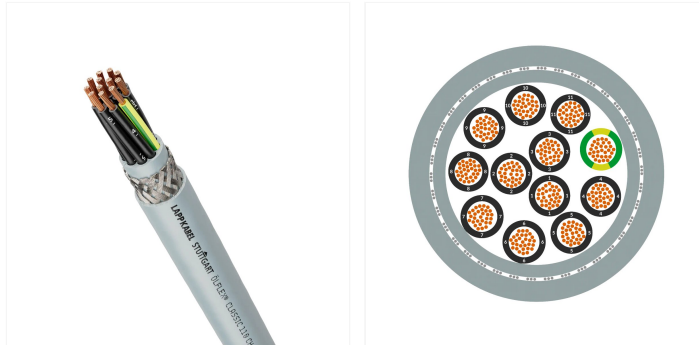


## ÖLFLEX® CLASSIC 110 CH 2X1,5

**Article No.:** 10035067

Power and control cable; 2X1.5;  $U_0/U$ : 300/500 V; HFFR; Core identification: Numbers; Shielded; UL recognized; Flexible



### Details

#### Benefits

- Halogen free and highly flame retardant materials reduce the risk of flame propagation, high smoke density and toxic flue gases in the event of a fire.
- Ideal protection against electromagnetic interference thanks to copper shielding braiding with a high degree of coverage.
- Classified fire behavior according to EU Directive 305/2011 (BauPVO/CPR) with article number selection on the LAPP website.
- High electrical safety thanks to 4000 V test voltage.
- UL certification according to technical data enables the product to be used on the North American market.
- Product with multiple certifications enables universal use and reduces the variety of parts, thus guaranteeing logistics savings.

#### Application

- For universal use for wiring machine-internal and cross-plant control circuits.
- Especially for environments where electromagnetic compatibility (EMC) is required.
- For fixed installation and occasional flexing without tensile strain.
- Can be used in dry and damp environments.
- Suitable for medium mechanical stress.

- Suitable for outdoor use.
- Flexible use at temperatures down to -30°C.

**Notes**

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

If applicable, the prices are solid metal prices without additional charges and VAT. Sales only to business customers.

Unless specified otherwise, the product values shown are rated values at room temperature. You can receive additional values, such as tolerances, upon request if they are available and have been released for publication.

The absence of PWIS raw materials does not protect against the potential risk of contamination with substances that interfere with the paint wetting during subsequent handling of the product(s) during transport, storage or further processing after delivery.

**Remarks**

Technical Data

**General information**

|                  |   |
|------------------|---|
| Brand            | ÖLFLEX®   |
| Product type     | Power and control cable   |
| Copper index     | 357.5 lb/10000 ft   |
| Industry segment | Agricultural & Farm Machinery<br>Assembly Machines<br>Automotive<br>Construction Machinery<br>Energy<br>Food & Beverage<br>Healthcare & Pharma<br>Heating, Ventilation, Air Conditioning & Refrigeration<br>Intralogistics & Material handling<br>Lifts & Elevators<br>Machine Tools<br>Packaging<br>Process Industry<br>Robotics<br>Rolling Stock<br>Ships & boats |

**Electrical parameters**

|                                  |   |
|----------------------------------|---|
| Nominal voltage                  | $U_0/U$ : 300/500 V AC rms according to IEC |
| Rated voltage                    | 600 V AC rms according to UL AWM            |
| Test voltage conductor/conductor | 4 kV  |
| Test voltage conductor/shielding | 4 kV  |

**Product design**

|  |                              |
|--|------------------------------|
| Cable dimension                                    | 2X1.5                        |
| Nominal cross section conductor (mm <sup>2</sup> ) | 1.5 mm <sup>2</sup>          |
| Nominal cross section conductor (AWG)              | 16 AWG                       |
| Leading conductor cross-section                    | mm <sup>2</sup>              |
| Conductor material                                 | Bare Copper                  |
| Conductor design                                   | IEC 60228 class 5: fine-wire |
| Including protective ground                        | No                           |
| Number of cores                                    | 2                            |
| Stranding type                                     | Layered Stranding            |
| Shielded   | Yes                          |
| Type of overall shielding                          | Tin-plated copper braiding   |
| Nominal outer diameter                             | 0.339 in                     |
| Cable form   | Round                        |
| Core insulation base material                      | Halogen-free compound        |
| Conductor insulation basic material, short form    | HFFR                         |
| Basic material of inner jacket                     | Halogen-free compound        |
| Basic material of inner jacket, short form         | HFFR                         |
| colour inner sheath                                | gray                         |
| Basic material of outer jacket                     | Halogen-free compound        |
| Base material of outer sheath, shortname           | HFFR                         |
| Outer jacket color                                 | gray                         |
| Core identification                                | Numbers                      |
| Conductor color code                               | VDE 0293-1<br>EN 50334       |

