

|                           |                    |                                                                                     |
|---------------------------|--------------------|-------------------------------------------------------------------------------------|
| 0011113                   | <b>DATA SHEET</b>  |  |
| valid from:<br>09.03.2021 | <b>ÖLFLEX® 191</b> |                                                                                     |

## Application

ÖLFLEX® 191 cables are oil resistant control cables for the European, Northern American and Canadian market for occasional flexible use and fixed installation subject to 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.

ÖLFLEX® 191 cables are increased resistant to oils and at room temperature largely resistant to acids and alkalis. 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: Plant engineering, industrial machinery, heating and air-conditioning systems and machine tools

USE acc. to UL: PVC sheathed cables for external interconnection or internal wiring of electronic equipment, appliances where exposed to oil at a temperature not exceeding 80°C (80°C oil rating)

USE acc. to CSA: I A/B and II A/B. Cables for internal wiring or external interconnection with or without mechanical abuse

## Design

|                          |                                                                                                               |
|--------------------------|---------------------------------------------------------------------------------------------------------------|
| Design                   | acc. to UL AWM Style 21098, UL 758, CSA AWM C22.2 No. 210-15 based on DIN EN 50525-2-51                       |
| Certification            | UL AWM Style 21098 (File No. 63634)<br>CSA AWM I A/B, II A/B (File No. LL 53776)                              |
| Conductor                | fine wire strands of bare copper, acc. to IEC 60228 resp. EN 60228, class 5                                   |
| Insulation               | PVC compound (UL/CSA 90°C rating)                                                                             |
| Core identification code | acc. to VDE 0293-1, with or without GN/YE ground conductor<br>black cores with white numbers acc. to EN 50334 |
| Outer sheath             | PVC compound (UL / CSA 90°C Rating)<br>colour: silver grey, similar RAL 7001                                  |

## Electrical properties at 20 °C

|                             |                                                                           |
|-----------------------------|---------------------------------------------------------------------------|
| Specific volume resistivity | > 20 G Ω x cm                                                             |
| Nominal voltage             | U <sub>0</sub> / U in acc. to EN: 300 / 500 V<br>U acc. to UL/ CSA: 600 V |
| Test voltage                | core / core: >4000 V AC                                                   |

## Mechanical and thermal properties

|                           |                                                                                                                                                                                                                                                                                         |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum bending radius    | occasional flexing: 15 x outer diameter<br>fixed installation: 4 x outer diameter                                                                                                                                                                                                       |
| Temperature range         | occasional flexing: acc. to EN -5 °C up to +70 °C max. conductor temperature<br>acc. to UL/CSA -5 °C up to +90 °C max. conductor temperature<br>fixed installation: acc. to EN -40 °C up to +70 °C max. conductor temperature<br>acc. to UL/CSA up to +90 °C max. conductor temperature |
| Flammability              | flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2<br>UL: Cable flame test, VW-1<br>CSA: FT1                                                                                                                                                                                      |
| Oil resistance            | EN: EN 50363-4-1<br>UL: 80°C rating acc. to. UL 758<br>CSA: acc. to CSA C22.2 No. 210-15                                                                                                                                                                                                |
| Tests                     | acc. to IEC 60811 resp. EN 60811, EN 50395, EN 50396                                                                                                                                                                                                                                    |
| General requirements      | This cable is conform to the EU-Directive 2014/35/EU (Low Voltage Directive).                                                                                                                                                                                                           |
| Environmental information | These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).                                                                                                                                                                                            |

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