HELUDATA® ROBOFLEX® 2001

TECHNICAL DATA

PUR robot cable in alignment with DIN VDE 0250, DIN VDE 0285-525-1 / DIN EN 50525-1

Temperature range	flexible -30°C to +90°C fixed -40°C to +90°C
Peak operating voltage	350 V (not for high power current installation purposes)
Test voltage core/core	1500 V
Mutual capacitance core/core	at 800 Hz, approx. 100 pF/m
Inductance	approx. 0.69 mH/km
Minimum bending radius	flexible 7.5x Outer-Ø fixed 4x Outer-Ø

CABLE STRUCTURE

- Copper wire bare, extra finely stranded
- Wire structure:
  0.25 mm²: approx.19 x 0.13 mm
  0.34 mm²: approx.19 x 0.15 mm
- Core insulation: PP
- Core identification acc. to DIN 47100, colour coded
- x = without protective conductor
- Stranding:
  2 - 7 core(s): cores stranded into one layer with an optimally matched lay length
  12 - 25 core(s): cores stranded into bundles with optimally matched lay lengths; bundles stranded together around a tensile core
- Central filler or bundles with PTFE wrapping, depending on the part number
- Fleece wrapping
- Outer sheath: Special grade of full polyurethane acc. to DIN VDE 0207-363-10-2 / DIN EN 50363-10-2 (compound type TMPU)
- Sheath colour: black (RAL 9005)
- Length marking: in metres

PROPERTIES

- resistant to: oil, UV radiation, ozone, oxygen, weathering effects, hydrolysis, microbes, coolants, hydraulic fluids, acids, alkalis, greases, seawater and wastewater
- highly abrasion-resistant, notch-resistant, tear-resistant, cut-resistant, wear-resistant, low adhesion
- smooth, high-quality core insulation for eased sliding and optimized core stranding ensure long service-life within applications that request combined bending and torsion movements
- for outdoor use
- torsion rated
- Torsion parameters
  Torsional stress up to +/- 360 °/m: 10 Mio. Cycles (min.)

TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2
- oil-resistant acc. to DIN VDE 0473-811-404 / DIN EN 60811-404 / IEC 60811-404
- UV-resistant acc. to DIN EN ISO 4892-2
- weather-resistant acc. to DIN EN ISO 4892-2

APPLICATION

This robotic cable is particularly designed for torsion and bending stresses in robots and handling tools.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
25459	7 x 0.25	24	5.4	16.8	48.0
25439	12 x 0.25	24	7.6	28.8	71.0
25460	25 x 0.25	24	10.6	60.0	143.0
25461	2 x 0.34	22	4.0	6.6	28.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
25462	3 x 0.34	22	4.0	9.8	34.0
25440	7 x 0.34	22	5.7	22.8	51.0
25449	12 x 0.34	22	8.3	39.2	69.0