



**ÖLFLEX® ROBOT 900 DP**

Screened TPE-PUR robot cable for bending and torsion loads

**Info**

- Simultaneous bending and torsion
- Torsion angle up to +/- 180 °/m
- Copper screening



**Benefits**

- Allows much faster speed and accelerations which increases the economic efficiency of the machines
- 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

**Application range**

- Plant engineering
- Industrial machinery and machine tools
- Automated handling equipment
- Multi-axis articulated robots
- In power chains or moving machine parts

**Product features**

- Abrasion and notch-resistant
- Flame-retardant
- High oil-resistance
- Flexible at low temperatures
- Low-adhesive surface

**Norm references / Approvals**

- 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
- PTFE tape wrapping
- Screen wrapping of tinned copper wires
- PUR outer sheath, black (RAL 9005)

**Technical data**

- Classification**  
ETIM 5.0 Class-ID: EC000104  
ETIM 5.0 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 printed numbers
- Mutual capacitance**  
C/C approx. 100 nF/km  
C/S approx. 120 nF/km
- Peak operating voltage**  
0.34 mm<sup>2</sup>: 350 V  
(not for power transmission)
- Inductivity**  
approx. 0.7 mH/km
- Conductor stranding**  
Fine wire or extra-fine wire
- Torsion**  
Torsion load max. ± 180 °/m
- 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> U<sub>0</sub>/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

Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
<b>ÖLFLEX® ROBOT 900 DP</b>				
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
0028195	12 G 1,5	14.0	259	395

Unless specified otherwise, the shown product values are nominal values. 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 are not to scale and do not represent detailed images of the respective products.

**Similar products**

- ÖLFLEX® ROBOT F1 ( C ) refer to page 143

**Accessories**

- SILVYN® RILL PA 12 refer to page 863