**Product features**

|  |   |
|--|---|
| Application area                                   | Flexible<br>Fixed Installation  |
| For torsional load                                 | No  |
| Minimum bending radius, stationary                 | 6 x outer diameter  |
| Minimum bending radius in inch, fixed installation | 2.031 in  |
| Minimum bending radius, occasionally moved         | 15 x outer diameter   |
| Minimum bending radius in mm, occasionally moved   | 5.079 in  |
| Temperature, fixed installation                    | to 75 °C max. conductor temperature according to UL AWM<br>-40 °C to 80 °C max. conductor temperature |
| Temperature, occasionally moved                    | to 75 °C max. conductor temperature according to UL AWM<br>-30 °C to 70 °C max. conductor temperature |
| Flame-retardant                                    | Yes   |
| Flame retardance according to                      | IEC 60332-1-2<br>IEC 60332-3-22<br>IEC 60332-3-25<br>UL Cable Flame Test                              |
| low smoke density according to                     | IEC 61034-2   |
| low toxicity of combustion gases                   | NES 02-713 ( $\leq 3$ )   |
| Corrosiveness of combustion gases according to     | IEC 60754-2   |
| UV-resistant                                       | Yes   |

|                              |  |
|------------------------------|--|
| UV-resistant according to    | DIN EN ISO 4892-2 method A<br>EN 50620<br>EN 50618 |
| Ozone-resistant              | Yes  |
| ozone resistant according to | EN 50396, method B                                 |
| Halogenfree                  | Yes  |
| Halogen-free according to    | IEC 60754-1  |
| Oil resistant                | Yes  |

|                             |  |
|-----------------------------|--|
| Oil resistance according to | EN 50363-4-1: TM5<br>UL OILRES I<br>UL OILRES II |
| PWIS-free                   | Yes  |
| PWIS-free according to      | VDMA 24364-B2-L                                  |

#### Certifications and standards

|                          |   |
|--------------------------|---|
| CE marking               | Yes   |
| EAC certified            | Yes   |
| EAC certification number | EAЭC N RU Д-DE.АЮ64.В.00130/20                    |
| UL recognized            | Yes   |
| UL AWM certification     | 21089 according to UL 758 (e-file number: E63634) |
| UL listed                | No  |
| cUR recognized           | No  |
| cUL listed               | No  |
| CSA certified            | No  |
| VDE certified            | No  |
| DNV-certified            | No  |
| CPR fire class           | B2ca  |
| CPR smoke density        | s1  |
| CPR droplets             | d1  |
| CPR acidity              | a1  |

---

|   |    |
|---|----|
| Resistance to flame propagation tested according to UN/ECE-R118 | No |
|---|----|

---

|   |    |
|---|----|
| Tested for fire protection for railway vehicles | No |
|---|----|

