


0012762	<b>DATA SHEET</b>	
valid from: 30.01.2026	<b>ÖLFLEX® 540 CP 450/750 V</b>	

## 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 acc. to EN 50565-2. They are suitable for occasional, non-automated movements. The maximum tensile load is 15 N/mm<sup>2</sup> 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
Certification	< VDE-REG 6584 >
Conductor	fine wire strands of tinned copper acc. to IEC 60228 resp. EN IEC 60228, class 5
Insulation	Thermoplastic elastomer (TPE-V)
Core identification code	up to 5 cores coloured acc. to HD 308 S2 resp. VDE 0293-308 more than 5 cores: black cores with white numbers with GN/YE ground conductor acc. to EN 50334
Inner sheath	Thermoplastic elastomer (TPE-V)
Screen	braid of tinned copper, coverage = 85 % (nominal value)
Outer sheath	TPU Polyurethane compound acc. to EN 50363-10-2 colour: yellow, similar RAL 1016

## Electrical properties at 20 °C

Nominal voltage	EN U <sub>0</sub> / U: 450/750 V
Test voltage	core / core: 3500 V AC core / screen: 3500 V AC

## Mechanical and thermal properties

Minimum bending radius	occasional flexing: 12.5 x outer diameter fixed installation: 6 x outer 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. EN 60332-1-2
Halogen free	acc. to IEC 60754-1 resp. EN 60754-1
UV resistance	acc. to EN 50618 acc. to EN 50620 acc. to EN ISO 4892-2, method A (change of colour allowed)
Oil resistance	acc. to EN 50363-10-2
MUD resistance	acc. to IEC 60092-360
Water-resistance	acc. to EN 50525-2-21, Annex D + E

<b>Tests</b>	acc. to IEC 60811 resp. EN 60811, EN 50395, EN 50396
<b>General requirements</b>	These cables conform to the EU-Directive 2014/35/EU (Low Voltage Directive)
<b>Environmental information</b>	These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).

Creator: SESC / PDC	Document: DB0012762EN	Page 1 of 1
Released: ALTE / PDC	Version: 01	