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| 10036001 | DATA SHEET |  |
| valid from: 15.12.2020 | ÖLFLEX® CLASSIC 115 CH | |

Application

ÖLFLEX® CLASSIC 115 CH are screened, halogen free, oil resistant, highly flame retardant power and control cables designed for the European and North American market, for occasional flexible use and fixed installation subject to normal mechanical load conditions. They are also suitable for use in dry or damp areas. They are suitable for outdoor use if the indicated temperature range is observed. They are suitable for occasional, non-automated movements. They meet the requirements for slow rotational movements, such as in the loop of a wind turbine. The maximum tensile load is 15 N/mm² of conductor cross-section during installation and operation. Compulsory guidance is not permitted. The screen is a protection against electrical interference.

Application range:

Public buildings, airports, railway stations, plant engineering and construction, air conditioning systems and particularly where human and animal life as well as valuable property are exposed to high risk of fire hazards. In the event of a fire minimal toxic and no corrosive gases occur. This cable is suitable for torsion application in wind turbines (WTG). The torsional load is limited to applications, as they typically occur in the loop of a wind turbine.

USE according to UL: FRPE sheathed cable for internal wiring of appliances and external interconnection of electronic equipment.

Design

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| Design | acc. to UL AWM Style 21089, UL 758 and based on EN 50525-3-11 EN 50525-2-51 |
| Certification | UL AWM Style 21089 (File No. 63634), UL 758 EN 13501-6 und EN 50575 Klassifizierung des Brandverhaltens (Artikel/Abmessungsspektrum s. www.lappkabel.de/cpr) |
| Conductor | fine wire strands of bare copper, acc. to IEC 60228 resp. EN 60228, class 5 |
| Insulation | halogen free compound TI6, polyolefin based, acc. to EN 50363-7, with increased requirements acc. to Lapp specification |
| Core identification code | acc. to VDE 0293-1, with or without GN/YE ground conductor black cores with white numbers acc. to EN 50334 |
| Stranding | cores are stranded in layers |
| Taping | non-woven wrapping optional |
| Screen | braid of tinned copper, coverage = 85% (nominal value) |
| Outer sheath | halogen free compound HM2, polyolefin based, acc. to VDE 0250-214, with increased requirements LAPP special compound LP Ultraflex FR Colour: silver grey, similar RAL 7001 |

Electrical properties at 20 °C

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| Specific volume resistivity | > 20 G Ω x cm |
| Transfer impedance | max. 250 mΩ/m (at 30 MHz) |
| Nominal voltage | EN U ₀ / U: 300 / 500 V UL: 600 V |
| Test voltage | core / core: 4000 V AC core / screen: 2000 V AC |

Mechanical and thermal properties

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| Minimum bending radius | occasional flexing: 20 x outer diameter fixed installation: 6 x outer diameter |
| Temperature range | occasional flexing (EN): -30 °C up to +70 °C max. conductor temperature occasional flexing (UL): up to +75 °C max. conductor temperature fixed installation (EN): -40 °C up to +80 °C max. conductor temperature fixed installation (UL): up to +75 °C max. conductor temperature |
| Torsional stress | in WTG: TW-0 (5000 cycles at ≥ +5 °C) TW-1 (2000 cycles at ≥ -20 °C) ± 150° /m at 1 revolution per minute |
| Flammability | flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2 UL: Cable flame test |

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| Halogen free | no flame-propagation acc. to IEC 60332-3-24 resp. EN 60332-3-24 or acc. to IEC 60332-3-25 resp. EN 60332-3-25 |
| Corrosivity of gases | acc. to IEC 60754-1 resp. EN 60754-1 |
| Smoke density | acc. to IEC 60754-2 resp. EN 60754-2 |
| Toxicity | acc. to IEC 61034-2 resp. EN 61034-2 |
| UV resistance | acc. to NES 713-3, EN 50306-1 (≤ 3) |
| Ozone resistance | acc. to EN 50620 acc. to EN ISO 4892-2-2013, method A (change of colour allowed) |
| Oil resistance | acc. to EN 50396, method B acc. to EN 50363-4-1 (TM5) UL OIL RES I und OIL RES II |
| Tests | acc. to IEC 60811 resp. EN 60811, EN 50395, EN 50396, UL 1581 |
| General requirements | These cables are conform to the EU-Directive 2014/35/EU (Low Voltage Directive). |
| Environmental information | A part of these cables (see www.lappkabel.com/cpr) are classified acc. to the EU-Regulation no. 305/2011 (CPR). These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS). |

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