---

**ÖLFLEX® CLASSIC 110 CH**

| Article No. | Name                           | Number of cores | Including protective ground | Nominal cross section conductor (mm <sup>2</sup> ) | Nominal outer diameter | Copper index        | CPR fire class |
|-------------|--------------------------------|-----------------|-----------------------------|--|------------------------|---------------------|----------------|
| 10035030    | ÖLFLEX® CLASSIC 110 CH 2X0,5   | 2               | No                          | 0.5 mm <sup>2</sup>                                | 0.28 in                | 195.5 lb/10000 ft   | Dca            |
| 10035031    | ÖLFLEX® CLASSIC 110 CH 3G0,5   | 3               | Yes                         | 0.5 mm <sup>2</sup>                                | 0.291 in               | 235.83 lb/10000 ft  | B2ca           |
| 10035032    | ÖLFLEX® CLASSIC 110 CH 3X0,5   | 3               | No                          | 0.5 mm <sup>2</sup>                                | 0.291 in               | 235.86 lb/10000 ft  | B2ca           |
| 10035033    | ÖLFLEX® CLASSIC 110 CH 4G0,5   | 4               | Yes                         | 0.5 mm <sup>2</sup>                                | 0.315 in               | 278.16 lb/10000 ft  | B2ca           |
| 10035034    | ÖLFLEX® CLASSIC 110 CH 4X0,5   | 4               | No                          | 0.5 mm <sup>2</sup>                                | 0.315 in               | 278.2 lb/10000 ft   | B2ca           |
| 10035035    | ÖLFLEX® CLASSIC 110 CH 5G0,5   | 5               | Yes                         | 0.5 mm <sup>2</sup>                                | 0.339 in               | 322.5 lb/10000 ft   | B2ca           |
| 10035036    | ÖLFLEX® CLASSIC 110 CH 7G0,5   | 7               | Yes                         | 0.5 mm <sup>2</sup>                                | 0.358 in               | 402.46 lb/10000 ft  |                |
| 10035037    | ÖLFLEX® CLASSIC 110 CH 12G0,5  | 12              | Yes                         | 0.5 mm <sup>2</sup>                                | 0.453 in               | 614.1 lb/10000 ft   |                |
| 10035040    | ÖLFLEX® CLASSIC 110 CH 2X0,75  | 2               | No                          | 0.75 mm <sup>2</sup>                               | 0.303 in               | 237.88 lb/10000 ft  | B2ca           |
| 10035041    | ÖLFLEX® CLASSIC 110 CH 3G0,75  | 3               | Yes                         | 0.75 mm <sup>2</sup>                               | 0.315 in               | 294.3 lb/10000 ft   | B2ca           |
| 10035042    | ÖLFLEX® CLASSIC 110 CH 3X0,75  | 3               | No                          | 0.75 mm <sup>2</sup>                               | 0.315 in               | 294.3 lb/10000 ft   | B2ca           |
| 10035043    | ÖLFLEX® CLASSIC 110 CH 4G0,75  | 4               | Yes                         | 0.75 mm <sup>2</sup>                               | 0.335 in               | 354.8 lb/10000 ft   | B2ca           |
| 10035044    | ÖLFLEX® CLASSIC 110 CH 4X0,75  | 4               | No                          | 0.75 mm <sup>2</sup>                               | 0.335 in               | 354.8 lb/10000 ft   | B2ca           |
| 10035045    | ÖLFLEX® CLASSIC 110 CH 5G0,75  | 5               | Yes                         | 0.75 mm <sup>2</sup>                               | 0.366 in               | 418.6 lb/10000 ft   | B2ca           |
