

Torsion Cables

RT 123

PUR rugged and dependable robot/track cable $\pm 450^\circ$ torsion over 0.5 m



Marking for RT 123 7951618:

SAB BRÖCKSKES · D-VIERSEN · 7951815 18 x 1.5 mm² RT 123 16 AWG/18c 7951618 AWM Style 21060 80°C 600V CSA AWM I/II A/B 80°C 600V FT1 FT2 CE

Construction:

Conductor: 26 AWG - 22 AWG: from 20 AWG:	bare copper strands, extra fine wires bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	TPE
Color code: 26 AWG - 22 AWG: from 20 AWG:	US 2, see below black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	specially adjusted layering with netting tape over each layer and one additional non-woven tape over the outer layer
Jacket material:	PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Jacket color:	black (RAL 9005)

Outstanding features:

- rugged and reliable
- torsion angle up to $\pm 450^\circ$ over 0.5 meter
- weld resistant

Technical data:

Peak operating voltage: 26 AWG - 22 AWG: from 20 AWG:	max. 375 V U _o /U 300/500 V
Voltage UL/CSA: 26 AWG - 22 AWG: from 20 AWG:	300 V 600 V
Testing voltage: 26 AWG - 22 AWG: from 20 AWG:	conductor/conductor: 1500 V conductor/conductor: 3000 V
Torsion angle:	up to $\pm 450^\circ/0.5$ m
Min. bending radius: continuously flexing: from 34 conductors:	12 x O.D. 20 x O.D.
Radiation resistance:	5 x 10 ⁷ cJ/kg
Temperature range: static: motion:	DIN VDE UL/CSA: up to +80°C -50/+90°C -40/+90°C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL VW-1, CSA FT1, FT2
Oil resistance:	very good - TPU acc. to IEC 50363-10-2 + VDE 0207-363-10-2
Chemical resistance:	good against acids, alkalines, solvents, hydraulic liquids, etc.
Continuous flexibility:	very good
Approvals:	UR AWM, CSA AWM, CE, EAC, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors	outer- ϕ inch $\pm 10\%$	outer- ϕ mm $\pm 10\%$	cable weight \approx lbs/mft
▶ 26 AWG ($\approx 18/38$) ▪ 0.14 mm²				
7952603	3	0.217	5.5	21
7952604	4	0.185	4.7	17
7952616	16	0.295	7.5	87
▶ 24 AWG ($\approx 14/34$) ▪ 0.25 mm²				
7952403	3	0.181	4.6	17
7952404	4	0.189	4.8	19
7952407	7	0.213	5.4	26
7952425	25	0.358	9.1	79
▶ 22 AWG ($\approx 7/30$) ▪ 0.34 mm²				
7952202	2	0.189	4.8	18

item no.	no. of conductors incl. ground	outer- ϕ inch $\pm 10\%$	outer- ϕ mm $\pm 10\%$	cable weight \approx lbs/mft
▶ 20 AWG ($\approx 28/34$) ▪ 0.50 mm²				
7952004	4	0.291	7.4	44
7952018	18	0.492	12.5	145
7952025	25	0.575	14.6	204
▶ 19 AWG ($\approx 42/34$) ▪ 0.75 mm²				
7951904	4	0.307	7.8	52
7951914	14	0.496	12.6	139
▶ 18 AWG ($\approx 56/34$) ▪ 1.00 mm²				
7951802	2	0.287	7.3	43
7951803	3	0.299	7.6	50
7951804	4	0.319	8.1	61
7951806	6	0.370	9.4	85
7951807	7	0.394	10.0	99
7951812	12	0.480	12.2	144
7951818	18	0.579	14.7	212
7951825	25	0.654	16.6	288
7951834	34	0.776	19.7	376
7951840	40	0.823	20.9	443
7951841	41	0.823	20.9	450

item no.	no. of conductors incl. ground	outer- ϕ inch $\pm 10\%$	outer- ϕ mm $\pm 10\%$	cable weight \approx lbs/mft
▶ 16 AWG ($\approx 84/34$) ▪ 1.50 mm²				
7951603	3	0.335	8.5	67
7951607	7	0.445	11.3	132
7951612	12	0.563	14.3	204
7951618	18	0.654	16.6	292
7951625	25	0.752	19.1	409
▶ 14 AWG ($\approx 140/34$) ▪ 2.50 mm²				
7951403	3	0.390	9.9	91
7951404	4	0.406	10.3	112
7951405	5	0.465	11.8	141
▶ 12 AWG ($\approx 224/34$) ▪ 4.00 mm²				
7951203	3	0.453	11.5	142
▶ 8 AWG ($\approx 320/32$) ▪ 10.00 mm²				
7950803	3	0.650	16.5	316
▶ 6 AWG ($\approx 504/32$) ▪ 16.00 mm²				
7950603	3	0.764	19.4	458
▶ 4 AWG ($\approx 760/32$) ▪ 25.00 mm²				
7950403	3	0.945	24.0	695
▶ 2 AWG ($\approx 1083/32$) ▪ 35.00 mm²				
7950203	3	1.071	27.2	933

US 2 color code: (26 - 22 AWG)

#1- black, #2- white, #3- red, #4- green, #5- orange, #6- blue, #7- white-black, #8- red-black,
#9- green-black, #10- orange-black, #11- blue-black, #12- black-white, #13- red-white, #14- green-white,
#15- blue-white, #16- black-red, #17- white-red, #18- orange-red, #19- blue-red, #20- red-green,
#21- orange-green, #22- black-white-red, #23- white-black-red, #24- red-black-white, #25- green-black-white,

Other dimensions and colors are available on request

