

TPE-PUR robot cable, for flexing and torsion load

Product Description

Space saving installation due to small cable diameters; Warehouse available High-Tec Robot cables!; Protected against water and dirt; Wear-resistant



Application range

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

Benefits

- Space saving installation due to small cable diameters
- Warehouse available High-Tec Robot cables!
- Protected against water and dirt
- Wear-resistant

Design

- Fine or superfine strands of plain copper wire
- Core insulation: TPE
- Cores twisted in layers
- PTFE tape wrapping
- Polyurethane sheath (PUR), black (RAL 9005)

Approvals (Norm references)

- Usage in Power Chains: Please comply with the assembly guidelines Appendix T3
- For travel distances up to 10 m.



Product features

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

Technical Data

Core identification code

Up to 0.34 mm²: DIN 47100 cores
Starting at 0.50 mm²: black cores with white printed numbers

Mutual capacitance

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

Peak working voltage

0.34 mm²: 350 V (not for high current purposes)

Inductivity

Approx 0.7 mH/km

Based on

VDE 0281/0282
VDE 0812

Specific insulation resistance

> 20 GOhm x cm

Conductor stranding

Fine wire or superfine wire

Torsion

Torsion load max.
+/- 360° /m

Minimum bending radius

Flexing: 15 x outer diameter
Static: 4 x cable diameter

Rated voltage

48 V AC
Starting at 0.5 mm² U0/U: 300/500 V

Test voltage

Up to 0.34 mm²: 1500 V
Starting at 0.5 mm²: 3000 V

Protective conductor

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

Range of temperature

Flexing: -40°C up to +80°C Fixed installation: -50°C up to +80°C
Core insulation: Capable of temporary overload up to +120 °C

Article List

Part number	Number of cores and mm ² per conductor	Outer diameter in 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	60.0	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

Footnote:

All product related values as shown are nominal values unless specified differently. Further values, e.g. tolerances we submit on request - if available and released for publication.

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: Coil \leq 30 kg and \leq 250 m, otherwise drum

Please specify the desired packaging size (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.