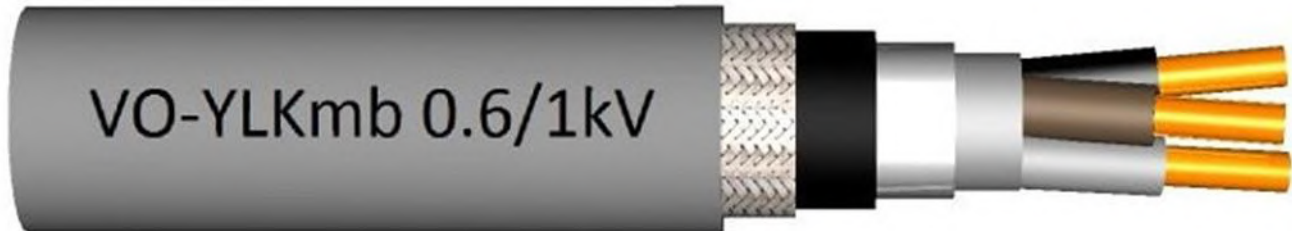


# VO-YLKmb 0.6/1kV

Steel wire braid armoured installation cable with a lead sheath as inner protection



## Application

Is applied in situations where protection against aggressive substances is required. Suitable for direct burial, for low voltage installations up to 1 kV. The lead sheath offers excellent protection against aggressive substances, such as organic solvents and fuels and is very corrosion-proof. Lead cannot withstand concentrated Nitric Acid and organic acids. Steel wire braiding offers an excellent mechanical protection.

## Construction

|                            |   |
|----------------------------|---|
| <b>Conductor</b>           | : Plain solid annealed copper, round  |
| <b>Insulation</b>          | : Cross-linked polyethylene (XLPE)  |
| <b>Assembly</b>            | : 2 up to 8 cores: cores cabled together, filled to make a round shape<br>≥ 10 cores: wrapped with polyester foil |
| <b>Inner sheath</b>        | : Polyvinyl chloride (PVC)  |
| <b>Chemical protection</b> | : Lead, with one or more earth leads of tinned copper wires underneath  |
| <b>Sheath</b>              | : Polyvinyl chloride (PVC)  |
| <b>Braiding</b>            | : Galvanized steel wires (ECC)  |
| <b>Outer sheath</b>        | : Polyvinyl chloride (PVC) flame retardant (mb)   |
| <b>Marking text</b>        | : E.g. "VO-YLKmb 0.6/1kV 2x1.5mm <sup>2</sup> 2016 KEMA-KEUR CE"  |
| <b>Rated voltage</b>       | : 0.6/1kV   |
| <b>Test voltage</b>        | : 3.5kV   |

## Core identification

|                  |                                   |
|------------------|-----------------------------------|
| <b>2 cores</b>   | : Brown, blue                     |
| <b>3 cores</b>   | : Brown, black, grey              |
| <b>4 cores</b>   | : Brown, black, grey, blue        |
| <b>5 cores</b>   | : Brown, black, grey, black, blue |
| <b>Multicore</b> | : Black, numbered                 |

## Standards Applied

|                                |                    |
|--------------------------------|--------------------|
| NEN-EN-IEC 60332-3-24 (cat. C) | Flame retardant    |
| NEN IEC 603321                 | Self-extinguishing |

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## Outer Sheath Colours

Available colours : Grey\*

\*other colours available on request

## Installation recommendations

Minimum Bending Radius : 7xD  
 Max. operating temperature : 90°C (temporary overload permissible until +130°C)  
 Max. operating temperature, fixed : -40 / 80°C  
 Temperature, moved/during installation : 0 / 90°C

