torsional/twisting angle up to ± 450°

SAB Robot

RT 123 D

Spiral shielded PUR rugged and dependable robot/track cable
±450° torsion over 0.5 m

Marking for RT 123 D 7961618:
SAB BRÖCKSKES · D-VIERSEN · 7961815 18 x 1.5 mm² RT 123 D 16 AWG/18c 7961618 AWM Style 21060 80°C 600V CSA AWM I/II A/B 80°C 600V FT1 FT2

Construction:

Conductor:	
26 AWG - 22 AWG:	bare copper strands, extra fine wires
from 20 AWG:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	TPE
Color code:	
26 AWG - 22 AWG:	US 2, see below
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 netting tape over each layer and one additional non-woven tape over the outer layer
Shielding:	wrapped with bare copper wires
Wrapping:	non-woven tape
Jacket material:	PUR, TMPU 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 ± 450° per 0.5 meter**
- **UL recognized, CSA approval**

Technical data:

Peak operating voltage:	
26 AWG - 22 AWG:	max. 350 V
from 20 AWG:	Uo/U 300/500 V
Voltage UL/CSA:	
26 AWG - 22 AWG:	300 V
from 20 AWG:	600 V
Testing voltage:	conductor/conductor: 1500 V
26 AWG - 22 AWG:	conductor/shielding: 1200 V
from 20 AWG:	conductor/conductor: 3000 V
	conductor/shielding: 2000 V
Torsion angle:	up to ± 450°/0.5 m (tested)
Min. bending radius:	
continuously 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:** up to +80°C
static:	-50/+90°C
motion:	-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 - TMPU acc. to EN 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-ø inch ± 10%	outer-ø mm ± 10%	cable weight ≈lbs/mft
▶ **26 AWG (≈ 18/38) ▪ 0.14 mm²**				
7962612	12	0.272	6.9	42
▶ **24 AWG (≈ 14/34) ▪ 0.25 mm²**				
7962425	25	0.394	10.0	105

item no.	no. of conductors incl. ground	outer-ø inch ± 10%	outer-ø mm ± 10%	cable weight ≈lbs/mft
▶ **20 AWG (≈ 28/34) ▪ 0.50 mm²**				
7962005	5	0.323	8.2	63
▶ **18 AWG (≈ 56/34) ▪ 1.00 mm²**				
7961807	7	0.421	10.7	120
▶ **16 AWG (≈ 84/34) ▪ 1.50 mm²**				
7961612	12	0.587	14.9	227
7961618	18	0.673	17.1	333

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

Also suitable for flexing applications