| 10035046    | ÖLFLEX® CLASSIC 110 CH 5X0,75  | 5               | No                          | 0.75 mm <sup>2</sup>                               | 0.366 in               | 418.64 lb/10000 ft  | B2ca           |
| 10035047    | ÖLFLEX® CLASSIC 110 CH 7G0,75  | 7               | Yes                         | 0.75 mm <sup>2</sup>                               | 0.39 in                | 534.16 lb/10000 ft  | B2ca           |
| 10035048    | ÖLFLEX® CLASSIC 110 CH 7X0,75  | 7               | No                          | 0.75 mm <sup>2</sup>                               | 0.39 in                | 534.22 lb/10000 ft  | B2ca           |
| 10035050    | ÖLFLEX® CLASSIC 110 CH 12G0,75 | 12              | Yes                         | 0.75 mm <sup>2</sup>                               | 0.492 in               | 827.8 lb/10000 ft   |                |
| 10035051    | ÖLFLEX® CLASSIC 110 CH 18G0,75 | 18              | Yes                         | 0.75 mm <sup>2</sup>                               | 0.583 in               | 1267.2 lb/10000 ft  |                |
| 10035052    | ÖLFLEX® CLASSIC 110 CH 25G0,75 | 25              | Yes                         | 0.75 mm <sup>2</sup>                               | 0.665 in               | 1663.12 lb/10000 ft |                |
| 10035055    | ÖLFLEX® CLASSIC 110 CH 2X1     | 2               | No                          | 1 mm <sup>2</sup>                                  | 0.315 in               | 278.2 lb/10000 ft   | B2ca           |
| 10035056    | ÖLFLEX® CLASSIC 110 CH 3G1     | 3               | Yes                         | 1 mm <sup>2</sup>                                  | 0.331 in               | 350.05 lb/10000 ft  | B2ca           |
| 10035057    | ÖLFLEX® CLASSIC 110 CH 3X1     | 3               | No                          | 1 mm <sup>2</sup>                                  | 0.331 in               | 350.1 lb/10000 ft   | B2ca           |
| 10035058    | ÖLFLEX® CLASSIC 110 CH 4G1     | 4               | Yes                         | 1 mm <sup>2</sup>                                  | 0.35 in                | 493.84 lb/10000 ft  | B2ca           |
| 10035059    | ÖLFLEX® CLASSIC 110 CH 4X1     | 4               | No                          | 1 mm <sup>2</sup>                                  | 0.35 in                | 493.9 lb/10000 ft   | B2ca           |
| 10035060    | ÖLFLEX® CLASSIC 110 CH 5G1     | 5               | Yes                         | 1 mm <sup>2</sup>                                  | 0.382 in               | 559 lb/10000 ft     | B2ca           |
| 10035061    | ÖLFLEX® CLASSIC 110 CH 7G1     | 7               | Yes                         | 1 mm <sup>2</sup>                                  | 0.406 in               | 653.1 lb/10000 ft   | B2ca           |
| 10035062    | ÖLFLEX® CLASSIC 110 CH 12G1    | 12              | Yes                         | 1 mm <sup>2</sup>                                  | 0.535 in               | 1133.5 lb/10000 ft  |                |
| 10035063    | ÖLFLEX® CLASSIC 110 CH 18G1    | 18              | Yes                         | 1 mm <sup>2</sup>                                  | 0.618 in               | 1581.7 lb/10000 ft  |                |
| 10035064    | ÖLFLEX® CLASSIC 110 CH 25G1    | 25              | Yes                         | 1 mm <sup>2</sup>                                  | 0.701 in               | 2096.32 lb/10000 ft |                |

