

**ÖLFLEX® CLASSIC 100 300/500V**
**DB 00100004**  
 valid from: 23.11.2015

## Application

ÖLFLEX® CLASSIC 100 300/500V cables are connecting- and control cables for occasional flexible use and fixed installation for medium mechanical use. They are for use in dry, damp and wet rooms and are space-saving due to smaller cable diameters. They may only be installed outdoors with UV-protection and in observation of the temperature range. At room temperature they are generally resistant against acids, caustics solutions and certain oils. ÖLFLEX® CLASSIC 100 300/500V 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. They are suitable for free non-continuously recurring movement without tensile load or compulsory guidance. 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 resp. VDE 0285-525-2-11 EN 50525-2-51 resp. VDE 0285-525-2-51
Specific insulation resistance	> 20 G $\Omega$ x cm	
Conductor	bare copper, fine wire strand in acc. with IEC 60228 resp. VDE 0295, Class 5	
Core insulation	PVC compound TI2 acc. to EN 50363-3 resp. VDE 0207-363-3 with increased requirements acc. to Lapp specification	
Core identification	with up to 5 cores color coded acc. to VDE 0293-308; cables with more than 5 cores are color coded acc. to LAPP ÖLFLEX color code.	
Outer sheath	PVC compound TM2 acc. to EN 50363-4-1 resp. VDE 0207-363-4-1 with increased requirements acc. to LAPP specification	

## Electrical properties

Nominal voltage	$U_0/U$	300 / 500 V
Test voltage	C/C	4000 V AC

## Mechanical and thermal properties

Min. bending radius	occasional flexing:	15 x cable diameter
	fixed installation:	4 x cable 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.
Torsion movement in WTG	TW-0 (5000 cycles at $\geq +5^\circ\text{C}$ ) TW-1 (2000 cycles at $\geq -20^\circ\text{C}$ ) $\pm 150^\circ/\text{m}$ at 1 revolution per minute	
Flammability	flame retardant in acc. to IEC 60332-1-2 resp. VDE 0482-332-2-1	
Tests	acc. to IEC 60811 resp. VDE 0473-811, VDE 0472, EN 50395, EN 50396	
EU-Directives	This cable is conform to the EU-Directives 2014/35/EU (Low Voltage Directive) and 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances)	