## Range and Dimensions

| Article Code    | Number of cores Size Cross-section in mm <sup>2</sup> | Earth screen (mm <sup>2</sup> ) | Nominal diameter over insulation (mm) | Nominal diameter over inner sheath (mm) | Nominal overall diameter (mm) | Maximum tensile strength (N) | Approx. weight (kg/km) |
|-----------------|---|---------------------------------|---------------------------------------|---|-------------------------------|------------------------------|------------------------|
| O0502C1.5BWWGR4 | 2 x 1.5   | 5                               | 2.7                                   | 7.0                                     | 17.6                          | 925                          | 785                    |
| O0502C2.5BWWGR4 | 2 x 2.5   | 5.1                             | 3.1                                   | 7.8                                     | 18.5                          | 1025                         | 880                    |
| O0502C004BWWGR4 | 2 x 4   | 5.8                             | 3.5                                   | 9.2                                     | 19.5                          | 1140                         | 990                    |
| O0502C006BWWGR4 | 2 x 6   | 7.8                             | 4                                     | 10.1                                    | 20.7                          | 1285                         | 1135                   |
| O0503C1.5BBAGR4 | 3 x 1.5   | 5                               | 2.7                                   | 7.4                                     | 17.8                          | 950                          | 810                    |
| O0503C2.5BBAGR4 | 3 x 2.5   | 5.3                             | 3.1                                   | 8.3                                     | 19.0                          | 1080                         | 935                    |
| O0503C004BBAGR4 | 3 x 4   | 6                               | 3.5                                   | 9.7                                     | 20.0                          | 1200                         | 1060                   |
| O0503C006BBAGR4 | 3 x 6   | 8                               | 4                                     | 10.8                                    | 21.4                          | 1370                         | 1230                   |
| O0504C1.5BBCGR4 | 4 x 1.5   | 5.3                             | 2.7                                   | 8.2                                     | 19.0                          | 1080                         | 875                    |
| O0504C2.5BBCGR4 | 4 x 2.5   | 5.6                             | 3.1                                   | 9.1                                     | 19.8                          | 1175                         | 1020                   |
| O0504C004BBCGR4 | 4 x 4   | 6.4                             | 3.5                                   | 10.6                                    | 20.9                          | 1310                         | 1165                   |
| O0504C006BBCGR4 | 4 x 6   | 8.4                             | 4                                     | 11.8                                    | 22.4                          | 1505                         | 1365                   |
| O0505C1.5BBGGR4 | 5 x 1.5   | 5.5                             | 2.7                                   | 9.0                                     | 19.3                          | 1115                         | 955                    |
| O0505C2.5BBGGR4 | 5 x 2.5   | 5.9                             | 3.1                                   | 10.0                                    | 20.7                          | 1285                         | 1115                   |
| O0505C004BBGGR4 | 5 x 4   | 6.8                             | 3.5                                   | 11.7                                    | 22.0                          | 1450                         | 1290                   |
| O0506C1.5BTTGR4 | 6 x 1.5   | 5.6                             | 2.7                                   | 10.2                                    | 20.1                          | 1210                         | 1015                   |
| O0506C2.5BTTGR4 | 6 x 2.5   | 6                               | 3.1                                   | 11.3                                    | 21.3                          | 1360                         | 1160                   |
| O0507C1.5BTTGR4 | 7 x 1.5   | 5.6                             | 2.7                                   | 10.3                                    | 20.4                          | 1245                         | 1030                   |
| O0507C2.5BTTGR4 | 7 x 2.5   | 6                               | 3.1                                   | 11.4                                    | 21.3                          | 1360                         | 1175                   |
| O0508C1.5BTTGR4 | 8 x 1.5   | 5.9                             | 2.7                                   | 10.8                                    | 21.1                          | 1335                         | 1115                   |
| O0508C2.5BTTGR4 | 8 x 2.5   | 6.4                             | 3.1                                   | 12.0                                    | 22.3                          | 1490                         | 1280                   |
| O0510C2.5BTTGR4 | 10 x 2.5  | 7.1                             | 3.1                                   | 14.0                                    | 24.3                          | 1770                         | 1470                   |
| O0512C1.5BTTGR4 | 12 x 1.5  | 6.7                             | 2.7                                   | 13.0                                    | 23.3                          | 1625                         | 1335                   |
| O0512C2.5BTTGR4 | 12 x 2.5  | 7.2                             | 3.7                                   | 14.5                                    | 24.9                          | 1860                         | 1555                   |
| O0514C1.5BTTGR4 | 14 x 1.5  | 7                               | 2.7                                   | 13.7                                    | 24.0                          | 1725                         | 1420                   |
| O0514C2.5BTTGR4 | 14 x 2.5  | 7.5                             | 3.1                                   | 15.3                                    | 25.7                          | 1980                         | 1665                   |
| O0516C2.5BTTGR4 | 16 x 2.5  | 7.8                             | 3.1                                   | 16.2                                    | 26.6                          | 2120                         | 1785                   |
| O0519C1.5BTTGR4 | 19 x 1.5  | 7.5                             | 2.7                                   | 15.3                                    | 25.6                          | 1965                         | 1615                   |
| O0519C2.5BTTGR4 | 19 x 2.5  | 8.1                             | 3.1                                   | 17.2                                    | 27.5                          | 2265                         | 1920                   |
| O0521C2.5BTTGR4 | 21 x 2.5  | 9.1                             | 3.1                                   | 28.2                                    | 28.9                          | 2505                         | 2135                   |
| O0524C2.5BTTGR4 | 24 x 2.5  | 9.8                             | 3.1                                   | 20.2                                    | 30.9                          | 2860                         | 2365                   |
| O0530C2.5BTTGR4 | 30 x 2.5  | 10.9                            | 3.7                                   | 21.5                                    | 32.6                          | 3185                         | 2725                   |
| O0537C1.5BTTGR4 | 37 x 1.5  | 10                              | 2.7                                   | 20.7                                    | 31.4                          | 2955                         | 2405                   |
| O0537C2.5BTTGR4 | 37 x 2.5  | 11.7                            | 3.1                                   | 23.4                                    | 34.4                          | 3550                         | 3060                   |

