

# CABLES FOR AUTOMATION INDUSTRY






















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# Cables for Automation Industry




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**NEW**  
**NEW**  
**NEW**  
**NEW**

## Family business in the third generation

**75** years of experience in cable and wire manufacturing as well as in temperature measurement technology turned a one-man business into a company with more than 550 employees. We prove our strength every year with more than 1500 special products according to customers' requirements. Each product is a new challenge for our creative technical team. We at **SAB** see ourselves as a manufacturer and a service provider – in the sense of true partnership and the greatest possible customer orientation.

Today, the quality of our products is known and appreciated in more than 100 countries around the world. In all product ranges, we are certified according to DIN EN ISO 9001. Furthermore, we have implemented an environmental management system for our company according to DIN EN ISO 14001, an occupational health and safety management system according to NLF/ILO-OSH and DIN ISO 45001, and an energy management system according to DIN EN ISO 50001.

And also for the future, our slogan is: **"WE GO FORWARD!"**

FOUNDED:	1947 by Peter Bröckskes sen. an independent, medium-sized company.
CEO:	Peter Bröckskes and Sabine Bröckskes-Wetten
PLANT/LOCATION:	In Viersen (Lower Rhine) 110.000 m <sup>2</sup> company site.  Own manufacturing from copper conductor to outer sheath.  VDE approved burnchamber and laboratory within the company.
EMPLOYEES/WORKERS:	approx. 430 at the plant in Viersen, 550 worldwide
YEARLY SALES:	over 134 Mio. € worldwide
PRODUCTS:	Special Cables  Measurement Technology  Cable Harnessing
CERTIFICATES AND APPROVALS:	Quality management system acc. to DIN EN ISO 9001 for every manufacturing field  Environmental management system acc. to DIN EN ISO 14001  Occupational health and safety management acc. to NLF/ILO-OSH and DIN ISO 45001  Energy management system acc. to DIN EN ISO 50001



# Cables for Automation Industry

## Applications



- ▶ **S 980 P**  
continuously flexible TPE/PUR control cable with numbered cores
- ▶ **S 980 CP**  
continuously flexible TPE/PUR control cable with numbered cores and overall copper screen
- ▶ **SL 833 C**  
PUR motor connection cable with TPE cores and overall copper screen 0,6/1kV
- ▶ **SL 871 C**  
low capacity combined PUR motor connection cable with overall copper screen 0,6/1 kV
- ▶ **SL 875 C - single cable solution**  
low capacity hybrid motor connection cable with overall copper screen 0,6/1 kV
- ▶ **SL 841 C**  
combined TPE/PUR motor connection cable with overall copper screen 0,6/1 kV
- ▶ **SL 842 C**  
TPE/PUR feedback cable with overall copper screen
- ▶ **SL 843 C**  
TPE/PUR transmission cable with overall copper screen



- ▶ **S 200**  
extremely flexible TPE/PUR control cable with numbered cores
- ▶ **S 200 C**  
continuously flexible TPE/PUR control cable with numbered cores and overall copper screen
- ▶ **SL 801 C**  
combined TPE/PUR motor connection cable with overall copper screen 0.6/1 kV
- ▶ **SL 802 C**  
TPE/PUR feedback cable with overall copper screen
- ▶ **SL 803 C**  
TPE/PUR transmission cable with overall copper screen
- ▶ **SL 823 C**  
PUR motor connection cable with TPE cores and overall copper screen 0.6/1 kV
- ▶ **S PB 634**  
PUR Profibus-DP cable for cable tracks

Photos: Liebherr Verzahrtechnik GmbH

# Cable Track Cable

## S 200

extremely flexible TPE/PUR control cable with numbered cores for continuous movement



Marking for S 200 07741215:

SAB BRÖCKSKES · D-VIERSEN · S 200 12 x 1,5 mm² CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 6
<b>Insulation:</b>	TPE
<b>Colour code from 2 conductors</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
<b>Stranding:</b>	specially adjusted layering with non-woven tape over each layer
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
<b>Sheath colour:</b>	grey (RAL 7000)

### Technical Data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	core/core 2000 V
<b>Min. bending radius</b> <i>continuously flexible:</i>	7,5 x d
<b>Radiation resistance:</b>	1 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b> <i>fixed laying:</i> <i>flexible application:</i>	-50/+90 °C -40/+90 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Oil resistance:</b>	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Continuous flexibility:</b>	very good
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

### Outstanding features:



- **PWIS uncritical**  
(PWIS = paint-wetting impairment substances)
- **flexible at low temperatures**
- **halogen-free**
- **travel > 10 m is possible**
- **high abrasion resistance**
- **small bending radius**
- **small outer diameter**

Also available as hybrid cable for example

3G1,0 + 16 x 0,34 mm<sup>2</sup>

3G1,0 + 8 x 0,34 mm<sup>2</sup>

1G0,5 + 4 x 0,34 mm<sup>2</sup>

Peak operating voltage of data conductors: max. 500 V

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
07740205	2 x 0,50	0,16	4,9	9,6	28
07740305	3 x 0,50	0,16	5,1	14,4	34
07740405	4 x 0,50	0,16	5,5	19,2	41
07740505	5 x 0,50	0,16	6,0	24,0	51
07740705	7 x 0,50	0,16	6,9	33,6	69
07741205	12 x 0,50	0,16	8,3	57,6	99
07741805	18 x 0,50	0,16	9,9	86,4	143
07742505	25 x 0,50	0,16	11,9	120,0	197
07740207	2 x 0,75	0,16	5,4	14,4	36
07740307	3 x 0,75	0,16	5,7	21,6	44
07740407	4 x 0,75	0,16	6,1	28,8	54
07740507	5 x 0,75	0,16	6,7	36,0	67
07740707	7 x 0,75	0,16	7,9	50,4	93
07740210	2 x 1,00	0,16	5,8	19,2	45
07740310	3 x 1,00	0,16	6,1	28,8	54
07740410	4 x 1,00	0,16	6,6	38,4	67
07740510	5 x 1,00	0,16	7,2	48,0	82
07740115	1 x 1,50	0,16	4,0	14,4	25
07740215	2 x 1,50	0,16	6,4	28,8	57
07740315	3 x 1,50	0,16	6,7	43,2	70
07740415	4 x 1,50	0,16	7,3	57,6	89
07740125	1 x 2,50	0,16	4,7	24,0	39
07740425	4 x 2,50	0,16	9,2	96,0	142
07740140	1 x 4,00	0,16	5,4	38,4	56
07740440	4 x 4,00	0,16	10,8	153,6	217
07740160	1 x 6,00	0,21	6,1	57,6	76
07740161	1 x 10,0	0,21	7,1	96,0	120
07740461	4 x 10,0	0,21	15,8	384,0	507
07740162	1 x 16,0	0,21	8,3	153,6	177
07740462	4 x 16,0	0,21	19,0	614,4	782
07740163	1 x 25,0	0,21	9,9	240,0	263
07740463	4 x 25,0	0,21	22,8	960,0	1155
07740164	1 x 35,0	0,21	11,5	336,0	367
07740165	1 x 50,0	0,31	14,0	480,0	538
07740166	1 x 70,0	0,31	16,7	672,0	754
07740167	1 x 95,0	0,31	20,5	912,0	1028
07740168	1 x 120,0	0,31	21,5	1152,0	1260
07740169	1 x 150,0	0,31	24,6	1440,0	1618
07740170	1 x 185,0	0,41	26,7	1776,0	1942
07740171	1 x 240,0	0,41	30,1	2304,0	2483

Other dimensions and colours are possible on request.

### further continuously flexible TPE/PUR data and control cables:

#### SD 200

Item groupe  
0774

extremely flexible TPE/PUR data cable  
with coloured cores for continuous movement



#### S 200 C

Item groupe  
0784

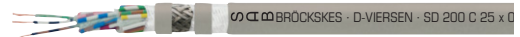
continuously flexible TPE/PUR control cable  
with numbered cores and overall copper screen



#### SD 200 C

Item groupe  
0784

continuously flexible TPE/PUR data cable  
with coloured cores and overall copper screen



#### SD 200 C TP

Item groupe  
0789

continuously flexible TPE/PUR paired data cable  
with coloured cores and overall copper screen



... for more information: [www.sab-cable.com](http://www.sab-cable.com)

# Cable Track Cable



**S 910 P** continuously flexible TPE/PUR single conductor

**S 910 CP** continuously flexible TPE/PUR single conductor with overall copper screen



Marking for S 910 P 37681362:

SAB BRÖCKSKES · D-VIERSEN · 37681362 16,0 mm<sup>2</sup> S 910 P 6 AWG 37680601 AWM Style 10456 80°C 600V CSA AWM I/II A/B 80°C 1000V FT1 FT2 CE



Marking for S 910 CP 37692362:

SAB BRÖCKSKES · D-VIERSEN · 37692362 16,0 mm<sup>2</sup> S 910 CP 6 AWG 37690601 AWM Style 10456 80°C 600V CSA AWM I/II A/B 80°C 1000V FT1 FT2 CE

## Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 6
<b>Insulation:</b>	TPE, black
<b>Wrapping:</b>	non-woven tape
<b>S 910 CP</b>	
<b>Screen:</b>	tinned copper braiding
<b>S 910 CP</b>	
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
<b>Sheath colour:</b>	black (RAL 9005)

## Technical Data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 0,6/1 kV	
<b>Voltage:</b>	<b>UL:</b> 600 V	<b>CSA:</b> 1000 V
<b>Min. bending radius</b> <i>continuously flexible:</i>	7,5 x d	
<b>Radiation resistance:</b>	1 x 10 <sup>7</sup> cJ/kg	
<b>Temperature range</b> <i>fixed laying:</i> <i>flexible application:</i>	<b>DIN VDE</b> -50/+90 °C	<b>UL/CSA:</b> up to +80 °C -40/+90 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1	
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL/CSA FT1, FT2	
<b>Oil resistance:</b>	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2	
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.	
<b>Continuous flexibility:</b>	very good	
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union	

## Outstanding features:



- highly flexible single conductor for use in cable tracks
- good chemical resistance
- high abrasion resistance
- halogen-free

## S 910 P

item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	AWG/MCM	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
37681340	4,00	0,16	12 (224/34)	6,6	38,4	69
37681360	6,00	0,21	10 (186/32)	7,5	57,6	94
37681361	10,00	0,21	8 (320/32)	8,4	96,0	138
37681362	16,00	0,21	6 (512/32)	9,9	153,6	206
37681363	25,00	0,21	4 (798/32)	11,1	240,0	296
37681364	35,00	0,21	2 (1083/32)	12,6	336,0	390
37681365	50,00	0,31	1 (703/28)	14,7	480,0	554
37681366	70,00	0,31	2/0 (988/28)	17,0	672,0	771
37681367	95,00	0,31	3/0 (1340/28)	20,4	912,0	1024
37681368	120,00	0,31	4/0 (1680/28)	23,0	1152,0	1318
37681369	150,00	0,31	250 MCM (2122/28)	25,7	1440,0	1649

Other dimensions and colours are possible on request.

## S 910 CP

item no.	nominal cross section mm <sup>2</sup>	largest single wire ø mm	AWG/MCM	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
37692340	4,00	0,16	12 (224/34)	7,1	54,5	83
37692360	6,00	0,21	10 (186/32)	8,0	77,3	112
37692361	10,00	0,21	8 (320/32)	8,9	119,7	157
37692362	16,00	0,21	6 (512/32)	10,3	182,6	227
37692363	25,00	0,21	4 (798/32)	11,7	293,9	335
37692364	35,00	0,21	2 (1083/32)	13,3	395,7	434
37692365	50,00	0,31	1 (703/28)	15,8	577,7	631
37692366	70,00	0,31	2/0 (988/28)	17,9	783,2	840
37692367	95,00	0,31	3/0 (1340/28)	22,9	1051,4	1193
37692368	120,00	0,31	4/0 (1680/28)	23,9	1293,3	1421
37692369	150,00	0,31	250 MCM (2122/28)	26,6	1611,3	1773

Other dimensions and colours are possible on request.



### Possible on request:

- with green-yellow insulation

# Cable Track Cable

## S 980 P

continuously flexible TPE/PUR control cable with numbered cores



Marking for S 980 P 77741807:

SAB BRÖCKSKES · D-VIERSEN · 77741812 S 980 P 12 x 0,50 mm<sup>2</sup> 20 AWG/12c 77742012

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

Construction:	
<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 6
<b>Insulation:</b>	TPE
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
<b>Stranding:</b>	specially adjusted layering with netting tape over each layer and one additional non-woven tape over the outer layer
<b>Sheath material:</b>	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
<b>Sheath colour:</b>	grey (RAL 7000)

Technical Data:	
<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Voltage UL/CSA:</b>	600 V
<b>Testing voltage:</b>	core/core 2000 V
<b>Min. bending radius</b> <i>continuously flexible:</i>	7,5 x d
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b> <i>fixed laying:</i> <i>flexible application:</i>	<b>DIN VDE</b> <b>UL/CSA:</b> up to +80 °C -50/+90 °C -40/+90 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, CSA FT1, FT2
<b>Oil resistance:</b>	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Continuous flexibility:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

Outstanding features:	
●	<b>PWIS uncritical</b> (PWIS = paint-wetting impairment substances)
●	<b>halogen-free</b>
●	<b>flexible at low temperatures</b>
●	<b>travel &gt; 10 m is possible</b>
●	<b>high abrasion resistance</b>
●	<b>small bending radius</b>

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
77740305	3 x 0,50	0,16	6,6	14,4	52
77740405	4 x 0,50	0,16	7,1	19,2	61
77740505	5 x 0,50	0,16	7,8	24,0	72
77740705	7 x 0,50	0,16	8,9	33,6	93
77741205	12 x 0,50	0,16	10,5	57,6	139
77741805	18 x 0,50	0,16	12,1	86,4	192
77742505	25 x 0,50	0,16	14,3	120,0	255
77740307	3 x 0,75	0,16	7,1	21,6	60
77740407	4 x 0,75	0,16	7,6	28,8	71
77740507	5 x 0,75	0,16	8,4	36,0	85
77740707	7 x 0,75	0,16	9,6	50,4	109
77740310	3 x 1,00	0,16	7,3	28,8	68
77740410	4 x 1,00	0,16	7,9	38,4	83
77740510	5 x 1,00	0,16	8,6	48,0	98
77740710	7 x 1,00	0,16	10,0	67,2	128
77740315	3 x 1,50	0,16	8,0	43,2	87
77740415	4 x 1,50	0,16	8,9	57,6	108
77740515	5 x 1,50	0,16	9,4	72,0	131
77740715	7 x 1,50	0,16	10,9	100,8	168
77740325	3 x 2,50	0,16	9,3	72,0	126
77740425	4 x 2,50	0,16	10,0	96,0	155
77740525	5 x 2,50	0,16	11,1	120,0	187
77740725	7 x 2,50	0,16	12,8	168,0	249
77740340	3 x 4,00	0,16	10,5	115,2	221
77740440	4 x 4,00	0,16	11,5	153,6	232
77740540	5 x 4,00	0,16	12,6	192,0	271
77740360	3 x 6,00	0,21	12,2	172,8	257
77740460	4 x 6,00	0,21	13,3	230,4	323
77740560	5 x 6,00	0,21	14,6	288,0	376
77740361	3 x 10,0	0,21	15,8	288,0	418
77740461	4 x 10,0	0,21	17,4	384,0	536
77740561	5 x 10,0	0,21	19,5	480,0	653
77740362	3 x 16,0	0,21	18,6	460,8	594
77740462	4 x 16,0	0,21	20,6	614,4	824
77740562	5 x 16,0	0,21	24,5	768,0	1062
77740463	4 x 25,0	0,21	26,0	960,0	1243
77740563	5 x 25,0	0,21	28,9	1200,0	1512
77740464	4 x 35,0	0,21	29,5	1344,0	1626
77740564	5 x 35,0	0,21	32,8	1680,0	1983
77740465	4 x 50,0	0,31	36,2	1920,0	2331

Other dimensions and colours are possible on request.

