# DATA SHEET

valid from: 01.01.2019

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## ÖLFLEX® CLASSIC 110 LT



### **Application**

ÖLFLEX® CLASSIC 110 LT are cold flexible power and control cables for occasional flexible use and fixed installation for medium mechanical stresses. They are among others designed for use in dry, damp and wet conditions. 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 LT cables are suitable for occasional, non-automated movements, even at low temperatures. 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.

Application range:

plant engineering and construction, industrial machinery, air conditioning installations, freezing plants and cold stores.

The cables are 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 resp. VDE 0285-525-2-51

Conductor fine wire strands of bare copper, acc. to IEC 60228 resp. VDE 0295, Class 5

Insulation PVC compound TI2 acc. to EN 50363-3 resp. VDE 0207-363-3, with increased requirements

Core identification code acc. to VDE 0293-1, with or without GN/YE ground conductor

black cores with white numbers acc. to DIN EN 50334 resp. VDE 0293-334

Stranding cores are stranded in layers

Outer sheath PVC compound TM4 acc. to EN 50363-4-1 resp. VDE 0207-363-4-1

colour: black, similar RAL 9005

#### Electrical properties at 20°C

Rated voltage  $U_0 / U: 300 / 500 V$ Test voltage core / core: 4000 V AC

#### Mechanical and thermal properties

Minimum bending radius occasional flexing: 15 x outer diameter

fixed installation: 4 x outer diameter

Temperature range occasional flexing: - 30 °C up to +70 °C max. conductor temp.

fixed installation: - 40°C up to +80°C max. conductor temp.

Torsional stress in WTG

TW-0 (5000 cycles at ≥ +5°C)
TW-2 (2000 cycles at ≥ -40°C)
± 150°/m at 1 revolution per minute

Flammability flame retardant acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2

UV resistance acc. to EN 50525-1 (VDE 0285-525-1) cable with black sheath are suitable for permanent

outdoor use. UV-resistant acc. to EN ISO 4892-2-2013, method A (change of colour allowed)

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

General requirements

These cables are conform to the EU-Directive 2014/35/EU (Low Voltage Directive).