

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:	bare copper strands, extra fine wires
Conductor: from 20 AWG:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	TPE
Color code: 26 AWG - 22 AWG:	acc. to color code US 2, see page O/27
Color code: from 20 AWG:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	specially adjusted layering with non-woven 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:	max. 350 V	
Peak operating voltage: from 20 AWG:	U _o /U 300/500 V	
Voltage UL/CSA: 26 AWG - 22 AWG:	300 V	
Voltage UL/CSA: from 20 AWG:	600 V	
Testing voltage: 26 AWG - 22 AWG:	conductor/conductor: 1500 V	
Testing voltage: from 20 AWG:	conductor/conductor: 3000 V	
Torsion angle:	up to $\pm 450^\circ/0.5$ m	
Min. bending radius: continuously flexible:	12 x O.D.	
from 34 conductors:	20 x O.D.	
Radiation resistance:	5 x 10 ⁷ cJ/kg	
Temperature range: static:	DIN VDE	UL/CSA: up to +80°C
motion:	-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 incl. ground	nominal outer-ø inch	mm	cable weight ≈lbs/mft
► 26 AWG (≈ 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 (≈ 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 (≈ 7/30) ▪ 0.34 mm²				
7952202	2	0.189	4.8	18
► 20 AWG (≈ 28/34) ▪ 0.50 mm²				
7952018	18	0.492	12.5	138
7952025	25	0.579	14.7	193

item no.	no. of conductors incl. ground	nominal outer-ø inch	mm	cable weight ≈lbs/mft
► 19 AWG (≈ 42/34) ▪ 0.75 mm²				
7951904	4	0.315	8.0	53
7951914	14	0.496	12.6	139
► 18 AWG (≈ 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	nominal outer-ø inch	mm	cable weight ≈lbs/mft
► 16 AWG (≈ 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 (≈ 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 (≈ 224/34) ▪ 4.00 mm²				
7951203	3	0.453	11.5	142
► 8 AWG (≈ 320/32) ▪ 10.00 mm²				
7950803	3	0.650	16.5	316
► 6 AWG (≈ 504/32) ▪ 16.00 mm²				
7950603	3	0.764	19.4	458
► 4 AWG (≈ 760/32) ▪ 25.00 mm²				
7950403	3	0.945	24.0	695
► 2 AWG (≈ 1083/32) ▪ 35.00 mm²				
7950203	3	1.071	27.2	933

Other dimensions and colors are available on request



Also suitable
for flexing applications

