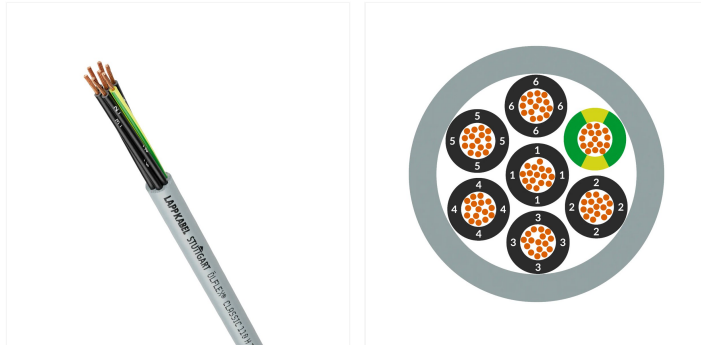


## ÖLFLEX® CLASSIC 110 H 4G0,75

**Article No.:** 10019913

Power and control cable; 4G0.75;  $U_0/U$ : 300/500 V; HFFR; Core identification: Numbers; 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.
- 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.
- VDE-tested fire behavior.

#### Application

- For structured building cabling for fulfilling special fire protection requirements.
- For universal use for wiring machine-internal and cross-plant control circuits.
- For fixed installation and occasional flexing without tensile strain.
- Can be used in dry and damp environments.
- Suitable for medium mechanical stress.
- The HFFR outer jacket is highly resistant to acids and alkaline solutions.
- 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     | 193.5 lb/10000 ft  |
| Industry segment | <ul style="list-style-type: none"> <li>Agricultural &amp; Farm Machinery</li> <li>Assembly Machines</li> <li>Automotive</li> <li>Construction Machinery</li> <li>Energy</li> <li>Food &amp; Beverage</li> <li>Healthcare &amp; Pharma</li> <li>Heating, Ventilation, Air Conditioning &amp; Refrigeration</li> <li>Intralogistics &amp; Material handling</li> <li>Lifts &amp; Elevators</li> <li>Machine Tools</li> <li>Packaging</li> <li>Process Industry</li> <li>Robotics</li> <li>Rolling Stock</li> <li>Ships &amp; boats</li> <li>Solar</li> </ul> |

**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    | 4 kV  |

**Product design**

|  |                              |
|--|------------------------------|
| Cable dimension                                    | 4G0.75                       |
| Nominal cross section conductor (mm <sup>2</sup> ) | 0.75 mm <sup>2</sup>         |
| Nominal cross section conductor (AWG)              | 19 AWG                       |
| Leading conductor cross-section                    | mm <sup>2</sup>              |
| Conductor material                                 | Bare Copper                  |
| Conductor design                                   | IEC 60228 class 5: fine-wire |
| Including protective ground                        | Yes                          |
| Number of cores                                    | 4                            |
| Stranding type                                     | Layered Stranding            |
| Shielded   | No                           |
| Nominal outer diameter                             | 0.248 in                     |
| Cable form   | Round                        |
| Core insulation base material                      | Halogen-free compound        |
| Conductor insulation basic material, short form    | HFFR                         |
| 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 | 4 x outer diameter             |

|  |   |
|--|---|
| Minimum bending radius in inch, fixed installation | 0.992 in  |
| Minimum bending radius, occasionally moved         | 10 x outer diameter   |
| Minimum bending radius in mm, occasionally moved   | 2.48 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 ( $\leq 3$ )<br>EN 50306-1 ( $\leq 3$ )  |
| 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   |

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**Certifications and standards**

|   |   |
|---|---|
| CE marking  | Yes   |
| EAC certified   | Yes   |
| EAC certification number  | EAЭC N RU Д-DE.АЮ064.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  | Cca   |
| 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 H**

