

## PRODUCT INFORMATION

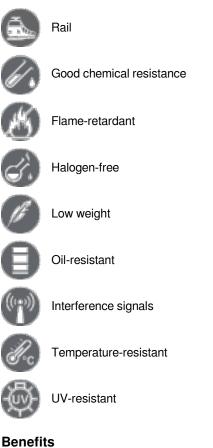
## **UNITRONIC® TRAIN**

LAPP KABEL STUTIGART UNITRONIC<sup>®</sup> TRAIN

Bus cables - MVB and WTB - Electron beam cross-linked for high requirements in railway applications

Info

Small outer diameters for maximum saving of space and weight Extremely low attenuation  $\leq$  5 MHz



Good chemical resistance please see Appendix T1 Resistant to mechanical influences in harsh environmental conditions Extended temperature range

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# **UNITRONIC® TRAIN**

Reduced flame spreading increases the protection against damage to persons and property in the event of a fire EMC-optimised design

#### **Application range**

The communication systems WTB (wire train bus) and MVB (multifunction vehicle bus) make up the so-called TCN (train communication network) UNITRONIC® TRAIN bus cables are designed for use in TCN acc. IEC 61375 MVB according IEC 61375-3-1 WTB according IEC 61375-2-1 For use in railway vehicles and buses, for fixed installations and applications where limited movement may occur Also applicable within oily environments and areas with increased ambient temperature

### **Product features**

- Fire behaviour according to EN/IEC:
- Halogen-free acc. to EN 60754-1
- No corrosive gases acc. to EN 60754-2
- No fluorine acc. to EN 60684-2
- No toxic gases acc. to EN 50305
- Low smoke density acc. to EN 61034-2
- Flame-retardant acc. to EN 60332-1-2
- No fl ame propagation acc. to EN 60332-3-25
- Fire behaviour according to NF:
- Toxicity of gases acc. to NF X 70-100
- Low smoke density acc. to NF X 10-702
- No flame propagation acc. to NF C 32-070,
- Cat. C1 and C2

Chemical properties:

- Oil resistant acc. to EN 50264-1
- Fuel resistant acc. to EN 50264-1
- Acid resistant acc. to EN 50264-1
- Alkali resistant acc. to EN 50264-1
- Ozone resistant acc. to EN 50264-3-2

### Norm references / Approvals

EN 45545-2 HL1, HL2, HL3 EN 50264-1

#### **Product Make-up**

Stranded tinned 19-wire conductor Core insulation: Based on Polyolefin Outer sheath: electron beam cross-linked polymer-compound EM 104 Outer sheath colour: Black

### **Technical Data**

Classification ETIM 5:

Classification ETIM 6:

Peak operating voltage:

Minimum bending radius:

ETIM 5.0 Class-ID: EC000830 ETIM 5.0 Class-Description: Data cable

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(not for power applications) 125 V

Flexing: 10 x outer diameter Fixed installation: 6 x outer diameter

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## **UNITRONIC® TRAIN**

Test voltage:

Characteristic impedance:

Temperature range:

Core/core: 1000 V Core/screen: 1000 V

120 ohm (±10%)

Fixed installation: -45°C to +90°C Occasional flexing: -35°C up to +90°C

#### Note

Photographs and graphics are not to scale and do not represent detailed images of the respective products. Prices are net prices without VAT and surcharges. Sale to business customers only.

Article number	Article designation	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)
Cables for MVB		•		
2173000	UNITRONIC <sup>®</sup> TRAIN MVB 1x2x0,5	1x2x0,5	7.6	29
2173001	UNITRONIC <sup>®</sup> TRAIN MVB 1x2x0,5+1x0,5	1x2x0,5+1x0,5	7.6	34
2173002	UNITRONIC <sup>®</sup> TRAIN MVB 2x2x0,5	2x2x0,5	8.3	40
2173003	UNITRONIC <sup>®</sup> TRAIN MVB 2x2x0,5+4x0,25	2x2x0,5+4x0,25	8.3	50
Cables for WTB				
2173004	UNITRONIC <sup>®</sup> TRAIN WTB 1x2x0,75	1x2x0,75	8.4	41

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