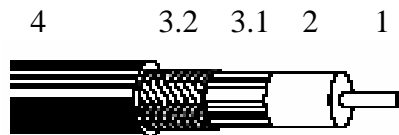


## Application

Coaxial cable used in cable broadband communication networks designed according the European Standard EN 50117-1 and EN 50117-2-1, -2, -4, -5, EN 50083-2/A1

## Screening class B

## Construction & Dimensions



### 1. Conductor

### 2. Dielectric

### 3.1 Foil

### 3.2 Braid

### 4. Jacket

- |                           |  |
|---------------------------|--|
| <b>1. Inner Conductor</b> | Innenleiter - Conduttore Interno - Conducteur - Conductor - Проводник                            |
| Material                  | solid, bare copper   |
| Diameter                  | 0.8 mm   |
| <b>2. Dielectric</b>      | Dielektrikum - Dielettrico - Diélectrique - Dieléctrico - Диэлектрик                             |
| Material                  | Gas injected PE  |
| Diameter over insulation  | 3.50 mm  |
| <b>3. Outer Conductor</b> | Aussenleiter - Conduttore Esterno - Conducteur extérieur - Conductor externo - Внешний проводник |
| Material                  | foil + braid   |
| Diameter screen           | 4.1 mm   |
| 3.1 Shielding foil        | Cu-foil  |
| Coverage:                 | 100%   |
| 3.2 Shielding braid       | bare copper braid  |
| Coverage                  | 45% (+/- 5%)   |
| <b>4. Jacket</b>          | Aussenmantel - Guaina - Gaine - Revestimiento - Оболочка   |
| Material                  | PVC  |
| Diameter:                 | 5.00 ± 0.2 mm  |
| Color and text:           | see table Marking  |

## Requirements and test methods

### Electrical characteristics

Mean characteristic impedance: 75 ± 3 Ω

Wellenwiderstand - Impedenza Caratteristica Principale - Impédance nominale - Características eléctricas - Электрические характеристики

Nominal capacitance conductor to shield: 53 pF/m

Kapazitaet - Capacità Nominale Conduttore/Schermo - Capacité nominale entre conducteur et blindage - Capacitancia nominal de conductor a blindaje - Номинальная емкость "проводник-экран"

Nominal velocity of propagation: 84%

Ausbreitungsgeschwindigkeit - Velocità Nominale di Propagazione - Vitesse de propagation nominale - Velocidad nominal de propagación - Номинальная скорость распространения сигнала

Max. DC loop resistance: 59 Ω/km

Schleifenwiderstand - Resistenza continua di Loop - Resistenza (DC) di Loop - Resistencia de bucle CC - Сопrotвление петли пост. Тока

Max. inner conductor DC resistance @ 20 °C: 35 Ω/km

Gleichstromwiderstand Innenleiter - Resistenza Nominale DC del Conduttore Interno - Résistance du conducteur intérieur - Resistencia CC nominal del conductor interno - Номин. сопротивление пост. тока внутреннего проводника при

**Max. outer conductor DC resistance @ 20 °C: 24 Ω/km**

Gleichstromwiderstand Aussenleiter - Resistenza Nominale DC del Conduttore Esterno - Résistance du conducteur extérieur - Resistencia CC nominal del conductor externo - Номин. сопротивление пост. тока внутреннего проводника при

**Return loss at**

5- 470 MHz:	≥ 20 dB*
470-1000 MHz:	≥ 18 dB*
1000-2000 MHz:	≥ 16 dB*
2000-3000 MHz:	≥ 15 dB*

Rueckflussdaempfung - Perdite Cumulative di Riflessione - Taux de réflexion du signal - Pérdida de retorno - Обратные потери на  
\* max. 3 peak values 4 dB lower than specified

**Screening attenuation at 30-1000 MHz: ≥ 80 dB**

Schirmungsmass – Attenuazione dello Schermo- L'affaiblissement lié au blindage - Eficacia de blindaje - Эффективность экранирования

**Transfer impedance at 5- 30 MHz: ≤ 10.0 mΩ/m**

Kopplungswiderstand – Impedenza di Trasferimento - Le transfert d'impédance - Impedancia de transferencia – Передаточный импеданс

**Nominal Attenuation:** Wellendaempfung - Attenuazione Nominale – Affaiblissement - Atenuación nominal - Номинальное затухание

MHz	dB/100m	MHz	dB/100m
5	1.7	862	22.6
50	5.3	1000	24.5
100	7.5	1350	28.7
230	11.4	1750	33.0
400	15.1	2150	36.9
800	21.7	2400	39.2



### Mechanical and physical characteristics

Temperature range - storage/operation -15°C to +70°C

Temperature range - installation -5 °C to + 70°C

Minimum bending radius 10x Ø cable

Biegeradius - Raggio Minimo di Curvatura - Rayon de courbure minimum - Radio de curvatura mínimo - Минимальный радиус изгиба

Nominal cable weight 27 kg/km

Gewicht - Peso Nominale del Cavo – Poids - Peso nominal del cable - Номинальный вес кабеля

### Ordering information

#### MARKING

Jacket colour	Text
White	BELDEN-NL H121C00 0.80/3.50 PVC 21 EN50117-2-4 Class B

Meter marking: yes, MM-YY: month and year of manufacturing

#### PACKAGING (PUT-UP, +/-2%)

B100m and 500m

Each reel is labelled with the following data:

Belden Logo, Belden code number, item description, length on the reel and date of manufacturing.