### further continuously flexible TPE/PUR data and control cables:

- SD 980 P**  
Item groupe 0774  
continuously flexible TPE/PUR data cable with coloured cores for continuous movement  
 21198 80°C 300V CSA AWM I/II A/B 80°C 300V FT1 FT2 CE
- S 980 CP**  
Item groupe 0784  
continuously flexible TPE/PUR control cable with numbered cores and overall copper screen  
 AWM Style 21060 80°C 600V CSA AWM I/II A/B 80°C 600V FT1 FT2 CE
- SD 980 CP**  
Item groupe 0784  
continuously flexible TPE/PUR data cable with coloured cores and overall copper screen  
 80°C 300V CSA AWM I/II A/B 80°C 300V FT1 FT2 CE
- SD 980 CP TP**  
Item groupe 0789  
continuously flexible TPE/PUR paired data cable with coloured cores and overall copper screen  
 300V CSA AWM I/II A/B 80°C 300V FT1 FT2 CE

... for more information: [www.sab-cable.com](http://www.sab-cable.com)



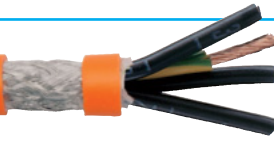
# Servo Motor Cables

## SL 860 C

low capacity PVC motor connection cable with overall copper screen 0.6/1 kV



4 **DESINA** AWM Style 21179 80°C 1000V CE



Marking for SL 860 C 08600415:

SAB BRÜCKSKES · D-VIERSEN · 08600415 4 x 1,5 mm<sup>2</sup> SL 860 C 16 AWG/4c 08601604 **DESINA** AWM Style 21179 80°C 1000V CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	special polymer
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green-yellow earth wire
<b>Stranding:</b>	specially adjusted layering
<b>Wrapping:</b>	foil
<b>Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	PVC
<b>Sheath colour:</b>	orange (RAL 2003)

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 0.6/1 kV	
<b>Voltage UL:</b>	1000 V	
<b>Testing voltage:</b>	core/core 4000 V	core/screen 4000 V
<b>Min. bending radius</b>		
<i>fixed laying:</i>	5 x d	
<i>flexible application:</i>	10 x d	
<b>Temperature range</b>	<b>DIN VDE</b>	<b>UL:</b> up to +80 °C
<i>fixed laying:</i>	-30/+70 °C	
<i>flexible application:</i>	+0/+70 °C	
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT1	
<b>Oil resistance:</b>	very good - TM5 acc. to EN 50363-4-1 + VDE 0207-363-4-1	
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union	

### Outstanding features:



- UL recognized
- very good EMC characteristics
- very good stripping
- low capacity construction
- very good oil resistance

item no.	no. of cores x cross section n x mm <sup>2</sup>	AWG	largest single wire ø mm	outer-ø ± 5 % mm	copper figure kg/km	cable weight ≈ kg/km
08600410	4 x 1,00	18 / 4c	0,21	7,7	58,1	95
08600415	4 x 1,50	16 / 4c	0,26	8,5	81,3	116
08600425	4 x 2,50	14 / 4c	0,26	9,3	125,0	159
08600440	4 x 4,00	12 / 4c	0,31	11,9	207,6	262
08600460	4 x 6,00	10 / 4c	0,31	13,6	290,2	354
08600470	4 x 10,00	8 / 4c	0,41	21,4	493,9	618
08600480	4 x 16,00	6 / 4c	0,41	22,2	753,6	919
08600490	4 x 25,00	4 / 4c	0,41	26,0	1130,3	1319
08600495	4 x 35,00	2 / 4c	0,41	29,3	1538,4	1760
08600496	4 x 50,00	1 / 4c	0,41	30,6	2118,8	2430

Other dimensions and colours are possible on request.

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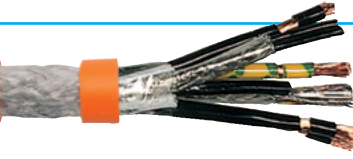
# Servo Motor Cables

## SL 863 C

low capacity combined PVC motor connection cable with overall copper screen 0.6/1 kV



**SINA** AWM Style 21179 80°C 1000V CE



Marking for SL 863 C 08631415:

SAB BRÖCKSKES · D-VIERSEN · 08631415 SL 863 C 4 x 1,50 mm<sup>2</sup> + (2 x 1,50 mm<sup>2</sup>) **DESINA** AWM Style 21179 80°C 1000V CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	special polymer
<b>Colour code:</b>	supply cores: black cores with printing core 1: U/L1/C/L+ core 2: V/L2 core 3: W/L3/D/L- and a green-yellow earth wire control cores: with numbers 5+6
<b>Stranding:</b>	control cores twisted to pairs
<b>Screen:</b>	tinned copper braiding
<b>Wrapping:</b>	PETP foil
<b>Stranding:</b>	screened control pair and supply cores twisted together in layer
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	PVC
<b>Sheath colour:</b>	orange (RAL 2003)

### Technical data:

<b>Nominal voltage:</b>	supply cores U <sub>0</sub> /U 0.6/1 kV
<b>Voltage UL:</b>	supply cores 1000 V
<b>Peak operating voltage:</b>	control cores max. 350 V
<b>Voltage UL:</b>	control cores 1000 V
<b>Testing voltage:</b>	supply cores core/core 4000 V core/screen 4000 V control cores core/core 2000 V core/screen 2000 V
<b>Min. bending radius</b>	
fixed laying:	5 x d
flexible application:	10 x d
<b>Temperature range</b>	<b>DIN VDE</b> <b>UL:</b> up to +80 °C
fixed laying:	-30/+70 °C
flexible application:	+0/+70 °C
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT1
<b>Oil resistance:</b>	very good - TM5 acc. to EN 50363-4-1 + VDE 0207-363-4-1
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

### Outstanding features:



- UL recognized
- very good EMC characteristics
- very good stripping
- low capacity construction
- very good oil resistance

item no.	dimension	AWG		largest single wire ø mm	outer-ø mm	copper figure kg/km	cable weight ≈ kg/km
		supply cores	control cores (pairs)				
08631415	4 x 1,50 + (2 x 1,50)	16 / 4c	16 / 1pr	0,26/0,26	10,4	133,4	178
08631425	4 x 2,50 + (2 x 1,50)	14 / 4c	16 / 1pr	0,26/0,26	12,2	196,7	256
08631440	4 x 4,00 + (2 x 1,50)	12 / 4c	16 / 1pr	0,31/0,26	13,7	260,0	324
08631460	4 x 6,00 + (2 x 1,50)	10 / 4c	16 / 1pr	0,31/0,26	16,2	374,9	472
08631470	4 x 10,00 + (2 x 1,50)	8 / 4c	16 / 1pr	0,41/0,26	18,9	542,3	672
08631480	4 x 16,00 + (2 x 1,50)	6 / 4c	16 / 1pr	0,41/0,26	23,3	802,2	975
08631490	4 x 25,00 + (2 x 1,50)	4 / 4c	16 / 1pr	0,41/0,26	26,7	1178,5	1363
08631495	4 x 35,00 + (2 x 1,50)	2 / 4c	16 / 1pr	0,41/0,26	29,8	1586,4	1789

Other dimensions and colours are possible on request.

**DESINA**  
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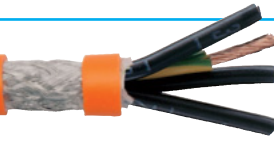
# Servo Motor Cables

## SL 834 C

low capacity PUR motor connection cable with overall copper screen 0.6/1 kV



20235 80°C CSA AWM I/II A/B 80°C 1000V FT1 FT2 CE



Marking for SL 834 C 08340415:

SAB BBRÖCKSKES · D-VERSEN · 08340415 4 x 1,5 mm<sup>2</sup> SL 834 C 16 AWG/4c 1000V 08341604

DESINA AWM Style 20235 80°C CSA AWM I/II A/B 80°C 1000V FT1 FT2 CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 6
<b>Insulation:</b>	special polymer
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	non-woven tape
<b>Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	PUR
<b>Sheath colour:</b>	orange (RAL 2003)

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 0.6/1 kV	
<b>Voltage UL/CSA:</b>	1000 V	
<b>Testing voltage:</b>	core/core 4000 V	core/screen 4000 V
<b>Min. bending radius</b>		
fixed laying:	5 x d	
flexible application:	10 x d	
continuously flexible:	12 x d	
<b>Temperature range</b>	DIN VDE	UL/CSA: up to +80 °C
fixed laying:	-50/+70 °C	
flexible application:	-40/+70 °C	
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT1, CSA FT1, FT2	
<b>Oil resistance:</b>	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2	
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.	
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union	

### Outstanding features:



- UL recognized, CSA approval
- low capacity construction
- very good EMC characteristics
- halogen-free
- very high flexibility
- suitable for cable tracks
- very good oil resistance
- very long service life
- adhesion-free installation
- PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- flexible at low temperatures
- DESINA® colours



for DNC motors  
on frequency converters

item no.	no. of cores x cross section n x mm <sup>2</sup>	AWG	largest single wire ø mm	outer-ø ± 5 % mm	copper figure kg/km	cable weight ≈ kg/km
08340415	4 x 1,50	16 / 4c	0,16	9,0	83,5	126
08340425	4 x 2,50	14 / 4c	0,16	10,8	142,5	195
08340440	4 x 4,00	12 / 4c	0,16	12,4	206,5	270
08340460	4 x 6,00	10 / 4c	0,21	15,4	298,1	398
08340470	4 x 10,00	8 / 4c	0,21	17,6	494,7	604
08340480	4 x 16,00	6 / 4c	0,21	22,7	749,7	953
08340490	4 x 25,00	4 / 4c	0,21	25,6	1119,8	1303
08340495	4 x 35,00	2 / 4c	0,21	28,9	1532,9	1750
08340496	4 x 50,00	1 / 4c	0,31	34,5	2144,5	2486

Other dimensions and colours are possible on request.

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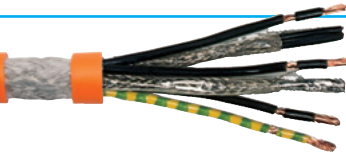
# Servo Motor Cables

## SL 871 C

low capacity combined PUR motor connection cable with overall copper screen 0.6/1 kV



1000V CSA AWM I/II A/B 80°C 300V FT1 FT2 CE



Marking for SL 871 C 08710415:

SAB BRÖCKSKES · D-VIERSEN · SL 871 C 4 x 1,5 mm<sup>2</sup> (1000V) + (2 x 1,5 mm<sup>2</sup>) (300V) 0871-0415

DESINA AWM Style 20235 80°C 1000V CSA AWM I/II A/B 80°C 300V FT1 FT2 CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 6 < 0,50 mm <sup>2</sup> with reference to VDE 0812
<b>Insulation:</b>	special polymer
<b>Colour code:</b>	supply cores up to 08710496: black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green-yellow earth wire supply cores up to 08711415: core 1: U/L1/C/L+, core 2: V/L2, core 3: W/L3/D/L- and a green-yellow earth wire control cores: with 1 control pair: black, white with 2 control pairs: black with numbers 5, 6 and 7, 8
<b>Stranding:</b>	control cores: twisted to pairs
<b>Wrapping:</b>	control cores: non-woven tape
<b>Screen:</b>	control cores: tinned copper braiding
<b>Wrapping:</b>	control cores: non-woven tape
<b>Stranding:</b>	screened control pairs and supply cores twisted together with fillers in layers
<b>Wrapping:</b>	non-woven tape
<b>Screen:</b>	overall copper screen
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
<b>Sheath colour:</b>	orange (RAL 2003)

### Technical data:

<b>Nominal voltage:</b>	supply cores 0.6/1 kV
<b>Peak operating voltage:</b>	control cores max. 350 V
<b>Voltage UL/CSA:</b>	supply cores 1000 V control cores 300 V (from 08711415: 1000 V)
<b>Testing voltage:</b>	supply cores core/core 4000 V core/screen 4000 V control cores core/core 2000 V core/screen 2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
<i>continuously flexible:</i>	12 x d
<b>Temperature range</b>	<b>DIN VDE</b> -50/+90 °C <b>UL/CSA:</b> up to +80°C
<i>fixed laying:</i>	-50/+90 °C
<i>flexible application:</i>	-40/+90 °C
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT1, CSA FT1, FT2
<b>Oil resistance:</b>	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

### Outstanding features:



- low capacity construction
- UL recognized, CSA approval
- very good EMC characteristics
- long service life
- adhesion-free installation
- high flexibility
- suitable for cable tracks
- halogen-free
- PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- flexible at low temperatures
- DESINA® colours



Cable harnessing possible on request

item no.	dimension	AWG		largest single wire ø mm	outer-ø mm	copper figure kg/km	cable weight ≈ kg/km
		supply cores	control cores (pairs)				
08710407	4 x 0,75 + 2 x (2 x 0,34)	19 / 4c	22 / 2pr	0,16/0,11	11,6 ± 0,5	117,1	168
08710410	4 x 1,00 + 2 x (2 x 0,75)	18 / 4c	19 / 2pr	0,16	11,8 ± 0,5	150,1	201
08710415	4 x 1,50 + 2 x (2 x 0,75)	16 / 4c	19 / 2pr	0,16	12,3 ± 0,5	170,1	224
08710425	4 x 2,50 + 2 x (2 x 1,00)	14 / 4c	18 / 2pr	0,16	14,5 ± 0,8	231,8	320
08710441	4 x 4,00 + (2 x 1,00) + (2 x 1,50)	12 / 4c	18 / 1pr + 16 / 1pr	0,16	17,4 ± 0,6	343,0	458
08710461	4 x 6,00 + (2 x 1,00) + (2 x 1,50)	10 / 4c	18 / 1pr + 16 / 1pr	0,21/0,16	18,9 ± 0,8	432,8	557
08710471	4 x 10,00 + (2 x 1,00) + (2 x 1,50)	8 / 4c	18 / 1pr + 16 / 1pr	0,21/0,16	20,4 ± 1,0	603,7	758
08710485	4 x 16,00 + 2 x (2 x 1,50)	6 / 4c	16 / 2pr	0,21/0,16	26,0 ± 0,8	875,7	1111
08710490	4 x 25,00 + 2 x (2 x 1,50)	4 / 4c	16 / 2pr	0,21/0,16	29,4 ± 0,8	1251,1	1517
08710495	4 x 35,00 + 2 x (2 x 1,50)	2 / 4c	16 / 2pr	0,21/0,16	31,3 ± 0,8	1644,6	1882
08710496	4 x 50,00 + 2 x (2 x 2,50)	1 / 4c	14 / 2pr	0,31/0,16	38,2 ± 0,8	2317,6	2659
08711415	4 x 1,50 + (2 x 1,50)	16 / 4c	16 / 1pr	0,16/0,16	12,0 ± 0,3	159,0	200
08711425	4 x 2,50 + (2 x 1,50)	14 / 4c	16 / 1pr	0,16/0,16	13,0 ± 0,3	204,0	290
08711440	4 x 4,00 + (2 x 1,50)	12 / 4c	16 / 1pr	0,16/0,16	15,0 ± 0,3	259,0	340
08711460	4 x 6,00 + (2 x 1,50)	10 / 4c	16 / 1pr	0,21/0,16	16,6 ± 0,4	377,0	470
08711470	4 x 10,00 + (2 x 1,50)	8 / 4c	16 / 1pr	0,21/0,16	19,5 ± 0,4	566,0	700
08711480	4 x 16,00 + (2 x 1,50)	6 / 4c	16 / 1pr	0,21/0,16	23,0 ± 0,4	814,8	1010
08711490	4 x 25,00 + (2 x 1,50)	4 / 4c	16 / 1pr	0,21/0,16	27,0 ± 0,5	1175,0	1450
08711495	4 x 35,00 + (2 x 1,50)	2 / 4c	16 / 1pr	0,21/0,16	30,0 ± 0,5	1586,0	2160
08711496	4 x 50,00 + (2 x 1,50)	1 / 4c	16 / 1pr	0,26/0,16	34,4 ± 0,5	2192,0	2950

Other dimensions and colours are possible on request.

