

# Torsion Cables

## RT 123 D

PUR torsion cable with overall copper screen, torsion angle up to  $\pm 450^\circ$  over 0.5 m



marking example:

SAB BRÜCKSKES · D-VIERSEN · 07961815 18x1,5mm<sup>2</sup> RT 123 D 16 AWG/18c 07961618

AWM Style 21060 80°C 600V CSA AWM I/II A/B 80°C 600V FT1 FT2 CE

### Construction:

<b>Conductor</b> 0,14 mm <sup>2</sup> - 0,34 mm <sup>2</sup> :	bare copper strands, extra fine wires
<b>Conductor</b> from 0,50 mm <sup>2</sup> :	bare copper strands acc. to IEC 60228, VDE 0295, class 6
<b>Insulation:</b>	TPE
<b>Colour code</b> 0,14 mm <sup>2</sup> - 0,34 mm <sup>2</sup> :	acc. to colour code US 2, see chapter N „Technical data“
<b>Colour code</b> from 0,50 mm <sup>2</sup> :	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
<b>Stranding:</b>	specially adjusted layering with netting tape over each layer and one additional non-woven tape over the outer layer
<b>Screen:</b>	wrapped with bare copper wires
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Sheath colour:</b>	black (RAL 9005)

### Outstanding features:

- » rugged and reliable
- » torsion angle up to  $\pm 450^\circ$  over 0.5 m
- » UL recognized, CSA approval
- » PFAS free

### Technical data:

<b>Peak operating voltage</b> 0,14 mm <sup>2</sup> - 0,34 mm <sup>2</sup> :	max. 350 V	
<b>Nominal voltage</b> from 0,50 mm <sup>2</sup> :	U <sub>0</sub> /U 300/500 V	
<b>Voltage UL/CSA</b> 0,14 mm <sup>2</sup> - 0,34 mm <sup>2</sup> :	300 V	
<b>Voltage UL/CSA</b> from 0,50 mm <sup>2</sup> :	600 V	
<b>Testing voltage</b> 0,14 mm <sup>2</sup> - 0,34 mm <sup>2</sup> :	core/core	1500 V
	core/screen	1200 V
<b>Testing voltage</b> from 0,50 mm <sup>2</sup> :	core/core	3000 V
	core/screen	2000 V
<b>Torsion angle:</b>	up to $\pm 450^\circ/0.5$ m	
<b>Min. bending radius</b> <i>continuously flexible:</i>	12 x d	
<i>from 34 cores:</i>	20 x d	
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg	
<b>Temperature range</b> <i>fixed laying:</i>	DIN VDE	UL/CSA: up to +80 °C
<i>flexible application:</i>	-50/+90 °C	
	-40/+90 °C	
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1	
<b>Fire performance:</b>	acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL VW-1, CSA FT1, FT2	
<b>Oil resistance:</b>	very good - TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2	
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.	
<b>Continuous flexibility:</b>	very good	
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“	

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07961201	12 x 0,14	0,11	6,9	30,2	62
07962502	25 x 0,25	0,11	10,0	90,9	156
07960505	5 x 0,50	0,16	8,2	40,5	94
07960710	7 x 1,00	0,16	10,7	108,5	178
07961215	12 x 1,50	0,16	14,9	214,7	338
07961815	18 x 1,50	0,16	17,1	326,0	496

Other dimensions and colours are possible on request.

Also suitable  
for applications on robots!