

## 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. $\pm 180$ °/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.

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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

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