Application

ÖLFLEX® 150 cables are oil resistant power and control cables for the European, North American and Canadian market, for occasional flexible use and fixed installation to normal mechanical load conditions. They are among others designed for use in dry, damp and wet rooms. Outdoor use: They may only be installed with UV protection and considering the temperature range. ÖLFLEX® 150 cables are increased oil resistant and at room temperature widely resistant against acid and caustic solutions. They are suitable for non-continuously recurring movement without tensile load. Continuous operational movements, restricted guidance, usage of these cables in moving cable carriers or on motor drum guidance or under a strain of more than 15 N/mm² are not allowed.

Application range:

- plant engineering, industrial machinery, heating and air conditioning systems
- HAR: DIN VDE 0298-300 resp. VDE 0298-300
- acc. to UL: PVC-sheathed cables for external interconnection or internal wiring of electric and electronic equipment, use when getting in contact with oil not above +80 °C (80 °C oil rating)
- acc. CSA: CSA AWM I A/B II A/B, cables for internal or external interconnection with or without mechanical load

Design

Design

≤ 61 cores: acc. to EN 50525-2-51 resp. VDE 0285-525-2-51
> 61 cores: based on EN 50525-2-51 resp. VDE 0285-525-2-51
UL AWM Style 21098 or 2587, CSA C22.2 No. 210-11

Approvals

UL AWM Style 21098 or 2587 (File No. E63634)
CSA AWM I A/B II A/B (File No. LL 53776)
up to 61 cores: acc. to H05VV5-F acc. to EN 50525-2-51 resp. VDE 0285-525-2-51
> 61 cores: based on EN 50525-2-51 resp. VDE 0285-525-2-51

Conductor

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

Core insulation

PVC compound TI2 acc. to DIN EN 50363-3 resp. VDE 0207-363-3
(UL/CSA 90°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 0293-334

Outer sheath

PVC compound TM5 acc. to DIN EN 50363-4-1 resp. VDE 0207-363-4-1
(UL/CSA 90°C rating)
colour: silver grey, similar RAL 7001

Electrical properties

Nominal voltage

U₀/U in acc. to HAR: 300 / 500 V
U acc. to UL / CSA: 600 V

Test voltage

core / core 3000 V AC

Mechanical and thermal properties

Min. bending radius

occasional flexing: 12,5 x outer diameter
fixed installation: 4 x outer diameter
Temperature range

occasional flexing: acc. to HAR -5 °C up to +70 °C max. conductor temp.
acc. to UL / CSA -5 °C up to +90 °C max. conductor temp.

fixed installation: acc. to HAR -40 °C up to +70 °C max. conductor temp.
acc. to UL / CSA -40 °C up to +90 °C max. conductor temp.

Oil resistance

TM 5 acc. to DIN EN 50363-4-1 resp. VDE 0207-363-4-1
UL: 80 °C rating acc. to UL 758
CSA: CSA 22.2 No. 210-11

Flammability

HAR: acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2
UL: vertical flame test VW-1
CSA: FT1

Tests

acc. to IEC 60811, EN 50395, EN 50396, UL 1581and CSA 22.2

EC-Directives

This cable is conform to the EC-Directives 2006/95/EC (Low Voltage Directive) and 2011/65/EG (RoHS, Restriction of the use of certain hazardous substances).