ÖLFLEX® TRAIN 327 C TW-E 300V

Screened multi-core cable according to EN 50306-4 5E type MM S for high requirements in railway applications

ÖLFLEX® TRAIN 327 C TW-E 300V - control cable shielded according to EN 50306-4 5E type MM S, 300/500V for rail vehicles/trains, EN 45545: HL1-HL3, NF F 16-101: C/F1

Info
Meets EN 50306-4 class E, type MM S and EN 45545-2
High temperature resistance: -50°C up to +125°C
Highly oil- and fuel-resistant

UV-resistant
Temperature-resistant
Interference signals
Space requirement
Oil-resistant
Mechanical resistance
Halogen-free
Good chemical resistance

Last Update (21.05.2019)
©2019 Lapp Group - Technical changes reserved
Product Management www.lappkabel.de
You can find the current technical data in the corresponding data sheet.
PN 0456 / 02_03.16
ÖLFLEX® TRAIN 327 C TW-E 300V

Benefits
Reduced insulation wall thickness, thus space-saving installation
Copper screening complies with EMC requirements and protects against electromagnetic interference
Resistant to mechanical influences in harsh environmental conditions
Extended temperature range
Reduced flame spreading increases the protection against damage to persons and property in the event of a fire

Application range
In EMC-sensitive environments
For use in railway vehicles, for fixed installations and applications where limited movement may occur
Suitable for control and monitoring circuits as well as locking circuits and internal wiring of equipment in trains and locomotives
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 flame propagation acc. to EN 60332-3-24 / EN 60332-3-25 / EN 50305

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 50306
- Fuel resistant acc. to EN 50306
- Acid resistant acc. to EN 50306
- Alkali resistant acc. to EN 50306
- Ozone resistant acc. to EN 50306

Current rating according to EN 50355, appendix A

Norm references / Approvals
EN 50306-4 class E, type MM S
EN 45545-2 HL1, HL2, HL3
NF F 16-101 - Classification: C / F1 (flame propagation / smoke)

Product Make-up
ÖLFLEX® TRAIN 327 C TW-E 300V

Tinned-copper strand, 19 or 37 wires, SRC (Special Round Conductor)
Insulation: Electron beam cross-linked Polymer compound acc. to EN 50306
Colour of insulation: White with black numbers
Screen: Tinned-copper braiding over each pair
Jacket over screen: electron beam cross-linked polymer-compound S2 acc. to EN 50306
Outer sheath: electron beam cross-linked polymer-compound S2 acc. to EN 50306
Outer sheath colour: Black

Technical Data
Classification ETIM 5:
ETIM 5.0 Class-ID: EC000104
ETIM 5.0 Class-Description: Control cable
Classification ETIM 6:
ETIM 6.0 Class-ID: EC000104
ETIM 6.0 Class-Description: Control cable
Core identification code:
White with black numbers
Conductor stranding:
SRC (special round conductor) 19 or 37 wires acc. to EN 50306-1
Minimum bending radius:
Fixed installation: 5 x outer diameter
Occasional flexing: 10 x outer diameter
Nominal voltage:
$U_{0}: 600 \text{ V AC}$
$U_{0}/U: 300/500 \text{ V AC acc. to EN 50306}$
$U_{m}: 550 \text{ V AC}$
Test voltage:
$3,5 \text{ kV AC}; 8,4 \text{ kV DC}$
Temperature range:
Fixed installation:
- $-45^\circ\text{C} \text{ to } +125^\circ\text{C} (20.000 \text{ h})$
- $-50^\circ\text{C acc. to GOST 20.57.406-81}$
Occasional flexing:
- $-35^\circ\text{C} \text{ to } +105^\circ\text{C}$
- Short circuit: $+160^\circ\text{C} (5s)$

Note
Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.
Packaging size: coil $\leq 30 \text{ kg or } \leq 250 \text{ m}$, otherwise drum
Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).
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>Number of cores and mm² per conductor</th>
<th>Outer diameter [mm]</th>
<th>Copper index (kg/km)</th>
<th>Weight (kg/km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15327000</td>
<td>2x (2X0,5)</td>
<td>10.7</td>
<td>38.87</td>
<td>178.98</td>
</tr>
<tr>
<td>15327001</td>
<td>3x (2X0,5)</td>
<td>11.4</td>
<td>58.3</td>
<td>211.95</td>
</tr>
<tr>
<td>15327002</td>
<td>4x (2X0,5)</td>
<td>12.4</td>
<td>77.74</td>
<td>253.53</td>
</tr>
<tr>
<td>15327003</td>
<td>7x (2X0,5)</td>
<td>14.7</td>
<td>136.38</td>
<td>374.84</td>
</tr>
<tr>
<td>15327004</td>
<td>2x (2X0,75)</td>
<td>11.5</td>
<td>51.5</td>
<td>212.9</td>
</tr>
<tr>
<td>15327005</td>
<td>3x (2X0,75)</td>
<td>12.2</td>
<td>77.25</td>
<td>249.55</td>
</tr>
<tr>
<td>15327006</td>
<td>4x (2X0,75)</td>
<td>13.4</td>
<td>103</td>
<td>306.77</td>
</tr>
<tr>
<td>15327007</td>
<td>7x (2X0,75)</td>
<td>15.9</td>
<td>180.64</td>
<td>446.95</td>
</tr>
<tr>
<td>15327008</td>
<td>2x (2X1)</td>
<td>11.9</td>
<td>63</td>
<td>234.98</td>
</tr>
<tr>
<td>15327009</td>
<td>3x (2X1)</td>
<td>12.6</td>
<td>94.5</td>
<td>281.92</td>
</tr>
<tr>
<td>15327010</td>
<td>4x (2X1)</td>
<td>13.8</td>
<td>126</td>
<td>341.82</td>
</tr>
<tr>
<td>15327011</td>
<td>7x (2X1)</td>
<td>16.5</td>
<td>220.93</td>
<td>499.43</td>
</tr>
<tr>
<td>15327012</td>
<td>2x (2X1,5)</td>
<td>13.9</td>
<td>90</td>
<td>317.42</td>
</tr>
<tr>
<td>15327013</td>
<td>3x (2X1,5)</td>
<td>14.8</td>
<td>136</td>
<td>383.34</td>
</tr>
<tr>
<td>15327014</td>
<td>4x (2X1,5)</td>
<td>16.3</td>
<td>181</td>
<td>491.8</td>
</tr>
<tr>
<td>15327015</td>
<td>7x (2X1,5)</td>
<td>19.5</td>
<td>320</td>
<td>697.3</td>
</tr>
</tbody>
</table>