

0010086	<b>DATA SHEET</b>	 <b>LAPP</b>
valid from: 21.05.2024	<b>ÖLFLEX® CLASSIC 100 450/750V</b>	

## Application

ÖLFLEX® CLASSIC 100 450/750V cables are connecting- and control cables for occasional flexible use and fixed installation for medium mechanical use. They are also suitable for use in dry, damp or 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 100 450/750V cables are suitable for occasional, non-automated movements. 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: ÖLFLEX® CLASSIC 100 450/750V cables are used as supply and flexible connecting cable in machine tool manufacture, plant engineering, in power stations, in heating and air conditioning installations, etc.

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 50525-2-11 EN 50525-2-31 EN 50525-2-51 and IEC 60227-5
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	PVC compound TI2 acc. to EN 50363-3
Core identification code	with increased requirements acc. to Lapp specification 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	PVC compound TM2 acc. to EN 50363-4-1 with increased requirements acc. to LAPP specification colour: silver grey, similar RAL 7001

## Electrical properties at 20 °C

Specific volume resistivity	> 20 G Ω x cm
Nominal voltage	U <sub>0</sub> / U : 450 / 750 V fixed and protected installation: 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: - 5 °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

## Tests

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

automation

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