


1321852	<b>DATA SHEET</b>	
valid from: 31.01.2020	<b>ÖLFLEX® 409 CP</b>	

## Application

ÖLFLEX® 409 CP cables are screened control cables for the European and North American market for occasional flexible use and fixed installation subject to normal 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.

ÖLFLEX® 409 CP 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. 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.

Application range:

Appliance and apparatus construction, industrial machinery and machine tools, measurement, control and electrical applications, very suitable for oily wet areas within machinery and production lines

USE according to RU: PUR sheathed cables for external interconnection of electronic equipment.

USE according to cRUUs: Cables for internal and external interconnection with or without mechanical use.

## Design

Design	acc. to UL 758; Style 11009 and 20234, C22.2 No. 210-15 based on EN 50525-1 resp. VDE 0285-525-1
Certification	RU AWM Style 11009 and 20234 (File No. E63634) cRUUs AWM I A/B, II A/B (File No. E63634)
Conductor	fine wire strands of bare copper, acc. to IEC 60228 resp. VDE 0295, Class 5
Insulation	PVC compound (UL/CSA 80°C rating)
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 (VDE 0293-334)
Stranding	cores are stranded in layers
Screen	braid of tinned copper, coverage = 85% (nominal value)
Outer sheath	TMPU Polyurethane compound (UL/CSA 80°C Rating) colour: black, similar RAL 9005

## Electrical properties at 20°C

Specific volume resistivity	> 20 G Ω x cm
Nominal voltage	IEC U <sub>0</sub> /U: 300/500 V RU/cRUUs: 1000 V
Test voltage	core / core: 4000 V AC core / screen: 3000 V AC

## Mechanical and thermal properties

Minimum bending radius	occasional flexing: 15 x outer diameter fixed installation: 4 x outer diameter
Temperature range	flexing (VDE): -5 °C up to +70 °C max. conductor temperature flexing (RU/cRUUs): -5 °C up to +80 °C max. conductor temperature fixed installation (VDE): -40 °C up to +80 °C max. conductor temperature fixed installation (RU/cRUUs): up to +80 °C max. conductor temperature
Flammability	flame retardant acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2 UL: Cable flame test, Vertical flame test VW-1; CSA: FT1
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)
Ozone resistance	acc. to EN 50396 resp. VDE 0473-396, method B
Oil resistance	acc. to EN 50363-10-2 resp. VDE 0207-363-10-2
Tests	acc. to IEC 60811 resp. VDE 0473 part 811, VDE 0472, EN 50395, EN 50396, UL 1581, CSA C22.2
General requirements	These cables are conform to the EU Directive 2014/35/EU (Low Voltage Directive)
Environmental information	These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).

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