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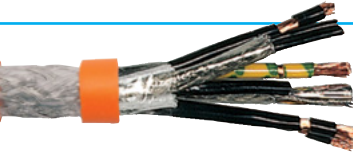
# Servo Motor Cables

## SL 875 C

low capacity hybrid motor connection cable with overall copper screen 0.6/1 kV



0 80°C CSA AWM I/II A/B 80°C 300V FT1 FT2 CE



Marking for SL 875 C 08750105:

SAB BRÖCKSKES · D-VIERSEN · 08750105 SL 875 C 4G1,5 mm<sup>2</sup> (1000V) + (2 x 1,0 mm<sup>2</sup>)C (1000V) + (2 x AWG 22)C (1000V)

DESINA AWM Style 20910 80°C CSA AWM I/II A/B 80°C 300V FT1 FT2 CE

Construction:	
<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 6 < 0,50 mm <sup>2</sup> with reference to VDE 0812
<b>Insulation:</b>	special polymer
<b>Colour code:</b>	<b>item 087501 . . .</b> supply cores: black cores with printing core 1: U/L1/C/L+ core 2: V/L2 core 3: W/L3/D/L- and a green-yellow earth wire control cores: black cores with number 5+6 feedback: white, blue <b>item 087505 . . .</b> supply cores: black, blue, brown, green-yellow control cores: white-blue, white-green feedback: white-green, brown-green + gray, pink, yellow, violet
<b>Stranding:</b>	control cores pairwise, <b>item 087501 . . .</b> feedbackcores pairwise <b>item 087505 . . .</b> feedbackcores 0,09 mm <sup>2</sup> pairwise pairs with cores 0,24 mm <sup>2</sup> in layers optimally stranded
<b>Wrapping:</b>	non-woven tape resp. foil
<b>Screen:</b>	elements with tinned copper braiding <b>item 087501 . . .</b> feedbackcores additional alu foil
<b>Wrapping:</b>	non-woven tape resp. foil
<b>Stranding:</b>	screened elements and supply cores in layers optimally stranded
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
<b>Sheath colour:</b>	orange (RAL 2003)

Technical data:	
<b>Nominal voltage:</b>	DIN VDE: supply cores U <sub>o</sub> /U 0.6/1 kV
<b>Peak operating voltage:</b>	DIN VDE: control cores + feedbackcores max. 500 V
<b>Voltage:</b>	<b>UL:</b> 1000 V <b>CSA:</b> ≥ 0,5 mm <sup>2</sup> 1000 V < 0,5 mm <sup>2</sup> 300 V
<b>Testing voltage:</b>	supply cores + core/core 4000 V control cores core/screen 4000 V feedbackcores core/core 3000 V core/screen 3000 V
<b>Min. bending radius</b>	<i>fixed laying:</i> 5 x d <i>flexible application:</i> 10 x d <i>continuously flexible:</i> 12 x d
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	DIN VDE UL/CSA: up to +80 °C <i>fixed laying:</i> -50/+90 °C <i>flexible application:</i> -40/+90 °C
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT1, CSA FT1, FT2
<b>Oil resistance:</b>	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

**Outstanding features:**

- used as all-in-one cable solution in motor feedback systems
- low capacity construction
- UL recognized, CSA approval
- very good EMC characteristics
- long service life
- adhesion-free installation
- suitable for cable tracks
- halogen-free
- PWIS uncritical (PWIS = paint-wetting impairment substances)
- flexible at low temperatures
- DESINA® colours

item no.	dimension	outer-ø approx. mm	copper figure kg/km	cable weight ≈ kg/km
<b>acc. to SICK HIPERFACE DSL*</b>				
08750101	4 x 0,50 + (2 x 0,34)C + (2 x 26 AWG)C	9,8	85,2	131
08750102	4 x 0,75 + (2 x 0,34)C + (2 x 26 AWG)C	10,0	95,4	139
08750103	4 x 1,00 + (2 x 0,75)C + (2 x 22 AWG)C	11,8	155,2	199
08750104	4 x 1,50 + (2 x 0,75)C + (2 x 22 AWG)C	12,6	176,5	230
08750105	4 x 1,50 + (2 x 1,00)C + (2 x 22 AWG)C	12,8	181,7	237
08750106	4 x 2,50 + (2 x 1,00)C + (2 x 22 AWG)C	13,9	222,0	286
08750107	4 x 4,00 + (2 x 1,00)C + (2 x 22 AWG)C	15,4	292,8	376
08750108	4 x 6,00 + (2 x 1,00)C + (2 x 22 AWG)C	18,1	414,2	520
08750109	4 x 10,00 + (2 x 1,50)C + (2 x 22 AWG)C	20,0	593,3	715
08750110	4 x 16,00 + (2 x 1,50)C + (2 x 22 AWG)C	24,4	851,9	1055
<b>acc. to HEIDENHAIN HMC6*</b>				
08750501	4 x 0,75 + (2 x 0,34)C + (2 x 0,24 + 2 x 2 x 0,09)C	10,8	122,7	163
08750502	4 x 1,50 + (2 x 0,75)C + (2 x 0,24 + 2 x 2 x 0,09)C	12,1	171,1	219
08750503	4 x 2,50 + (2 x 1,00)C + (2 x 0,24 + 2 x 2 x 0,09)C	13,7	224,0	282
08750504	4 x 4,00 + (2 x 1,00)C + (2 x 0,24 + 2 x 2 x 0,09)C	15,4	288,2	359

Other dimensions and colours are possible on request.

Note: SICK HIPERFACE DSL® is a registered trademark of SICK AG. It is only used for comparative purposes.  
HEIDENHAIN HMC6® is a registered trademark of Dr. Johannes Heidenhain GmbH.  
It is only used for comparative purposes.



# Servo Motor Cables

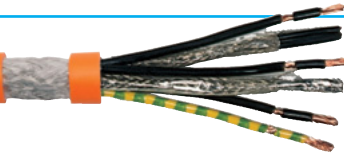
## SL 801 C

combined TPE/PUR motor connection cable with overall copper screen 0.6/1 kV

suitable for  
cable tracks and  
very good EMC

SAB Servo

0,75 mm<sup>2</sup> + 2 x (2 x 0,34 mm<sup>2</sup>) **DESINA** CE



Marking for SL 801 C 08010407:

SAB BRÖCKSKES · D-VIERSEN · SL 801 C 4 x 0,75 mm<sup>2</sup> + 2 x (2 x 0,34 mm<sup>2</sup>) **DESINA** CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 6 >0,5 mm <sup>2</sup> with reference to VDE 0812
<b>Insulation:</b>	TPE
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334 (except 0,34 mm <sup>2</sup> = coloured) and a green-yellow earth wire supply cores: U1, V2, W3 and a green-yellow earth wire control cores: BR1 and BR2
<b>from item no. 08011415:</b>	
<b>Stranding:</b>	control cores 0,34 mm <sup>2</sup> - 2,5 mm <sup>2</sup> twisted to pairs
<b>Screen:</b>	pairs wrapped with alu foil, tinned copper braiding
<b>Wrapping:</b>	pairs with PETP foil
<b>Stranding:</b>	screened control pairs and supply cores twisted together in layers
<b>Wrapping:</b>	non-woven tape
<b>Screen:</b>	tinned copper braiding
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
<b>Sheath colour:</b>	orange (RAL 2003)

### Technical data:

<b>Nominal voltage:</b>	supply cores	U <sub>0</sub> /U 0.6/1 kV
<b>Peak operating voltage:</b>	control cores	max. 500 V
<b>Testing voltage:</b>	supply cores	core/core 4000 V core/screen 4000 V
	control cores	core/core 1500 V core/screen 1200 V
<b>Min. bending radius</b>	<i>fixed laying:</i>	5 x d
	<i>flexible application:</i>	10 x d
	<i>continuously flexible:</i>	12 x d
<b>Radiation resistance:</b>		5 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	<i>fixed laying:</i>	-50/+90 °C
	<i>flexible application:</i>	-40/+90 °C
<b>Oil resistance:</b>		very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Chem. resistance:</b>		good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Weather resistance:</b>		very good
<b>Absence of harmful substances:</b>		acc. to RoHS directive of the European Union

### Outstanding features:



- very good EMC characteristics
- long service life
- suitable for cable tracks
- adhesion-free installation
- high flexibility
- halogen-free
- PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- flexible at low temperatures
- DESINA® colours



Cable harnessing  
possible on request

item no.	dimension	AWG		largest single wire ø mm	outer-ø mm	copper figure kg/km	cable weight ≈ kg/km
		supply cores	control cores (pairs)				
08010407	4 x 0,75 + 2 x (2 x 0,34)	19 / 4c	22 / 2pr	0,16/0,11	10,5 ± 0,5	115,5	160
08010410	4 x 1,00 + 2 x (2 x 0,75)	18 / 4c	19 / 2pr	0,16	12,0 ± 0,5	154,2	209
08010415	4 x 1,50 + 2 x (2 x 0,75)	16 / 4c	19 / 2pr	0,16	12,2 ± 0,5	174,3	233
08010425	4 x 2,50 + 2 x (2 x 1,00)	14 / 4c	18 / 2pr	0,16	15,0 ± 0,8	236,8	312
08010441	4 x 4,00 + (2 x 1,00) + (2 x 1,50)	12 / 4c	18 / 1pr + 16 / 1pr	0,16	17,8 ± 0,6	349,8	463
08010461	4 x 6,00 + (2 x 1,00) + (2 x 1,50)	10 / 4c	18 / 1pr + 16 / 1pr	0,21/0,16	18,6 ± 0,8	437,6	580
08010471	4 x 10,00 + (2 x 1,00) + (2 x 1,50)	8 / 4c	18 / 1pr + 16 / 1pr	0,21/0,16	22,5 ± 1,0	613,5	792
08010485	4 x 16,00 + 2 x (2 x 1,50)	6 / 4c	16 / 2pr	0,21/0,16	27,6 ± 0,8	880,6	1130
08010490	4 x 25,00 + 2 x (2 x 1,50)	4 / 4c	16 / 2pr	0,21/0,16	28,0 ± 1,0	1237,0	1507
08010495	4 x 35,00 + 2 x (2 x 1,50)	2 / 4c	16 / 2pr	0,21/0,16	32,0 ± 1,0	1647,3	2011
08010496	4 x 50,00 + 2 x (2 x 2,50)	1 / 4c	14 / 2pr	0,21/0,16	38,2 ± 1,0	2324,0	2866
08011415	4 x 1,50 + (2 x 1,50)	16 / 4c	16 / 1pr	0,16	12,5 ± 0,4	161,8	213
08011425	4 x 2,50 + (2 x 1,50)	14 / 4c	16 / 1pr	0,16	13,8 ± 0,4	202,1	266
08011440	4 x 4,00 + (2 x 1,50)	12 / 4c	16 / 1pr	0,16	14,9 ± 0,4	270,4	353
08011460	4 x 6,00 + (2 x 1,50)	10 / 4c	16 / 1pr	0,21/0,16	16,7 ± 1,1	382,5	490
08011470	4 x 10,00 + (2 x 1,50)	8 / 4c	16 / 1pr	0,21/0,16	19,2 ± 1,6	549,4	698
08011480	4 x 16,00 + (2 x 1,50)	6 / 4c	16 / 1pr	0,21/0,16	23,0 ± 1,7	802,2	1008
08011490	4 x 25,00 + (2 x 1,50)	4 / 4c	16 / 1pr	0,21/0,16	26,9 ± 1,0	1171,1	1448
08011495	4 x 35,00 + (2 x 1,50)	2 / 4c	16 / 1pr	0,21/0,16	31,0 ± 1,0	1592,3	2012
08011496	4 x 50,00 + (2 x 1,50)	1 / 4c	16 / 1pr	0,21/0,16	34,8 ± 1,0	2203,3	2695

Other dimensions and colours are possible on request.

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DESINA® is a registered trademark of the German Machine Tool Builders' Association.

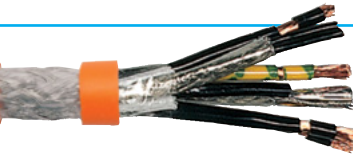
# Servo Motor Cables

## SL 841 C

combined TPE/PUR motor connection cable with overall copper screen 0.6/1 kV



80°C CSA AWM I/II A/B 80°C 300V FT1 FT2 CE



Marking for SL 841 C 08410407:

SAB BRÖCKSKES · D-VIERSEN · 08410407 SL 841 C 4 x 0,75 mm<sup>2</sup> (1000V) + 2 x (2 x 0,34 mm<sup>2</sup>) (300V)

DESINA AWM Style 20235 80°C CSA AWM I/II A/B 80°C 300V FT1 FT2 CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 6 < 0,50 mm <sup>2</sup> with reference to VDE 0812
<b>Insulation:</b>	TPE
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green-yellow earth wire
<b>from item no. 08411415:</b>	supply cores: * U1, V2, W3 and a green-yellow earth wire control cores: ** BR1 and BR2
<b>Stranding:</b>	control cores 0,34 mm <sup>2</sup> - 2,5 mm <sup>2</sup> twisted to pairs
<b>Screen:</b>	pairs wrapped with alu foil, tinned copper braiding
<b>Wrapping:</b>	pairs with PETP foil
<b>Stranding:</b>	screened control pairs and supply cores twisted together in layers
<b>Wrapping:</b>	two layers non-woven tape
<b>Screen:</b>	overall copper screen
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
<b>Sheath colour:</b>	orange (RAL 2003)

### Technical data:

<b>Nominal voltage:</b>	supply cores U <sub>0</sub> /U 0.6/1 kV
<b>Peak operating voltage:</b>	control cores max. 350 V
<b>Voltage UL/CSA:</b>	supply cores 1000 V control cores 300 V
<b>Testing voltage:</b>	supply cores core/core 4000 V core/screen 4000 V control cores core/core 2000 V core/screen 2000 V
<b>Min. bending radius</b>	5 x d
<i>fixed laying:</i>	10 x d
<i>flexible application:</i>	12 x d
<i>continuously flexible:</i>	
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	DIN VDE UL/CSA: up to +80 °C
<i>fixed laying:</i>	-50/+90 °C
<i>flexible application:</i>	-40/+90 °C
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT1, CSA FT1, FT2
<b>Oil resistance:</b>	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

### Outstanding features:



- UL recognized, CSA approval
- very good EMC characteristics
- long service life
- adhesion-free installation
- high flexibility
- suitable for cable tracks
- halogen-free
- PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- flexible at low temperatures
- DESINA® colours



Cable harnessing possible on request

item no.	dimension	AWG		largest single wire ø mm	outer-ø mm	copper figure kg/km	cable weight ≈ kg/km
		supply cores	control cores (pairs)				
08410407	4 x 0,75 + 2 x (2 x 0,34)	19 / 4c	22 / 2pr	0,16/0,11	11,6 ± 0,5	117,1	168
08410410	4 x 1,00 + 2 x (2 x 0,75)	18 / 4c	19 / 2pr	0,16	11,8 ± 0,5	150,1	201
08410415	4 x 1,50 + 2 x (2 x 0,75)	16 / 4c	19 / 2pr	0,16	12,3 ± 0,5	170,1	228
08410425	4 x 2,50 + 2 x (2 x 1,00)	14 / 4c	18 / 2pr	0,16	14,5 ± 0,8	231,8	320
08410441	4 x 4,00 + (2 x 1,00) + (2 x 1,50)	12 / 4c	18 / 1pr + 16 / 1pr	0,16	17,4 ± 0,6	343,0	458
08410461	4 x 6,00 + (2 x 1,00) + (2 x 1,50)	10 / 4c	18 / 1pr + 16 / 1pr	0,21/0,16	18,9 ± 0,8	432,8	557
08410471	4 x 10,00 + (2 x 1,00) + (2 x 1,50)	8 / 4c	18 / 1pr + 16 / 1pr	0,21/0,16	20,4 ± 1,0	603,7	736
08410485	4 x 16,00 + 2 x (2 x 1,50)	6 / 4c	16 / 2pr	0,21/0,16	26,0 ± 0,8	875,7	1111
08410490	4 x 25,00 + 2 x (2 x 1,50)	4 / 4c	16 / 2pr	0,21/0,16	29,4 ± 0,8	1251,1	1517
08410495	4 x 35,00 + 2 x (2 x 1,50)	2 / 4c	16 / 2pr	0,21/0,16	31,3 ± 0,8	1644,6	1882
08410496	4 x 50,00 + 2 x (2 x 2,50)	1 / 4c	14 / 2pr	0,31/0,16	38,2 ± 0,8	2317,6	2659
08411415	4 x 1,50 + (2 x 1,50)	16 / 4c	16 / 1pr	0,16	12,5 ± 0,3	159,9	222
08411425	4 x 2,50 + (2 x 1,50)	14 / 4c	16 / 1pr	0,16	13,3 ± 0,4	204,8	285
08411440	4 x 4,00 + (2 x 1,50)	12 / 4c	16 / 1pr	0,16	15,2 ± 0,4	268,8	369
08411460	4 x 6,00 + (2 x 1,50)	10 / 4c	16 / 1pr	0,21/0,16	16,6 ± 1,1	377,5	485
08411470	4 x 10,00 + (2 x 1,50)	8 / 4c	16 / 1pr	0,21/0,16	19,5 ± 1,6	555,8	677
08411480	4 x 16,00 + (2 x 1,50)	6 / 4c	16 / 1pr	0,21/0,16	23,7 ± 1,0	814,8	1019
08411490	4 x 25,00 + (2 x 1,50)	4 / 4c	16 / 1pr	0,21/0,16	27,2 ± 0,7	1175,6	1418
08411495	4 x 35,00 + (2 x 1,50)	2 / 4c	16 / 1pr	0,21/0,16	30,1 ± 1,0	1586,4	1810
08411496	4 x 50,00 + (2 x 1,50)	1 / 4c	16 / 1pr	0,31/0,16	34,4 ± 1,0	2192,4	2463

Other dimensions and colours are possible on request.

