1311802 DATA SHEET



Application

ÖLFLEX® 409 P cables are 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 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/mm² 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 applica-tions, 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

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. EN 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

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

Nominal voltage IEC U₀/U: 300/500 V

UL/CSA: 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 occasional flexing (IEC): -5 °C up to +70 °C max. conductor temp.

occasional flexing (UL/CSA): -5 °C up to +80 °C max. conductor temp. fixed installation (IEC): -40 °C up to +70 °C max. conductor temp. fixed installation (UL/CSA): up to +80 °C max. conductor temp.

Flammability flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2

UL: Vertical flame test VW-1;

CSA: FT1

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

Tests acc. to IEC 60811 resp. EN 60811, EN 50395, EN 50396, UL AWM 758, UL 1581

and 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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