

### Product Description



### Application range

- Automated production processes require data transmission cables of increasingly higher flexibility, stability and good screening
- UNITRONIC® FD series cables are especially suited for power chain use

### Design

- Stranded bare copper conductor, superfine
- PVC core insulation
- Tinned copper braiding
- PVC outer sheath
- Colour: grey (RAL 7001)

### Product features

- Highly flexible data transmission cable with copper braiding for power chain use
- The PVC outer sheath prevents mutual adhesion between several cables in the power chain
- Flame retardant according to IEC 60332-1-2
- Please observe the Installation Guidelines in Table T3.

**Technical Data**
**Core identification code**

DIN 47100, see Appendix T9

**Mutual capacitance**

C/C approx. 110 nF/km C/S: approx. 110 nF/km

**Peak working voltage**

(not for power applications) at 0.14 mm<sup>2</sup>: 350 V  
at ≥ 0.25 mm<sup>2</sup>: 500 V

**Inductivity**

approx. 0.65 mH/km

**Based on**

VDE 0812

**Specific insulation resistance**

&gt; 20 GOhm x cm

**Conductor stranding**

Strand, superfine wire in accordance with VDE 0295,  
single wire diameter 0.1 mm

**Conductor resistance**

see Appendix T11

**Minimum bending radius**

For flexible applications: 7.5 x outer diameter

**Test voltage**

1500 V

**Range of temperature**

Flexing: -5°C up to +70°C fixed installation: -40°C up to  
+70°C

**Article List**

| Part number      | Number of cores and mm <sup>2</sup> per conductor | Outer diameter in mm max. | Copper index kg/km | Weight kg/km |
|------------------|---|---------------------------|--------------------|--------------|
| UNITRONIC® FD CY |   |                           |                    |              |
| 0027411          | 3 x 0,14  | 4.7                       | 14.1               | 37           |
| 0027412          | 4 x 0,14  | 5.0                       | 15.5               | 42           |
| 0027413          | 5 x 0,14  | 5.4                       | 18.3               | 47           |
| 0027414          | 7 x 0,14  | 6.0                       | 27.6               | 70           |
| 0027416          | 10 x 0,14   | 7.0                       | 39.3               | 90           |
| 0027418          | 14 x 0,14   | 7.1                       | 45.3               | 106          |
| 0027420          | 18 x 0,14   | 7.7                       | 54.1               | 123          |
| 0027422          | 25 x 0,14   | 9.2                       | 68.4               | 163          |
| 0027425          | 2 x 0,25  | 5.1                       | 14.9               | 39           |
| 0027426          | 3 x 0,25  | 5.4                       | 18.8               | 46           |
| 0027427          | 4 x 0,25  | 5.8                       | 21.3               | 53           |
| 0027428          | 5 x 0,25  | 6.2                       | 31.0               | 71           |
| 0027429          | 7 x 0,25  | 7.0                       | 39.6               | 75           |
| 0027431          | 10 x 0,25   | 8.5                       | 53.9               | 114          |
| 0027434          | 14 x 0,25   | 8.6                       | 64.2               | 141          |
| 0027436          | 18 x 0,25   | 9.4                       | 78.4               | 167          |
| 0027438          | 25 x 0,25   | 11.4                      | 101.0              | 221          |



|         |           |      |       |     |
|---------|-----------|------|-------|-----|
| 0027440 | 2 x 0,34  | 5.6  | 16.1  | 47  |
| 0027441 | 3 x 0,34  | 5.9  | 28.7  | 63  |
| 0027442 | 4 x 0,34  | 6.3  | 35.7  | 81  |
| 0027443 | 5 x 0,34  | 6.8  | 39.1  | 89  |
| 0027444 | 7 x 0,34  | 7.7  | 52.7  | 117 |
| 0027446 | 10 x 0,34 | 9.4  | 67.4  | 155 |
| 0027448 | 14 x 0,34 | 9.5  | 85.3  | 194 |
| 0027450 | 18 x 0,34 | 10.7 | 99.7  | 225 |
| 0027452 | 25 x 0,34 | 12.9 | 155.0 | 327 |

**Footnote:**

All product related values as shown are nominal values unless specified differently. Further values, e.g. tolerances we submit on request - if available and released for publication.

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: Coil  $\leq$  30 kg and  $\leq$  250 m, otherwise drum

Please specify the desired packaging size (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.