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# Servo Motor Cables

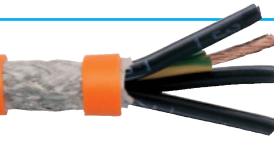
## SL 823 C

PUR motor connection cable with TPE cores and overall copper screen 0.6/1 kV

extremely long  
service life

SAB Servo

ISEN · SL 823 C 0,6/1 kV 4 x 1,5 mm<sup>2</sup> **DESINA** CE



Marking for SL 823 C 08230415:

SAB BRÖCKSKES · D-VIERSEN · SL 823 C 0,6/1 kV 4 x 1,5 mm<sup>2</sup> **DESINA** CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 6
<b>Insulation:</b>	TPE
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	two layers of non-woven tape
<b>Screen:</b>	tinned copper braiding
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
<b>Sheath colour:</b>	orange (RAL 2003)

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 0.6/1 kV
<b>Testing voltage:</b>	core/core 4000 V core/screen 4000 V
<b>Min. bending radius</b>	
fixed laying:	5 x d
flexible application:	10 x d
continuously flexible:	12 x d
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
fixed laying:	-50/+90 °C
flexible application:	-40/+90 °C
<b>Oil resistance:</b>	very good - TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

### Outstanding features:

- very good EMC characteristics
- very high flexibility
- suitable for cable tracks
- oil resistant
- very long service life
- adhesion-free installation
- halogen-free
- PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- flexible at low temperatures
- DESINA® colours



for DNC motors  
on frequency converters

**DESINA**

item no.	no. of cores x cross section n x mm <sup>2</sup>	AWG	largest single wire ø mm	outer-ø ± 5 % mm	copper figure kg/km	cable weight ≈ kg/km
08230415	4 x 1,50	16 / 4c	0,16	9,5	95,8	141
08230425	4 x 2,50	14 / 4c	0,16	11,9	147,0	217
08230440	4 x 4,00	12 / 4c	0,16	13,0	210,2	289
08230460	4 x 6,00	10 / 4c	0,21	15,9	300,5	420
08230470	4 x 10,00	8 / 4c	0,21	18,5	489,9	627
08230480	4 x 16,00	6 / 4c	0,21	22,4	751,3	965
08230490	4 x 25,00	4 / 4c	0,21	25,5	1118,2	1363
08230495	4 x 35,00	2 / 4c	0,21	29,5	1533,4	1848
08230496	4 x 50,00	1 / 4c	0,31	34,5	2148,7	2553

Other dimensions and colours are possible on request.

Note: DESINA® is a registered trademark of the German Machine Tool Builders' Association.



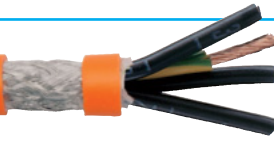
# Servo Motor Cables

## SL 833 C

PUR motor connection cable with TPE cores and overall copper screen 0.6/1 kV



20235 80°C CSA AWM I/II A/B 80°C 1000V FT1 FT2 CE



Marking for SL 833 C 08330415:

SAB BRÖCKSKES · D-VIERSEN · 08330415 4 x 1,5 mm<sup>2</sup> SL 833 C 16 AWG/4c 1000V 08331604

DESINA AWM Style 20235 80°C CSA AWM I/II A/B 80°C 1000V FT1 FT2 CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 6
<b>Insulation:</b>	TPE
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334 and a green-yellow earth wire
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	non-woven tape
<b>Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	PU acc. to UL 758
<b>Sheath colour:</b>	orange (RAL 2003)

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 0.6/1 kV	
<b>Voltage UL/CSA:</b>	1000 V	
<b>Testing voltage:</b>	core/core 4000 V	core/screen 4000 V
<b>Min. bending radius</b>		
fixed laying:	5 x d	
flexible application:	10 x d	
continuously flexible:	12 x d	
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg	
<b>Temperature range</b>	DIN VDE	UL/CSA: up to +80 °C
fixed laying:	-50/+80 °C	
flexible application:	-40/+80 °C	
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT1, CSA FT1, FT2	
<b>Oil resistance:</b>	very good - oilrating 60 °C acc. to UL 1581	
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.	
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union	

### Outstanding features:



- UL recognized, CSA approval
- very good EMC characteristics
- very high flexibility
- suitable for cable tracks
- oil resistant
- very long service life
- adhesion-free installation
- PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- flexible at low temperatures
- DESINA® colours



for DNC motors  
on frequency converters

item no.	no. of cores x cross section n x mm <sup>2</sup>	AWG	largest single wire ø mm	outer-ø ± 5 % mm	copper figure kg/km	cable weight ≈ kg/km
08330415	4 x 1,50	16 / 4c	0,16	9,1	83,5	126
08330425	4 x 2,50	14 / 4c	0,16	11,0	142,5	192
08330440	4 x 4,00	12 / 4c	0,16	12,5	206,7	273
08330460	4 x 6,00	10 / 4c	0,21	15,5	298,3	399
08330470	4 x 10,00	8 / 4c	0,21	17,8	495,2	605
08330480	4 x 16,00	6 / 4c	0,21	22,8	750,0	951
08330490	4 x 25,00	4 / 4c	0,21	25,7	1120,2	1331
08330495	4 x 35,00	2 / 4c	0,21	29,2	1534,3	1732
08330496	4 x 50,00	1 / 4c	0,31	34,3	2144,0	2428

Other dimensions and colours are possible on request.

Note: DESINA® is a registered trademark of the German Machine Tool Builders' Association.

# Servo Motor Cables

**SL 802 C** TPE/PUR feedback cable with overall copper screen

**SL 803 C** TPE/PUR transmission cable with overall copper screen

suitable for  
cable tracks

SAB Servo

BOSCH REXROTH · D-VIERSEN · SL 802 C 9 x 0,5 mm<sup>2</sup> CE



Marking for SL 802 C 08020050:

SAB BRÖCKSKES · D-VIERSEN · SL 802 C 9 x 0,5 mm<sup>2</sup> CE



4 x 2 x 0,14 mm<sup>2</sup> + 4 x 0,5 mm<sup>2</sup> DESINA CE



Marking for SL 803 C 08030012:

SAB BRÖCKSKES · D-VIERSEN · SL 803 C 4 x 2 x 0,14 mm<sup>2</sup> + 4 x 0,5 mm<sup>2</sup> DESINA CE

## Construction:

<b>Conductor:</b>	bare copper strands with reference to VDE 0812
<b>Insulation:</b>	TPE
<b>Colour code:</b>	coloured
<b>Stranding</b>	
<b>SL 802 C:</b>	in layers
<b>SL 803 C:</b>	in layers or pairwise
	<i>acc. to dimension:</i>
<b>Screen:</b>	pairs with tinned copper wires braided or wrapped
<b>Inner sheath:</b>	TPE
<b>Stranding:</b>	cores/pairs twisted together in layers
<b>Wrapping:</b>	non-woven tape or netting tape
<b>Screen:</b>	tinned copper braiding
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
<b>Sheath colour</b>	<b>SL 802 C:</b> orange (RAL 2003) <b>SL 803 C:</b> green (RAL 6018)

## Technical data:

<b>Peak operating voltage</b>	
<b>SL 802 C:</b>	max. 500 V
<b>SL 803 C:</b>	max. 350 V
<b>Testing voltage:</b>	core/core 2000 V core/screen 1200 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
<i>continuously flexible:</i>	12 x d
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-50/+90 °C
<i>flexible application:</i>	-40/+90 °C
<b>Oil resistance:</b>	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Weather resistance:</b>	very good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

## Outstanding features:



- very good EMC characteristics
- very high flexibility
- very long service life
- suitable for cable tracks
- adhesion-free installation
- oil resistant
- halogen-free
- PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- flexible at low temperatures
- DESINA® colours



suitable for  
resolvers and shaft encoders

item no.	dimension	sheath colour	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
motor feedback cable						
08020050	9 x 0,50	orange	0,16	7,8	66,2	97
transmission cable						
08030009	4 x 2 x 0,25 + 2 x 0,50	orange	0,11/0,16	7,8	51,8	81
08030010	4 x 2 x 0,25 + 2 x 1,00	orange	0,11/0,16	7,9	63,3	93
08030160	3 x 2 x 0,25 + 3 x 0,25 + 2 x 1,00	orange	0,11/0,16	7,9	65,8	96
08030040	3 x 2 x 0,25	orange	0,11	6,3	33,2	52
08030060	4 x 2 x 0,14 + (4 x 0,14) D + 4 x 1,00	orange	0,11/0,16	9,7	88,5	135
08030012	4 x 2 x 0,14 + 4 x 0,50	green	0,11/0,16	7,9	54,9	86
08030112	10 x 0,14 + 2 x 0,50	green	0,11/0,16	7,0	44,0	66
08030114	10 x 0,14 + 4 x 0,50	green	0,11/0,16	7,8	55,6	83
08030013	4 x 2 x 0,38 + 4 x 0,50	green	0,11/0,16	8,9	75,9	112
08030020	3 x (2 x 0,14 C) + 2 x 1,00	green	0,11/0,16	8,6	80,6	102
08030022	3 x (2 x 0,14 C) + 2 x (0,50 C)	green	0,11/0,16	8,8	87,6	108
08031050	3 x (2 x 0,14 D) + 4 x 0,14 + 4 x 0,22 + 2 x 0,50	green	0,11	9,5	77,9	121

Other dimensions and colours are possible on request.

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# Servo Motor Cables



**SL 842 C** TPE/PUR feedback cable with overall copper screen

**SL 843 C** TPE/PUR transmission cable with overall copper screen



Marking for SL 842 C 08420050:

SAB BRÜCKSKES · D-VIERSEN · 08420050 9 x 0,5 mm<sup>2</sup> SL 842 C 20 AWG/9c 08422009

AWM-Style 20233 80°C 300V CSA AWM I/II A/B 80°C 300V FT1 FT2 CE



Marking for SL 843 C 08431050:

SAB BRÜCKSKES · D-VIERSEN · 08431050 SL 843 C 3 x (2 x 0,14 mm<sup>2</sup> D) + 4 x 0,22 mm<sup>2</sup> + 2 x 0,5 mm<sup>2</sup>

DESINA AWM-Style 20235 80°C 300V CSA AWM I/II A/B 80°C 300V FT1 CE

## Construction:

<b>Conductor:</b>	bare copper strands with reference to VDE 0812
<b>Insulation:</b>	TPE
<b>Colour code:</b>	coloured
<b>Stranding</b>	<b>SL 842 C:</b> in layers <b>SL 843 C:</b> in layers or pairwise
<b>Screen:</b>	acc. to dimension: pairs with tinned copper wires braided or wrapped
<b>Inner sheath:</b>	TPE over screened pairs
<b>Stranding:</b>	cores/pairs twisted together in layers
<b>Wrapping:</b>	one or two layers non-woven tape
<b>Screen:</b>	tinned copper braiding
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
<b>Sheath colour</b>	<b>SL 842 C:</b> orange (RAL 2003) <b>SL 843 C:</b> orange (RAL 2003) resp. green (RAL 6018)

## Technical data:

<b>Peak operating voltage</b>		
<b>SL 842 C:</b>	max. 500 V	
<b>SL 843 C:</b>	max. 350 V	
<b>Voltage UL/CSA:</b>	300 V	
<b>Testing voltage:</b>	core/core	2000 V
	core/screen	2000 V
<b>Min. bending radius</b>		
<i>fixed laying:</i>	5 x d	
<i>flexible application:</i>	10 x d	
<i>continuously flexible:</i>	12 x d	
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg	
<b>Temperature range</b>	<b>DIN VDE</b>	<b>UL/CSA:</b> up to +80 °C
<i>fixed laying:</i>	-50/+90 °C	
<i>flexible application:</i>	-40/+90 °C	
<b>Fire performance</b>	flame retardant and self-extinguishing	
<b>SL 842 C:</b>	acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT1, CSA FT1, FT2	
<b>Fire performance</b>	flame retardant and self-extinguishing	
<b>SL 843 C:</b>	acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL/CSA FT1	
<b>Oil resistance:</b>	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2	
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.	
<b>Weather resistance:</b>	very good	
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“	

## Outstanding features:



- UL recognized, CSA approval
- good EMC characteristics
- high flexibility
- suitable for cable tracks
- oil resistant
- long service life
- adhesion-free installation
- halogen-free
- PWIS uncritical (PWIS = paint-wetting impairment substances)
- DESINA® colours (see page C/4)



suitable for  
resolvers and shaft encoders

item no.	dimension	sheath colour	largest single wire ø mm	outer-ø approx. mm	copper figure kg/km	cable weight ≈ kg/km
motor feedback cable						
08420050	9 x 0,50	orange	0,16	8,8 ± 0,3	72,6	104
transmission cable						
08430009	4 x 2 x 0,25 + 2 x 0,50	orange	0,11/0,16	8,8 ± 0,3	54,7	92
08430010	4 x 2 x 0,25 + 2 x 1,00	orange	0,11/0,16	8,8 ± 0,3	63,5	96
08430160	3 x (2 x 0,25) D + 3 x 0,25 + 2 x 1,00	orange	0,11/0,16	10,0 ± 0,3	85,6	132
08430040	3 x (2 x 0,25) D	orange	0,11	8,7 ± 0,3	57,7	94
08430060	4 x 2 x 0,14 + (4 x 0,14) D + 4 x 1,0	orange	0,11/0,16	9,8 ± 0,3	88,7	136
08430012	4 x 2 x 0,14 + 4 x 0,50	green	0,11/0,16	9,1 ± 10%	56,9	101
08430112	10 x 0,14 + 2 x 0,50	green	0,11/0,16	8,5 ± 10%	46,8	90
08430114	10 x 0,14 + 4 x 0,50	green	0,11/0,16	9,0 ± 10%	59,5	106
08430006	3 x 2 x 0,25 + 2 x 0,50	green	0,11/0,16	8,7 ± 10%	50,1	89
08430013	4 x 2 x 0,38 + 4 x 0,50	green	0,11/0,16	10,3 ± 10%	80,6	135
08430020	3 x (2 x 0,14) C + 2 x 1,00	green	0,11/0,16	10,0 ± 10%	85,8	127
08430022	3 x (2 x 0,14) C + 2 x (0,50 C)	green	0,11/0,16	10,1 ± 10%	93,0	134
08431050	3 x (2 x 0,14) D + 4 x 0,14 + 4 x 0,22 + 2 x 0,50	green	0,11	10,7 ± 10%	97,9	129
08430070	3 x (2 x 0,14) D + 4 x 0,14 + 2 x 0,50	green	0,11/0,16	10,1 ± 10%	71,5	122
08430310	12 x 0,22	green	0,11	8,5 ± 10%	46,4	86
08430212	2 x 2 x 0,18	green	0,11	6,7 ± 10%	24,2	50
08430214	4 x 2 x 0,18	green	0,11	8,2 ± 10%	34,9	71
08430216	8 x 2 x 0,18	green	0,11	9,7 ± 10%	55,2	104

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Other dimensions and colours are possible on request.

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# Servo Motor Cables

## SL 839 C

PUR transmission cable with overall copper screen



Marking for SL 839 C 08390122:

SAB BRÜCKSKES · D-VIERSEN · 08390122 SL 839 C 12 x 0,22 mm<sup>2</sup> DESINA AWM Style 20236 80°C 30V

### Construction:

<b>Conductor:</b>	tinned copper strands with reference to VDE 0812
<b>Insulation:</b>	special polymer
<b>Colour code:</b>	coloured
	<i>acc. to dimension:</i>
<b>Screen:</b>	pairs wrapped with tinned copper braiding
<b>Inner sheath:</b>	special polymer
<b>Stranding:</b>	cores or pairs
<b>Stranding:</b>	cores/pairs twisted together in layers
<b>Wrapping:</b>	one non-woven tape or non-woven tape and PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface or PU acc. to UL 758
<b>Sheath colour:</b>	green (RAL 6018)

### Technical data:

<b>Peak operating voltage:</b>	max. 30 V	
<b>Voltage UL:</b>	30 V	
<b>Testing voltage:</b>	core/core	600 V
	core/screen	600 V
<b>Min. bending radius</b>		
<i>fixed laying:</i>	5 x d	
<i>flexible application:</i>	10 x d	
<i>continuously flexible:</i>	12 x d	
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg	
<b>Temperature range</b>	<b>DIN VDE</b>	<b>UL:</b> up to +80 °C
<i>fixed laying:</i>	-40/+70 °C	
<i>flexible application:</i>	-20/+70 °C	
<b>Oil resistance:</b>	very good - TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 or oilrating 60 °C acc. to UL 758	
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.	
<b>Weather resistance:</b>	very good	
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union	

### Outstanding features:



- UL recognized
- good EMC characteristics
- suitable for cable tracks
- flexible installation
- oil resistant
- long service life
- adhesion-free installation
- halogen-free
- PWIS uncritical  
(PWIS = paint-wetting impairment substances)
- DESINA® colours



**suitable for resolvers and shaft encoders**

### Sheath material TPU acc. to DIN VDE 0282

item no.	dimension	sheath colour	largest single wire ø mm	outer-ø mm	copper figure kg/km	cable weight ≈ kg/km
08390114	3 x (2 x 0,14) D + 2 x (0,50) D	green	0,11/0,16	9,2 ± 0,4	68,2	106
08390214	3 x (2 x 0,14) D + 4 x 0,14 + 2 x 0,50	green	0,11/0,16	9,0 ± 0,4	63,7	101
08391050	3 x (2 x 0,14) D + 4 x 0,14 + 4 x 0,22 + 2 x 0,50	green	0,11/0,16	9,6 ± 0,4	79,0	114
08390138	4 x 2 x 0,38 + 4 x 0,50	green	0,11/0,16	8,8 ± 0,4	72,2	111
08390318	8 x 2 x 0,18	green	0,11	7,8 ± 0,4	48,0	77
08390122	12 x 0,22	green	0,11	6,7 ± 0,4	42,5	66

Other dimensions and colours are possible on request.

