1026801	DATA SHEET	LAPP
valid from: 01.01.2019	ÖLFLEX® CHAIN 815 CY	

Application

ÖLFLEX® CHAIN 815 CY cables are high-flexible PVC power and control cables for flexible use and fixed installation under medium mechanical load conditions. They are among others designed for use in dry, damp or 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, caustic solutions and certain oils. They are especially for use in power chains and in permanently moved machine parts. Usage of these cables in moving cable carriers or on motor drum guidance or under a tensile strain of more than 15 N/mm² conductor cross-section is not allowed. The screen is a protection against electrical interference.
Application range:
Power chains or moving machine parts, plant engineering, measuring, control and regulation circuits, assembly and production lines.
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	extra fine wire strands of bare copper acc. to IEC 60228 resp. VDE 0295, Class 6
Insulation	LAPP special PVC compound P8/1, better than the PVC compound TI2, acc. to EN 50363-3 resp. VDE 0207-363-3
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
Taping	nonwoven wrapping
Screen	braid of tinned copper wires, coverage = 85% (nominal value)
Outer sheath	PVC Mischung TM2 gem. EN 50363-4-1 bzw. VDE 0207-363-4-1 Farbe: transparent

Electrical properties at 20°C

Rated voltage	U_0 / U: 300 / 500 V
Test voltage	core / core: 4000 V AC core / screen: 2000 V AC

Mechanical and thermal properties

Minimum bending radius	for flexible use: 7,5 x outer diameter fixed installation: 4 x outer diameter
Temperature range	occasional flexing: 0°C up to +70°C max. conductor temp. fixed installation: - 40°C up to +80°C max. conductor temp.
Travel distance	in power chains up to 10 m
Torsional stress	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 resp. VDE 0473-811, VDE 0472, EN 50395
General requirements	These cables are conform to the EU-Directive 2014/35/EU (Low Voltage Directive)