

## UNIRAIL S 50264-3-2 600V MM FR

Fire-resistant multi-core railway cable according to EN 50264-3-2 type MM and EN 50200

UNIRAIL S 50264-3-2 600V MM FR - Fire-resistant control cable for railways/rolling stock  
120 min. circuit integrity according to EN 50200

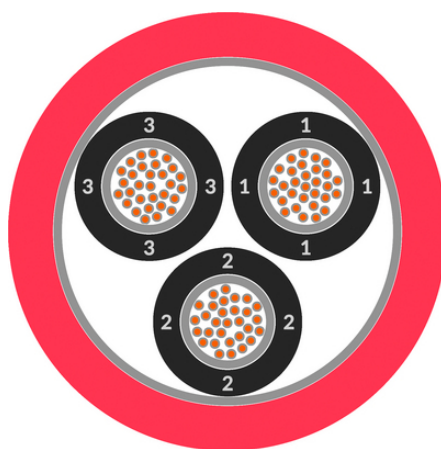
EN 45545 HL3

### Info

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

Circuit integrity according to EN 50200 up to 120 minutes

Highly oil- and fuel-resistant



Rail



Good chemical resistance



Flame-retardant



Halogen-free



Cold-resistant



Mechanical resistance



Oil-resistant



Temperature-resistant

### Benefits

For protection against personal injury and damage to property.

Insulation integrity for up to 120 minutes under the effect of fire (classification PH120 according to EN 50200). Guarantees

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

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## UNIRAIL S 50264-3-2 600V MM FR

functional integrity and the power supply in the event of an emergency.

Compliant with standards for use in rail vehicles: fire safety and cable design requirements according to DIN EN 50264-3-2, type MM; fire behaviour in accordance with DIN EN 45545-2, hazard level HL3.

The cross-linked insulation and sheath materials promote longevity at high temperatures or with a high current load, and provide high dielectric strength.

Halogen-free and highly flame-retardant materials reduce the risk of fire propagation, high smoke density and toxic fumes in case of fire

### Application range

For wiring safety-related components in railway vehicles.

Typical application areas are emergency power circuits for alarm, lighting and communication purposes, which must maintain their function for a certain period of time in the event of a fire.

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

Can be used in dry, damp and especially in harsh and oily environments.

The cross-linked polymer compound is highly resistant to oils, fuels, alkalis and acids.

### 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

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

DIN EN 45545-2 (HL3)

EN 50200

### Product Make-up

Tinned-copper strand, fine-wire

Mica tape wrapping

Insulation: Cross-linked polymer compound EI 109

Colour of insulation: Black with white numbers

Wrapping: Non-hygroscopic tape

Outer sheath: Cross-linked polymer-compound EM 104

Color of the outer sheath: Red

### Technical Data

Classification ETIM 5:

ETIM 5.0 Class-ID: EC000104

ETIM 5.0 Class-Description: Control cable

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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: 4 x 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: -40 °C to +90 °C

### 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.

**UNIRAIL S 50264-3-2 600V MM FR**

Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)
15382170	2 X 1.5	8.4	28.8
15382171	3 X 1.5	8.9	43.2
15382172	4 X 1.5	9.9	57.6
15382173	2 X 2.5	9.4	48
15382174	3 X 2.5	10.1	72
15382175	4 X 2.5	11.1	96
15382176	2 X 4.0	10.4	76.8

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