

**CABLE SOLUTIONS  
FOR ROLLING STOCK**
**FIRE RESISTANT POWERCABLES**  
 EN 50264-2 & EN 50200 / EN 50264-3 & EN 50200

# VARPREN® RW

## EN 50264-3-1 1800V M FR

### Unsheathed cable



- 1 • Tin-plated copper core - class 5 - EN 60228.
- 2 • Mica tape.
- 3 • Red fire resistant elastomer - type EI 109 as per EN 50264-3-1.

### Characteristics

#### Thermal

Continuous operating temperature:  
-40 °C to +90 °C.

#### Electrical

Operating voltage: 1.8 kV / 3 kV.  
Test voltage: 6.5 kV A.C.

#### Mechanical

Cut-through resistance: ★★★★★  
Resistance to abrasion: ★★★★★  
Minimum static internal bending radius  
(EN 50355): 10xD.

#### Chemical

Acid and base resistance: ★★★★★  
Mineral oil resistance: ★★★★★  
Fuel resistance only for class M: ★★★★★

#### Fire-smoke

Halogen-free (EN 60754-1).  
Low toxicity (EN 60754-2).  
Low smoke (EN 61034-2).  
Flame retardant (EN 60332-1-2, EN 60332-3-24).  
Fire resistance (EN 50200 or EN 50362).

### Options

Other cross-sections on request.

### Marking

OMERIN 332- EN 50264-3-1 1800V < cross-section > M FR - batch number - week/year

| Nominal cross-section (mm²) | Nominal stranding | Nominal wall thickness (mm) | Cable outer diameter (mm) |      | Maximum linear resistance at 20 °C (Ω/km) | Approx. linear weight (kg/km) |
|-----------------------------|-------------------|-----------------------------|---------------------------|------|---|-------------------------------|
|                             |                   |                             | Mini                      | Maxi |   |                               |
| 1.5                         | 30 x 0.25         | 2                           | 5.6                       | 6.5  | 13.7                                      | 54                            |
| 2.5                         | 50 x 0.25         | 2                           | 6.0                       | 7.0  | 8.21                                      | 67                            |
| 4                           | 56 x 0.30         | 2                           | 6.5                       | 7.6  | 5.09                                      | 84                            |
| 6                           | 84 x 0.30         | 2                           | 7.1                       | 8.3  | 3.39                                      | 111                           |
| 10                          | 80 x 0.40         | 2                           | 8.3                       | 9.6  | 1.95                                      | 162                           |
| 16                          | 126 x 0.40        | 2                           | 9.4                       | 10.8 | 1.24                                      | 225                           |
| 25                          | 196 x 0.40        | 2                           | 10.7                      | 12.4 | 0.795                                     | 319                           |
| 35                          | 276 x 0.40        | 2                           | 11.9                      | 13.8 | 0.565                                     | 419                           |
| 50                          | 396 x 0.40        | 2                           | 13.2                      | 15.3 | 0.393                                     | 551                           |
| 70                          | 360 x 0.50        | 2                           | 14.8                      | 17.2 | 0.277                                     | 741                           |
| 95                          | 485 x 0.50        | 2.2                         | 16.7                      | 19.4 | 0.210                                     | 958                           |
| 120                         | 608 x 0.50        | 2.2                         | 18.5                      | 21.5 | 0.164                                     | 1197                          |
| 150                         | 756 x 0.50        | 2.2                         | 20.7                      | 23.9 | 0.132                                     | 1507                          |
| 185                         | 944 x 0.50        | 2.4                         | 22.4                      | 25.9 | 0.108                                     | 1823                          |
| 240                         | 1221 x 0.50       | 2.4                         | 25.0                      | 28.8 | 0.0817                                    | 2374                          |

This product is a cable EN 50264-3-1 1800 V M with a mica tape on the core.  
It is not described in EN 50264-1 and EN 50264-3-1 standards.

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LES CABLES DE L'EXTREME

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For an optimum use of the cables produced by our company, we recommend testing in real conditions. Our sales department is available for a possible provision of samples, and/or for the conditions of a complete study in our laboratories.  
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