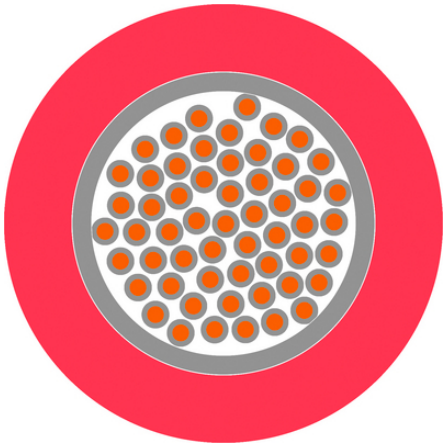
# UNIRAIL S 50264-3-1 600V M FR

Fire-resistant single-core railway cable according to EN 50264-3-1 type M and EN 50200

UNIRAIL S 50264-3-1 600V M FR - Fire-resistant control cable for railways/rolling stock
120 min. circuit integrity according to EN 50200
EN 45545 HL3

## Info

Meets EN 50264-3-1 type M 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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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 EN 50264-3-1, type M; fire behaviour in accordance with EN 45545-2, hazard level HL3.
The cross-linked insulation material promotes longevity at high temperatures or with high current loads, and provides 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 50264-3-1 type M
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 core insulation: red

## Technical Data

| | |
|---|---|
| Classification ETIM 5: | ETIM 5.0 Class-ID: EC000993<br>ETIM 5.0 Class-Description: Single core cable |
| Classification ETIM 6: | ETIM 6.0 Class-ID: EC000993<br>ETIM 6.0 Class-Description: Single core cable |


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| | |
|---|---|
| Conductor stranding: | Fine-wired/ Finely stranded according to IEC 60228, conductor class 5 |
| Minimum bending radius: | Fixed installation:<br>≤ 12 mm: 4 x OD<br>> 12 mm: 5 x OD |
| Nominal voltage: | U0/U AC 0.6/1 kV<br>$U_m$ AC 1.2 kV<br>$V_0$ DC 0.9 kV |
| Test voltage: | 3,5 kV AC; 8,4 kV DC |
| 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.


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PRODUCT INFORMATION

| Article number | Number of cores and mm² per conductor | Outer diameter [mm] | Copper index (kg/km) |
|---|---|---|---|
| 15382100 | 1 X 0.5 | 2.2 | 4.8 |
| 15382101 | 1 X 0.75 | 2.4 | 7.2 |
| 15382102 | 1 X 1.0 | 2.6 | 9.6 |
| 15382103 | 1 X 1.5 | 3.1 | 14.4 |
| 15382104 | 1 X 2.5 | 3.5 | 24 |
| 15382105 | 1 X 4.0 | 4.1 | 38.4 |
| 15382106 | 1 X 6.0 | 4.6 | 57.6 |
| 15382107 | 1 X 10.0 | 5.5 | 96 |
| 15382108 | 1 X 16.0 | 6.7 | 153.6 |
| 15382109 | 1 X 25.0 | 8.5 | 240 |
| 15382110 | 1 X 35.0 | 9.8 | 336 |
| 15382111 | 1 X 50.0 | 11.5 | 480 |
| 15382112 | 1 X 70.0 | 13.6 | 672 |
| 15382113 | 1 X 95.0 | 15.1 | 912 |
| 15382114 | 1 X 120.0 | 17.1 | 1152 |
| 15382115 | 1 X 150.0 | 19.1 | 1440 |
| 15382116 | 1 X 185.0 | 21.3 | 1776 |
| 15382117 | 1 X 240.0 | 24.1 | 2304 |
| 15382118 | 1 X 300.0 | 26.7 | 2880 |
| 15382119 | 1 X 400.0 | 30.5 | 3840 |

Last Update (19.12.2024)
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Product Management www.lappkabel.de
You can find the current technical data in the corresponding data sheet.
PN 0456 / 02_03.16