1120232	DATA SHEET	LAPP
valid from: 01.01.2019	ÖLFLEX® CLASSIC 110 BLACK 0,6/1kV	

Application

ÖLFLEX® CLASSIC 110 BLACK 0,6/1kV cables are power and control cables with a black outer sheath for occasional flexible use and fixed installation subject to medium mechanical load conditions. They are also suitable for use in dry, damp or wet areas. 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 BLACK 0,6/1kV cables are suitable for occasional, non-automated movements. 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, heating air conditioning systems, power station, stage application.
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 0250-1 and VDE 0276-627 resp. HD 627 S1
Certification	EN 13501-6 and EN 50575 Classification of fire behaviour (article/dimension range see www.lappkabel.com/cpr)
Conductor	fine wire strands of bare copper, acc. to IEC 60228 resp. VDE 0295, Class 5
Insulation	PVC compound TI2 acc. to DIN EN 50363-3 resp. VDE 0207-363-3 with increased requirements acc. to Lapp specification
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 TM2 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: 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	in WTG: TW-0 (5000 cycles at ≥ +5 °C) TW-1 (2000 cycles at ≥ -20 °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 ISO 4892-2, Method A, DIN EN 50289-4-17/VDE 0819-289-4-17, Method A
Ozone resistance	acc. to EN 50396
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). A part of these cables (see www.lappkabel.com/cpr) are classified in accordance with the EU-Regulation no. 305/2011 (CPR).