



## ÖLFLEX® 540 P

valid from: 02.11.2009

**Application**

ÖLFLEX® 540 P 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 designed for use in dry, damp and wet conditions. Outdoor use: They may only be installed considering the temperature range.

Continuous busy movements, compulsory guidance respectively usage on cable drums or pulleys or under a strain of more than 15 N / mm<sup>2</sup> are not allowed. At room temperature they are widely resistant to certain oils and resistant to acids. The outer sheath of Polyurethane 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.

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

**Design**

|                     |                                                                                      |                   |
|---------------------|--------------------------------------------------------------------------------------|-------------------|
| Design              | based on HD 22.10 S2 resp. VDE 0282-10                                               |                   |
| Approvals           | up to 1,0 mm <sup>2</sup> :                                                          | VDE Reg.-No. 6583 |
|                     | starting at 1,5 mm <sup>2</sup> :                                                    | VDE Reg.-No. 6584 |
| Conductor           | fine wire strands of tinned copper acc. to IEC 60228 resp. VDE 0295, Class 5         |                   |
| Core insulation     | Thermoplastic elastomer (TPE)                                                        |                   |
| Core identification | 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 DIN EN 50334 resp. VDE 0293-334                  |                   |
| Outer sheath        | Polyurethane compound TPU in acc. to HD 22.10 S2 resp. VDE 0282-10<br>colour: Yellow |                   |

**Electrical properties at 20 °C**

|                 |                                   |             |
|-----------------|-----------------------------------|-------------|
| Nominal voltage | up to 1,0 mm <sup>2</sup> :       | 300 / 500 V |
|                 | starting at 1,5 mm <sup>2</sup> : | 450 / 750 V |
| Test voltage    | up to 1,0 mm <sup>2</sup> :       | 3000 V AC   |
|                 | starting at 1,5 mm <sup>2</sup> : | 3500 V AC   |

**Mechanical and thermal properties**

|                     |                                                                  |                                                |
|---------------------|------------------------------------------------------------------|------------------------------------------------|
| Min. bending radius | occasional flexing:                                              | 10 x cable diameter                            |
|                     | fixed installation:                                              | 4 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 in acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2  |                                                |
| Oil resistance      | acc. to IEC 60811-2-1 resp. VDE 0473 part 811-2-1                |                                                |
| MUD                 | MUD resistant acc. to IEC 61892-4 Annex D                        |                                                |
| Tests               | acc. to IEC 60811 resp. VDE 0473 and VDE 0472                    |                                                |
| EC directive        | This cable is conform to ECD 2006/95/EC (Low Voltage Directive). |                                                |