



ÖLFLEX® CLASSIC 110 ORANGE

DB 0019700

valid from: 15.11.2012

Application

ÖLFLEX® CLASSIC 110 ORANGE cables are PVC-insulated power and control cables for flexible use and fixed installation for normal mechanical stresses. They are among others designed for use in dry, damp and wet rooms. Outdoor use: They may only be installed with UV protection and considering the temperature range. At room temperature they are widely resistant to acids, alkali-resistant and resistant to certain oils. They are suitable for free non-continuously recurring movement without tensile load or compulsory guidance.

Application range:

Interlocking control circuits acc. to DIN EN 60204-1 VDE 0113-1, electrical lighting and socket circuits for maintenance or repair purposes.

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.

Design

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| Design | based on HD 21.13 S1 resp. VDE 0281-13 |
| Conductor | fine wire strands of bare copper, acc. to IEC 60228 resp. VDE 0295, Class 5 |
| Core insulation | LAPP special PVC compound P8/1, better than the PVC compound TI2 acc. to VDE 0281-1 |
| Core identification | acc. to VDE 0293-1, with or without GN/YE ground conductor orange cores with black numbers acc. to DIN EN 50334 resp. VDE 0293-334 |
| Outer sheath | PVC compound TM2 acc. to VDE 0281-1 with increased requirements acc. to LAPP specification colour: Orange, similar RAL 2003 |

Electrical properties

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| Nominal voltage | 300 / 500 V |
| Test voltage | 4000 V AC |

Mechanical and thermal properties

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|-------------------------|---|
| Min. bending radius | occasional flexing: 15 x cable diameter Fixed installation: 4 x cable diameter |
| Temperature range | fixed installation: -40 °C to +80 °C max. conductor temp. occasional flexing: -5 °C to +70 °C max. conductor temp. |
| Torsion movement in WTG | TW-0 (5000 cycles at $\geq +5^{\circ}\text{C}$) TW-1 (2000 cycles at $\geq -20^{\circ}\text{C}$) $\pm 150^{\circ}/\text{m}$ at 1 revolution per minute |
| Flammability | flame retardant in acc. with IEC 60332-1-2 resp. VDE 0482-332-1-2 |
| Tests | acc. to IEC 60811 resp. VDE 0473 and VDE 0472 |
| EC Directives | These cables are conform to the EC-Directives 2006/95 EC (Low Voltage Directive) and ECD 2002/95/EC (RoHS, Restriction of the use of certain hazardous substances). |