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| 10282617 | DATA SHEET |  |
| valid from: 23.03.2026 | ÖLFLEX® ROBOT 909 | |

Application

ÖLFLEX® ROBOT 909 cables are control cables designed for the European, North American and Canadian market, for flexibel use and fixed installation under moderate mechanical stress in moderate conditions.
They are suitable for linear, automated movements (power chains), as well as torsional applications in robots and automated handling machines. The maximum tensile load is 15 N/mm² of conductor cross-section during installation and operation. Compulsory guidance is not permitted.
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® ROBOT 909 are largely resistant to acids, alkalis and certain oils at room temperature.

Design

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| Design | acc. to UL AWM Style 21695, UL 758 CSA C22.2 No. 210 based on EN 50525-2-51 |
| Certification |  : AWM Style 21695, UL 758 (File No. E63634) AWM I/II A/B (File No. E63634) |
| Conductor | extra fine wire strands of bare copper, acc. to IEC 60228 resp. EN IEC 60228, Class 6 |
| Insulation | PP |
| Core identification code | white cores with black numbers with or without GN/YE ground conductor |
| Cable assembly | cores stranded in layers resp. bundles with short lay length |
| Wrapping | nonwoven polyester or PTFE tape |
| Outer sheath | PVC acc. to EN 50363-4-1, UL 758, CSA C22.2 No. 210 colour: black, similar RAL 9005 |

Electrical properties at 20 °C

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| Specific volume resistivity | > 2500 M Ω x km |
| Nominal voltage | EN U ₀ / U: 300/500 V |
| Rated voltage | UL/CSA: 600 V |
| Test voltage | core / core: 3000 V AC |

Mechanical and thermal properties

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| Minimum bending radius | flexing: 15 x outer diameter fixed installation: 4 x outer diameter |
| Temperature range | flexing EN: -5 °C up to +70 °C max. conductor temperature UL: -5 °C up to +80 °C max. conductor temperature fixed installation EN: -40 °C up to +70 °C max. conductor temperature UL: up to +80 °C max. conductor temperature |
| Bending cycles and power chain operation parameters | Travel distance: 5 m Acceleration: 3 m/s ² Velocity: 3 m/s Cycles: 2.000.000 |
| Torsional stress | max. torsion angle: ± 180°/m cycles: 2.000.000 |
| Flammability | flame retardand acc. to: IEC 60332-1-2 resp. EN 60332-1-2 UL: horizontal flame test acc. to UL 1581, Section 1090 vertical flame test VW-1 acc. to UL 1581, Section 1080 CSA: FT2 acc. to CSA C22.2 No. 2556, § 9.1 |
| UV resistance | Acc. to EN 50525-1 are cables with black sheath suitable for a permanent outdoor use. |

Tests

acc. to IEC 60811, EN 50395, EN 50396, UL 758, UL 1581, CSA C22.2 No. 210

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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