### Sheath material PU acc. to UL 758

item no.	dimension	sheath colour	largest single wire ø mm	outer-ø mm	copper figure kg/km	cable weight ≈ kg/km
08390118	4 x 0,18	green	0,11	4,9 ± 0,4	18,9	30
08390218	4 x 2 x 0,18	green	0,11	6,3 ± 0,4	30,8	50
08390115	2 x 2 x 0,15 + 2 x 0,38	green	0,11/0,16	6,9 ± 0,3	46,1	67
08390220	2 x 2 x 0,20 + 2 x 0,38	green	0,11/0,16	6,9 ± 0,3	34,9	61

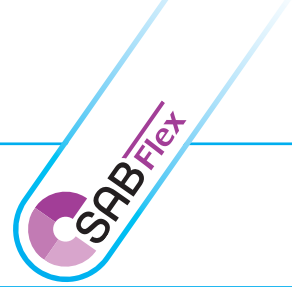
Other dimensions and colours are possible on request.

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# Sensor-/Actuator Cable

## PUR Sensor cable

suitable for cable tracks



Marking for PUR Sensor cable 07489001:

SAB BRÖCKSKES · D-VIERSEN · PUR-Sensorleitung 16 x 0,5 mm² + 3 x 1,0 mm² CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 6
<b>Insulation:</b>	SABIX®
<b>Colour code:</b>	acc. to colour code Euchner
<b>Stranding:</b>	specially adjusted layering
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Sheath colour:</b>	grey (RAL 7000)

### Outstanding features:



- halogen-free
- small outer diameter
- suitable for cable tracks
- high abrasion resistance
- very good flexibility

### Technical Data:

<b>Nominal voltage:</b>	Uo/U 300/500 V
<b>Testing voltage:</b>	core/core 2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
<i>continuously flexible:</i>	12 x d
<b>Radiation resistance:</b>	5 x 10 <sup>6</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+90 °C
<i>flexible application:</i>	-20/+90 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Oil resistance:</b>	very good - TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

item no.	no. of cores x cross section	outer-ø mm	copper figure kg/km	cable weight ≈ kg/km	ohmic resistance at 20°C max. Ω/km
07489001	n x mm <sup>2</sup>				
	16 x 0,50	11,7	105,6	168	39,0
07489002	3 x 1,00	± 0,3			19,5
	9 x 0,50	9,5	72,0	117	39,0
	3 x 1,00	± 0,3			19,5

Other dimensions and colours are possible on request.

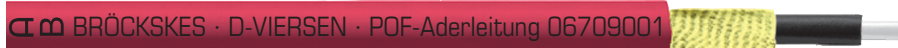


PUR Sensor cable also possible with reticulated by irradiation outer sheath! Item group 0355

# Data Cables

## Optical waveguide

1 x POF



Marking 06709001:

SAB BRÖCKSKES · D-VIERSEN · POF-Aderleitung 06709001

### Construction:

<b>Optical waveguide:</b>	POF
<b>Colour code:</b>	black
<b>Strain relief:</b>	aramid wrapping
<b>Sheath material:</b>	PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
<b>Sheath colour:</b>	blazing red (RAL 3000)

### Outstanding features:



- insensitive against electromagnetic interferences
  - flexible
  - high abrasion resistance
  - good reversed bending strength
- POF: polymer optical fibre

### Technical Data:

<b>Bending radius</b>	
<i>short time use:</i>	> 30 mm (with installation, not operating)
<i>continuously:</i>	> 80 mm
<i>continuously in cable track:</i>	> 100 mm
<b>Strain relief:</b>	max. 1680 N
<b>Temperature range</b>	
<i>storage:</i>	-20/+70 °C
<i>operation:</i>	0/+70 °C
<b>Specific impedance:</b>	0,2 dB/m at 650 nm
<b>Reversed bending strength:</b>	> 100.000 cycles ± 90°, r=100 mm, drawing force 2 N
<b>Bending attenuation:</b>	additionally 0,2 dB/m for 10 windings with r=50 mm
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

item no.	outer diameter mm	weight ≈ kg/km
06709001	6,00 ± 0,20	30,0

Other dimensions and colours are possible on request.



# Torsion Cables



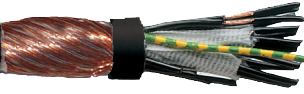
**RT 123**

PUR torsion cable,  
torsion angle up to  $\pm 450^\circ$  over 0.5 m

**RT 123 D**

PUR torsion cable  
with overall copper screen, torsion angle up to  $\pm 450^\circ$  over 0.5 m

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



Marking for RT 123 D 07961815:

SAB BRÖCKSKES · D-VIERSEN · 07961815 18 x 1.5 mm<sup>2</sup> RT 123 D 16 AWG/18c 07961618

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

## Construction:

<b>Conductor</b> 0,14 mm <sup>2</sup> - 0,34 mm <sup>2</sup> :	bare copper strands, extra fine wires
<b>Conductor</b> from 0,50 mm <sup>2</sup> :	bare copper strands acc. to IEC 60228, VDE 0295, class 6
<b>Insulation:</b>	TPE
<b>Colour code</b> 0,14 mm <sup>2</sup> - 0,34 mm <sup>2</sup> :	acc. to colour code US 2
<b>Colour code</b> from 0,50 mm <sup>2</sup> :	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
<b>Stranding:</b>	specially adjusted layering with netting tape over each layer and one additional non-woven tape over the outer layer
<b>RT 123 D</b> <b>Screen:</b>	wrapped with bare copper wires
<b>RT 123 D</b> <b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Sheath colour:</b>	black (RAL 9005)

## Technical data:

<b>Peak operating voltage</b> 0,14 mm <sup>2</sup> - 0,34 mm <sup>2</sup> :	max. 350 V	
<b>Nominal voltage</b> from 0,50 mm <sup>2</sup> :	U <sub>0</sub> /U 300/500 V	
<b>Voltage UL/CSA</b> 0,14 mm <sup>2</sup> - 0,34 mm <sup>2</sup> :	300 V	
<b>Voltage UL/CSA</b> from 0,50 mm <sup>2</sup> :	600 V	
<b>Testing voltage</b> 0,14 mm <sup>2</sup> - 0,34 mm <sup>2</sup> :	<b>RT 123</b> core/core 1500 V	<b>RT 123 D</b> core/core 1500 V core/screen 1200 V
<b>Testing voltage</b> from 0,50 mm <sup>2</sup> :	<b>RT 123</b> core/core 3000 V	<b>RT 123 D</b> core/core 3000 V core/screen 2000 V
<b>Torsion angle:</b>	up to $\pm 450^\circ/0.5$ m	
<b>Min. bending radius</b> <i>continuously flexible:</i> <i>from 34 cores:</i>	12 x d 20 x d	
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg	
<b>Temperature range</b> <i>fixed laying:</i> <i>flexible application:</i>	<b>DIN VDE</b> -50/+90 °C	<b>UL/CSA:</b> up to +80 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1	
<b>Fire performance:</b>	acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL VW-1, CSA FT1, FT2	
<b>Oil resistance:</b>	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2	
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.	
<b>Continuous flexibility:</b>	very good	
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union	

## Outstanding features:



- rugged and reliable
- torsion angle up to  $\pm 450^\circ$  over 0.5 m
- UL recognized, CSA approval

## RT 123

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø $\pm 5\%$ mm	copper figure kg/km	cable weight $\approx$ kg/km
07950301	3 x 0,14	0,11	5,5	4,0	31
07950401	4 x 0,14	0,11	4,7	5,4	26
07950302	3 x 0,25	0,11	4,6	7,2	25
07950402	4 x 0,25	0,11	4,8	9,6	28
07950702	7 x 0,25	0,11	5,4	16,8	39
07952502	25 x 0,25	0,11	9,1	60,0	117
07950203	2 x 0,34	0,11	4,8	6,6	27
07951805	18 x 0,50	0,16	12,5	95,0	216
07952505	25 x 0,50	0,16	14,6	132,0	303
07950407	4 x 0,75	0,16	7,8	28,8	78
07951407	14 x 0,75	0,16	12,6	100,8	207
07950210	2 x 1,00	0,16	7,3	19,2	64
07950310	3 x 1,00	0,16	7,6	28,8	75
07950410	4 x 1,00	0,16	8,1	38,4	91
07950610	6 x 1,00	0,16	9,4	57,6	127
07950710	7 x 1,00	0,16	10,0	67,2	147
07951210	12 x 1,00	0,16	12,2	115,2	214
07951810	18 x 1,00	0,16	14,7	172,8	316
07952510	25 x 1,00	0,16	16,6	240,0	428
07953410	34 x 1,00	0,16	19,7	326,4	559
07954010	40 x 1,00	0,16	20,9	384,0	659
07954110	41 x 1,00	0,16	20,9	393,6	670
07950715	7 x 1,50	0,16	11,3	100,8	197
07951215	12 x 1,50	0,16	14,3	172,8	303
07951815	18 x 1,50	0,16	16,6	259,2	435
07952515	25 x 1,50	0,16	19,1	360,0	609
07950325	3 x 2,50	0,16	9,9	72,0	136
07950425	4 x 2,50	0,16	10,3	96,0	166
07950525	5 x 2,50	0,16	11,8	120,0	210
07950340	3 x 4,00	0,16	11,5	115,2	211
07950361	3 x 10,00	0,21	16,5	288,0	471
07950362	3 x 16,00	0,21	19,4	460,8	682
07950363	3 x 25,00	0,21	24,0	720,0	1035
07950364	3 x 35,00	0,21	27,2	1008,0	1389

Other dimensions and colours are possible on request.

## RT 123 D

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø $\pm 5\%$ mm	copper figure kg/km	cable weight $\approx$ kg/km
07961201	12 x 0,14	0,11	6,9	30,2	62
07962502	25 x 0,25	0,11	10,0	90,9	156
07960505	5 x 0,50	0,16	8,2	40,5	94
07960710	7 x 1,00	0,16	10,7	108,5	178
07961215	12 x 1,50	0,16	14,9	214,7	338
07961815	18 x 1,50	0,16	17,1	326,0	496

Other dimensions and colours are possible on request.



Also suitable  
for applications on robots!

# Tray Cables

## TR 600 Auto black Type TC, MTW and WTTC

UV and oil resistant, flexible Tray Cable and Machine-Tool Cable with black cores for cable tracks

WTTC approval

NFPA 79 for industrial machinery

high-flex

600V c(UL) Type CIC 90°C dry 600V FT1 FT2 FT4 CE



Marking for TR 600 Auto black 32121625:

SAB BRÖCKSKES · D-VIERSEN · TR 600 Auto black 16 AWG/25c 32121625 TFFN (UL) Type TC-ER 90°C 600V, Oil Resistant I, Sunlight Resistant, Direct Burial, FT4 (UL) WTTC 90°C 1000V (UL) MTW 16 AWG/25c 600V flexing AWM Style 21179 600V c(UL) Type CIC 90°C dry 600V FT1 FT2 FT4 CE

### Construction:

<b>Conductor:</b>	bare copper strands with reference to IEC 60228, VDE 0295 class 6
<b>Insulation:</b>	special formulated PVC/Nylon
<b>Colour code:</b>	black cores with consecutive white numbers, green-yellow earth wire from 3 cores
<b>Stranding:</b>	in layers
<b>Sheath material:</b>	special sunlight and oil resistant PVC
<b>Sheath colour:</b>	black (RAL 9005)

### Technical data:

<b>Voltage</b>	600 V
<b>UL-AWM / (UL) / c(UL):</b>	1000 V
<b>(UL) WTTC:</b>	
<b>Testing voltage:</b>	AWG 18-10 = 6000 V AWG 8-2 = 7500 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	< 12 mm = 3 x d > 12 mm = 4 x d
<i>flexible application:</i>	< 12 mm = 5 x d > 12 mm = 6 x d
<i>continuously flexible:</i>	10 x d
<b>Radiation resistance:</b>	8 x 10 <sup>7</sup> cJ/kg
<b>Temperature:</b>	<b>UL-AWM:</b> up to +105 °C <b>(UL) / c(UL):</b> up to +90 °C -25 °C
<i>fixed laying:</i>	
<b>Burning characteristics:</b>	(UL) FT4 + c(UL) FT1, FT2, FT4
<b>Oil resistance I:</b>	yes
<b>Sunlight resistance:</b>	yes
<b>Exposed Runs:</b>	yes
<b>Direct Burial:</b>	yes
<b>Machinery Area:</b>	yes
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

### Outstanding features:



- Flexible cable for cable tray use
- Oil resistance
- Sunlight resistance
- NFPA 79 for industrial machinery
- WTTC approval
- WTTC: UL Subject 2277
- TC: UL Standard 1277
- (UL)/(cUL) listed

item no.	no. of cores x cross section n x AWG	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
32121803	3 x 18	0,16	7,7	28,8	84
32121804	4 x 18	0,16	8,3	38,4	100
32121805	5 x 18	0,16	9,0	48,0	125
32121807	7 x 18	0,16	10,5	67,2	165
32121809	9 x 18	0,16	11,9	86,4	210
32121812	12 x 18	0,16	12,5	115,2	232
32121816	16 x 18	0,16	14,6	153,6	316
32121818	18 x 18	0,16	15,3	172,8	350
32121819	19 x 18	0,16	16,0	182,4	376
32121825	25 x 18	0,16	18,1	240,0	460
32121603	3 x 16	0,16	8,3	43,2	105
32121604	4 x 16	0,16	9,0	57,6	129
32121605	5 x 16	0,16	9,8	72,0	150
32121607	7 x 16	0,16	11,5	100,8	211
32121608	8 x 16	0,16	12,3	115,2	243

item no.	no. of cores x cross section n x AWG	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
32121609	9 x 16	0,16	13,1	129,6	270
32121612	12 x 16	0,16	14,5	172,8	324
32121616	16 x 16	0,16	16,0	230,4	410
32121618	18 x 16	0,16	16,8	259,2	453
32121619	19 x 16	0,16	17,6	273,6	490
32121625	25 x 16	0,16	19,9	360,0	604
32121403	3 x 14	0,16	9,9	72,0	153
32121404	4 x 14	0,16	10,7	96,0	184
32121405	5 x 14	0,16	11,7	120,0	230
32121407	7 x 14	0,16	14,5	168,0	334
32121409	9 x 14	0,16	16,5	216,0	431
32121412	12 x 14	0,16	17,4	288,0	479
32121418	18 x 14	0,16	20,3	432,0	690
32121425	25 x 14	0,16	25,3	600,0	966
32121007	7 x 10	0,21	18,7	369,6	583

Other dimensions and colours are possible on request.



