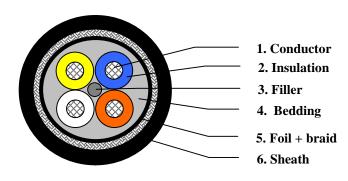


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APPLICATION:

For use in railway applications such as rolling stock, buses or other vehicles, cable meets the requirements of the relevant parts of international railway standards like DIN 5510-2, EN50153 EN50155, EN50305 and CEN/TS 45545

CONSTRUCTION



1. Conductor IEC 60228 class 5 19x0.15 mm (22AWG) stranded tinned copper

2. Insulation

Material Polyolefin Diameter over insulation $1.63 \pm 0.05 \text{ mm}$

Colour of insulation White, Blue and Yellow, Orange

3. Filler

4. Bedding
Material LSOH

Nom. Diameter 4.3 mm

5. Foil + Braid

Material Aluminium / Polyester

Thickness $50/23 \mu m$ Coverage of braided screen > 80%

6. Sheath

Material X-FRNC
Colour Black

Diameter over jacket 6.70 + -0.3 mm

Minimum wallthickness 0.8 mm



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REQUIREMENTS AND TEST METHODS

Electrical: IEC 60288-2-2 and ISO/IEC 11801 ed. 2.0, Cat.5e as a minimum.

 $\begin{array}{lll} \mbox{Voltage rating} & 300 \ \mbox{V} \\ \mbox{Test voltage wire-wire/wire-screen} & 2.5 \mbox{kVdc} \\ \mbox{Maximum conductor DC-resistance @ 20 °C} & 57.1 \ \ \Omega/\mbox{km} \\ \mbox{Transfer impedance @ 10MHz} & <10 \ \mbox{mOhm/m} \\ \mbox{Nom. velocity of propagation} & 66 \ \% \end{array}$

Delay $$<5.3~\rm{ns/m}$$ Impedance @ 1 – 100 MHz $$100~\rm{+/-}$ 15 Ω

Frequency	Max.	Min. Next	Min. FEXT
(MHz)	Attenuation	(dB)	(dB/100m)
	(dB/100m)		
1	2.1	65.3	64
4	4.1	56.3	52
10	6.5	50	43.8
16	8.3	47	40
31.25	11.7	42.9	33.9
62.5	17.0	38.4	28
100	22.0	35.3	24

Mechanical and physical:

Fire protection Railway vehicles
Flame resistance according TS 45545

Oil resistance

Resistance against mineral oil Resistance against Fuel

Resistance against acid and alkali Halogen content according to

Corrosivity of fire gases according to

Conductivity pH value

Smoke density according to

Toxicity index to NF X70-100 Temperature range installing Temperature range operating Temperature range storage Bending / setting radius DIN 5510-2 protection level 1 to 4

IEC 60332-1-2, EN50305 &

IEC60332-3-25 cat D

IEC 60811-2-1

EN 50306 par 4.8 1.5kV/1min. EN 50306 par 4.9 1.5kV/1min. EN 50306 par 4.10 1.5kV/1min.

IEC 60754-1, EN 50267-1-2

HCL < 0.4%

IEC 60754-2, EN 50267-2-2

 $\leq 10 \text{ us/mm}$

 ≥ 3.4

DIN EN 61034-2, EN50268-2

T > 70%

CITc < 0.7 EN/TS 45545 (Class R14 HL3)

- 5 to +50 °C

- 40 to +90 °C -40 to +90 °C

10*D/ 5*D



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.



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