



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

- Simultaneous bending and torsion



Product description

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
- Hightech robot cable
- Protection against water and dirt
- Wear-resistant

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

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 ² : DIN 47100 cores From 0.5 mm ² : 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 mm ² : 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 $\pm 360^\circ/\text{m}$
Minimum bending radius	Flexing: 15 x outer diameter Fixed installation: 4 x outer diameter
Nominal voltage	48 V AC From 0.5 mm ² U ₀ /U: 300/500 V
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 Core insulation: capable of temporary overload to +120°C