

# Power and control cables

Various applications • Halogen-free



## ÖLFLEX® CLASSIC 110 H

Halogen-free control cable, oil resistant and very flexible

LAPP KABEL STUTTGART ÖLFLEX® CLASSIC 110 H  
HFFR IEC 60332.3 CE AWM Style 21089 75° 600V E63634

### Benefits

- Easy handling and installation due to very flexible cable type
- Wide application range due to excellent product features
- Certified for maritime applications

### Application range

- Public buildings like airports or railway stations
- Plant engineering, Industrial machinery Heating and air-conditioning systems Stage applications
- Particularly where human and animal life as well as valuable property are exposed to high risk of fire hazards
- Intended for use under the European Construction Product Regulation (CPR), refer to catalogue appendix T14
- Note: for the use of AWM (Appliance Wiring Material) cables in industrial machinery (USA) according to NFPA 79 Ed. 2015: please see the catalogue appendix table T29

### Product features

- Flame-retardant according to IEC 60332-1-2 (flame spread on a single cable)
- No flame-propagation according to IEC 60332-3-22 and IEC 60332-3-24 respectively IEC 60332-3-25 (Flame spread on vertical cable or wire bundle)

- Halogen-free according to IEC 60754-1 (amount of halogen acid gas) Corrosiveness of combustion gases according to IEC 60754-2 (degree of acidity)
- Low smoke density according to IEC 61034-2
- Oil-resistant according to EN 50363-4-1 (TM5) and UL OIL RES I and UL OIL RES II
- UV and weather-resistant according to ISO 4892-2
- Ozone-resistant according to EN 50396

### Norm references / Approvals

- UL AWM style 21089
- Based on EN 50525-3-11
- Based on EN 50525-2-51
- Germanischer Lloyd (GL) certificate no. 11 119-14 HH

### Product Make-up

- Fine-wire strand made of bare copper wires
- Core insulation: Halogen-free
- Cores twisted in layers
- Outer sheath made of special halogen-free compound, grey (RAL 7001)

### Info

- New: Extended application range due to GL certification
- High flexibility and oil-resistance
- VDE-certified

### Technical data

|  |                                                                                                                              |
|--|------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Classification</b><br>ETIM 5.0 Class-ID: EC000104<br>ETIM 5.0 Class-Description:<br>Control cable                         |
|  | <b>Core identification code</b><br>Black with white numbers acc. to VDE 0293-1                                               |
|  | <b>Conductor stranding</b><br>Fine wire according to VDE 0295, class 5/IEC 60228 class 5                                     |
|  | <b>Minimum bending radius</b><br>Occasional flexing: 10 x outer diameter<br>Fixed installation: 4 x outer diameter           |
|  | <b>Nominal voltage</b><br>U <sub>0</sub> /U: 300/500 V<br>UL: 600 V                                                          |
|  | <b>Test voltage</b><br>4000 V                                                                                                |
|  | <b>Protective conductor</b><br>G = with GN-YE protective conductor<br>X = without protective conductor                       |
|  | <b>Temperature range</b><br>Occasional flexing: -30°C to +70°C (UL: +75°C)<br>Fixed installation: -40°C to +80°C (UL: +75°C) |

