

1752010R	DATA SHEET	
valid from: 01.01.2019	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 machinery, 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
Certification	< VDE-REG 8639 > limited to following dimension range: 0.5 mm ² - 2.5 mm ² 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 V
Test 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)

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