U.I. Lapp GmbH

DATA SHEET



ÖLFLEX® SERVO 700

DB 0036140 valid from: 2013-02-01

Application

ÖLFLEX® SERVO 700 cables are PVC cables preferred for connecting servo-motors, for medium mechanical abuse. They are for use in dry, damp and wet rooms, but not outside. At room temperature it is generally resistant against acids, caustics solution and certain oils.

Continuous, busy movements, usage of these cables in moving cable carriers, respectively on motor drum guidance or under a strain of more than 15 N/mm² is not allowed.

The core pairs are provided for signaling and controlling purposes, like for example thermocouple and/or brake. In order to avoid any interference of the signals the pairs are screened in a double way, i.e. by means an aluminum clad foil and a cuwire wrapping (exception: conductors with one control pair have only copper frapping).

Application range:

connecting cable between frequency converter and motor, connecting cable between servo controller and motor, Plant engineering

Design

Design based on:

DIN 57250-1 resp. VDE 0250-1 / DIN VDE 0812 + A1/

EN 50525-2-51 resp. VDE 0285-525-2-51 / HD 21.13 S1 + A1 resp. VDE 0281-13

Conductor fine wire strands of bare copper, acc. to IEC 60228 resp. VDE 0295, Class 5

0,34 mm²: 7x0,25

Core insulation PVC-compound TI2 acc. to EN50363-3 resp. VDE 0207-363-3

exception: 0,34mm²: TPE-E

Core identification acc. to VDE 0293-1, with GN/YE ground conductor

conductors with 2 control pairs resp. star quad:

supply cores: black cores with white numbers 1-3 according to DIN EN 50334

resp. VDE 0293-334 and GN/YE protective conductor;

control cores: black with numbers 5-8 acc. to DIN EN 50334 resp. VDE 0293-334; differing colours for control pair with 0,34 mm 2 : DIN 47100 (WH/BN/GN/YE)

conductor with one control pair:

conductors with 4 resp. 7 supply cores: black cores with withe numbers 3-5 resp. 3-8 according to DIN EN 50334 resp. VDE 0293-334 and GN/YE protective conductor; conductors with 5 supply cores: coloured cores acc. to HD 308 S2 resp. VDE 0293-308

with GN/YE protective conductor;

control cores: black cores with withe numbers 1-2 acc. to DIN EN 50334

resp. VDE 0293-334

Outer sheath PVC compound TM2 according to:

EN 50363-4-1 resp. VDE 0207-363-4-1 colour: silver grey, similar RAL 7001

Electrical properties

Nominal voltage supply cores: U_0 / U : 600 / 1000 V

control core pairs: U: 250 V / AC

Test voltage supply coresdes: core / core 4000 V

core / screen 2000 V

control core pairs: core / core 1500 V core / screen 750 V

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Mechanical and thermal properties

Min. bending radius occasional flexing: 20 x outer diameter

fixed installation: 6 x outer diameter

Temperature range occasional flexing: -5 °C up to +70 °C

fixed installation: -40 °C up to +80 °C

Flammability according to IEC 60332-1-2 resp. VDE 0482-332-1-2

Tests according to IEC 60811, EN 50395, EN 50396

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

and 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

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