


11101400	<b>DATA SHEET</b>	
valid from: 04.08.2021	<b>ÖLFLEX® DC ROBOT 900</b>	

## Application

ÖLFLEX® DC ROBOT 900 cables are connection cables with an outer sheath of Polyurethane for torsion and bending stresses and fixed installation under medium mechanical stress. 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. They are increased resistant to oils and at room temperature largely resistant to acids and alkalis. The outer sheath withstands high mechanical stresses, in particular abrasion and dragging. It is also cut proof and resists microbes and hydrolysis. They are suitable for linear, automated movements, as well as torsional applications in robots and automated handling machines. The maximum tensile load is 15 N/mm<sup>2</sup> of conductor cross-section during installation and operation. Compulsory guidance is not permitted.

Application range: Connection cable for electrical systems which are operated with direct voltage.

## Design

Design	based on EN 50525-2-51
Conductor	extra fine wire strand of bare copper acc. to IEC 60228 resp. EN 60228, Class 6
Insulation	TPE- E
Core identification code	coloured cores: red , white, GN/YE
Stranding	cores stranded in layer with short lay length
Taping	nonwoven materials taping
Outer sheath	PUR acc. to EN 50363-10-2, flame retardant colour: black, similar RAL 9005

## Electrical properties at 20 °C

Specific volume resistivity	> 20 G Ω x cm
Nominal voltage	conductor – earth: 750 V DC conductor – conductor: 1500 V DC
Operating voltage	conductor – earth: max. 900 V DC conductor – conductor: max. 1800 V DC
Test voltage	core/core: 4000 V AC

## Mechanical and thermal properties

Minimum bending radius	flexing: 12.5 x outer diameter fixed installation: 4 x outer diameter
Temperature range	flexing: -35 °C up to + 90 °C max. conductor temp. fixed installation: -50 °C up to + 90 °C max. conductor temp.
Torsional stress	± 360° /m
Flammability	flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2
UV resistance	acc. to EN 50618 acc. to EN 50620 acc. to EN ISO 4892-2, method A (change of colour allowed)
Ozone resistance	acc. to EN 50396, method B
Oil resistance	acc. to EN 50363-10-2
MUD resistance	acc. to IEC 60092-360, Annex C+D
Tests	acc. to IEC 60811, EN 50395, EN 50396
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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