

Shielded 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: -45 $^{\circ}$ C to +125 $^{\circ}$ C Highly oil- and fuel-resistant







UV-resistant



Temperature-resistant



Interference signals



Space requirement



Oil-resistant



Mechanical resistance



Halogen-free



Good chemical resistance





Rail



Flame-retardant



Cold-resistant

Benefits

Reduced insulation wall thickness, therefore a space-saving installation
Copper shielded complies with EMC requirements and protects against electromagnetic interference
Resistant to mechanical influences in harsh environmental conditions
Extended temperature range

Reduced flame spreading for protection against damage to persons and property in the event of a fire

Application range

In EMC-sensitive environments

For use in railway vehicles and buses, for fixed installation and applications where limited movement is to be expected Suitable for control and monitoring circuits as well as locking circuits and internal wiring of equipment in trains and locomotives Can also be used in oily environments and areas with increased ambient temperature

Product features

Fire behaviour in accordance with EN/IEC:

- Halogen-free according to EN 60754-1
- No corrosive gases according to EN 60754-2
- No fluorine according to EN 60684-2
- No toxic gases according to EN 50305
- Low smoke density according to EN 61034-2
- Flame-retardant according to EN 60332-1-2
- No flame propagation according to EN 60332-3-24 / EN 60332-3-25 / EN 50305

Fire behaviour in accordance with NF:

- Toxicity of combustion gases according to NF X 70-100
- Low smoke density according to NF X 10-702
- No flame propagation according to NF C 32-070, cat. C1 and C2

Chemical properties:

- Oil-resistant according to EN 50306
- Fuel-resistant according to EN 50306
- Acid-resistant according to EN 50306
- Alkali-resistant according to EN 50306
- Ozone-resistant according to EN 50306

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)



Design

Tin-plated copper strand, 19- or 37-wire, SRC (Special Round Conductor)

Insulation: Electron beam cross-linked polymer compound according to EN 50306

Core colour: White with black numbers

Shield: Tin-plated copper braiding over each pair

Cover over shield: Electron beam cross-linked polymer-compound S2 according to EN 50306

Sheath: Electron beam cross-linked polymer-compound S2 according to EN 50306

Sheath colour: Black

Technical Data

Classification: ETIM 5.0 Class-ID: EC000104

ETIM 5.0 Class-Description: Control cable

Core identification code: White with black numbers

Conductor design: SRC (special round conductor) 19- or 37-wire according, to EN

50306-1

Minimum bending radius: Fixed installation:

10 x outer diameter

Occasional flexing: 10 x outer diameter

Nominal voltage: U_0/U AC 300/500 V

 U_m AC 550 V V_0 DC 410 V Fixed installation: U_0/U AC 0.6/1 kV U_m AC 1.2 kV V_0 DC 0.9 kV

Test voltage: Core/core: 3,5 kV AC; 8,4 kV DC

Core/screen: 3,5 kV AC; 8,4 kV DC

Temperature range: Fixed installation:

-45°C to +125°C (20,000 h)

Occasional flexing: -35°C to +105°C Short circuit: +160°C (5s)

Note

Unless otherwise specified, the product values shown are nominal values. You can receive further values, such as tolerances, upon request if they available and have been released for publication.

Copper price basis: EUR 150/100 kg; see catalogue appendix T17 for the application and definition of "Metal price basis" and "Metal index"

Packaging: Ring ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred packaging (e.g. 1 x 500 m drum or 5 x 100 m rings)

Photographs 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 | Outer diameter [mm] | Copper index (kg/km) | Weight (kg/km) |
|----------------|---------------------|----------------------|----------------|
| 15327000 | 10.7 | 38.87 | 178.98 |
| 15327001 | 11.4 | 58.3 | 211.95 |
| 15327002 | 12.4 | 77.74 | 253.53 |
| 15327003 | 14.7 | 136.38 | 374.84 |
| 15327004 | 11.5 | 51.5 | 212.9 |
| 15327005 | 12.2 | 77.25 | 249.55 |
| 15327006 | 13.4 | 103 | 306.77 |
| 15327007 | 15.9 | 180.64 | 446.95 |
| 15327008 | 11.9 | 63 | 234.98 |
| 15327009 | 12.6 | 94.5 | 281.92 |
| 15327010 | 13.8 | 126 | 341.82 |
| 15327011 | 16.5 | 220.93 | 499.43 |
| 15327012 | 13.9 | 90 | 317.42 |
| 15327013 | 14.8 | 136 | 383.34 |
| 15327014 | 16.3 | 181 | 491.8 |
| 15327015 | 19.5 | 320 | 697.3 |