

## ÖLFLEX® TRAIN 345 C 600V

Shielded multi-core cable according to EN 50264-3-2 type MM S for high requirements in railway applications

ÖLFLEX® TRAIN 345 C 600V - control cable shielded according to EN 50264-3-2 type MM S, for rail vehicles/trains, 0.6/1kV, EN 45545: HL1-HL3, NF F 16-101: C/F0

### Info

Meets EN 50264-3-2 type MM S and  
EN 45545-2

High temperature resistance: -45 °C to 90 °C

Highly oil- and fuel-resistant

LAPP KABEL STUTTGART ÖLFLEX® TRAIN 345 C 600V EN 50264-3-2 MM S



CE



UV-resistant



Temperature-resistant



Interference signals



Oil-resistant



Mechanical resistance



Halogen-free



Good chemical resistance



Rail

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Product Management [www.lappkabel.de](http://www.lappkabel.de)

You can find the current technical data in the corresponding data sheet.

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## ÖLFLEX® TRAIN 345 C 600V



Flame-retardant



Cold-resistant

### Benefits

Copper shielded complies with EMC requirements and protects against electromagnetic interference  
Good chemical resistance  
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

For use in railway vehicles and buses, for fixed installation and applications where limited movement is to be expected  
Suitable for connecting lamps, heating equipment, switchgear, terminal boxes and power supply  
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 50264-3-2
- Fuel-resistant according to EN 50264-3-2
- Acid-resistant according to EN 50264-3-2
- Alkali-resistant according to EN 50264-3-2
- Ozone-resistant according to EN 50264-3-2/  
EN 50305)

### Norm references / approvals

EN 50264-3-2 type MM S  
EN 45545-2 HL1, HL2, HL3  
NF F 16-101 - classification: C / F0  
(flame propagation / smoke)

## ÖLFLEX® TRAIN 345 C 600V

### Design

Conductor: Finely stranded wire made of tin-plated copper  
Insulation: Electron beam cross-linked polymer compound EI 109  
Core colour: Black with white numbers  
Wrapping: Halogen-free plastic film  
Shield: Tin-plated copper braiding  
Sheath: Electron beam cross-linked polymer-compound EM 104  
Sheath colour: Black

### Technical Data

Classification:	ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable
Core identification code:	Black with white numbers
Conductor design:	Fine-wired according to IEC 60228 / VDE 0295, braided conductor class 5
Minimum bending radius:	Fixed installation: ≤ 12 mm: 3 x OD > 12 mm: 4 x OD Occasional flexing: ≤ 12 mm: 4 x OD > 12 mm ≤ 20 mm: 5 x OD > 20 mm: 6 x OD (OD = outer diameter)
Nominal voltage:	$U_0/U$ 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
Protective conductor:	G = with GN-YE protective conductor X = without protective conductor
Temperature range:	Fixed installation: -45°C to +90°C Occasional flexing: -35°C to +90°C Short circuit: +200°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 are 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.

**ÖLFLEX® TRAIN 345 C 600V**

Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
15345000	2 X 1.5	8.2	57.35	125.3
15345001	3 X 1.5	8.7	73.27	149.1
15345025	3 G 1.5	8.7	73.27	149.1
15345002	4 X 1.5	9.4	90.92	180.3
15345026	4 G 1.5	9.4	90.92	180.3
15345003	2 X 2.5	9	80.38	160
15345004	3 X 2.5	9.5	107.46	196.2
15345027	3 G 2.5	9.5	107.46	196.2
15345005	4 X 2.5	10.8	147.08	258.5
15345028	4 G 2.5	10.8	147.08	258.5
15345006	2 X 4	10.8	126.68	237.2
15345007	3 X 4	11.4	167.66	289.6
15345008	4 X 4	12.4	210.89	353.9
15345009	2 X 6	11.8	171.91	294.3
15345010	3 X 6	12.5	233.52	368.3
15345011	4 X 6	14	297.39	470.2
15345012	2 X 10	14.2	258.83	427.9
15345013	3 X 10	15.2	378.94	571.9
15345014	4 X 10	16.6	485.83	711.2
15345015	2 X 16	16.4	411.94	637.3
15345016	3 X 16	17.8	574.29	836.3
15345017	4 X 16	19.4	741.03	1,040.4
15345018	2 X 25	20.2	608.98	939.8
15345019	3 X 25	21.4	861.67	1,219.1
15345020	4 X 25	24.1	1,147.27	1,601.3
15345021	2 X 35	23.2	852.85	1,286.7
15345022	3 X 35	24.6	1,203.78	1,668.2
15345023	2 X 50	27.6	1,175.17	1,732.8
15345024	3 X 50	29.8	1,710.69	2,336.3

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