### Possible on request:

- with blue or red cores

# Tray Cables

**TR 600 HD** Type TC-ER Heavy Duty Tray Cable

**TR 600 C HD** Type TC-ER Heavy Duty Tray Cable with overall copper screen

TC PVC/N 600V FT4 CSA AWM I/II A/B 90C 600V FT4 RoHS CE



Marking for TR 600 HD 32301604:

SAB NORTH AMERICA TR 600 HD 16 AWG 4c P/N 32301604 (UL) TC-ER 90C DRY 75C WET 600V OIL RES I/II SUN RES DIR BUR OR WTTC 1000V OR AWM 21270 105C 600V OR c(UL) CIC-TC PVC/N 600V FT4 CSA AWM I/II A/B 90C 600V FT4 RoHS CE

## Construction:

<b>Conductor:</b>	bare copper strands class K
<b>Insulation:</b>	special formulated PVC/Nylon
<b>Colour code:</b>	black cores with consecutive white numbers* and green-yellow earth wire *alpha-numeric alternate and inverted, i.e. 1-ONE
<b>Stranding:</b>	in layers
<b>TR 600 C HD Inner sheath:</b>	PVC, colour black
<b>TR 600 C HD Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	TPE
<b>Sheath colour:</b>	orange (RAL 2003) also available in grey or black

## Technical data:

<b>Voltage</b>	600 V
<b>UL-AWM / (UL) / c(UL):</b>	1000 V
<b>(UL) WTTC:</b>	
<b>Testing voltage:</b>	2000 V
<b>Min. bending radius:</b>	7,5 x d
<b>Temperature:</b>	<b>UL-AWM:</b> up to +105 °C <b>(UL) / c(UL) / CSA-AWM:</b> up to +90 °C
<i>fixed laying:</i>	
<b>Cold Bend Test:</b>	-40 °C
<b>Burning characteristics:</b>	(UL) FT4 + c(UL) FT1, FT2, FT4
<b>Oil resistance I &amp; II:</b>	yes
<b>Exposed Runs:</b>	yes
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

## Outstanding features:



- Heavy Duty Tray Cable, Control and Instrumentation Cable
- UL-AWM recognition for +105 °C
- extreme oil resistant
- WTTC approval
- WTTC: UL Subject 2277
- TC: UL Standard 1277
- (UL)/(cUL) listed
- CSA approval
- NFPA 79 2012
- c(UL) CIC-TC FT4

## Possible on request:



- with grey or black outer sheath as well as blue or red cores

item no.	dimension	outer-ø ± 5% mm	cable weight ≈ kg/km
	AWG		
32301803	18/3c	7,6	82
32301804	18/4c	8,2	99
32301805	18/5c	8,9	117
32301807	18/7c	9,6	149
32301812	18/12c	12,2	233
32301818	18/18c	15,1	363
32301825	18/25c	17,4	474
32301603	16/3c	8,2	104
32301604	16/4c	8,8	120
32301605	16/5c	9,6	143
32301607	16/7c	10,5	247
32301612	16/12c	13,4	291
32301618	16/18c	16,4	446
32301625	16/25c	18,9	588
32301403	14/3c	9,2	131
32301404	14/4c	10,1	137
32301407	14/7c	12,0	251
32301412	14/12c	16,4	442

item no.	dimension	outer-ø ± 5% mm	cable weight ≈ kg/km
	AWG		
32301203	12/3c	10,2	178
32301204	12/4c	11,2	223
32301205	12/5c	12,2	271
32301207	12/7c	13,4	357
32301212	12/12c	18,3	625
32301003	10/3c	12,9	266
32301004	10/4c	15,0	369
32301005	10/5c	16,3	443
32300804	8/4c	19,2	573
32300805	8/5c	21,0	692
32300603	6/3c	19,5	634
32300604	6/4c	22,3	863
32300404	4/4c	26,9	1257
32300405	4/5c	29,9	1541
32300204	2/4c	31,4	1903
32300205	2/5c	34,6	2345
32300104	1/4c	35,6	2390

Other dimensions and colours are possible on request.



# Control and connection cables



## CC 600 P black/blue/red

PUR control cable with numbered black, blue or red cores

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



Marking for CC 600 P 02610415:

SAB BRÖCKSKES · D-VIERSEN · 02610415 4x1,5mm<sup>2</sup> CC 600 P 16 AWG/4c 02611604

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

Construction:	
<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	PVC, TI2 acc. to EN 50363-3 + VDE 0207-363-3
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
<b>Stranding:</b>	in layers
<b>Inner sheath:</b>	from 4,0 mm <sup>2</sup> : PVC, TM2 acc. to EN 50363-3 + VDE 0207-363-3
<b>Sheath material:</b>	PU acc. to UL 758
<b>Sheath colour:</b>	grey (RAL 7000)

Technical data:	
<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Voltage UL/CSA:</b>	600 V
<b>Testing voltage:</b>	core/core 2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	4 x d
<i>flexible application:</i>	6 x d
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	<b>DIN VDE</b> <b>UL/CSA:</b> up to +80 °C
<i>fixed laying:</i>	-40/+70 °C
<i>flexible application:</i>	+5/+70 °C
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL VW-1, CSA FT1, FT2
<b>Oil resistance:</b>	very good - oilrating 60 °C acc. to UL 1581
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

**Outstanding features:**

- UL recognized, CSA approved
- oil resistant
- abrasion resistant
- notch resistant
- good chemical resistance

**blue cores: item group 0263**  
**red cores: item group 0264**

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
02610205	2 x 0,50	0,21	6,2	10,3	48
02610305	3 x 0,50	0,21	6,4	15,4	56
02610405	4 x 0,50	0,21	6,8	20,5	66
02610505	5 x 0,50	0,21	7,4	25,6	79
02610705	7 x 0,50	0,21	7,9	35,9	96
02611205	12 x 0,50	0,21	10,1	61,5	144
02611805	18 x 0,50	0,21	11,6	92,3	203
02612505	25 x 0,50	0,21	13,7	128,2	265
02613005	30 x 0,50	0,21	14,1	153,8	306
02613405	34 x 0,50	0,21	15,2	174,3	347
02614205	42 x 0,50	0,21	16,6	215,3	432
02615005	50 x 0,50	0,21	18,0	256,4	492
02610207	2 x 0,75	0,21	6,7	14,4	58
02610307	3 x 0,75	0,21	6,9	21,6	67
02610407	4 x 0,75	0,21	7,4	28,8	80
02610507	5 x 0,75	0,21	8,0	36,0	96
02610707	7 x 0,75	0,21	9,3	50,4	130
02611207	12 x 0,75	0,21	11,1	86,4	178
02611807	18 x 0,75	0,21	12,9	129,6	253
02612507	25 x 0,75	0,21	15,2	180,0	330
02613007	30 x 0,75	0,21	16,0	216,0	393
02613407	34 x 0,75	0,21	17,3	244,8	446
02614207	42 x 0,75	0,21	18,5	302,4	542
02615007	50 x 0,75	0,21	20,1	360,0	621
02610210	2 x 1,00	0,21	6,9	19,2	64
02610310	3 x 1,00	0,21	7,1	28,8	76
02610410	4 x 1,00	0,21	7,7	38,4	91
02610510	5 x 1,00	0,21	8,3	48,0	110
02610710	7 x 1,00	0,21	9,6	67,2	148
02611210	12 x 1,00	0,21	11,5	115,2	207
02611810	18 x 1,00	0,21	13,4	172,8	297

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
02612510	25 x 1,00	0,21	16,0	240,0	397
02613010	30 x 1,00	0,21	16,7	288,0	465
02613410	34 x 1,00	0,21	18,0	326,4	528
02614210	42 x 1,00	0,21	19,2	403,2	642
02615010	50 x 1,00	0,21	22,5	480,0	806
02610215	2 x 1,50	0,26	7,5	28,8	79
02610315	3 x 1,50	0,26	7,8	43,2	96
02610415	4 x 1,50	0,26	8,4	57,6	116
02610515	5 x 1,50	0,26	9,1	72,0	140
02610715	7 x 1,50	0,26	10,6	100,8	190
02611215	12 x 1,50	0,26	12,8	172,8	271
02611815	18 x 1,50	0,26	14,9	259,2	392
02612515	25 x 1,50	0,26	18,0	360,0	536
02613015	30 x 1,50	0,26	18,6	432,0	625
02613415	34 x 1,50	0,26	20,1	489,6	786
02614215	42 x 1,50	0,26	22,9	604,8	936
02615015	50 x 1,50	0,26	25,0	720,0	1080
02610225	2 x 2,50	0,26	8,7	48,0	112
02610325	3 x 2,50	0,26	9,1	72,0	140
02610425	4 x 2,50	0,26	9,8	96,0	170
02610525	5 x 2,50	0,26	10,7	120,0	208
02610725	7 x 2,50	0,26	12,6	168,0	288
02611225	12 x 2,50	0,26	15,3	288,0	412
02611825	18 x 2,50	0,26	18,2	432,0	613
02612525	25 x 2,50	0,26	23,2	600,0	885
02610340	3 x 4,00	0,31	11,9	115,2	233
02610440	4 x 4,00	0,31	13,0	153,6	288
02610540	5 x 4,00	0,31	13,9	192,0	342
02610460	4 x 6,00	0,31	14,7	230,4	393
02610560	5 x 6,00	0,31	16,1	288,0	482
02610461	4 x 10,0	0,41	18,5	384,0	644

Other dimensions and colours are possible on request.

# Control and connection cables

## CC 600 CP

PUR control cable with numbered cores and overall copper screen



Marking for CC 600 CP 02810415:

SAB BRÜCKSKES · D-VIERSEN · 02810415 4x1,5mm<sup>2</sup> CC 600 CP 16 AWG/4c 02811604

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

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	PVC, TI2 acc. to EN 50363-3 + VDE 0207-363-3
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	tinned copper braiding
<b>Wrapping:</b>	fine cotton binding
<b>Sheath material:</b>	PU acc. to UL 758
<b>Sheath colour:</b>	grey (RAL 7000)

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V	
<b>Voltage UL/CSA:</b>	600 V	
<b>Testing voltage:</b>	core/core 2000 V	core/screen 2000 V
<b>Min. bending radius</b>		
fixed laying:	5 x d	
flexible application:	10 x d	
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg	
<b>Temperature range</b>	DIN VDE	UL/CSA: up to +80 °C
fixed laying:	-40/+70 °C	
flexible application:	+5/+70 °C	
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL VW-1, CSA FT1, FT2	
<b>Oil resistance:</b>	very good - oilrating 60 °C acc. to UL 1581	
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.	
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union	

### Outstanding features:

- UL recognized, CSA approved
- oil resistant
- abrasion resistant
- notch resistant
- good chemical resistance

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
02810205	2 x 0,50	0,21	6,7	26,1	62
02810305	3 x 0,50	0,21	7,0	31,3	70
02810405	4 x 0,50	0,21	7,4	38,1	80
02810505	5 x 0,50	0,21	8,0	45,2	95
02810705	7 x 0,50	0,21	8,5	57,5	112
02811205	12 x 0,50	0,21	10,6	90,6	167
02811805	18 x 0,50	0,21	12,4	146,4	245
02812505	25 x 0,50	0,21	14,4	194,3	314
02810207	2 x 0,75	0,21	7,2	31,9	72
02810307	3 x 0,75	0,21	7,5	39,2	82
02810407	4 x 0,75	0,21	8,0	48,4	95
02810507	5 x 0,75	0,21	8,6	57,7	112
02810707	7 x 0,75	0,21	9,9	76,6	148
02811207	12 x 0,75	0,21	11,8	140,2	219
02811807	18 x 0,75	0,21	13,5	189,3	297
02812507	25 x 0,75	0,21	16,4	277,8	414
02810210	2 x 1,00	0,21	7,4	36,8	79
02810310	3 x 1,00	0,21	7,7	48,3	91
02810410	4 x 1,00	0,21	8,3	59,9	107
02810510	5 x 1,00	0,21	8,9	71,6	127
02810710	7 x 1,00	0,21	10,2	96,1	168
02811210	12 x 1,00	0,21	12,2	169,2	248
02811810	18 x 1,00	0,21	14,1	238,8	347

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
02812510	25 x 1,00	0,21	17,0	349,4	482
02810315	3 x 1,50	0,26	8,4	64,8	112
02810415	4 x 1,50	0,26	9,0	81,3	133
02810515	5 x 1,50	0,26	9,7	98,2	159
02810715	7 x 1,50	0,26	11,4	148,4	225
02811215	12 x 1,50	0,26	13,5	232,4	316
02811815	18 x 1,50	0,26	16,1	356,7	475
02812515	25 x 1,50	0,26	18,9	483,1	627
02810325	3 x 2,50	0,26	9,7	98,2	158
02810425	4 x 2,50	0,26	10,4	125,0	189
02810525	5 x 2,50	0,26	11,5	167,6	240
02810725	7 x 2,50	0,26	13,4	227,6	326
02811225	12 x 2,50	0,26	16,5	385,9	496
02811825	18 x 2,50	0,26	19,1	555,4	704
02812525	25 x 2,50	0,26	24,1	740,9	992
02810340	3 x 4,00	0,31	11,3	162,7	232
02810440	4 x 4,00	0,31	12,2	207,6	281
02810540	5 x 4,00	0,31	13,3	251,5	340
02810360	3 x 6,00	0,31	13,1	227,2	323
02810460	4 x 6,00	0,31	14,2	296,2	395
02810560	5 x 6,00	0,31	15,7	385,1	498
02810461	4 x 10,0	0,41	19,0	494,9	692

Other dimensions and colours are possible on request.

# Halogen-free Cables

## SABIX® A 260 PUR

halogen-free, cold-flexible, oil resistant control cable with numbered cores



ES · D-VIERSEN · SABIX® A 260 PUR 12 x 1,5 mm<sup>2</sup> CE



Marking for SABIX® A 260 PUR 52601215:

SAB BRÜCKSKES · D-VIERSEN · SABIX® A 260 PUR 12 x 1,5 mm<sup>2</sup> CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	SABIX®
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores
<b>Stranding:</b>	in layers
<b>Inner sheath:</b>	SABIX® - from 4,0 mm <sup>2</sup>
<b>Sheath material:</b>	PUR, TMPU acc. to EN 50363-10-2 + DIN VDE 0207-363-10-2
<b>Sheath colour:</b>	grey (RAL 7000)

### Outstanding features:



- halogen-free
- oil resistant
- flexible at low temperatures
- weather resistant

### Technical Data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	core/core 3000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	4 x d
<i>flexible application:</i>	6 x d
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	
<i>fixed laying:</i>	-50/+90 °C
<i>flexible application:</i>	-40/+90 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Oil resistance:</b>	very good - PUR, TMPU acc. to EN 50363-10-2 + DIN VDE 0207-363-10-2
<b>Chem. resistance:</b>	good against acids, alkalines, solvents, hydraulic liquids etc.
<b>Flexibility:</b>	very good
<b>Weather resistance:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
52600207	2 x 0,75	0,21	5,6	14,4	39
52600307	3 x 0,75	0,21	5,9	21,6	47
52600407	4 x 0,75	0,21	6,4	28,8	57
52600507	5 x 0,75	0,21	7,0	36,0	68
52600707	7 x 0,75	0,21	7,6	50,4	87
52601007	10 x 0,75	0,21	9,6	72,0	119
52601207	12 x 0,75	0,21	10,3	86,4	145
52601807	18 x 0,75	0,21	12,0	129,6	206
52602507	25 x 0,75	0,21	14,7	180,0	284
52600210	2 x 1,00	0,21	5,8	19,2	44
52600310	3 x 1,00	0,21	6,1	28,8	54
52600410	4 x 1,00	0,21	6,6	38,4	66
52600510	5 x 1,00	0,21	7,3	48,0	81
52600710	7 x 1,00	0,21	7,9	67,2	103
52601010	10 x 1,00	0,21	10,4	96,0	143
52601210	12 x 1,00	0,21	10,7	115,2	173
52601810	18 x 1,00	0,21	12,5	172,8	247
52602510	25 x 1,00	0,21	15,3	240,0	341
52600215	2 x 1,50	0,26	6,4	28,8	57
52600315	3 x 1,50	0,26	6,8	43,2	72
52600415	4 x 1,50	0,26	7,4	57,6	88
52600515	5 x 1,50	0,26	8,1	72,0	107
52600715	7 x 1,50	0,26	8,8	100,8	139

item no.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
52601015	10 x 1,50	0,26	11,6	144,0	191
52601215	12 x 1,50	0,26	12,0	172,8	233
52601815	18 x 1,50	0,26	14,0	259,2	336
52602515	25 x 1,50	0,26	17,0	360,0	451
52600225	2 x 2,50	0,26	7,6	48,0	86
52600325	3 x 2,50	0,26	8,5	72,0	114
52600425	4 x 2,50	0,26	8,8	96,0	135
52600525	5 x 2,50	0,26	10,1	120,0	172
52600725	7 x 2,50	0,26	11,0	168,0	224
52601025	10 x 2,50	0,26	14,0	240,0	311
52601225	12 x 2,50	0,26	14,9	288,0	373
52601825	18 x 2,50	0,26	17,4	432,0	539
52602525	25 x 2,50	0,26	21,7	600,0	755
52600340	3 x 4,00	0,31	11,7	115,2	198
52600440	4 x 4,00	0,31	12,6	153,6	243
52600540	5 x 4,00	0,31	13,7	192,0	293
52600360	3 x 6,00	0,31	14,0	172,8	290
52600460	4 x 6,00	0,31	15,1	230,4	357
52600560	5 x 6,00	0,31	16,4	288,0	431
52600461	4 x 10,0	0,41	18,9	384,0	582
52600561	5 x 10,0	0,41	20,6	480,0	709
52600462	4 x 16,0	0,41	22,2	614,4	851
52600562	5 x 16,0	0,41	24,4	768,0	1041

Other dimensions and colours are possible on request.

