

ÖLFLEX® CLASSIC FD 810 P

DB 0026300

valid from: 2014-02-21

Application

ÖLFLEX® CLASSIC FD 810 P cables are oil resistant high-flexible control cables with an outer sheath of Polyurethane for flexible use and fixed installation subject to medium mechanical stress. They are among others designed for use in dry, damp or wet rooms. Considering the indicated temperature range an outdoor use is possible. ÖLFLEX® FD CLASSIC 810 P cables are increased oil resistant and at room temperature widely resistant to acids and caustic solutions. The outer sheath is resistant against high mechanical stress, particularly to abrasion and scouring, cut resistant, microbe-proof and hydrolysis resistant. They are especially for use 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:

in power chains or moving machine parts; particularly in wet areas of machine tools and transfer lines; mechanical engineering; suitable for use in measuring, control and regulating circuits; power circuits for electrical equipment used in automation engineering

Design

Design	based on DIN EN 50525-2-51 resp. VDE 0285-525-2-51 DIN EN 50525-2-21 resp. VDE 0285-525-2-21
Conductor	extra fine wire strands of bare copper acc. to IEC 60228 resp. VDE 0295, Class 6
Core insulation	LAPP special PVC compound P8/1, TI2, acc. to EN 50363-3 resp. VDE 0207-363-3, with increased requirements
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 0293-334
Outer sheath	Polyurethane compound TPU acc. to EN 50363-10-2 resp. VDE 0207-363-10-2 colour: grey, similar RAL 7001

Electrical properties

Nominal voltage	U ₀ /U: 300/500 V AC
Test voltage	C/C: 4000 V AC

Mechanical and thermal properties

Min. bending radius	occasional flexing: 7,5 x outer diameter fixed installation: 4 x outer diameter
Temperature range	occasional flexing: - 5 °C up to +70 °C max. conductor temp. fixed installation: -40 °C up to +80 °C max. conductor temp.
Number of bending/unbending cycles	5 mio. cycles
Travel distance	10 m
Oil resistance	acc. to EN 50363-10-2 resp. VDE 0207-363-10-2
UV resistance	acc. to EN ISO 4892-2-2006, method A (change of colour allowed)
Ozone resistance	acc. to EN 50396 resp. VDE 0473-396, method B
Flammability	flame retardant in acc. with IEC 60332-1-2 resp. VDE 0482-332-1-2
Tests	acc. 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).