Torsion Cables

RT 113

PVC torsion cable, torsion angle up to ± 270° over 0.5 m



marking example:
SAB BRÖCKSKES · D-VIERSEN · 07971815 18x1,5mm² RT 113 16 AWG/18c 07961618
AWM Style 21216 90°C 600V Oil 60°C CSA AWM I/II A/B 90°C F 600V FT1 FT2

Construction:

Conductor 0,14 mm² - 0,34 mm²:	bare copper strands, extra fine wires
Conductor from 0,50 mm²:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	PVC, TI2 acc. to EN 50363-3 + VDE 0207-363-3
Colour code 0,14 mm² - 0,34 mm²:	acc. to colour code US 2, see chapter N „Technical data“
Colour code from 0,50 mm²:	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
Stranding:	specially adjusted layering with netting tape over each layer and one additional non-woven tape over the outer layer
Sheath material:	PVC, TM5 acc. to EN 50363-4-1 + VDE 0207-363-4-1
Sheath colour:	black (RAL 9005)

Outstanding features:

- rugged and reliable
- torsion angle up to ± 270° over 0.5 m
- UL recognized, CSA approval
- PFAS free

Technical data:

Peak operating voltage 0,14 mm² - 0,34 mm²:	max. 350 V	
Nominal voltage from 0,50 mm²:	Uo/U 300/500 V	
Voltage UL/CSA 0,14 mm² - 0,34 mm²:	300 V	
Voltage UL/CSA from 0,50 mm²:	600 V	
Testing voltage 0,14 mm² - 0,34 mm²:	core/core 1500 V	
Testing voltage from 0,50 mm²:	core/core 2000 V	
Torsion angle:	up to ± 270°/0.5 m	
Min. bending radius *continuously flexible:* *from 34 cores:*	12 x d 20 x d	
Temperature range 0,14 mm² - 0,34 mm²: *fixed laying:* *flexible application:*	**DIN VDE** -40/+70 °C +5/+70 °C	**UL:** up to +80 °C
Temperature range from 0,50 mm²: *fixed laying:* *flexible application:*	**DIN VDE** -40/+70 °C +5/+70 °C	**UL/CSA:** up to +80 °C
Fire performance 0,14 mm² - 0,34 mm²:	acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL VW-1	
Fire performance from 0,50 mm²:	acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL VW-1, CSA FT1, FT2	
Oil resistance:	very good - TM5 acc. to EN 50363-4-1 + VDE 0207-363-4-1, oilrating 60 °C acc. to UL 758, Fuel-Oil acc. to CSA C22.2 No. 210.2-M90	
Continuous flexibility:	very good	
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“	

UL

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07970301	3 x 0,14	0,11	5,2	4,0	31
07970401	4 x 0,14	0,11	5,6	5,4	36
07970302	3 x 0,25	0,11	5,4	7,2	37
07970402	4 x 0,25	0,11	5,9	9,6	43
07970702	7 x 0,25	0,11	7,3	16,8	67
07972502	25 x 0,25	0,11	11,2	60,0	173
07970203	2 x 0,34	0,11	5,3	6,5	36

UL / CSA

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07972505	25 x 0,50	0,16	14,8	120,0	332
07970407	4 x 0,75	0,16	7,4	28,8	75
07970707	7 x 0,75	0,16	9,6	67,2	134
07971407	14 x 0,75	0,16	12,5	100,8	225
07970210	2 x 1,00	0,16	6,8	19,2	59
07970310	3 x 1,00	0,16	6,9	28,8	71
07970410	4 x 1,00	0,16	7,8	38,4	90
07970710	7 x 1,00	0,16	9,8	64,2	151
07971210	12 x 1,00	0,16	12,4	115,2	234
07971810	18 x 1,00	0,16	14,4	172,8	334
07972510	25 x 1,00	0,16	16,9	240,0	468
07971815	18 x 1,50	0,16	16,5	259,2	456
07972515	25 x 1,50	0,16	18,7	360,0	630
07970325	3 x 2,50	0,16	9,8	72,0	146
07970425	4 x 2,50	0,16	10,6	96,0	184
07970340	3 x 4,00	0,16	12,1	115,2	225
07970361	3 x 10,00	0,21	16,8	288,0	502
07970362	3 x 16,00	0,21	19,7	460,8	731
07970363	3 x 25,00	0,21	23,8	720,0	1080
07970364	3 x 35,00	0,21	27,2	1008,0	1470

Other dimensions and colours are possible on request.

Also suitable for applications on robots!