# DATA SHEET

valid from: 01.01.2019

1752010R

## ÖLFLEX® SMART 108



## **Application**

ÖLFLEX® SMART 108 cables are VDE approved control cables for occasional flexible use and fixed installation under medium load conditions. They are also suitable for use in dry, damp or wet areas. If using outdoors, observe the indicated temperature range and use with UV protection. They are largely resistant to certain oils at room temperature. They are suitable for occasional, non-automated movements. The maximum tensile load is 15 N/mm² of conductor cross-section during in-stallation and operation. Compulsory guidance is not permitted.

#### Application range:

As power and connecting cable for control systems in machine tools, plant engineering and construction, industrial machin-ery, conveyor systems, production and assembly lines as well as in measuring and control technology and data processing systems.

## Design

Design based on

EN 50525-2-51 resp. VDE 0285-525-2-51

limited to following dimension range: 0.5 mm<sup>2</sup> - 2.5 mm<sup>2</sup> 2 - 7 cores

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

Insulation PVC compound TI2 acc. to VDE 0207-363-3 with increased requirements acc. to Lapp specification

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

Stranding cores are stranded in layers

Outer sheath PVC compound TM2 acc. to VDE 0207-363-4-1

2-layer design

Colour: silver grey, similar RAL 7001 Internal layer black, similar RAL 9005

## Electrical properties at 20°C

Rated voltage  $U_0$  /U: 300 / 500 VTest voltage core/core: 4000 V AC

### Mechanical and thermal properties

Minimum bending radius occasional flexing: 15 x cable diameter

fixed installation: 4 x cable diameter

Temperature range occasional flexing: - 5 °C up to +70 °C max. conductor temp.

fixed installation: - 40°C up to +80°C max. conductor temp.

Flammability flame retardant acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2

Tests acc. to IEC 60811, EN 50395, EN 50396

General requirements These cables are conform to the EU-Directive 2014/35/EU (Low Voltage Directive)