

|                           |                                |                                                                                     |
|---------------------------|--------------------------------|-------------------------------------------------------------------------------------|
| 0046301                   | <b>DATA SHEET</b>              |  |
| valid from:<br>05.08.2019 | <b>ÖLFLEX® HEAT 180 EWKF C</b> |                                                                                     |

## Application

ÖLFLEX® HEAT 180 EWKF C are screened notch resistant silicone cables with increased mechanical characteristics designed for use as power and control cables at high ambient temperatures. The use of these cables is recommended for example in the following fields: Steel and iron works, cement and ceramic works, bakery equipment and industrial furnaces, electric motor industry, sauna and solarium construction, thermal and heating elements, lighting technology, ventilator engineering, air conditioning technology, galvanization technology and polymer processing, generator and transformer building, wind turbine engineering.

## Design

|                          |                                                                                                                                                                                               |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design                   | based on VDE 0285-525-2-83                                                                                                                                                                    |
| Conductor                | fine wire strand of tinned copper acc.to IEC 60228 resp. VDE 0295, class 5                                                                                                                    |
| Insulation               | notch resistant silicone compound EI2 acc. to VDE 0207-363-1                                                                                                                                  |
| Core identification code | starting at 3 cores with GN/YE ground conductor<br>up to 5 cores coloured acc. to VDE 0293-308<br>starting at 6 cores: Black cores with white numbers acc. to DIN EN 50334 resp. VDE 0293-334 |
| Stranding                | cores are stranded in layers<br>7-core cables with 1+6 stranding                                                                                                                              |
| Inner sheath             | silicone compound EM9 acc. to VDE 0207-363-2-1<br>coral red like RAL 3016                                                                                                                     |
| Screen                   | Braiding with tinned copper wires, wrapping with foil on the screen                                                                                                                           |
| Outer sheath             | notch resistant silicone compound EM9 acc. to VDE 0207-363-2-1<br>colour: black, similar RAL 9005                                                                                             |

## Electrical properties at 20°C

|                             |                                          |
|-----------------------------|------------------------------------------|
| Specific volume resistivity | > 200 GΩ x cm                            |
| Nominal voltage             | U <sub>0</sub> /U: 300/500 V             |
| Test voltage                | core/core: 2000 V<br>core/screen: 2000 V |

## Mechanical and thermal properties

|                        |                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum bending radius | occasional flexing: 20 x outer diameter<br>fixed installation: 6 x outer diameter                                                         |
| Temperature range      | occasional flexing: -25 °C bis +180 °C<br>fixed installation: -60 °C bis +180 °C<br>(adequate ventilation provided)<br>temporary: +200 °C |
| Flammability           | flame retardant in acc. with IEC 60332-1-2 resp. VDE 0482-332-1-2                                                                         |
| Halogen free           | acc. to IEC 60754-1                                                                                                                       |
| Corrosivity of gases   | acc. to IEC 60754-2                                                                                                                       |
| General requirements   | These cables are conform to the EU-Directive 2014/35/EU (Low Voltage Directive)                                                           |

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