UNITRONIC® 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 ≤ 5 MHz

Benefits
Good chemical resistance
Resistant to mechanical influences in harsh environmental conditions
Extended temperature range
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 61032-1-2
- Flame-retardant 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:
ETIM 5.0 Class-ID: EC000830
ETIM 5.0 Class-Description: Data cable

Classification ETIM 6:
ETIM 6.0 Class-ID: EC000830
ETIM 6.0 Class-Description: Data cable

Peak operating voltage:
(not for power applications) 125 V

Minimum bending radius:
Flexing: 10 x outer diameter
Fixed installation: 6 x outer diameter
UNITRONIC® TRAIN

Test voltage:  
Core/core: 1000 V  
Core/screen: 1000 V

Characteristic impedance:  
120 ohm (±10%)

Temperature range:  
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.
<table>
<thead>
<tr>
<th>Article number</th>
<th>Article designation</th>
<th>Number of cores and mm² per conductor</th>
<th>Outer diameter [mm]</th>
<th>Copper index (kg/km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2173000</td>
<td>UNITRONIC® TRAIN MVB 1x2x0,5</td>
<td>1x2x0,5</td>
<td>7.6</td>
<td>29</td>
</tr>
<tr>
<td>2173001</td>
<td>UNITRONIC® TRAIN MVB 1x2x0,5+1x0,5</td>
<td>1x2x0,5+1x0,5</td>
<td>7.6</td>
<td>34</td>
</tr>
<tr>
<td>2173002</td>
<td>UNITRONIC® TRAIN MVB 2x2x0,5</td>
<td>2x2x0,5</td>
<td>8.3</td>
<td>40</td>
</tr>
<tr>
<td>2173003</td>
<td>UNITRONIC® TRAIN MVB 2x2x0,5+4x0,25</td>
<td>2x2x0,5+4x0,25</td>
<td>8.3</td>
<td>50</td>
</tr>
<tr>
<td>2173004</td>
<td>UNITRONIC® TRAIN WTB 1x2x0,75</td>
<td>1x2x0,75</td>
<td>8.4</td>
<td>41</td>
</tr>
</tbody>
</table>