73220107

DATA SHEET

valid from: 01.01.2019

ÖLFLEX® SPIRAL 540 P



Application

ÖLFLEX® SPIRAL 540 P are highly flexible oil-resistant connecting cables with a core insulation of TPE and an outer sheath of Polyurethane for flexible use and fixed installation under increased mechanical load conditions. They are among others designed for use in dry, damp or wet conditions. Outdoor use: They may only be installed considering the temperature range. ÖLFLEX® SPIRAL 540 P cables are increased oil-resistant and at room temperature widely resistant to acids and caustic solutions. The outer sheath is resistant against high mechanical load, particularly to abrasion and scouring, cut resistant, microbe-proof and hydrolysis resistant. All materials used for these cables are halogen-free. ÖLFLEX® SPIRAL 540 P cables are designed for use under rough working conditions and to high wear and tear. The strength of recoiling and and the extension lengths up to 3.5 times of the original length are features of the high quality. They can also be used for connection of agricultural devices and heaters, provided that there is no risk of contact with hot particles or of thermal radiation. Application range:

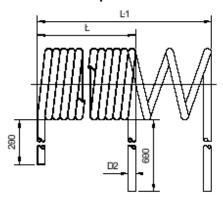
L L1

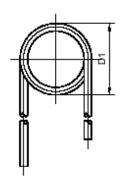
D1

D2

Mechanical engineering, construction industry, power tools like drill machines, circular hand saw, portable motors and construction machinery, medical equipment.

Dimensions of spiral cable





Unextended spiral length Max. extended length of spiral Approx. outer diameter of spiral Approx. outer diameter of spiral

Length of straight ends: First end: 200 mm Second end: 600 mm

Design

Design based on standard

EN 50525-2-21 bzw. VDE 0285-525-2-21 EN 50525-2-51 bzw. VDE 0285-525-2-51

Certification The used uncoiled cable sold by the metre ÖLFLEX® 540 P has following VDE-approvals:

U0/U: 300/500 V up to 1,0 mm²: ⊲ VDE-REG 6583 ⊳ U0/U: 450/750 V starting at 1,5 mm²: ⊲ VDE-REG 6584 ⊳

Conductor fine wire strands of bare copper, acc. to IEC 60228 resp. VDE 0295, Class 5

Insulation Thermoplastic elastomer (TPE)

Core identification code acc. to VDE 0293-1, with or without GN/YE ground conductor

up to 5 cores coloured acc. to HD 308 S2 resp. VDE 0293-308;

starting at 6 cores: Black cores with white numbers

acc. to DIN EN 50334 resp. VDE 0293-334

Outer sheath Polyurethane compound TMPU in acc. with HD 22.10 S2 resp. VDE 0282-10

colour: Yellow, similar RAL 1016

Electrical properties at 20°C

Specific volume resistivity > 20 G Ω x cm

Rated voltage up to 1,0 mm²: 300 / 500 V

starting at 1,5 mm²: 450 / 750 V

Test voltage up to 1,0 mm²: 3000 V AC

starting at 1,5 mm²: 3500 V AC

Mechanical and thermal properties

Temperature range for flexible applications: -30 $^{\circ}$ C up to +50 $^{\circ}$ C

Flammability acc. to IEC 60332-1-2 resp. EN 60332-1-2 (VDE 0482-332-1-2)

Oil resistance acc. to EN 50363-10-2 resp. VDE 0207-363-10-2 MUD resistance MUD resistant acc. to IEC 61892-4 Annex D

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Tests



01.01.2019

acc. to IEC 60811, EN 50395, EN 50396 These cables are conform to the EU Directive 2014/35/EU (Low Voltage Directive) General requirements

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