

Torsion Cables

RT 123

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

torsional/twisting
angle up to $\pm 450^\circ$

SAB Robot

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



Marking for RT 123 7951618:

SAB BRÜCKSKES · 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. 350 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 flexible: 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	nominal outer-ø inch mm	cable weight ≈lbs/mft
► 26 AWG (≈ 18/38) ▪ 0.14 mm ²			
7952603	3	0.217 5.5	21
7952604	4	0.185 4.7	17
7952616	16	0.295 7.5	87
► 24 AWG (≈ 14/34) ▪ 0.25 mm ²			
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 (≈ 7/30) ▪ 0.34 mm ²			
7952202	2	0.189 4.8	18

item no.	no. of conductors incl. ground	nominal outer-ø inch mm	cable weight ≈lbs/mft
► 20 AWG (≈ 28/34) ▪ 0.50 mm ²			
7952004	4	0.291 7.4	44
7952018	18	0.492 12.5	145
7952025	25	0.575 14.6	204
► 19 AWG (≈ 42/34) ▪ 0.75 mm ²			
7951904	4	0.307 7.8	52
7951914	14	0.496 12.6	139
► 18 AWG (≈ 56/34) ▪ 1.00 mm ²			
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	nominal outer-ø inch mm	cable weight ≈lbs/mft
► 16 AWG (≈ 84/34) ▪ 1.50 mm ²			
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 (≈ 140/34) ▪ 2.50 mm ²			
7951403	3	0.390 9.9	91
7951404	4	0.406 10.3	112
7951405	5	0.465 11.8	141
► 12 AWG (≈ 224/34) ▪ 4.00 mm ²			
7951203	3	0.453 11.5	142
► 8 AWG (≈ 320/32) ▪ 10.00 mm ²			
7950803	3	0.650 16.5	316
► 6 AWG (≈ 504/32) ▪ 16.00 mm ²			
7950603	3	0.764 19.4	458
► 4 AWG (≈ 760/32) ▪ 25.00 mm ²			
7950403	3	0.945 24.0	695
► 2 AWG (≈ 1083/32) ▪ 35.00 mm ²			
7950203	3	1.071 27.2	933

Other dimensions and colors are available on request

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,