

1120450	<b>DATA SHEET</b>	 <b>LAPP</b>
valid from: 21.05.2024	<b>ÖLFLEX® CLASSIC 100 BK 0,6/1 kV</b>	

## Application

ÖLFLEX® CLASSIC 100 BK 0,6/1 kV cables are cold flexible power and control cables for occasional flexible use and fixed installation under medium mechanical load conditions. They are among others designed for use in dry, damp and wet conditions. If using outdoors, observe the indicated temperature range.

ÖLFLEX® CLASSIC 100 BK 0,6/1 kV cables are suitable for occasional, non-automated movements, even at low temperatures. The maximum tensile load is 15 N/mm<sup>2</sup> of conductor cross-section during installation and operation. Compulsory guidance is not permitted. Application range: Plant engineering and construction, industrial machinery, air conditioning installations, paint-spray lines and stage technology.

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 VDE 0276-627 resp. HD 627 S1 and EN 50525-2-51
Certification	EN 13501-6 and EN 50575 Classification of fire behaviour (article/dimension range see <a href="http://www.lappkabel.com/cpr">www.lappkabel.com/cpr</a> )
Conductor	fine wire strands of bare copper acc. to IEC 60228 resp. EN 60228, class 5
Insulation	cold-flexible PVC compound
Core identification code	acc. to VDE 0293-1, with or without GN/YE ground conductor up to 5 cores: acc. to HD 308 S2 from 6 cores: acc. to LAPP ÖLFLEX® color code
Stranding	cores are stranded in layers
Outer sheath	cold-flexible PVC compound colour: black, similar RAL 9005

## Electrical properties at 20 °C

Specific volume resistivity	> 20 G Ω x cm
Nominal voltage	U <sub>0</sub> / U: 600 / 1000 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	Torsion movement in wind turbine generators TW-0 (5000 cycles at $\geq 5$ °C) TW-1 (2000 cycles at $\geq -20$ °C) $\pm 150$ °/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. acc. to EN 50618 acc. to EN 50620 acc. to EN ISO 4892-2-2013, method A (change of colour allowed)
Ozone resistance	acc. to EN 50396, method B

## Tests

### General requirements

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

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

A part of these cables (see [www.lappkabel.com/cpr](http://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).

AbN  
automation

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