


0012752	DATA SHEET	
valid from: 01.01.2019	ÖLFLEX® 540 CP	

Application

ÖLFLEX® 540 CP cables 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 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 suitable for constant use in fresh water to a depth of 10 m and at a maximum water temperature of 40°C according to EN 50565-2. They are suitable for occasional, non-automated movements. The maximum tensile load is 15 N/mm² of conductor cross-section during installation and operation. Compulsory guidance is not permitted.

ÖLFLEX® 540 CP cables are increased resistant to oils and at room temperature largely resistant to acids and alkalis.

The outer sheath withstands high mechanical stresses, in particular abrasion and dragging. It is also cut proof and resists microbes and hydrolysis. All materials used are halogen-free. The screening braid protects against interference from electrical fields.

Application range: Agricultural equipment, power tools like drill machines, circular hand saw, portable motors, construction machinery, machine tools and submersible pumps.

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	up to 1,0 mm ² : < VDE-REG 6583 > starting at 1,5 mm ² : < VDE-REG 6584 >
Conductor	fine wire strands of tinned copper acc. to IEC 60228 resp. VDE 0295, Class 5
Insulation	Thermoplastic elastomer (TPE)
Core identification code	up to 5 cores coloured acc. VDE 0293-308 resp. HD 308 S2 more than 5 cores: black cores with white numbers with GN/YE ground conductor acc. to DIN EN 50334 resp. VDE 0293-334
Inner sheath	Thermoplastic elastomer (TPE)
Screen	braid of tinned copper, coverage = 85% (nominal value)
Outer sheath	polyurethane compound TPU acc. to EN 50363-10-2 resp. VDE 0207-363-10-2 colour: yellow, similar RAL 1016

Electrical properties at 20°C

Rated voltage	up to 1,0 mm ² : 300 / 500 V starting at 1,5 mm ² : 450 / 750 V
Test voltage	up to 1,0 mm ² : 3000 V AC starting at 1,5 mm ² : 3500 V AC

Mechanical and thermal properties

Minimum bending radius	occasional flexing: 12,5 x cable diameter fixed installation: 6 x cable diameter
Temperature range	occasional flexing: -40 °C up to +90 °C max. conductor temperature fixed installation: -50 °C up to +90 °C max. conductor temperature
Flammability	flame retardant acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2
Halogen free	acc. to VDE 0472-815
UV resistance	acc. to EN 50618 resp. VDE 0283-618 acc. to EN 50620 resp. VDE 0285-620 acc. to EN ISO 4892-2-2013, method A (change of colour allowed)
Oil resistance	acc. to EN 50363-10-2 resp. VDE 0207-363-10-2
MUD resistance	acc. to IEC 61892-4 Annex D
Water-resistance	acc. to EN 50525-2-21 resp. VDE 0285-525-2-21
Tests	acc. to IEC 60811 resp. VDE 0473 and VDE 0472
General requirements	These cables are conform to the EU-Directive 2014/35/EU (Low Voltage Directive)

AbN
automation

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