

TORSION CABLES

torsion/twisting angle
up to $\pm 450^\circ$
per 0.5 meter



RT 123 Halogen-free rugged and dependable robot/track cable



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

Marking for RT 123 07951618: SAB BRÖCKSKES · D-VIERSEN ·

07951815 18 G 1.5 mm² RT 123 16 AWG/18 c 07951618 AWM Style 21060 80°C 600V CSA AWM I/II A/B 80°C 600V FT1 FT2 CE

This 300/600 V UL recognized, CSA approved cable is rated for 80°C and used in applications where combined twisting and bending stresses occur. This unique cable accurately transmits control signals and power supply to welding robots, rotary tables and other automated applications. The high quality UL recognized, CSA approved insulation with its smooth surface and slide wrapping increases cable life expectancy under extreme twisting and bending stresses. The TPE outer jacket is blended with specially formulated polyurethane and is highly resistant to abrasion, oil, notching, microbes and hydrolysis. In addition, the surface quality prevents adhesion to adjacently installed cables.

Construction:

Conductor	
26 AWG - 22 AWG:	bare copper strands, extra fine wires
from 20 AWG:	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 6
Insulation:	TPE
Color code	
26 AWG - 22 AWG:	acc. to color code US 2 see page O/27
from 20 AWG:	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
Stranding:	specially adjusted layering with woven tape over each layer and one additional non-woven tape over the outer layer
Jacket material:	PUR, TPU acc. to DIN VDE 0282 part 10 + HD 22.10
Jacket color:	black

Outstanding features:

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

Technical data:

Voltage			
26 AWG - 22 AWG:	UL/CSA: 300 V		
from 20 AWG:	UL/CSA: max. 600 V		
Peak operating voltage			
26 AWG - 22 AWG:	max. 350 V		
Nominal voltage U_o/U			
from 20 AWG:	DIN VDE: 300/500 V		
Testing voltage U			
26 AWG - 22 AWG:	1500 V acc. to DIN VDE 0472 part 509		
from 20 AWG:	3000 V acc. to DIN VDE 0281 part 2 + HD 21.2		
Torsion angle:	up to $\pm 450^\circ/0.5$ meter (tested)		
Min. bending radius:	continuous flexing 12 x O.D. from 34 conductors 20 x O.D.		
Radiation resistance:	5 x 10 ⁷ cJ/kg		
Temperature range	DIN VDE:	UL:	CSA:
<i>static:</i>	-50/+90°C	up to +80°C	up to +80°C
<i>motion:</i>	-40/+90°C	up to +80°C	up to +80°C
Zero halogen:	acc. to IEC 60754-1 and DIN VDE 0472 part 815		
Burning characteristics:	UL VW-1 + CSA FT1 and FT2, IEC 60332-1-2 and EN 60332-1-2		
Oil resistance:	very good acc. to DIN VDE 0282 part 10 + HD 22.10		
Chemical resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.		
Continuous flexibility:	very good		
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30		

item no.	no. of conductors	nominal outer- ϕ inch	nominal outer- ϕ mm	cable weight \approx lbs/mft
▶ 26 AWG (\approx 18/38) • 0.14 mm²				
07952603	3	0.217	5.5	21
07952604	4	0.224	5.7	23
07952616	16	0.295	7.5	87
▶ 24 AWG (\approx 14/34) • 0.25 mm²				
07952403	3	0.228	5.8	25
07952404	4	0.217	5.5	28
07952407	7	0.283	7.2	40
07952425	25	0.421	10.7	97
▶ 22 AWG (\approx 7/30) • 0.34 mm²				
07952202	2	0.205	5.2	26

item no.	no. of conductors incl. ground	nominal outer- ϕ inch	nominal outer- ϕ mm	cable weight \approx lbs/mft
▶ 20 AWG (\approx 28/34) • 0.50 mm²				
07952018	18	0.492	12.5	138
07952025	25	0.579	14.7	193
▶ 19 AWG (\approx 42/34) • 0.75 mm²				
07951904	4	0.315	8.0	53
07951914	14	0.496	12.6	137
▶ 18 AWG (\approx 56/34) • 1.00 mm²				
07951802	2	0.295	7.5	46
07951803	3	0.307	7.8	52
07951804	4	0.331	8.4	62
07951806	6	0.382	9.7	87
07951807	7	0.406	10.3	99
07951812	12	0.496	12.6	146
07951818	18	0.587	14.9	214
07951825	25	0.677	17.2	294
07951834	34	0.787	20.0	379
07951840	40	0.843	21.4	444
07951841	41	0.843	21.4	452

item no.	no. of conductors incl. ground	nominal outer- ϕ inch	nominal outer- ϕ mm	cable weight \approx lbs/mft
▶ 16 AWG (\approx 84/34) • 1.50 mm²				
07951603	3	0.335	8.5	67
07951607	7	0.461	11.7	134
07951612	12	0.579	14.7	206
07951618	18	0.673	17.1	297
07951625	25	0.787	20.0	415
▶ 14 AWG (\approx 140/34) • 2.50 mm²				
07951403	3	0.409	10.4	101
07951404	4	0.441	11.2	122
▶ 12 AWG (\approx 224/34) • 4.00 mm²				
07951203	3	0.476	12.1	142
▶ 8 AWG (\approx 320/32) • 10.00 mm²				
07950803	3	0.709	18.0	319
▶ 6 AWG (\approx 504/32) • 16.00 mm²				
07950603	3	0.803	20.4	469
▶ 4 AWG (\approx 760/32) • 25.00 mm²				
07950403	3	1.008	25.6	716
▶ 2 AWG (\approx 1083/32) • 35.00 mm²				
07950203	3	1.118	28.4	931

Other dimensions and colors are possible on request.

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