Power chain applications • Torsion, articulated robot





® LAPP GROUP















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
- 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



LAPP KABEL STUTIGART ÖLFLEX® ROBOT 900 DP (6

Classification

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



Core identification code

Up to 0.34 mm²: DIN 47100 cores From 0.5 mm²: black cores with white printed numbers



Mutual capacitance

C/C approx. 100 nF/km C/S approx. 120 nF/km

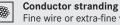


Peak operating voltage 0.34 mm²: 350 V

(not for power transmission)



approx. 0.7 mH/km



Fine wire or extra-fine wire



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

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°C Fixed installation: -50°C to +80°C

Article number	Number of cores and mm² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® ROBOT 900 DP				
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

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