| 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 |
|-------------|-------------------------------|-----------------|-----------------------------|--|------------------------|---------------------|----------------|
| 10019849    | ÖLFLEX® CLASSIC 110 H 4G16    | 4               | Yes                         | 16 mm <sup>2</sup>                                 | 0.74 in                | 4128.2 lb/10000 ft  | Cca            |
| 10019851    | ÖLFLEX® CLASSIC 110 H 4G10    | 4               | Yes                         | 10 mm <sup>2</sup>                                 | 0.638 in               | 2580.1 lb/10000 ft  | Cca            |
| 10019852    | ÖLFLEX® CLASSIC 110 H 5G10    | 5               | Yes                         | 10 mm <sup>2</sup>                                 | 0.713 in               | 3225.1 lb/10000 ft  | Cca            |
| 10019853    | ÖLFLEX® CLASSIC 110 H 5G16    | 5               | Yes                         | 16 mm <sup>2</sup>                                 | 0.835 in               | 5160.72 lb/10000 ft | Cca            |
| 10019854    | ÖLFLEX® CLASSIC 110 H 4G25    | 4               | Yes                         | 25 mm <sup>2</sup>                                 | 0.925 in               | 6450.2 lb/10000 ft  | Cca            |
| 10019856    | ÖLFLEX® CLASSIC 110 H 4G35    | 4               | Yes                         | 35 mm <sup>2</sup>                                 | 1.047 in               | 9030.3 lb/10000 ft  | Cca            |
| 10019900    | ÖLFLEX® CLASSIC 110 H 2X0,5   | 2               | No                          | 0.5 mm <sup>2</sup>                                | 0.201 in               | 64.5 lb/10000 ft    | Cca            |
| 10019901    | ÖLFLEX® CLASSIC 110 H 3G0,5   | 3               | Yes                         | 0.5 mm <sup>2</sup>                                | 0.213 in               | 96.75 lb/10000 ft   | Cca            |
| 10019902    | ÖLFLEX® CLASSIC 110 H 3X0,5   | 3               | No                          | 0.5 mm <sup>2</sup>                                | 0.213 in               | 96.8 lb/10000 ft    | Cca            |
| 10019903    | ÖLFLEX® CLASSIC 110 H 4G0,5   | 4               | Yes                         | 0.5 mm <sup>2</sup>                                | 0.228 in               | 129 lb/10000 ft     |                |
| 10019904    | ÖLFLEX® CLASSIC 110 H 4X0,5   | 4               | No                          | 0.5 mm <sup>2</sup>                                | 0.228 in               | 129.02 lb/10000 ft  |                |
| 10019905    | ÖLFLEX® CLASSIC 110 H 5G0,5   | 5               | Yes                         | 0.5 mm <sup>2</sup>                                | 0.248 in               | 161.25 lb/10000 ft  |                |
| 10019906    | ÖLFLEX® CLASSIC 110 H 7G0,5   | 7               | Yes                         | 0.5 mm <sup>2</sup>                                | 0.272 in               | 225.75 lb/10000 ft  |                |
| 10019907    | ÖLFLEX® CLASSIC 110 H 12G0,5  | 12              | Yes                         | 0.5 mm <sup>2</sup>                                | 0.358 in               | 387 lb/10000 ft     |                |
| 10019910    | ÖLFLEX® CLASSIC 110 H 2X0,75  | 2               | No                          | 0.75 mm <sup>2</sup>                               | 0.217 in               | 96.8 lb/10000 ft    | Cca            |
| 10019911    | ÖLFLEX® CLASSIC 110 H 3G0,75  | 3               | Yes                         | 0.75 mm <sup>2</sup>                               | 0.228 in               | 145.1 lb/10000 ft   | Cca            |
| 10019912    | ÖLFLEX® CLASSIC 110 H 3X0,75  | 3               | No                          | 0.75 mm <sup>2</sup>                               | 0.228 in               | 145.1 lb/10000 ft   | Cca            |
| 10019913    | ÖLFLEX® CLASSIC 110 H 4G0,75  | 4               | Yes                         | 0.75 mm <sup>2</sup>                               | 0.248 in               | 193.5 lb/10000 ft   | Cca            |
| 10019914    | ÖLFLEX® CLASSIC 110 H 4X0,75  | 4               | No                          | 0.75 mm <sup>2</sup>                               | 0.248 in               | 193.5 lb/10000 ft   | Cca            |
| 10019915    | ÖLFLEX® CLASSIC 110 H 5G0,75  | 5               | Yes                         | 0.75 mm <sup>2</sup>                               | 0.272 in               | 241.91 lb/10000 ft  |                |
| 10019916    | ÖLFLEX® CLASSIC 110 H 5X0,75  | 5               | No                          | 0.75 mm <sup>2</sup>                               | 0.272 in               | 241.9 lb/10000 ft   |                |
| 10019917    | ÖLFLEX® CLASSIC 110 H 7G0,75  | 7               | Yes                         | 0.75 mm <sup>2</sup>                               | 0.295 in               | 338.67 lb/10000 ft  |                |
| 10019918    | ÖLFLEX® CLASSIC 110 H 7X0,75  | 7               | No                          | 0.75 mm <sup>2</sup>                               | 0.295 in               | 338.64 lb/10000 ft  |                |
| 10019919    | ÖLFLEX® CLASSIC 110 H 9G0,75  | 9               | Yes                         | 0.75 mm <sup>2</sup>                               | 0.378 in               | 435.4 lb/10000 ft   |                |
| 10019920    | ÖLFLEX® CLASSIC 110 H 12G0,75 | 12              | Yes                         | 0.75 mm <sup>2</sup>                               | 0.398 in               | 580.5 lb/10000 ft   |                |
| 10019921    | ÖLFLEX® CLASSIC 110 H 18G0,75 | 18              | Yes                         | 0.75 mm <sup>2</sup>                               | 0.472 in               | 870.8 lb/10000 ft   |                |
| 10019922    | ÖLFLEX® CLASSIC 110 H 25G0,75 | 25              | Yes                         | 0.75 mm <sup>2</sup>                               | 0.555 in               | 1209.54 lb/10000 ft |                |
| 10019927    | ÖLFLEX® CLASSIC 110 H 34G1,5  | 34              | Yes                         | 1.5 mm <sup>2</sup>                                | 0.78 in                | 3289.96 lb/10000 ft |                |
| 10019930    | ÖLFLEX® CLASSIC 110 H 2X1,5   | 2               | No                          | 1.5 mm <sup>2</sup>                                | 0.252 in               | 193.5 lb/10000 ft   | Cca            |
| 10019931    | ÖLFLEX® CLASSIC 110 H 3G1,5   | 3               | Yes                         | 1.5 mm <sup>2</sup>                                | 0.268 in               | 290.26 lb/10000 ft  | Cca            |