| Article No. | Name                          | Number of cores | Including protective ground | Nominal cross section conductor (mm <sup>2</sup> ) | Nominal outer diameter | Copper index        | CPR fire class |
|-------------|-------------------------------|-----------------|-----------------------------|--|------------------------|---------------------|----------------|
| 10035067    | ÖLFLEX® CLASSIC 110 CH 2X1,5  | 2               | No                          | 1.5 mm <sup>2</sup>                                | 0.339 in               | 357.5 lb/10000 ft   | B2ca           |
| 10035068    | ÖLFLEX® CLASSIC 110 CH 3G1,5  | 3               | Yes                         | 1.5 mm <sup>2</sup>                                | 0.354 in               | 464.3 lb/10000 ft   | B2ca           |
| 10035069    | ÖLFLEX® CLASSIC 110 CH 3X1,5  | 3               | No                          | 1.5 mm <sup>2</sup>                                | 0.354 in               | 464.33 lb/10000 ft  | B2ca           |
| 10035070    | ÖLFLEX® CLASSIC 110 CH 4G1,5  | 4               | Yes                         | 1.5 mm <sup>2</sup>                                | 0.386 in               | 576.5 lb/10000 ft   | B2ca           |
| 10035071    | ÖLFLEX® CLASSIC 110 CH 5G1,5  | 5               | Yes                         | 1.5 mm <sup>2</sup>                                | 0.413 in               | 690.7 lb/10000 ft   | B2ca           |
| 10035072    | ÖLFLEX® CLASSIC 110 CH 7G1,5  | 7               | Yes                         | 1.5 mm <sup>2</sup>                                | 0.449 in               | 901.7 lb/10000 ft   | B2ca           |
| 10035073    | ÖLFLEX® CLASSIC 110 CH 12G1,5 | 12              | Yes                         | 1.5 mm <sup>2</sup>                                | 0.591 in               | 1564.2 lb/10000 ft  | B2ca           |
| 10035074    | ÖLFLEX® CLASSIC 110 CH 18G1,5 | 18              | Yes                         | 1.5 mm <sup>2</sup>                                | 0.685 in               | 2202.5 lb/10000 ft  |                |
| 10035075    | ÖLFLEX® CLASSIC 110 CH 25G1,5 | 25              | Yes                         | 1.5 mm <sup>2</sup>                                | 0.803 in               | 3112.2 lb/10000 ft  |                |
| 10035089    | ÖLFLEX® CLASSIC 110 CH 3G2,5  | 3               | Yes                         | 2.5 mm <sup>2</sup>                                | 0.413 in               | 690.7 lb/10000 ft   | B2ca           |
| 10035090    | ÖLFLEX® CLASSIC 110 CH 4G2,5  | 4               | Yes                         | 2.5 mm <sup>2</sup>                                | 0.449 in               | 869.4 lb/10000 ft   | B2ca           |
| 10035091    | ÖLFLEX® CLASSIC 110 CH 5G2,5  | 5               | Yes                         | 2.5 mm <sup>2</sup>                                | 0.5 in                 | 1058.2 lb/10000 ft  | B2ca           |
| 10035092    | ÖLFLEX® CLASSIC 110 CH 7G2,5  | 7               | Yes                         | 2.5 mm <sup>2</sup>                                | 0.551 in               | 1498.3 lb/10000 ft  | B2ca           |
| 10035093    | ÖLFLEX® CLASSIC 110 CH 12G2,5 | 12              | Yes                         | 2.5 mm <sup>2</sup>                                | 0.705 in               | 2422.2 lb/10000 ft  | B2ca           |
| 10035094    | ÖLFLEX® CLASSIC 110 CH 4G4    | 4               | Yes                         | 4 mm <sup>2</sup>                                  | 0.535 in               | 1394.86 lb/10000 ft | B2ca           |
| 10035095    | ÖLFLEX® CLASSIC 110 CH 5G4    | 5               | Yes                         | 4 mm <sup>2</sup>                                  | 0.587 in               | 1689.82 lb/10000 ft | B2ca           |
| 10035096    | ÖLFLEX® CLASSIC 110 CH 7G4    | 7               | Yes                         | 4 mm <sup>2</sup>                                  | 0.638 in               | 2243.5 lb/10000 ft  | B2ca           |
| 10035097    | ÖLFLEX® CLASSIC 110 CH 4G6    | 4               | Yes                         | 6 mm <sup>2</sup>                                  | 0.622 in               | 1980.8 lb/10000 ft  | B2ca           |
| 10035098    | ÖLFLEX® CLASSIC 110 CH 5G6    | 5               | Yes                         | 6 mm <sup>2</sup>                                  | 0.681 in               | 2392.63 lb/10000 ft | B2ca           |
| 10035099    | ÖLFLEX® CLASSIC 110 CH 7G6    | 7               | Yes                         | 6 mm <sup>2</sup>                                  | 0.74 in                | 3220.4 lb/10000 ft  | B2ca           |
| 10035380    | ÖLFLEX® CLASSIC 110 CH 4G10   | 4               | Yes                         | 10 mm <sup>2</sup>                                 | 0.752 in               | 3098.1 lb/10000 ft  | B2ca           |
| 10035381    | ÖLFLEX® CLASSIC 110 CH 5G10   | 5               | Yes                         | 10 mm <sup>2</sup>                                 | 0.843 in               | 3941.4 lb/10000 ft  | B2ca           |
| 10035382    | ÖLFLEX® CLASSIC 110 CH 4G16   | 4               | Yes                         | 16 mm <sup>2</sup>                                 | 0.878 in               | 4888.74 lb/10000 ft | B2ca           |
| 10035383    | ÖLFLEX® CLASSIC 110 CH 5G16   | 5               | Yes                         | 16 mm <sup>2</sup>                                 | 0.965 in               | 5971.82 lb/10000 ft | B2ca           |
| 10035384    | ÖLFLEX® CLASSIC 110 CH 4G25   | 4               | Yes                         | 25 mm <sup>2</sup>                                 | 1.063 in               | 7551.5 lb/10000 ft  | B2ca           |
| 10035386    | ÖLFLEX® CLASSIC 110 CH 4G35   | 4               | Yes                         | 35 mm <sup>2</sup>                                 | 1.197 in               | 10274.7 lb/10000 ft | B2ca           |

V1.1