

1120730	DATA SHEET	 LAPP
valid from: 15.12.2023	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. They are suitable for outdoor use if the indicated temperature range is observed. 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
Conductor	fine wire strands of bare copper, acc. to IEC 60228 resp. EN 80228, class 5
Insulation	PVC compound TI2 acc. to EN 50363-3, 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 EN 50334
Stranding	cores are stranded in layers
Outer sheath	PVC compound TM4 acc. to EN 50363-4-1 colour: black, similar RAL 9005

Electrical properties at 20 °C

Nominal 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 temperature fixed installation: - 40 °C up to +80 °C max. conductor temperature
Torsional stress	in WTG: TW-0 (5000 cycles at $\geq +5^{\circ}\text{C}$) TW-2 (2000 cycles at $\geq -40^{\circ}\text{C}$) $\pm 150^{\circ}/\text{m}$ at 1 revolution per minute
Flammability	flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2
UV resistance	acc. to EN 50525-1 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

General requirements

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

These cables are 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).

AbN
automation

Creator: LABU / PDC	Document: DB1120730EN	Page 1 of 1
Released: ALTE / PDC	Version: 04	