| 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 |
|-------------|------------------------------|-----------------|-----------------------------|--|------------------------|---------------------|----------------|
| 10019932    | ÖLFLEX® CLASSIC 110 H 4G1,5  | 4               | Yes                         | 1.5 mm <sup>2</sup>                                | 0.291 in               | 387 lb/10000 ft     | Cca            |
| 10019933    | ÖLFLEX® CLASSIC 110 H 5G1,5  | 5               | Yes                         | 1.5 mm <sup>2</sup>                                | 0.327 in               | 483.8 lb/10000 ft   | Cca            |
| 10019934    | ÖLFLEX® CLASSIC 110 H 7G1,5  | 7               | Yes                         | 1.5 mm <sup>2</sup>                                | 0.354 in               | 677.3 lb/10000 ft   | Cca            |
| 10019935    | ÖLFLEX® CLASSIC 110 H 12G1,5 | 12              | Yes                         | 1.5 mm <sup>2</sup>                                | 0.48 in                | 1161 lb/10000 ft    |                |
| 10019936    | ÖLFLEX® CLASSIC 110 H 14G1,5 | 14              | Yes                         | 1.5 mm <sup>2</sup>                                | 0.512 in               | 1354.6 lb/10000 ft  |                |
| 10019937    | ÖLFLEX® CLASSIC 110 H 18G1,5 | 18              | Yes                         | 1.5 mm <sup>2</sup>                                | 0.575 in               | 1741.6 lb/10000 ft  |                |
| 10019938    | ÖLFLEX® CLASSIC 110 H 25G1,5 | 25              | Yes                         | 1.5 mm <sup>2</sup>                                | 0.677 in               | 2418.8 lb/10000 ft  |                |
| 10019944    | ÖLFLEX® CLASSIC 110 H 2X2,5  | 2               | No                          | 2.5 mm <sup>2</sup>                                | 0.299 in               | 322.5 lb/10000 ft   | Cca            |
| 10019945    | ÖLFLEX® CLASSIC 110 H 3G2,5  | 3               | Yes                         | 2.5 mm <sup>2</sup>                                | 0.327 in               | 483.76 lb/10000 ft  | Cca            |
| 10019946    | ÖLFLEX® CLASSIC 110 H 4G2,5  | 4               | Yes                         | 2.5 mm <sup>2</sup>                                | 0.354 in               | 645 lb/10000 ft     | Cca            |
| 10019947    | ÖLFLEX® CLASSIC 110 H 5G2,5  | 5               | Yes                         | 2.5 mm <sup>2</sup>                                | 0.398 in               | 806.3 lb/10000 ft   | Cca            |
| 10019948    | ÖLFLEX® CLASSIC 110 H 7G2,5  | 7               | Yes                         | 2.5 mm <sup>2</sup>                                | 0.441 in               | 1128.8 lb/10000 ft  | Cca            |
| 10019949    | ÖLFLEX® CLASSIC 110 H 12G2,5 | 12              | Yes                         | 2.5 mm <sup>2</sup>                                | 0.594 in               | 1935.1 lb/10000 ft  | Cca            |
| 10019950    | ÖLFLEX® CLASSIC 110 H 4G4    | 4               | Yes                         | 4 mm <sup>2</sup>                                  | 0.425 in               | 1032.03 lb/10000 ft | Cca            |
| 10019951    | ÖLFLEX® CLASSIC 110 H 5G4    | 5               | Yes                         | 4 mm <sup>2</sup>                                  | 0.476 in               | 1290 lb/10000 ft    | Cca            |
| 10019952    | ÖLFLEX® CLASSIC 110 H 7G4    | 7               | Yes                         | 4 mm <sup>2</sup>                                  | 0.528 in               | 1806.1 lb/10000 ft  | Cca            |
| 10019953    | ÖLFLEX® CLASSIC 110 H 4G6    | 4               | Yes                         | 6 mm <sup>2</sup>                                  | 0.512 in               | 1548.1 lb/10000 ft  | Cca            |
