U.I. Lapp GmbH

DATA SHEET



ÖLFLEX® CHAIN 809

DB 1026700

valid from: 2014-02-21

Application

ÖLFLEX® CHAIN 809 cables are high-flexible PVC power and control cables designed for the European, North American and Canadian market, for flexible use and fixed installation under light or medium mechanical load conditions. They are among others designed for use in dry, damp or wet rooms. Outdoor use: They may only be installed with UV protection and considering the indicated temperature range. At room temperature they are widely resistant to acids, caustic solutions and certain oils. They are especially suitable for basic requirements (Basic Line) in power chains and in permanently moved machine parts. Usage of these cables in moving cable carriers or on motor drum guidance or under a tensile strain of more than 15 N/mm² conductor cross-section is not allowed.

Application range:

Power chains or moving machine parts, measuring, control and regulation circuits, wiring of machines, tools, devices, appliances and control cabinets.

USE acc. to UL: PVC sheathed cable for external interconnection or internal wiring of electronic equipment. USE acc. to cRU: Cables for internal wiring or external interconnection with or without mechanical abuse.

Design

Design acc. to UL AWM Style 20886, CSA C22.2 No. 210-05 and

based on HD 21.13 S1 +A1 resp. VDE 0281-13

Approvals UL AWM Style 20886 (File No. E63634)

cRU 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

Core insulation PVC compound (UL/CSA 80° C rating)

Core identification 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 part 334

Outer sheath PVC compound (UL/CSA 80° C rating)

Colour: Grey, similar RAL 7001

Electrical properties

Nominal voltage U_0/U : 300/500 V

UL/CSA: 1000 V

Test voltage Core/Core: 4000 V AC

Mechanical and thermal properties

Min. bending radius flexing up to 3m travel distance (horizontal, self supporting): 10 x cable diameter

flexing up to 10m travel distance (horizontal, sliding): 12 x cable diameter fixed installation: 4 x cable diameter

Number of bending/unbending

cycles 5 mio. cycles

Travel distance 10 m

Temperature range flexing (VDE): 0 °C up to +70 °C max. conductor temp.

flexing (UL/CSA):

0 °C up to +80 °C max. conductor temp.

-40 °C up to +70 °C max. conductor temp.

fixed installation(UL/CSA):

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

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

UL: Vertical flame test VW-1; CSA: FT1

Oil resistance TM54 acc. to DIN EN 50290-2-22

Tests acc. to IEC 60811 resp. VDE 0473 part 811, EN 50395, EN 50396

UL 1581 und CSA C22.2

EC directive This cable is conform to the EC-Directives 2006/95/EC (Low Voltage Directive)

and 2002/95/EC (RoHS, Restriction of the use of certain hazardous substances).

Originator: KASC / PDC approved: HAPF / PDC Document: DB00126700EN Page 1 of 1