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|---------------------------|-------------------------------|------------------------------------------------------------------------------------|
| 0026100                   | <b>DATA SHEET</b>             |  |
| Valid from:<br>19.07.2018 | <b>ÖLFLEX® CLASSIC FD 810</b> |                                                                                    |

## 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 also suitable for use in dry, damp or wet areas. If using outdoors, observe the indicated temperature range and use with UV protection. They are largely resistant to acids, alkalis and certain oils at room temperature. They are suitable for linear, automated movements. The maximum tensile load is 15 N/mm<sup>2</sup> of conductor cross-section during installation and operation. Compulsory guidance is not permitted.

### 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                                                                                                               |
| Conductor           | extra fine wire strands of bare copper acc. to IEC 60228 resp. VDE 0295, class 6                                                                                |
| Core insulation     | LAPP special PVC compound P8/1<br>T12 acc. to EN 50363-3 resp. VDE 0207-363-3 with increased requirements acc. to LAPP specification                            |
| 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 requirements acc. to LAPP specification<br>colour: silver grey, similar RAL 7001 |

## Electrical properties at 20°C

|                 |                               |
|-----------------|-------------------------------|
| Nominal voltage | U <sub>0</sub> / U: 300/500 V |
| Test voltage    | core / core: 4000 V           |

## Mechanical and thermal properties

|                                                     |                                                                                                                                                |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Min. bending radius                                 | flexible application: up from 7,5 x outer diameter<br>fixed installation: 4 x outer diameter                                                   |
| Bending cycles and power chain operation parameters | See Selection Table A2-1 in the appendix of our online catalogue<br>For use in power chains: Please comply with assembly guideline Appendix T3 |
| Temperature range                                   | flexible application: 0 °C up to +70 °C max. conductor temp.<br>fixed installation: -40 °C up to +80 °C max. conductor temp.                   |
| Flammability                                        | acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2                                                                                                   |
| Tests                                               | acc. to IEC 60811, EN 50395, EN 50396                                                                                                          |
| EU Directives                                       | These cables are conform to the EU-Directives 2014/35/EU (Low Voltage Directive)                                                               |

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