# Remote Bus Cables

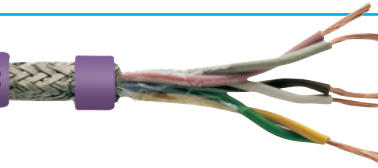
**S IBS 618** PUR Interbus-S cable  
for cable tracks with UL recognition

**SABIX® IBS 610** halogen-free  
Interbus-S cable

**SABIX® IBS 610 FRNC** halogen-free, flame retardant Interbus-S cable



S IBS 618 24AWG/3pr AWM Style 20235 80°C



Marking for S IBS 618 06183251:

SAB BRÖCKSKES · D-VIERSEN · 06183251 3x2x0,25mm² S IBS 618 24AWG/3pr AWM Style 20235 80°C voltage not specified CE



<b>Construction:</b>	S IBS 618*	SABIX® IBS 610	SABIX® IBS 610 FRNC
Dimension:	3 x 2 x 0,25 mm²	3 x 2 x 0,22 mm²	
Conductor:	bare copper strands with reference to VDE 0812		
Insulation:	PE, 2Y11 acc. to EN 50290-2-23 + VDE 0819-103	SABIX®	
Colour code:	acc. to DIN 47100		
Stranding:	twisted to pairs and pairs together		
Wrapping:	non-woven tape	PETP foil	
Screen:	tinned copper braiding		
Sheath material:	PUR	SABIX®	
Sheath colour:	redlilac (RAL 4001)		

<b>Technical data:</b>	S IBS 618*	SABIX® IBS 610	SABIX® IBS 610 FRNC
Item number:	0618-3251	5610-3221	6610-3221
Peak operating voltage:	max. 350 V		
Voltage UL:	300 V	---	
Testing voltage core/core: core/screen:	2000 V 2000 V	1000 V 1000 V	
Min. bending radius:	7,5 x d		
Radiation resistance:	5 x 10 <sup>7</sup> cJ/kg	5 x 10 <sup>8</sup> cJ/kg	---
Temperature range fixed laying: flexible application:	UL: up to +80 °C -40/+70 °C -40/+70 °C	-50/+90 °C -40/+90 °C	-40/+85 °C -30/+85 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1		
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2	---	no flame propagation acc. to IEC 60332-3-24 + IEC 60332-3-25 Cat. C resp. D. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Corrosiveness of conflagration gases:	---	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases	
Smoke density:	---	---	acc. to IEC 61034 + VDE 0482-1034
Oil resistance:	very good acc. to EN 50363-10-2 + VDE 0207-363-10-2	very good acc. to EN 50363-4-1	---
Characteristic impedance at 0.064 MHz:	120 Ω ± 20%		
Characteristic impedance at > 1 MHz:	100 Ω ± 15 Ω		
Flexibility:	very good		good
Application in cable tracks:	recommended	not recommended	
Weather resistance:	very good	good	
Bending characteristics: number of bendings acc. to VDE 0472-603 test methode H	min. 1.000.000 single bendings		
Direct Burial:	suitable	not suitable	
UL Style:	20235	---	
Absence of harmful substances:	acc. to RoHS directive of the European Union		

item no.	type	dimension	outer-ø ± 10%	copper figure kg/km	cable weight ≈kg/km
06183251	S IBS 618	3 x 2 x 0,25 mm²	8,5	35,9	82
56103221	SABIX® IBS 610	3 x 2 x 0,22 mm²	7,0	31,3	53
66103221	SABIX® IBS 610 FRNC	3 x 2 x 0,22 mm²	7,0	31,3	62

\* Interbus-S remote bus cables 3 x 2 x 0.22 mm² or 3 x 2 x 0.25 mm² are used for the sensor/actuator level of industrial communication

Other dimensions and colours are possible on request.

# Profibus-DP Cables acc. to IEC 61158-2



**S PB 634** PUR Profibus-DP cable for cable tracks

**PB 633** halogen-free, flexible PE Profibus-DP cable

**PB 632** flexible PVC Profibus-DP cable



Marking for S PB 634 06342341:

SAB BRÜCKSKES · D-VIERSEN · S PB 634 2x0,34mm² CE

<b>Construction:</b>	S PB 634	PB 633	PB 632
<b>Dimension:</b>	2 x 0,34 mm <sup>2</sup> , 2 x 0,34 mm <sup>2</sup> + 3 x 1,00 mm <sup>2</sup>		
<b>Conductor:</b>	0,34 mm <sup>2</sup> : bare copper strands acc. to VDE 0812 1,00 mm <sup>2</sup> : bare copper strands acc. to IEC 60228, VDE 0295, class 6	0,34 mm <sup>2</sup> : bare copper strands acc. to VDE 0812 1,00 mm <sup>2</sup> : bare copper strands acc. to IEC 60228, VDE 0295, class 5	
<b>Pairwise wrapping:</b>	non-woven tape/alu foil	alu foil	
<b>Pairwise sheathing:</b>	TPE	---	
<b>Insulation:</b>	0,34 mm <sup>2</sup> : EN 50290-2-23 + VDE 0819-103 (02Y11) 1,00 mm <sup>2</sup> : TPE	0,34 mm <sup>2</sup> : EN 50290-2-23 + VDE 0819-103 (02Y11) 1,00 mm <sup>2</sup> : PE 2Y11 acc. to EN 50290-2-23	0,34 mm <sup>2</sup> : EN 50290-2-23 + VDE 0819-103 (02Y11) 1,00 mm <sup>2</sup> : PVC T12 acc. to EN 50363-3
<b>Colour code:</b>	red, green (0,34 mm <sup>2</sup> ), brown, light blue and green-yellow earth wire (1,0 mm <sup>2</sup> )		
<b>Pairwise screening:</b>	tinned copper braiding		
<b>Stranding:</b>	in layers		
<b>Sheath material:</b>	PUR, TPU acc. to EN 50363-10-2 with rough surface	PE, 2YM1 acc. to EN 50290-2-24	PVC, TM2 acc. to EN 50363-4-1
<b>Sheath colour:</b>	redlilac (RAL 4001)		

<b>Technical data:</b>	S PB 634	PB 633	PB 632
<b>Item number:</b>	0634-2341, 0634-4341	0633-2341, 0633-4341	0632-2341, 0632-4341
<b>Peak operating voltage:</b>	max. 350 V		
<b>Testing voltage</b> core/core: core/screen:	1500 V 1500 V		
<b>Min. bending radius:</b>	12 x d		
<b>Temperature range</b> fixed laying: flexible application:	-40/+80 °C -40/+80 °C	-40/+70 °C -40/+70 °C	-30/+70 °C -5/+70 °C
<b>Fire performance:</b>	---		flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
<b>Corrosiveness of conflagration gases:</b>	---	in compliance with IEC 60754-2 + VDE 0482-754-2 - no development of corrosive conflagration gases	---
<b>Oil resistance:</b>	very good acc. to EN 50363-10-2 + VDE 0207-363-10-2	---	acc. to internal standard
<b>For fixed installation:</b>	suitable		
<b>For flexible application:</b>	suitable		
<b>Application in cable tracks:</b>	recommended	not recommended	
<b>Weather resistance:</b>	very good	good	medium
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union		

item no.	type	dimension	outer-ø ± 5%	copper figure kg/km	cable weight ≈kg/km
06342341	S PB 634	2 x 0,34 mm <sup>2</sup>	7,6	30,9	58
06344341	S PB 634	2 x 0,34 mm <sup>2</sup> + 3 x 1,00 mm <sup>2</sup>	10,2	58,8	108
06332341	PB 633	2 x 0,34 mm <sup>2</sup>	7,5	25,8	50
06334341	PB 633	2 x 0,34 mm <sup>2</sup> + 3 x 1,00 mm <sup>2</sup>	10,1	58,8	101
06322341	PB 632	2 x 0,34 mm <sup>2</sup>	7,5	25,8	56
06324341	PB 632	2 x 0,34 mm <sup>2</sup> + 3 x 1,00 mm <sup>2</sup>	10,1	58,8	122

Other dimensions and colours are possible on request.

**Profibus-DP** and **Profibus-FMS** apply the same transmission technology and a uniform bus access log. Therefore, both types can be used simultaneously on one cable.

# Profibus-DP Cables acc. to IEC 61158-2

**PB 640** flexible PVC Profibus-DP cable

**S PB 640** highly flexible PUR Profibus-DP cable

**PB 640 UL** flexible PVC Profibus-DP cable with UL recognition

**S PB 640 UL** highly flexible PUR Profibus-DP cable with UL recognition, CSA approval



Marking for S PB 640 UL 06402611:

SAB BRÜCKSKES · D-VIERSEN · S PB 640 UL 24 AWG/2c 06402611 AWM Style 21198 80°C 300V CSA AWM I/II A/B 80°C 300V FT2

<b>Construction:</b>	PB 640	PB 640 UL	S PB 640	S PB 640 UL
<b>Dimension:</b>	2 x AWG 24			
<b>Conductor:</b>	bare copper strands AWG 24			
<b>Insulation:</b>	acc. to EN 50290-2-23 + VDE 0819-103 (02Y11)			
<b>Colour code:</b>	red, green			
<b>Stranding:</b>	in layers			
<b>Inner sheath (nature):</b>	PVC		SABIX®	
<b>Screen:</b>	alu foil und tinned copper braiding			
<b>Sheath material:</b>	PVC, TM2 acc. to EN 50363-4-1		PUR, TMPU acc. to EN 50363-10-2 with matt surface	
<b>Sheath colour:</b>	redlilac (RAL 4001)			

<b>Technical data:</b>	PB 640	PB 640 UL	S PB 640	S PB 640 UL
<b>Item number:</b>	0640-2421	0640-2631	0640-2601	0640-2611
<b>Peak operating voltage:</b>	max. 350 V			
<b>Voltage UL:</b>	---	300 V	---	300 V
<b>Voltage CSA:</b>	---			
<b>Testing voltage</b>				
core/core:	1500 V	2000 V	1500 V	2000 V
core/screen:	1500 V	2000 V	1500 V	2000 V
<b>Min. bending radius</b>	12 x d		5 x d	
fixed laying:			10 x d	
flexible application:			15 x d	
<b>Temperature range</b>		UL: up to +80 °C		UL/CSA: up to +80 °C
fixed laying:	-30/+70 °C	-30/+70 °C	-40/+80 °C	-40/+80 °C
flexible application:	-5/+70 °C	-5/+70 °C	-30/+80 °C	-30/+80 °C
<b>Halogen-free:</b>	---		acc. to IEC 60754-1 + VDE 0482-754-1	
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332 + VDE 0482-332-1-2			
<b>Oil resistance:</b>	acc. to internal standard		very good EN 50363-10-2 + VDE 0207-363-10-2	
<b>Characteristic impedance 3 - 20 MHz:</b>	150 Ω ± 10%			
<b>For fixed installation:</b>	suitable			
<b>For flexible application:</b>	suitable			
<b>Application in cable tracks:</b>	not recommended		recommended	
<b>UL Style:</b>	---	2464	---	21198
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union			

**Outstanding features:**

- short assembling time
- avoidance of connection errors

item no.	type	dimension	outer-ø mm	copper figure kg/km	cable weight ≈kg/km
06402421	PB 640	2 x 24 AWG	8,0 ± 0,4	31,2	63
06402631	PB 640 UL	2 x 24 AWG	8,0 ± 0,4	31,2	62
06402601	S PB 640	2 x 24 AWG	8,0 ± 0,4	31,2	57
06402611	S PB 640 UL	2 x 24 AWG	8,0 ± 0,4	31,2	62

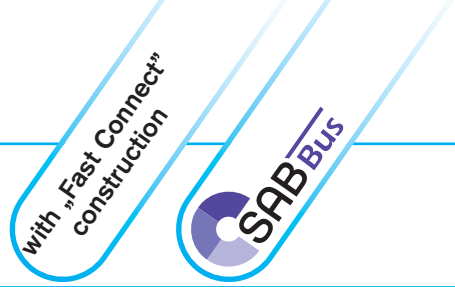
Other dimensions and colours are possible on request.

**Profibus-DP** and **Profibus-FMS** apply the same transmission technology and a uniform bus access log. Therefore, both types can be used simultaneously on one cable.

# Industrial Ethernet Cables Profinet

## S PN 667

Profinet type C, continuously flexible with UL recognition, CSA approval



2198 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE



Marking for S PN 667 06672202:

SAB BRÜCKSKES · D-VIERSEN · S PN 667 Industrial Ethernet FC Cat 5 Typ C 2x2x22AWG AWM Style 21198 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE

### Construction:

<b>Conductor:</b>	tinned copper strands, 7 wires
<b>Insulation:</b>	special polymer
<b>Colour code:</b>	blue, yellow, white, orange
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	PETP foil
<b>Inner sheath:</b>	thermoplastic material
<b>Screen:</b>	alu foil and tinned copper braiding
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR
<b>Sheath colour:</b>	green (similar RAL 6018)

### Technical data:

<b>Peak operating voltage:</b>	max. 350 V
<b>Voltage UL/CSA:</b>	300 V
<b>Testing voltage:</b>	core/core 2000 V core/screen 2000 V
<b>Min. bending radius</b>	
fixed laying:	5 x d
flexible application:	10 x d
continuously flexible:	15 x d
<b>Temperature range</b>	UL/CSA: up to +80 °C
fixed laying:	-40/+70 °C
flexible application:	-40/+70 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1
<b>Oil resistance:</b>	PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Characteristic impedance:</b>	100Ω ± 5Ω, fulfils the electrical and transmission requirements with high frequency acc. to EN 50288-2-2 + VDE 0819-2-2 (CAT 5 acc. to EN 50173)
<b>UL Style:</b>	21198
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

item no.	type	dimension	max. core-ø mm	outer-ø mm	copper figure kg/km	cable weight ≈kg/km	ohmic resistance at 20°C acc. to VDE 0812 max. Ω/km
06672202	S PN 667	2 x 2 x 22 AWG	1,55	6,5 ± 0,2	33,8	60	58,8

Other dimensions and colours are possible on request.

For extreme bending stress - conductor construction 19 wires:

item no.	type	dimension	max. core-ø mm	outer-ø mm	copper figure kg/km	cable weight ≈kg/km	ohmic resistance at 20°C acc. to VDE 0812 max. Ω/km
06679001	S PN 667	2 x 2 x 22 AWG	1,55	6,5 ± 0,2	33,8	58	58,8

Other dimensions and colours are possible on request.



short assembling time  
by „Fast Connect“  
construction (7 wires)

Also possible  
as harnessed cable  
with M12 or RJ 45 plug!



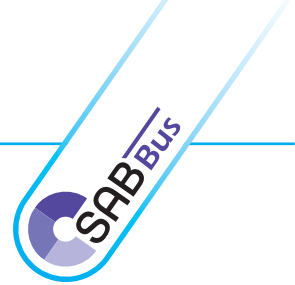
# Industrial Ethernet Cables Profinet

**S PN 668** Profinet type C, continuously flexible

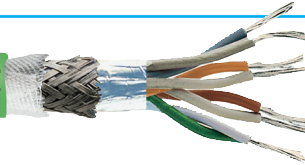
**PN 661** Profinet type B, for flexible applications with UL recognition

**S PN 669** Profinet type C, continuously flexible with UL recognition

**S PN 681** Ethernet cable type C, continuously flexible



D-VIERSEN · S PN 681 CAT 5 Typ C 4x2x26AWG CE



Marking for S PN 681 06812604:

SAB BRÜCKSKES · D-VIERSEN · S PN 681 CAT 5 Typ C 4x2x26AWG CE

<b>Construction:</b>	S PN 668 Profinet type C continuously flexible	S PN 669 Profinet type C continuously flexible	PN 661 Profinet type B flexible	S PN 681 Ethernet cable type C continuously flexible
<b>Dimension:</b>	2 x 2 x 22 AWG			4 x 2 x 26 AWG
<b>Conductor:</b>	tinned copper strands, extra fine wires		tinned copper strands, fine wires with reference to VDE 0812	tinned copper strands, extra fine wires
<b>Insulation:</b>	PE		PE, L/MD acc. to EN 50290-2-23	SABIX®
<b>Colour code:</b>	blue, yellow, white, orange			white cores with numbers 1 - 4 + (blue, orange, green, brown)
<b>Stranding:</b>	in layers			twisted to pairs and pairs together
<b>Wrapping:</b>	PETP foil			non-woven tapes
<b>Inner sheath:</b>	thermoplastic material			---
<b>Screen:</b>	alu foil and tinned copper braiding			
<b>Wrapping:</b>	non-woven tape			
<b>Sheath material:</b>	PUR		SABIX®	PUR
<b>Sheath colour:</b>	green (similar RAL 6018)			

<b>Technical data:</b>	S PN 668 Profinet type C continuously flexible	S PN 669 Profinet type C continuously flexible	PN 661 Profinet type B flexible	S PN 681 Ethernet cable type C continuously flexible
<b>Item number:</b>	0668-2202	0669-2202	0661-2202	0681-2604
<b>Peak operating voltage:</b>	max. 350 V			
<b>Voltage UL:</b>	---	300 V		---
<b>Testing voltage</b>				
core/core:	1500 V	2000 V		1500 V
core/screen:	1200 V	2000 V		1200 V
<b>Min. bending radius</b>				
fixed laying:	5 x d		5 x d	5 x d
flexible application:	10 x d		12 x d	10 x d
continuously flexible:	15 x d			12 x d
<b>Temperature range VDE</b>				
fixed laying:	-40/+70 °C	UL: up to +80 °C -30/+70 °C	UL: up to +75 °C -40/+70 °C	-40/+90 °C
flexible application:	-30/+70 °C	-20/+70 °C	-30/+70 °C	-30/+90 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1			
<b>Oil resistance:</b>	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2		---	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Characteristic impedance:</b>	100Ω ± 5Ω, fulfils the electrical and transmission requirements with high frequency acc. to EN 50288-2-2 + VDE 0819-2-2 (CAT 5 acc. to EN 50173-1)			
<b>UL Style:</b>	---	21198	21080	---
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union			

item no.	type	dimension	max. core-ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈kg/km	ohmic resistance at 20°C acc. to VDE 0812 max. Ω/km
06682202	S PN 668	2 x 2 x 22 AWG	1,55	6,4	36,7	58	58,0
06692202	S PN 669	2 x 2 x 22 AWG	1,55	6,9	36,7	69	58,0
06612202	PN 661	2 x 2 x 22 AWG	1,55	6,6	36,2	70	58,0
06812604	S PN 681	4 x 2 x 26 AWG	1,10	7,2	35,5	58	145

Other dimensions and colours are possible on request.



