0019700

DATA SHEET

valid from: 21.05.2024

ÖLFLEX® CLASSIC 110 ORANGE



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 suitable for use in dry, damp and wet areas. If using outdoors, observe the indicated temperature range and use with UV protection. They are largely resistant to acids, alkalis and certain oils at room temperature.

ÖLFLEX® CLASSIC 110 ORANGE cables are suitable for occasional, non-automated movements. The maximum tensile load is 15 N/mm² of conductor cross-section during installation and operation. Compulsory guidance is not permitted.

Application range:

Interlocking control circuits acc. to EN 60204-1, 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

Design based on EN 50525-2-51

Certification EN 13501-6 and EN 50575

Classification of fire behaviour

(article/dimension range see www.lappkabel.com/cpr)

Conductor fine wire strands of bare copper acc. to IEC 60228 resp. EN 60228, class 5

Insulation PVC compound TI2 acc. to EN 50363-3

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

Outer sheath PVC compound TM2 acc. to EN 50363-4-1

with increased requirements acc. to LAPP specification

colour: orange, similar RAL 2003

Electrical properties at 20 °C

Specific volume resistivity > $20 \ \Omega \ x \ cm$ Nominal voltage $U_0/U: 300 / 500 \ V$ Test voltage core / core: $4000 \ V$

Mechanical and thermal properties

Minimum bending radius occasional flexing: 15 x outer diameter

fixed installation: 4 x outer diameter

Temperature range occasional flexing: -5°C up to +70°C max. conductor temp.

fixed installation: $-40\,^{\circ}\text{C}$ up to $+80\,^{\circ}\text{C}$ max. conductor temp.

Torsional stress Torsion movement in wind turbine generators

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

Tests acc. to IEC 60811 resp. EN 60811, EN 50395, EN 50396

General requirements These cables are conform to the EU-Directive 2014/35/EU

(Low Voltage Directive).

A part of these cables (see www.lappkabel.com/cpr) are classified in accordance with the EU-Regulation no. 305/2011 (CPR).

Environmental information These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).

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