

NFPA 79  
for Industrial  
Machinery

also available  
with black conductors  
and gray jacket

# CONTINUOUS FLEX CABLES



**S 965 MTW CY** Type MTW Very flexible shielded continuous flex control cable and machine-tool cable for small bending radius with red conductors

(UL) Type MTW 600V AWM Style 2587 90°C 600V CE



Marking for S 965 MTW CY 37281207:

SAB SAB BRÖCKSKES · D-VIERSEN · 37280715 7x1,5mm<sup>2</sup> S 965 MTW CY 16 AWG/7c 37281607 (UL) Type MTW 600V AWM Style 2587 90°C 600V CE

S 965 MTW CY is a very flexible, shielded multi-conductor 90°C, 600 V cable designed for continuous flex applications. Also machine-tool cable for use as specified in the National Electrical Code (NFPA 70) and in the National Fire Protection Association Electrical Standard for Industrial Machinery (NFPA 79). An overall tinned copper shield is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed. The S 965 MTW CY is designed for use on cable tracks, pick and place units, automated handling equipment, machine tools, conveyor systems and other continuous flexing applications.

B  
26

## Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 6
<b>Insulation:</b>	special formulated PVC
<b>Color code:</b>	red conductors with consecutive numbers; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	specially adjusted layering with non-woven tape over each layer
<b>Inner jacket:</b>	special formulated PVC
<b>Screen:</b>	tinned copper braiding
<b>Wrapping:</b>	non-woven tape
<b>Jacket material:</b>	special oil resistant PVC
<b>Jacket color:</b>	black

## Outstanding features:

- very good EMC characteristics
- very good flexibility
- oil resistant
- NFPA 79 for Industrial Machinery

## Technical data:

<b>Nominal voltage:</b>	<b>DIN VDE:</b> U <sub>0</sub> /U 300/500 V <b>UL(UL):</b> 600 V
<b>Testing voltage U:</b>	3000 V acc. to DIN VDE 0281 part 2 + HD 21.2 conductor/screen 2000 V
<b>Min. bending radius continuous flexing:</b>	7.5 x O.D.
<b>Radiation resistance:</b>	8 x 10 <sup>7</sup> cJ/kg
<b>Temperature range static:</b>	<b>DIN VDE</b> -40/+70°C <b>flexing:</b> +5/+70°C
<b>Burning characteristics:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2, UL VW-1
<b>Oil resistance:</b>	very good - TM5 acc. to DIN VDE 0281 part 1 + HD 21.1
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page N/28

item no.	no. of conductors incl. ground	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
----------	--------------------------------	----------------------	----	------------------------

▶ 20 AWG (≈ 28/34) • 0.50 mm<sup>2</sup>

37282002	2	0.390	9.9	82
37282003	3	0.409	10.4	100
37282004	4	0.437	11.1	113
37282005	5	0.472	12.0	133
37282007	7	0.563	14.3	187
37282012	12	0.661	16.8	254
37282018	18	0.772	19.6	349
37282025	25	0.921	23.4	462

▶ 19 AWG (≈ 42/34) • 0.75 mm<sup>2</sup>

37281902	2	0.413	10.5	98
37281903	3	0.429	10.9	109
37281904	4	0.457	11.6	125
37281905	5	0.500	12.7	152
37281907	7	0.591	15.0	208
37281912	12	0.701	17.8	289
37281918	18	0.819	20.8	399
37281925	25	0.921	23.4	517

▶ 18 AWG (≈ 56/34) • 1.00 mm<sup>2</sup>

37281802	2	0.421	10.7	103
37281803	3	0.445	11.3	116
37281804	4	0.465	11.8	134
37281805	5	0.512	13.0	163

item no.	no. of conductors incl. ground	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
----------	--------------------------------	----------------------	----	------------------------

▶ 18 AWG (≈ 56/34) • 1.00 mm<sup>2</sup>

37281807	7	0.602	15.3	222
37281812	12	0.720	18.3	314
37281818	18	0.839	21.3	437
37281825	25	1.004	25.5	582

▶ 16 AWG (≈ 84/34) • 1.50 mm<sup>2</sup>

37281602	2	0.445	11.3	116
37281603	3	0.461	11.7	134
37281604	4	0.504	12.8	163
37281605	5	0.567	14.4	203
37281607	7	0.650	16.5	278
37281612	12	0.783	19.9	384
37281618	18	0.917	23.3	540
37281625	25	1.087	27.6	708

▶ 14 AWG (≈ 140/34) • 2.50 mm<sup>2</sup>

37281402	2	0.504	12.8	153
37281403	3	0.531	13.5	181
37281404	4	0.587	14.9	220
37281405	5	0.630	16.0	260
37281407	7	0.744	18.9	369
37281412	12	0.909	23.1	532
37281418	18	1.055	26.8	741
37281425	25	1.272	32.3	1000

item no.	no. of conductors incl. ground	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
----------	--------------------------------	----------------------	----	------------------------

▶ 12 AWG (≈ 224/34) • 4.00 mm<sup>2</sup>

37281203	3	0.598	15.2	237
37281204	4	0.646	16.4	292
37281205	5	0.709	18.0	353

▶ 10 AWG (≈ 186/32) • 6.00 mm<sup>2</sup>

37281003	3	0.669	17.0	308
37281004	4	0.724	18.4	374
37281005	5	0.803	20.4	464

▶ 8 AWG (≈ 320/32) • 10.00 mm<sup>2</sup>

37280804	4	0.925	23.5	587
37280805	5	1.016	25.8	728

▶ 6 AWG (≈ 504/32) • 16.00 mm<sup>2</sup>

37280604	4	1.142	29.0	880
37280605	5	1.276	32.4	1116

▶ 4 AWG (≈ 760/32) • 25.00 mm<sup>2</sup>

37280404	4	1.287	32.7	1173
37280405	5	1.417	36.0	1462

▶ 2 AWG (≈ 1083/32) • 35.00 mm<sup>2</sup>

37280204	4	1.457	37.0	1546
----------	---	-------	------	------

▶ 1 AWG (≈ 703/28) • 50.00 mm<sup>2</sup>

37280104	4	1.823	46.3	2267
----------	---	-------	------	------

Other dimensions and colors are possible on request.

E-mail: [info@sabcable.com](mailto:info@sabcable.com)



Web site: [www.sabcable.com](http://www.sabcable.com)