

## ÖLFLEX® TRAIN 345 C 600V

Screened 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 screened EN 50264-3-2 MM S 0,6/1kV for high requirements in railways/rolling stock

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: -50°C up to 120°C

Highly oil- and fuel-resistant



Rail



Good chemical resistance



Flame-retardant



Halogen-free



Cold-resistant



Mechanical resistance



Oil-resistant

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## ÖLFLEX® TRAIN 345 C 600V



Interference signals



Temperature-resistant



UV-resistant

### Benefits

Copper screening complies with EMC requirements and protects against electromagnetic interference

Good chemical resistance please see Appendix T1

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

For use in railway vehicles, for fixed installations and applications where limited movement may occur

Suitable for connecting lamps, heating equipment, switchgear, terminal boxes and power supply

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 50264-3-2
- Fuel resistant acc. to EN 50264-3-2
- Acid resistant acc. to EN 50264-3-2
- Alkali resistant acc. to EN 50264-3-2
- Ozone resistant acc. to EN 50264-3-2/ EN 50305)

Current rating according to EN 50355, appendix A

### 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)

### Product Make-up

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## ÖLFLEX® TRAIN 345 C 600V

Conductor: Fine-wire strands of tinned copper  
 Insulation: Electron beam cross-linked Polymer compound EI 109  
 Colour of insulation: Black with white numbers  
 Wrapping: Halogen-free plastic foil  
 Screen: Tinned-copper braiding  
 Outer sheath: electron beam cross-linked polymer-compound EM 104  
 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:	Black with white numbers
Conductor stranding:	Fine-wired/ Finely stranded according to IEC 60228, 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 <sub>0</sub> /U AC 0.6/1 kV U <sub>m</sub> AC 1.2 kV V <sub>0</sub> DC 0.9 kV
Test voltage:	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 +120°C (20.000 h) -50°C acc. to GOST 20.57.406-81 Occasional flexing: -35°C to +90°C Short circuit: +200°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 ≤ 30 kg or ≤ 250 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.

**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)
15345040	2 X 0.5	6.5	31.96	68
15345041	4 X 0.5	7.4	47.63	96
15345042	7 X 0.5	8.7	62.03	125
15345043	9 X 0.5	11.0	94.35	222
15345044	12 X 0.5	11.5	116.88	239
15345045	19 X 0.5	13.8	158.34	342
15345046	24 X 0.5	15.9	218.11	445
15345047	32 X 0.5	17.8	267.57	565
15345048	37 X 0.5	18.7	292.32	621
15345049	40 X 0.5	19.7	321.25	688
15345050	2 X 0.75	6.9	37.07	77
15345051	4 X 0.75	7.8	57.58	109
15345052	7 X 0.75	9.3	83.98	153
15345053	9 X 0.75	11.8	124.5	267
15345054	12 X 0.75	12.4	146.36	283
15345055	19 X 0.75	15.0	226.45	436
15345056	24 X 0.75	17.5	288.27	558
15345057	32 X 0.75	19.1	357.11	685
15345058	37 X 0.75	20.1	393.95	756
15345059	40 X 0.75	21.2	428.32	837
15345060	2 X 1.0	7.2	44.81	87
15345061	4 X 1.0	8.2	67.46	124
15345062	7 X 1.0	9.7	105.44	178
15345063	9 X 1.0	12.4	146.91	300
15345064	12 X 1.0	13.4	182.93	341
15345065	19 X 1.0	15.7	284.97	506
15345066	24 X 1.0	18.4	349.83	640
15345067	32 X 1.0	20.1	437.27	791
15345068	37 X 1.0	21.1	486.38	870
15345069	40 X 1.0	23.0	567.56	1047
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

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15345026	4 G 1.5	9.4	90.92	180.3
15345070	7 X 1.5	11.6	160.19	261
15345071	9 X 1.5	14.7	205.47	391
15345072	12 X 1.5	15.7	273.53	448
15345073	19 X 1.5	18.6	388.32	649
15345074	24 X 1.5	21.3	485.98	801
15345075	32 X 1.5	24.0	644.59	1067
15345076	37 X 1.5	25.2	732.73	1203
15345003	2 X 2.5	9.0	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
15345077	7 X 2.5	13.2	235.62	362
15345078	9 X 2.5	16.5	319.89	538
15345079	12 X 2.5	17.7	403.78	615
15345080	19 X 2.5	20.6	582.85	875
15345081	24 X 2.5	24.3	762.28	1160
15345006	2 X 4.0	10.8	126.68	237.2
15345007	3 X 4.0	11.4	167.66	289.6
15345008	4 X 4.0	12.4	210.89	353.9
15345009	2 X 6.0	11.8	171.91	294.3
15345010	3 X 6.0	12.5	233.52	368.3
15345011	4 X 6.0	14.0	297.39	470.2
15345012	2 X 10.0	14.2	258.83	427.9
15345013	3 X 10.0	15.2	378.94	571.9
15345014	4 X 10.0	16.6	485.83	711.2
15345015	2 X 16.0	16.4	411.94	637.3
15345016	3 X 16.0	17.8	574.29	836.3
15345017	4 X 16.0	19.4	741.03	1,040.4
15345018	2 X 25.0	20.2	608.98	939.8
15345019	3 X 25.0	21.4	861.67	1,219.1
15345020	4 X 25.0	24.1	1,147.27	1,601.3
15345021	2 X 35.0	23.2	852.85	1,286.7

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Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
15345022	3 X 35.0	24.6	1,203.78	1,668.2
15345023	2 X 50.0	27.6	1,175.17	1,732.8
15345024	3 X 50.0	29.8	1,710.69	2,336.3

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