



ÖLFLEX® ROBOT 900 DP

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



Info

- Simultaneous bending and torsion
- Torsion angle up to $\pm 180^\circ/\text{m}$
- Copper screening

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 torsional motions
- 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 5/6

ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description:
Control cable



Core identification code

Up to 0.34 mm²: DIN 47100 cores
From 0.5 mm²: 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. $\pm 180^\circ/\text{m}$



Minimum bending radius

Flexing: 15 x outer diameter
Fixed installation: 4 x outer diameter



Nominal voltage

Up to 0.34 mm²: 48 V AC
From 0.5 mm² U0/U: 300/500 V



Test voltage

Up to 0.34 mm²: 1500 V
From 0.5 mm²: 3000 V



Protective conductor

G = with GN-YE protective conductor
X = without protective conductor



Temperature range

Flexing: -40°C to $+80^\circ\text{C}$
Fixed installation: -50°C to $+80^\circ\text{C}$

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® ROBOT 900 DP				
Core colours according to DIN 47100				
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

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

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.

Similar products

- ÖLFLEX® ROBOT F1 (C) refer to page 147

Accessories

- SILVYN® RILL PA 12 refer to page 848