TPE-PUR robot cable for flexing and torsion load
Space-saving installation due to small cable diameters
Hightech robot cable
Protection against water and dirt
Wear-resistant



Mechanical resistance

Oil-resistant

Power chain

Torsion-resistant

UV-resistant

Info
Simultaneous bending and torsion

Application range
Plant engineering
Machine tools
Automated handling equipment
Multi-axis articulated robots
In power chains or moving machine parts

Product Make-up
Fine or extra-fine strands made of bare copper wire
Core insulation: TPE
Cores twisted in layers
PTFE tape wrapping
PUR outer sheath, black (RAL 9005)

Norm references / Approvals
For travel distances up to 10 m.
For use in power chains: Please comply with the assembly guidelines listed in Appendix T3

PN 0486/01_03.10 ©2012 Lapp Group - Technical changes reserved
Photographs are not to scale and do not represent detailed images of the respective products.

Product features

Abrasion and cut-resistant
Hydrolysis-resistant
Oil-resistant
Low-adhesive surface
Flame-retardant

Remark

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-standardlengthsPackaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drumPlease 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.

Technical Data

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)
Classification:	ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable
Inductivity:	approx. 0.7 mH/km
Conductor stranding:	Fine wire or extra-fine wire
Torsion:	Max. torsion load ± 360°/m
Minimum bending radius:	Flexing: 15 x outer diameter Fixed installation: 4 x outer diameter
Nominal voltage:	48 V AC From 0.5 mm² U_0/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 Core insulation: capable of temporary overload to +120°C

PN 0486/01_03.10 ©2012 Lapp Group - Technical changes reserved
Photographs are not to scale and do not represent detailed images of the respective products.

Part number	Number of cores and mm² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® ROBOT 900 P				
0028110	7 X 0,25	6,2	16.8	48
0028116	25 X 0,25	10,2	60.0	141
0028188	2 X 0,34	5.0	7.0	27
0028145	18 G 0,5	11,2	86.4	120
0028146	25 G 0,5	13,3	120.0	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	29.0	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	195.0	376
0028178	18 G 1,0	13,2	172.8	287
0028186	23 G 1,0 + (2 x 1,0)	17,3	262.0	470
0028180	25 G 1,0	16,4	240.0	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	72.0	136
0028182	4 G 2,5	10,1	96.0	171
0028400	3 G 16	21,4	460.8	721
0028187	3 G 25	26,2	720.0	1178
0028189	3 G 35	28,8	1008.0	1559

PN 0486/01_03.10
©2012 Lapp Group - Technical changes reserved
Photographs are not to scale and do not represent detailed images of the respective products.