

Application

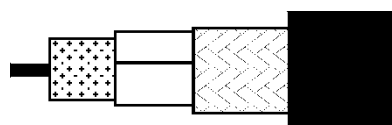
Coaxial cable used with antenna's or in mobile communication networks for outdoor use

Key features

- All copper conductor material
- Small static bend radius
- Test methods in accordance with International Standard IEC 1196.
- Designed according the International Standard IEC 1196.

Construction & Dimensions

1 2 3.1 3.2 4



1	Inner conductor	Solid soft annealed copper
2	Dielectric	Gas injected PE
3.1	Foil	Copper
3.2	Braid	Annealed copper
4	Sheath	PVC according the European Standard HD 624.

1. Inner conductor diameter:	2.62 mm \pm 0.03 mm
2. Dielectric diameter:	7.15 mm \pm 0.2 mm
3. Outer conductor diameter:	7.8 mm \pm 0.25 mm
4. Sheath diameter:	10.3 mm \pm 0.3 mm

Mechanical characteristics

Adhesion of dielectric:	41 – 410 N at 50 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:	-40°C to +70°C
Operating temperature:	-40°C to +70°C
Minimum installation temperature:	-5 °C
Minimum static bend radius:	100 mm
Total weight:	141 g/m



Electrical characteristics

Mean characteristic impedance:	$50 \pm 2 \Omega$
Regularity of impedance:	$> 46 \text{ dB}$
DC loop resistance:	$\leq 12.3 \Omega/\text{km}$
DC resistance inner conductor:	$\leq 3.5 \Omega/\text{km}$
DC resistance outer conductor:	$\leq 8.8 \Omega/\text{km}$
Capacitance:	$80 \text{ pF/m} \pm 3 \text{ pF/m}$
Velocity ratio:	0.83 ± 0.02
Insulation resistance:	$> 10^4 \text{ M}\Omega.\text{km}$
Voltage test of dielectric:	3 kVdc
Screening efficiency 30-1000 MHz:	$\geq 90 \text{ dB}$

Attenuation at	Nominal	Attenuation at	Nominal
5 MHz:	0.8 dB/100m	1000 MHz:	14.0 dB/100m
50 MHz:	2.8 dB/100m	1350 MHz:	16.7 dB/100m
100 MHz:	4.0 dB/100m	1750 MHz:	19.5 dB/100m
200 MHz:	5.7 dB/100m	2150 MHz:	22.1 dB/100m
400 MHz:	8.4 dB/100m	2400 MHz:	23.6 dB/100m
600 MHz:	10.5 dB/100m	5000 MHz:	37.4 dB/100m
800 MHz:	12.3 dB/100m		

Maximum attenuation is 10% higher.

Ordering information

COLOR

Sheath: BLACK

MARKING

Standard text Inkjet printing

BELDEN VENLO HOLLAND YYYY H1000 SUPER LOW LOSS 50 OHM CABLE

YYYY: Year of production.

PACKAGING

Belden code	Delivery length	Remark
46531 xxxx 242	500 m \pm 2%	Non returnable reel
46531 xxxx 245	1000 m \pm 5%	Non returnable reel

xxxx: Color code