ÖLFLEX® ROBOT 900 P

Abrasion- and oil-resistant PUR robot cable for dynamic bending and torsion motions

ÖLFLEX® ROBOT 900 P - Power and control cable for bending and torsional load in harsh environmental conditions

Info
Simultaneous bending and torsion
Torsion angle up to +/- 360 °/m



- Supplementary automation components from Lapp
- Suitable for outdoor use
- Cold-resistant
- Mechanical resistance
- Oil-resistant
- Power chain
- Torsion-resistant
- UV-resistant

Benefits
Space-saving installation due to small cable diameters

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PN 0456 / 02_03.16

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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

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
Versions with additional center pair:
2 cores twisted to a pair, PTFE foil wrapping, layer of tinned copper wires
Wrapping of PTFE tape
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^2: DIN 47100 cores From 0.5 mm^2: black cores with white numbers, cores of screened pair (2 x 1.0) are marked with no. 1 + 2
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. ± 360 °/m
Minimum bending radius:	For flexible use: 15 x outer diameter Fixed installation: 4 x outer diameter
Nominal voltage:	Up to 0,34 mm^2: 48 V AC From 0.5 mm^2 U0/U: 300/500 V

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Test voltage:	Up to 0.34 mm^2: 1500 V From 0.5 mm^2: 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
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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PRODUCT INFORMATION

Article number	Number of cores and mm² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
0028110	7 X 0.25	6.2	16.8	48
0028116	25 X 0.25	10.2	60	141
0028188	2 X 0.34	5.0	7	27
Numbered Cores				
0028145	18 G 0.5	11.2	86.4	120
0028146	25 G 0.5	13.3	120	254
0028160	4 G 0.75	6.6	28.8	63
0028164	14 G 0.75	11.2	100.8	199
0028170	2 X 1.0	6.2	19.2	47
0028171	3 G 1.0	6.5	29	61
0028172	4 G 1.0	7.0	38.4	76
0028174	7 G 1.0	9.3	67.2	131
0028176	12 G 1.0	11.5	115.2	216
0028185	16 G 1,0 + (2 x 1,0)	16.0	195	376
0028178	18 G 1.0	13.2	172.8	287
0028186	23 G 1,0 + (2 x 1,0)	17.3	262	470
0028180	25 G 1.0	16.4	240	433
0028190	34 G 1.0	19.9	326.4	571
0028191	41 G 1.0	22.3	393.6	705
0028198	18 G 1.5	15.8	259.2	446
0028181	3 G 2.5	9.3	72	136
0028182	4 G 2.5	10.1	96	171
0028400	3 G 16.0	21.4	460.8	721
0028187	3 G 25.0	26.2	720	1178
0028189	3 G 35.0	28.8	1008	1559

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