

<b>1311802</b>	<b>DATA SHEET</b>	
<b>valid from:</b> <b>31.07.2025</b>	<b>ÖLFLEX® 409 P</b>	

## Application

ÖLFLEX® 409 P cables are control cables for the European and North American market for occasional flexible use and fixed installation subject to medium 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 P 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 acc. to : External interconnection of electronic equipment

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



## Design

Design	acc. to UL AWM 20234, UL 758 acc. to CSA AWM C22.2 No. 210-15 based on EN 50525-2-51
Certification	 : AWM 20234, UL 758 (File-Nr. E63634) AWM I A/B, II A/B, C22.2 No. 210-15 (File-Nr. E63634)
Conductor	fine wire strands of bare copper acc. to IEC 60228 resp. EN IEC 60228, 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 EN 50334
Cable assembly	cores are stranded in layers
Outer sheath	two layer design: Inner layer: PVC compound (UL/CSA 80°C rating), colour: silver grey, similar RAL 7001 Outer layer: TPU 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	EN U <sub>0</sub> /U: 300/500 V
Rated voltage	 : 1000 V
Test voltage	4000 V AC

## Mechanical and thermal properties

Minimum bending radius	occasional flexing: 12.5 x outer diameter fixed installation: 4 x outer diameter
Temperature range	flexing (IEC): -5 °C up to +70 °C max. conductor temperature flexing (  ): -5 °C up to +80 °C max. conductor temperature fixed installation (IEC): -40 °C up to +80 °C max. conductor temperature fixed installation (  ): up to +80 °C max. conductor temperature
Flammability	flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2 UL: Cable flame test acc. to UL 1581, section 1061.2 Vertical flame test VW-1 acc. to UL 1581, section 1080 CSA: FT1 acc. to CSA C22.2 No. 2556 § 9.3
UV resistance	acc. to EN 50618 acc. to EN 50620 acc. to EN ISO 4892-2-2013, method A (change of colour allowed)
Oil resistance	acc. to EN 50363-10-2

AbN  
automation

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<b>Tests</b>	acc. to IEC 60811 resp. EN 60811, EN 50395, EN 50396, UL AWM 758, UL 1581 and CSA C22.2
<b>General requirements</b>	These cables are 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).

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