

Screened 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
- Screened version (DP): layer of tinned copper wires
- 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 mm<sup>2</sup>: DIN 47100 cores  
Starting at 0.50 mm<sup>2</sup>: 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 mm<sup>2</sup>: 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.  
+/- 180°/m

Minimum bending radius

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

Rated voltage

48 V AC  
Starting at 0.5 mm<sup>2</sup> U0/U: 300/500 V

Test voltage

Up to 0.34 mm<sup>2</sup>: 1500 V  
Starting at 0.5 mm<sup>2</sup>: 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 <sup>2</sup> per conductor	Outer diameter in mm	Copper index kg/km	Weight kg/km
0028100	12 x 0,14	6,7	42.5	69
0028105	3 x 2 x 0,14	5,9	17.0	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	259.0	395

**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](http://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.