0019700	DATA SHEET	LAPP
valid from: 01.01.2019	ÖLFLEX® CLASSIC 110 ORANGE	

Application

ÖLFLEX® CLASSIC 110 ORANGE cables are PVC-insulated power and control cables for flexible use and fixed installation for normal mechanical stresses. They are suitable for use in dry, damp and 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 110 ORANGE 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:
Interlocking control circuits acc. to DIN EN 60204-1 VDE 0113-1, electrical lighting and socket circuits for maintenance or repair purposes. 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 50525-2-51 resp. VDE 0285-525-2-51
Conductor	fine wire strands of bare copper, acc. to IEC 60228 resp. VDE 0295, Class 5
Insulation	PVC compound TI2 acc. to 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 orange cores with black numbers acc. to DIN EN 50334 resp. VDE 0293-334
Stranding	Adern in Lagen verseilt
Outer sheath	PVC compound TM2 acc. to EN 50363-4-1 resp. VDE 0207-363-4-1 with increased requirements acc. to LAPP specification colour: orange, similar RAL 2003

Electrical properties at 20°C

Rated voltage	U_0/ U: 300 / 500 V
Test voltage	core / core: 4000 V

Mechanical and thermal properties

Minimum 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.
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
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)