

## ÖLFLEX® ROBOT 900 DP

Shielded, abrasion- and oil-resistant PUR robot cable for dynamic bending and torsion motions

ÖLFLEX® ROBOT 900 DP - Screened power and control cable für bending and torsional load in harsh environmental conditions

### Info

Simultaneous bending and torsion

Torsion angle up to +/- 180 °/m

Copper screening



Supplementary automation components from Lapp



Suitable for outdoor use



Cold-resistant



Mechanical resistance



Oil-resistant



Power chain



Interference signals



Torsion-resistant

Last Update (24.04.2024)

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Product Management [www.lappkabel.de](http://www.lappkabel.de)

You can find the current technical data in the corresponding data sheet.

PN 0456 / 02\_03.16

# ÖLFLEX® ROBOT 900 DP



UV-resistant

## Benefits

Space-saving installation due to small cable diameters

Increased durability under harsh conditions thanks to robust PUR outer sheath

Resistant to contact with many mineral oil-based lubricants, diluted acids, aqueous alkaline solutions and other chemical media

Wide temperature range for applications in harsh climatic environments

Copper shielding protects against electromagnetic interference

## Application range

Industrial machinery and machine tools

Automated handling equipment

Automotive industry

In power chains or moving machine parts

Inside of dresspacks of buckling arm robots and for use for gantry robots

## Product features

Abrasion and notch-resistant

Flame-retardant

High oil-resistance

Flexible at low temperatures

Low-adhesive surface

## Norm references / Approvals

Designed for up to 5 million torsion cycles

For use in power chains: Please comply with assembly guideline Appendix T3

For travel distances up to 10 m

## Product Make-up

Fine or extra-fine strands made of bare copper wire

Core insulation: TPE

Cores twisted in layers

Wrapping of PTFE tape

Spiral shield made of tinned copper wires

PUR outer sheath, black (similar RAL 9005)

## Technical Data

Classification ETIM 5:

ETIM 5.0 Class-ID: EC000104

ETIM 5.0 Class-Description: Control cable

Classification ETIM 6:

ETIM 6.0 Class-ID: EC000104

ETIM 6.0 Class-Description: Control cable

Core identification code:

Up to 0.34 mm<sup>2</sup>: DIN 47100 cores

From 0.5 mm<sup>2</sup>: black cores with white numbers

Mutual capacitance:

C/C approx. 100 nF/km

C/S approx. 120 nF/km

Inductivity:

approx. 0.7 mH/km

Conductor stranding:

Fine wire or extra-fine wire

Torsion:

Torsion load max.  $\pm 180^\circ$ /m

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## ÖLFLEX® ROBOT 900 DP

Minimum bending radius:	Flexing: 15 x outer diameter Fixed installation: 4 x outer diameter
Nominal voltage:	Up to 0,34 mm <sup>2</sup> : 48 V AC From 0.5 mm <sup>2</sup> U0/U: 300/500 V
Test voltage:	Up to 0.34 mm <sup>2</sup> : 1500 V From 0.5 mm <sup>2</sup> : 3000 V
Protective conductor:	G = with GN-YE protective conductor X = without protective conductor
Temperature range:	Flexing: -40 °C to +80 °C Fixed installation: -50 °C to +80 °C

### Note

Unless specified otherwise, the shown product values are nominal values at room temperature. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Prices are net prices without VAT and surcharges. Sale to business customers only.

**ÖLFLEX® ROBOT 900 DP**

Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
0028100	12 x 0,14	6.7	42.5	69
0028105	3 x 2 x 0,14	6.2	17	44
0028126	25 x 0,25	11.1	103.5	183
0028135	4 x 0,34	5.7	21.3	46
0028136	5 x 2 x 0,34	9.1	64.4	114
Numbered Cores				
0028195	12 G 1,5	14.0	259	395