

# Torsion Cables

## RT 123

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



marking example:

SAB BRÖCKSKES · D-VIERSEN · 07951815 18x1,5mm<sup>2</sup> RT 123 16 AWG/18c 07951618

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>	specialy adjusted layering with netting tape over each layer and one additional non-woven tape over the outer layer
<b>Sheath material:</b>	PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Sheath colour:</b>	black (RAL 9005)

### 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
<b>Testing voltage</b> from 0,50 mm <sup>2</sup> :	core/core 3000 V
<b>Torsion angle:</b>	up to $\pm 450^\circ/0.5$ m
<b>Min. bending radius</b> <i>continuously flexible:</i> <i>from 34 cores:</i>	12 x d 20 x d
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b> <i>fixed laying:</i> <i>flexible application:</i>	DIN VDE UL/CSA: up to +80 °C -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“

### Outstanding features:

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

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
07950301	3 x 0,14	0,11	5,5	4,0	31
07950401	4 x 0,14	0,11	4,7	5,4	26
07950302	3 x 0,25	0,11	4,6	7,2	25
07950402	4 x 0,25	0,11	4,8	9,6	28
07950702	7 x 0,25	0,11	5,4	16,8	39
07952502	25 x 0,25	0,11	9,1	60,0	117
07950203	2 x 0,34	0,11	4,8	6,6	27
07951805	18 x 0,50	0,16	12,5	95,0	216
07952505	25 x 0,50	0,16	14,6	132,0	303
07950407	4 x 0,75	0,16	7,8	28,8	78
07951407	14 x 0,75	0,16	12,6	100,8	207

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
07950210	2 x 1,00	0,16	7,3	19,2	64
07950310	3 x 1,00	0,16	7,6	28,8	75
07950410	4 x 1,00	0,16	8,1	38,4	91
07950610	6 x 1,00	0,16	9,4	57,6	127
07950710	7 x 1,00	0,16	10,0	67,2	147
07951210	12 x 1,00	0,16	12,2	115,2	214
07951810	18 x 1,00	0,16	14,7	172,8	316
07952510	25 x 1,00	0,16	16,6	240,0	428
07953410	34 x 1,00	0,16	19,7	326,4	559
07954010	40 x 1,00	0,16	20,9	384,0	659
07954110	41 x 1,00	0,16	20,9	393,6	670
07950715	7 x 1,50	0,16	11,3	100,8	197
07951215	12 x 1,50	0,16	14,3	172,8	303
07951815	18 x 1,50	0,16	16,6	259,2	435
07952515	25 x 1,50	0,16	19,1	360,0	609
07950325	3 x 2,50	0,16	9,9	72,0	136
07950425	4 x 2,50	0,16	10,3	96,0	166
07950525	5 x 2,50	0,16	11,8	120,0	210
07950340	3 x 4,00	0,16	11,5	115,2	211
07950361	3 x 10,00	0,21	16,5	288,0	471
07950362	3 x 16,00	0,21	19,4	460,8	682
07950363	3 x 25,00	0,21	24,0	720,0	1035
07950364	3 x 35,00	0,21	27,2	1008,0	1389

Also suitable  
for applications on robots!

Other dimensions and colours are possible on request.