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## Electrical characteristics

| Number of cores<br>Size cross-<br>section<br>in mm <sup>2</sup> | Conductor<br>resistance at<br>20°C,<br>DC (ohm/km) | Conductor<br>resistance<br>at 90 °C, 50 Hz (oh<br>m/km) | Maximum<br>current rating <sup>1</sup><br>(A) | Working selfinductance<br>(mH/km) | Approx.<br>working<br>capacitance<br>(nF/km) |
|---|--|---|---|-----------------------------------|--|
| 2 x 1.5   | 12.1   | 15.4  | 26  | 0.37                              | 121  |
| 2 x 2.5   | 7.41   | 9.45  | 34  | 0.34                              | 139  |
| 2 x 4   | 4.61   | 5.88  | 44  | 0.32                              | 152  |
| 2 x 6   | 3.08   | 3.93  | 56  | 0.3                               | 164  |
| 3 x 1.5   | 12.1   | 15.4  | 22  | 0.37                              | 134  |
| 3 x 2.5   | 7.41   | 9.45  | 29  | 0.34                              | 156  |
| 3 x 4   | 4.61   | 5.88  | 37  | 0.32                              | 171  |
| 3 x 6   | 3.08   | 3.93  | 46  | 0.3                               | 186  |
| 4 x 1.5   | 12.1   | 15.4  | 22  | 0.41                              | 145  |
| 4 x 2.5   | 7.41   | 9.45  | 29  | 0.38                              | 162  |
| 4 x 4   | 4.61   | 5.88  | 37  | 0.36                              | 172  |
| 4 x 6   | 3.08   | 3.93  | 46  | 0.34                              | 193  |
| 5 x 1.5   | 12.1   | 15.4  | 22  | 0.41                              | 150  |
| 5 x 2.5   | 7.41   | 9.45  | 29  | 0.38                              | 167  |
| 5 x 4   | 4.61   | 5.88  | 37  | 0.36                              | 177  |
| 6 x 1.5   | 12.1   | 15.4  | 17  | -                                 | = < 160                                      |
| 6 x 2.5   | 7.41   | 9.45  | 22  | -                                 | = < 170                                      |
| 7 x 1.5   | 12.1   | 15.4  | 16  | -                                 | = < 160                                      |
| 7 x 2.5   | 7.41   | 9.45  | 21  | -                                 | = < 170                                      |
| 8 x 1.5   | 12.1   | 15.4  | 15  | -                                 | = < 160                                      |
| 8 x 2.5   | 7.41   | 9.45  | 20  | -                                 | = < 170                                      |
| 10 x 2.5  | 7.41   | 9.45  | 18  | -                                 | = < 170                                      |
| 12 x 1.5  | 12.1   | 15.4  | 13  | -                                 | = < 160                                      |
| 12 x 2.5  | 7.41   | 9.45  | 17  | -                                 | = < 170                                      |
| 14 x 1.5  | 12.1   | 15.4  | 12  | -                                 | = < 160                                      |
| 14 x 2.5  | 7.41   | 9.45  | 16  | -                                 | = < 170                                      |
| 16 x 2.5  | 7.41   | 9.45  | 15  | -                                 | = < 170                                      |
| 19 x 1.5  | 12.1   | 15.4  | 10.5  | -                                 | = < 160                                      |
| 19 x 2.5  | 7.41   | 9.45  | 13.5  | -                                 | = < 170                                      |
| 21 x 2.5  | 7.41   | 9.45  | -   | -                                 | = < 160                                      |
| 24 x 2.5  | 7.41   | 9.45  | 12.5  | -                                 | = < 170                                      |
| 30 x 2.5  | 7.41   | 9.45  | 11.5  | -                                 | = < 170                                      |
| 37 x 1.5  | 12.1   | 15.4  | 8   | -                                 | = < 160                                      |
| 37 x 2.5  | 7.41   | 9.45  | 11  | -                                 | = < 170                                      |

1) The maximum current rating applies to one cable directly in the ground, at a soil temperature of 20 °C and a soil thermal resistivity for 2.5 Km/W, in accordance with NEN 1010:2007. For 2 cores loaded cables table A.52-4 column 7 is applicable and for 3 cores loaded cables table A.52-6 column 7 is applicable. For 4 and 5 cores cables the maximum current is given for 3 cores loaded. Correction factors for other circumstances are given in table A.52-16 and A.52-19. The correction factor for a soil thermal resistivity of 1 Km/W amounts 1.5.

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