| 10019954    | ÖLFLEX® CLASSIC 110 H 5G6    | 5               | Yes                         | 6 mm <sup>2</sup>                                  | 0.571 in               | 1935.1 lb/10000 ft  | Cca            |
| 10019960    | ÖLFLEX® CLASSIC 110 H 2X1    | 2               | No                          | 1 mm <sup>2</sup>                                  | 0.228 in               | 129 lb/10000 ft     | Cca            |
| 10019961    | ÖLFLEX® CLASSIC 110 H 3G1    | 3               | Yes                         | 1 mm <sup>2</sup>                                  | 0.24 in                | 193.5 lb/10000 ft   | Cca            |
| 10019962    | ÖLFLEX® CLASSIC 110 H 3X1    | 3               | No                          | 1 mm <sup>2</sup>                                  | 0.24 in                | 193.5 lb/10000 ft   | Cca            |
| 10019963    | ÖLFLEX® CLASSIC 110 H 4G1    | 4               | Yes                         | 1 mm <sup>2</sup>                                  | 0.26 in                | 258 lb/10000 ft     | Cca            |
| 10019964    | ÖLFLEX® CLASSIC 110 H 4X1    | 4               | No                          | 1 mm <sup>2</sup>                                  | 0.26 in                | 258.04 lb/10000 ft  | Cca            |
| 10019965    | ÖLFLEX® CLASSIC 110 H 5G1    | 5               | Yes                         | 1 mm <sup>2</sup>                                  | 0.287 in               | 322.5 lb/10000 ft   | Cca            |
| 10019967    | ÖLFLEX® CLASSIC 110 H 7G1    | 7               | Yes                         | 1 mm <sup>2</sup>                                  | 0.319 in               | 451.5 lb/10000 ft   |                |
| 10019968    | ÖLFLEX® CLASSIC 110 H 8G1    | 8               | Yes                         | 1 mm <sup>2</sup>                                  | 0.382 in               | 516.07 lb/10000 ft  |                |
| 10019969    | ÖLFLEX® CLASSIC 110 H 12G1   | 12              | Yes                         | 1 mm <sup>2</sup>                                  | 0.421 in               | 774.02 lb/10000 ft  |                |
| 10019970    | ÖLFLEX® CLASSIC 110 H 14G1   | 14              | Yes                         | 1 mm <sup>2</sup>                                  | 0.449 in               | 903.13 lb/10000 ft  |                |
| 10019971    | ÖLFLEX® CLASSIC 110 H 18G1   | 18              | Yes                         | 1 mm <sup>2</sup>                                  | 0.508 in               | 1161 lb/10000 ft    |                |
| 10019972    | ÖLFLEX® CLASSIC 110 H 25G1   | 25              | Yes                         | 1 mm <sup>2</sup>                                  | 0.591 in               | 1612.6 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 |
|-------------|-----------------------------|-----------------|-----------------------------|--|------------------------|---------------------|----------------|
| 10019973    | ÖLFLEX® CLASSIC 110 H 41G1  | 41              | Yes                         | 1 mm <sup>2</sup>                                  | 0.756 in               | 2644.87 lb/10000 ft |                |
| 10019975    | ÖLFLEX® CLASSIC 110 H 7G6   | 7               | Yes                         | 6 mm <sup>2</sup>                                  | 0.63 in                | 2709.1 lb/10000 ft  | Cca            |
| 10019980    | ÖLFLEX® CLASSIC 110 H 3X1,5 | 3               | No                          | 1.5 mm <sup>2</sup>                                | 0.268 in               | 290.3 lb/10000 ft   | Cca            |
| 10019981    | ÖLFLEX® CLASSIC 110 H 8G1,5 | 8               | Yes                         | 1.5 mm <sup>2</sup>                                | 0.425 in               | 774.11 lb/10000 ft  | Cca            |
| 10019982    | ÖLFLEX® CLASSIC 110 H 9G1,5 | 9               | Yes                         | 1.5 mm <sup>2</sup>                                | 0.457 in               | 870.87 lb/10000 ft  |                |

V1.1