

TPE-PUR robot cable, for flexing and torsion load, AWM- approval

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
- Multi-axis articulated robots
- Automated handling equipment
- 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, 0.14mm² -0.5mm² made from tinned copper wires, above plain.
- Core insulation: TPE
- Core coding, see Appendix
- Cores (or core pairs) twisted in layers or bundles
- PTFE tape wrapping
- Pair screen (D): 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 100 m (horizontal)
- USA: Acc. NFPA79 Ed 08 in industrial machinery as part of a listed assembly only.

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: white cores with black printed numbers

Approvals

UL appr AWM style 20940 VW1 cUL appr AWM I/II
A/B FT 1

Specific insulation resistance

> 20 GOhm x cm

Conductor stranding

Fine wire or superfine wire

Torsion

Torsion load max.
+/- 360° /m

Minimum bending radius

Flexible use: 10 x outer diameter

Static: 4 x cable diameter

Rated voltage

IEC: up to 0.34mm² 250Vss. 0.5 - 2.5mm² 300/500V

UL/CSA up to 1.5mm² 600 V, from 2.5mm² 1000V

Test voltage

Cores: spark test 6 kV

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
0029590	7 X 0,25	6,7	16.8	62
0029591	12 X 0,25	9.0	30.0	122
0029592	18 X 0,25	10,6	45.0	156
0029593	25 X 0,25	12,5	60.0	205
0029594	2 X 0,34	4,6	7.0	38
0029595	3 X 0,34	4,8	10.0	40



0029596	4 X 0,34	5,2	15.0	48
0029599	12 X 0,34	9,4	40.0	130
0029600	18 X 0,34	11,2	60.0	170
0029601	25 X 0,34	13,1	83.0	220
0029608	18 G 0,5	12,3	84.0	202
0029609	25 G 0,5	15,2	120.0	284
0029610	2 X 1,0	6,3	19.0	60
0029611	3 G 1,0	6,6	28.0	71
0029612	4 G 1,0	7,2	38.0	87
0029614	7 G 1,0	9,2	65.0	141
0029615	12 G 1,0	12,4	110.0	237
0029616	14 G 1,0	13,2	128.0	257
0029617	16 G 1,0 + (2 x 1,0)	15,4	190.0	346
0029618	18 G 1,0	16,1	170.0	349
0029619	23 G 1 + (2 x 1,0)	18.0	250.0	461
0029620	25 G 1,0	17,8	240.0	407
0029621	34 G 1,0	21,1	320.0	600
0029622	41 G 1,0	23,6	390.0	753
0029624	4 G 1,5	8,2	57.0	114
0029625	5 G 1,5	9,1	72.0	141
0029627	7 G 1,5	10,5	101.0	187
0029629	12 G 1,5	14,3	170.0	294
0029630	18 G 1,5	17,5	259.0	450
0029631	25 G 1,5	19,7	360.0	661
0029632	3 G 2,5	9,1	72.0	136
0029641	4 G 6	13,3	220.0	330

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.