| Article number                                     | Number of cores and mm² per conductor | Outer diameter (mm) | Copper index (kg/km) | Weight (kg/km) |
|----------------------------------------------------|---------------------------------------|---------------------|----------------------|----------------|
| ÖLFLEX® CLASSIC 110 H U <sub>0</sub> /U: 300/500 V |                                       |                     |                      |                |
| 10019900                                           | 2 X 0.5                               | 5.1                 | 9.6                  | 41             |
| 10019901                                           | 3 G 0.5                               | 5.4                 | 14.4                 | 49             |
| 10019902                                           | 3 X 0.5                               | 5.4                 | 14.4                 | 49             |
| 10019903                                           | 4 G 0.5                               | 5.8                 | 19.2                 | 58             |
| 10019904                                           | 4 X 0.5                               | 5.8                 | 19.2                 | 58             |
| 10019905                                           | 5 G 0.5                               | 6.3                 | 24                   | 69             |
| 10019906                                           | 7 G 0.5                               | 6.9                 | 33.6                 | 87             |
| 10019907                                           | 12 G 0.5                              | 9.1                 | 57.6                 | 141            |
| 10019910                                           | 2 X 0.75                              | 5.5                 | 14.4                 | 51             |
| 10019911                                           | 3 G 0.75                              | 5.8                 | 21.6                 | 61             |
| 10019912                                           | 3 X 0.75                              | 5.8                 | 21.6                 | 61             |
| 10019913                                           | 4 G 0.75                              | 6.3                 | 28.8                 | 73             |
| 10019914                                           | 4 X 0.75                              | 6.3                 | 28.8                 | 73             |
| 10019915                                           | 5 G 0.75                              | 6.9                 | 36                   | 87             |
| 10019916                                           | 5 X 0.75                              | 6.9                 | 36                   | 87             |
| 10019917                                           | 7 G 0.75                              | 7.5                 | 50.4                 | 111            |
| 10019918                                           | 7 X 0.75                              | 7.5                 | 50.4                 | 111            |
| 10019919                                           | 9 G 0.75                              | 9.6                 | 64.8                 | 150            |
| 10019920                                           | 12 G 0.75                             | 10.1                | 86.4                 | 186            |
| 10019921                                           | 18 G 0.75                             | 12.0                | 129.6                | 265            |
| 10019922                                           | 25 G 0.75                             | 14.1                | 180                  | 365            |
| 10019960                                           | 2 X 1.0                               | 5.8                 | 19.2                 | 59             |
| 10019961                                           | 3 G 1.0                               | 6.1                 | 28.8                 | 72             |
| 10019962                                           | 3 X 1.0                               | 6.1                 | 28.8                 | 72             |
| 10019963                                           | 4 G 1.0                               | 6.6                 | 38.4                 | 87             |
| 10019964                                           | 4 X 1.0                               | 6.6                 | 38.4                 | 87             |
| 10019965                                           | 5 G 1.0                               | 7.3                 | 48                   | 104            |
| 10019967                                           | 7 G 1.0                               | 8.1                 | 67.2                 | 138            |
| 10019968                                           | 8 G 1.0                               | 9.7                 | 76.8                 | 164            |
| 10019969                                           | 12 G 1.0                              | 10.7                | 115.2                | 225            |
| 10019970                                           | 14 G 1.0                              | 11.4                | 134.4                | 261            |
| 10019971                                           | 18 G 1.0                              | 12.9                | 172.8                | 328            |
| 10019972                                           | 25 G 1.0                              | 15.0                | 240                  | 445            |

| Article number | Number of cores and mm² per conductor | Outer diameter (mm) | Copper index (kg/km) | Weight (kg/km) |
|----------------|---------------------------------------|---------------------|----------------------|----------------|
| 10019973       | 41 G 1.0                              | 19.2                | 393.6                | 719            |
| 10019930       | 2 X 1.5                               | 6.4                 | 28.8                 | 76             |
| 10019931       | 3 G 1.5                               | 6.8                 | 43.2                 | 94             |
| 10019980       | 3 X 1.5                               | 6.8                 | 43.2                 | 94             |
| 10019932       | 4 G 1.5                               | 7.4                 | 57.6                 | 115            |
| 10019933       | 5 G 1.5                               | 8.3                 | 72                   | 142            |
| 10019934       | 7 G 1.5                               | 9.0                 | 100.8                | 184            |
| 10019981       | 8 G 1.5                               | 10.8                | 115.2                | 218            |
| 10019982       | 9 G 1.5                               | 11.6                | 129.6                | 245            |
| 10019935       | 12 G 1.5                              | 12.2                | 172.8                | 308            |
| 10019936       | 14 G 1.5                              | 13.0                | 201.6                | 357            |
| 10019937       | 18 G 1.5                              | 14.6                | 259.2                | 449            |
| 10019938       | 25 G 1.5                              | 17.2                | 360                  | 617            |
| 10019927       | 34 G 1.5                              | 19.8                | 489.6                | 821            |
| 10019944       | 2 X 2.5                               | 7.6                 | 48                   | 113            |
| 10019945       | 3 G 2.5                               | 8.3                 | 72                   | 146            |
| 10019946       | 4 G 2.5                               | 9.0                 | 96                   | 180            |
| 10019947       | 5 G 2.5                               | 10.1                | 120                  | 221            |
| 10019948       | 7 G 2.5                               | 11.2                | 168                  | 295            |
| 10019949       | 12 G 2.5                              | 15.1                | 288                  | 491            |
| 10019950       | 4 G 4                                 | 10.8                | 153.6                | 268            |
| 10019951       | 5 G 4                                 | 12.1                | 192                  | 328            |
| 10019952       | 7 G 4                                 | 13.4                | 268.8                | 438            |
| 10019953       | 4 G 6                                 | 13.0                | 230.4                | 391            |
| 10019954       | 5 G 6                                 | 14.5                | 288                  | 478            |
| 10019975       | 7 G 6                                 | 16.0                | 403.2                | 638            |
| 10019851       | 4 G 10                                | 16.2                | 384                  | 635            |
| 10019852       | 5 G 10                                | 18.1                | 480                  | 775            |
| 10019849       | 4 G 16                                | 18.8                | 614.4                | 930            |
| 10019853       | 5 G 16                                | 21.2                | 768                  | 1147           |
| 10019854       | 4 G 25                                | 23.5                | 960                  | 1442           |
| 10019855       | 5 G 25                                | 26.4                | 1200                 | 1773           |
| 10019856       | 4 G 35                                | 26.6                | 1344                 | 1917           |

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.  
Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)  
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 are not to scale and do not represent detailed images of the respective products.