

## ÖLFLEX® CLASSIC FD 810

DB 0026 100

valid from: 2014-02-21

### Application

ÖLFLEX® CLASSIC FD 810 cables are high flexible, power and control cables with sheath of PVC for flexible use and fixed installation under normal mechanical load conditions. They are designed for use in dry, damp or wet rooms. They may only be installed outdoors with UV-protection and considering the temperature range. The cables are generally resistant against acids, caustics solution and specific oils. Usage on motor drum guidance or under a strain of more than  $15 \text{ N/mm}^2$  is not allowed.

Application range:

In power chain or moving machine parts; suitable for use in measuring, control and regulating circuits; power circuits for electrical equipment used in automation engineering; assembly lines, production lines in all kinds of machines; plant engineering

### Design

|                     |  |
|---------------------|--|
| Design              | based on<br>EN 50525-2-51 resp. VDE 0285-525-2-51 / HD 21.13 S1+A1 resp. VDE 0281-13   |
| Conductor           | fine wire strands of bare copper acc. to IEC 60228 that is VDE 0295, class 6   |
| Core insulation     | LAPP special PVC compound P8/1 with increased requests to Lapp specification TI2, acc. to EN 50363-3 resp. VDE 0207-363-3                              |
| Core identification | acc. to VDE 0293-1, with or without GN / YE ground conductor,<br>black cores with white numbers acc. to EN 50334 resp. VDE 0293-334                    |
| Outer sheath        | PVC-compound TM2 acc. to EN 50363-4-1 resp. VDE 0207-363-4-1<br>with increased requests to LAPP specification<br>colour: silver grey, similar RAL 7001 |

### Electrical properties

|                 |                     |
|-----------------|---------------------|
| >               |                     |
| Nominal voltage | $U_0/U$ : 300/500 V |
| Test voltage    | Core / Core: 4000 V |

### Mechanical and thermal properties

|                                     |  |
|-------------------------------------|--|
| Min. bending radius                 | occasional flexing: 7,5 x outer diameter<br>fixed installation: 4 x outer diameter   |
| Number of bending/ unbending cycles | 5 mio. cycles  |
| Travel distance                     | 10 m   |
| Temperature range                   | occasional flexing: 0 °C up to +70 °max. conductor temp.<br>fixed installation: -40 °C up to +70 °C max. conductor temp.                                     |
| Flame retardant                     | acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2   |
| Tests                               | acc. to IEC 60811, EN 50395, EN 50396  |
| EC-Directives                       | This cable is conform to the EC-Directives 2006/95/EC (Low Voltage Directive) and 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances). |