

ÖLFLEX® CLASSIC 110

DB 1119752
valid from: 15.11.2012

Application

ÖLFLEX® CLASSIC 110 cables are VDE approved power and control cables for occasional flexible use and fixed installation for normal mechanical stresses. They are among others designed for use in dry, damp and wet rooms. Outdoor use: They may only be installed with UV protection and considering the temperature range. At room temperature they are widely resistant to acids, alkali-resistant and resistant to certain oils. They are suitable for free and limited continuously recurring movement without tensile load or compulsory guidance.

Application range:

As power and connecting cable for control systems in machine tools, plant engineering and construction, industrial machinery, conveyor systems, production and assembly lines as well as in measuring and control technology and data processing systems.

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/VDE 0285-525-2-51/HD 21.13 S1+A1/VDE 0281-13
Approval	VDE REG.-Nr. 7030 limited to following dimension range: 0.5 mm ² - 2.5 mm ² 2 - 65 cores 4 mm ² - 16 mm ² 2 - 7 cores 25 mm ² - 120 mm ² 2 - 5 cores
Conductor	fine wire strands of bare copper, acc. to IEC 60228 resp. VDE 0295, Class 5
Core insulation	LAPP special PVC compound P8/1 TI2 acc. to EN 50363-3 resp. VDE 0207-363-3 with increased requirements
Core identification	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
Outer sheath	PVC compound TM2 acc. to EN 50363-3 resp. VDE 0207-363-3 with increased requirements acc. to LAPP specification colour: Silver Grey, similar RAL 7001

Electrical properties

Nominal voltage	300 / 500 V
Test voltage	4000 V AC

Mechanical and thermal properties

Min. bending radius	occasional flexing: 10 x cable Ø fixed installation: 4 x cable Ø
Temperature range	occasional flexing: -15 °C up to +70 °C max. conductor temp. fixed installation: -40 °C up to +80 °C max. conductor temp.

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Power chain	limited to 2-7 cores and 0.5 – 2.5 mm ² min. bending radius 15 x cable Ø temperature range -5 °C up to +70 °C max. conductor temp. travelling distance up to 5 m 0.2 ... 1 million bending cycles
Torsion movement 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 in acc. with IEC 60332-1-2 resp. VDE 0482-332-1-2
Oil resistance	acc. to DIN EN 50290-2-22 bzw. VDE 0819-102, TM54
Tests	acc. to IEC 60811, EN 50395, EN 50396
EC-Directives	This cable is conform to the EC-Directives 2006/95/EC (Low Voltage Directive) and 2002/95/EC and 2011/65/EC (RoHS, Restriction of the use of certain hazardous substances).