box
46401 xxxx 179	250 m $\pm$ 5%	Unreel box
46401 xxxx 011	250 m $\pm$ 5%	Non returnable reel
46401 xxxx 240	250 m $\pm$ 5%	Non returnable reel

xxxx: Color code

Other color or marking on request.