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|---------------------------|-----------------------|-------------------------------------------------------------------------------------|
| 11101106                  | <b>DATA SHEET</b>     |  |
| valid from:<br>25.03.2019 | <b>ÖLFLEX® DC 100</b> |                                                                                     |

## Application

ÖLFLEX® DC 100 cables are connecting cables for occasional flexible use and fixed installation subject to medium mechanical load conditions.

They are among others designed for use in dry, damp and wet areas.

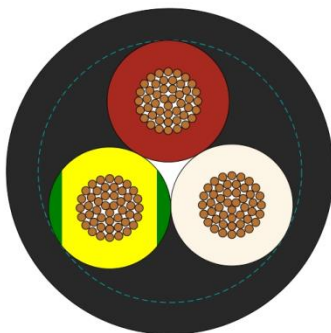
They are suitable for outdoor use if the indicated temperature range is observed.

They are largely resistant to acids, alkalis and oils at room temperature.

They are suitable for occasional, non-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: connection cable for electrical systems which are operated with direct voltage.

## Design



|                          |                                                                                                                    |
|--------------------------|--------------------------------------------------------------------------------------------------------------------|
| Design                   | based on VDE 0250-1, VDE 0262<br>EN 50525-2-51 resp. VDE 0285-525-2-51                                             |
| Conductor                | bare copper, fine wire strand in acc. with IEC 60228 resp. VDE 0295, Class 5                                       |
| Insulation               | PVC compound TI2 acc. to EN 50363-3 resp. VDE 0207-363-3<br>with increased requirements acc. to Lapp specification |
| Core identification code | coloured cores: red (L+); white (L-); GNYE                                                                         |
| Outer sheath             | PVC compound TM2 acc. to EN 50363-4-1 resp. VDE 0207-363-4-1<br>colour: black, similar RAL 9005                    |

## Electrical properties at 20°C

|                             |                                                                           |
|-----------------------------|---------------------------------------------------------------------------|
| Specific volume resistivity | > 20 G Ω x cm                                                             |
| Nominal voltage             | conductor – earth: 750 V DC<br>conductor – conductor: 1500 V DC           |
| Operating voltage           | conductor – earth: max. 900 V DC<br>conductor – conductor: max. 1800 V DC |
| Test voltage                | core/core: 4000 V AC                                                      |

## Mechanical and thermal properties

|                        |                                                                                                                                               |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum bending radius | occasional flexing: 15 x cable diameter<br>fixed installation: 4 x cable diameter                                                             |
| Temperature range      | occasional flexing: - 5 °C up to +70 °C max. conductor temp.<br>fixed installation: - 40 °C up to +80 °C max. conductor temp.                 |
| Flammability           | flame retardant acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2                                                                                  |
| UV resistance          | acc. to EN 50618 resp. VDE 0283-618<br>acc. to EN 50620 resp. VDE 0285-620<br>acc. to EN ISO 4892-2-2013, method A (change of colour allowed) |
| Ozone resistance       | acc. to EN 50396 resp. VDE 0473-396, method B                                                                                                 |
| Tests                  | acc. to IEC 60811 resp. VDE 0473-811, VDE 0472, EN 50395, EN 50396                                                                            |
| General requirements   | These cables are conform to the EU-Directive 2014/35/EU<br>(Low Voltage Directive).                                                           |

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