**DRIVE CLiQ Cable**  
see page 28!

Also possible  
as harnessed cable  
with M12 or RJ 45 plug!





# Industrial Ethernet Cables



**CATLine CAT 6 S / CAT 6A S** Gigabit Ethernet cable, suitable for cable tracks

**CATLine CAT 6 RT / CAT 6A RT** Gigabit Ethernet cable, suitable for cable tracks, suitable for robots

80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE



Marking for CATLine CAT 6 S 16774630:

SAB BRÜCKSKES · D-VIERSEN · **CATLine** Cat.6 S 4x2x26AWG 1677-4630 AWM Style 20549 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE



<b>Construction:</b>	CATLine CAT 6 S <i>suitable for cable tracks</i>	CATLine CAT 6A S <i>suitable for cable tracks</i>	CATLine CAT 6 RT <i>suitable for cable tracks/ suitable for robots</i>	CATLine CAT 6A RT <i>suitable for cable tracks/ suitable for robots</i>
<b>Dimension:</b>	4 x 2 x 26 AWG			
<b>Conductor:</b>	bare copper strands, fine wires			
<b>Insulation:</b>	special polymer			
<b>Colour code:</b>	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown			
<b>Stranding:</b>	cores twisted to pairs, pairs together			
<b>Wrapping:</b>	non-woven tape			
<b>Screen:</b>	alu foil and tinned copper braiding			
<b>Wrapping:</b>	non-woven tape			
<b>Sheath material:</b>	PUR			
<b>Sheath colour:</b>	green (similar RAL 6018)			

<b>Technical data:</b>	CATLine CAT 6 S <i>suitable for cable tracks</i>	CATLine CAT 6A S <i>suitable for cable tracks</i>	CATLine CAT 6 RT <i>suitable for cable tracks/ suitable for robots</i>	CATLine CAT 6A RT <i>suitable for cable tracks/ suitable for robots</i>
<b>Item number:</b>	1677-4630	1677-4631	1687-4630	1687-4631
<b>Peak operating voltage:</b>	max. 90 V			
<b>Voltage UL/CSA:</b>	300 V			
<b>Testing voltage</b>				
core/core:	2000 V			
core/screen:	2000 V			
<b>Min. bending radius</b>				
fixed laying:	5 x d			
flexible application:	10 x d			
continuously flexible:	15 x d			
<b>Torsion angle:</b>	---		up to ± 180°/m	
<b>Temperature range VDE</b>	UL/CSA: up to +80 °C			
fixed laying:	-40/+70 °C			
flexible application:	-40/+70 °C			
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1			
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 UL Horizontal Flame Test FT2			
<b>Oil resistance:</b>	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2			
<b>Characteristic impedance (100 MHz):</b>	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-5-2 / CAT 6	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-10-2 / CAT 6A	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-5-2 / CAT 6	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-10-2 / CAT 6A
<b>Flexibility:</b>	very good			
<b>UL Style:</b>	20549			
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union			

item no.	type	dimension	max. core-ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈kg/km
16774630	CATLine CAT 6 S	4 x 2 x 26 AWG	1,05	7,1	32,0	57
16774631	CATLine CAT 6A S	4 x 2 x 26 AWG	1,05	7,1	32,0	57
16874630	CATLine CAT 6 RT	4 x 2 x 26 AWG	1,05	7,1	32,0	57
16874631	CATLine CAT 6A RT	4 x 2 x 26 AWG	1,05	7,1	32,0	57

Other dimensions and colours are possible on request.

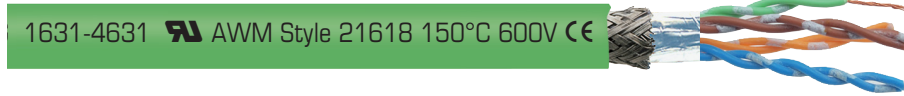
**+90°C**  
on request!

Also possible as harnessed cable with M12 or RJ 45 plug!



## CATLine CAT 6A HT

Gigabit Ethernet cable – high temperature resistant



Marking for CATLine CAT 6A HT 16314631:

SAB BRÜCKSKES · D-VIERSEN · CATLine Cat.6A HT 4x2x26AWG 1631-4631 AWM Style 21618 150°C 600V CE

### Construction:

<b>Conductor:</b>	bare copper strands, fine wires
<b>Insulation:</b>	FEP
<b>Colour code:</b>	white/blue, white/orange, white/green, white/brown
<b>Stranding:</b>	twisted to pairs
<b>Wrapping:</b>	PETP foil
<b>Screen:</b>	alu foil and tinned copper braiding
<b>Sheath material:</b>	FEP
<b>Sheath colour:</b>	green (similar RAL 6018)

### Outstanding features:



- high temperature resistant
- low temperature resistant
- flame retardant and self-extinguishing
- oil- and chemical resistant
- UL recognized

### Technical data:

<b>Peak operating voltage:</b>	max. 90 V
<b>Voltage UL:</b>	600 V
<b>Testing voltage:</b>	core/core 2000 V core/screen 2000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
<b>Temperature range</b>	<b>UL:</b> up to +150 °C
<i>fixed laying:</i>	-90/+180 °C
<i>flexible application:</i>	-55/+180 °C
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL VW1
<b>Oil resistance:</b>	very good
<b>Chemical resistance:</b>	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
<b>Characteristic impedance:</b>	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-10-2 (CAT 6A)
<b>UL Style:</b>	21618
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

item no.	type	dimension	max. core-ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈kg/km
16314631	CATLine CAT 6A HT	4 x 2 x 26 AWG	1,05	5,7	30,0	52

Other dimensions and colours are possible on request.

Also possible as harnessed cable with M12 or RJ 45 plug!



# Industrial Ethernet Cables



**CATLine CAT 7A S** Gigabit Ethernet cable, suitable for cable tracks with UL recognition, CSA approval

**CATLine CAT 7A RT** Gigabit Ethernet cable, suitable for robots with UL recognition, CSA approval

20549 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE



Marking for CATLine CAT 7A S 17774631:

SAB BRÜCKSKES · D-VIERSEN · **CATLine** Cat.7A S 4x2x26AWG 1777-4631 AWM Style 20549 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE



<b>Construction:</b>	CATLine CAT 7A S <i>suitable for cable tracks</i>	CATLine CAT 7A RT <i>suitable for robots</i>
<b>Dimension:</b>	4 x 2 x 26 AWG, 4 x 2 x 24 AWG	
<b>Conductor:</b>	bare copper strands, fine wires	
<b>Insulation:</b>	special polymer	
<b>Colour code:</b>	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown	
<b>Stranding:</b>	cores twisted to pairs, pairs screened with foil, pairs together	
<b>Screen:</b>	aluminized non-woven tape and tinned copper braiding	
<b>Wrapping:</b>	non-woven tape	
<b>Sheath material:</b>	PUR	
<b>Sheath colour:</b>	green (similar RAL 6018)	

<b>Technical data:</b>	CATLine CAT 7A S <i>suitable for cable tracks</i>	CATLine CAT 7A RT <i>suitable for robots</i>
<b>Item number:</b>	1777-4631, 1777-4431	1787-4631, 1787-4431
<b>Peak operating voltage:</b>	max. 90 V	
<b>Voltage UL/CSA:</b>	300 V	
<b>Testing voltage</b>		
core/core:	2000 V	
core/screen:	2000 V	
<b>Min. bending radius</b>		
fixed laying:	5 x d	5 x d
flexible application:	10 x d	10 x d
continuously flexible:	15 x d	
<b>Torsion angle:</b>	---	up to ± 180°/m
<b>Temperature range VDE</b>	<b>UL/CSA:</b> up to +80 °C	
fixed laying:	-40/+70 °C	
flexible application:	-40/+70 °C	
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1	
<b>Fire performance:</b>	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 UL Horizontal Flame Test FT2	
<b>Oil resistance:</b>	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2	
<b>Characteristic impedance (100 MHz):</b>	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-9-2 + VDE 0819-9-2 / CAT 7A	
<b>Flexibility:</b>	very good	
<b>UL Style:</b>	20549	
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union	

item no.	type	dimension	max. core-ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈kg/km
17774631	CATLine CAT 7A S	4 x 2 x 26 AWG	1,50	8,5	38,5	81
17774431	CATLine CAT 7A S	4 x 2 x 24 AWG	1,60	10,4	46,6	101
17874631	CATLine CAT 7A RT	4 x 2 x 26 AWG	1,50	8,9	38,5	83
17874431	CATLine CAT 7A RT	4 x 2 x 24 AWG	1,60	9,3	44,0	98

Other dimensions and colours are possible on request.



**+90°C  
on request!**

Also possible  
as harnessed cable  
with M12 or RJ 45 plug!

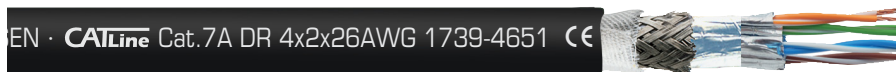


# Industrial Ethernet Cables

**CATLine CAT 5e DR** reeling CAT 5e Industrial Ethernet cable

**CATLine CAT 6A DR** reeling CAT 6A Gigabit Ethernet cable

**CATLine CAT 7A DR** reeling CAT 7A Gigabit Ethernet cable



Marking for CATLine CAT 7A DR 17394651:

SAB BRÜCKSKES · D-VIERSEN · CATLine Cat.7A DR 4x2x26AWG 1739-4651 CE

<b>Construction:</b>	CATLine CAT 5e DR <i>reeling Ethernet cable</i>	CATLine CAT 6A DR <i>reeling Ethernet cable</i>	CATLine CAT 7A DR <i>reeling Ethernet cable</i>
<b>Dimension:</b>	4 x 2 x 26 AWG		
<b>Conductor:</b>	bare copper strands, fine wires		
<b>Insulation:</b>	special polymer		
<b>Colour code:</b>	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown		
<b>Stranding:</b>	cores twisted to pairs, pairs together	cores twisted to pairs, pairs screened with foil, pairs together	
<b>Wrapping:</b>	non-woven tape		---
<b>Screen:</b>	alu foil and tinned copper braiding		aluminized non-woven tape and tinned copper braiding
<b>Wrapping:</b>	non-woven tape		
<b>Sheath material:</b>	PUR / supporting braid / PUR		
<b>Sheath colour:</b>	black (RAL 9005)		

<b>Technical data:</b>	CATLine CAT 5e DR <i>reeling Ethernet cable</i>	CATLine CAT 6A DR <i>reeling Ethernet cable</i>	CATLine CAT 7A DR <i>reeling Ethernet cable</i>
<b>Item number:</b>	1539-4651	1639-4651	1739-4651
<b>Peak operating voltage:</b>	max. 90 V		
<b>Testing voltage</b> core/core: core/screen:	750 V 750 V		
<b>Min. bending radius</b>	for laying and installation (fixed laying): for repeated winding action (flexible application): guided on pulleys (flexible application):		5 x d 10 x d 12 x d
<b>Temperature range VDE</b> fixed laying: flexible application:	-50/+90 °C -40/+90 °C		
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1		
<b>Oil resistance:</b>	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2		
<b>Characteristic impedance (100 MHz):</b>	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-2-2 / CAT 5	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-10-2 / CAT 6A	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-9-2 / CAT 7A
<b>Weather resistance:</b>	very good		
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union		

item no.	type	dimension	max. core-ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈kg/km	tensile strength max. N
15394651	CATLine CAT 5e DR	4 x 2 x 26 AWG	1,05	8,5	32,0	79	200
16394651	CATLine CAT 6A DR	4 x 2 x 26 AWG	1,05	8,5	32,0	81	200
17394651	CATLine CAT 7A DR	4 x 2 x 26 AWG	1,60	10,5	38,5	117	200

Other dimensions and colours are possible on request.

Also possible as harnessed cable with M12 or RJ 45 plug!

**CABLE ASSEMBLY POSSIBLE**

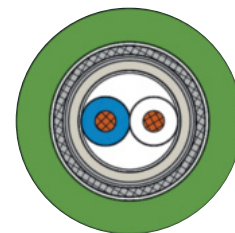
# Industrial Ethernet Cables



**CATLine SPE C-Track** Single Pair Ethernet cable, suitable for cable tracks UL recognition

**CATLine SPE Robot** Single Pair Ethernet cable, suitable for robots UL recognition

**CATLine SPE HT** Single Pair Ethernet cable, high temperature resistant UL recognition



Marking for CATLine SPE C-Track 17771630:

SAB BRÜCKSKES · D-VIERSEN · CATLine SPE C-Track 2xAWG26/7 1777-1630 AWM Style 20549 80°C 300V CE



<b>Construction:</b>	CATLine SPE C-Track <i>suitable for cable tracks</i>	CATLine SPE Robot <i>suitable for robots</i>	CATLine SPE HT <i>high temperature resistant</i>
<b>Dimension:</b>	2 x 28/7 AWG, 2 x 26/7 AWG, 2 x 24/7 AWG, 2 x 22/7 AWG		
<b>Conductor:</b>	bare copper strands, 7 wires		
<b>Insulation:</b>	special polymer		TPFP
<b>Colour code:</b>	white, blue		
<b>Stranding:</b>	twisted to pairs		
<b>Inner sheath:</b>	SABIX®		TPFP
<b>Screen:</b>	alu foil and tinned copper braiding		
<b>Wrapping:</b>	non-woven tape		---
<b>Sheath material:</b>	PUR		Besilen®
<b>Sheath colour:</b>	green (similar RAL 6018)		green

<b>Technical data:</b>	CATLine SPE C-Track <i>suitable for cable tracks</i>	CATLine SPE Robot <i>suitable for robots</i>	CATLine SPE HT <i>high temperature resistant</i>
<b>Item group:</b>	1777	1787	1721
<b>Peak operating voltage:</b>	max. 90 V		
<b>Voltage UL:</b>	300 V		600 V
<b>Testing voltage</b> core/core: core/screen:	2000 V 2000 V		
<b>Min. bending radius</b> fixed laying: flexible application: continuously flexible:	5 x d 10 x d 15 x d		5 x d 10 x d
<b>Torsion angle:</b>	---	up to ± 180°/m	
<b>Temperature range</b> fixed laying: flexible application:	UL: up to +80 °C -40/+70 °C -40/+70 °C		UL: up to +150 °C -40/+180 °C -25/+180 °C
<b>Temperature range conductor:</b>	---		up to +180 °C
<b>Halogen-free:</b>	acc. to IEC 60754-1 + VDE 0482-754-1		---
<b>Oil resistance:</b>	very good - PUR, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2		---
<b>Characteristic impedance:</b>	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to IEC 61156-12. Bandwidth 1 - 600 MHz.		
<b>UL Style:</b>	20549		4535
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union		

item group	type	dimension	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈kg/km
1777	CATLine SPE C-Track	2 x 28/7 AWG	4,0	12,1	21
1777	CATLine SPE C-Track	2 x 26/7 AWG	4,6	16,9	37
1777	CATLine SPE C-Track	2 x 24/7 AWG	5,1	18,5	33
1777	CATLine SPE C-Track	2 x 22/7 AWG	5,5	22,7	40
1787	CATLine SPE Robot	2 x 28/7 AWG	4,0	12,1	21
1787	CATLine SPE Robot	2 x 26/7 AWG	4,6	16,9	28
1787	CATLine SPE Robot	2 x 24/7 AWG	5,1	18,5	33
1787	CATLine SPE Robot	2 x 22/7 AWG	5,5	22,7	40
1721	CATLine SPE HT	2 x 28/7 AWG	4,0	12,7	27
1721	CATLine SPE HT	2 x 26/7 AWG	4,9	14,3	37
1721	CATLine SPE HT	2 x 24/7 AWG	5,4	19,9	44
1721	CATLine SPE HT	2 x 22/7 AWG	5,8	22,6	50

Other dimensions and colours are possible on request.



## Outstanding features:

### SPE C-Track / SPE Robot

- UL recognized
- low cabling effort
- short latency periods
- small outer diameter
- PWIS uncritical  
(PWIS = paint-wetting impairment substances)

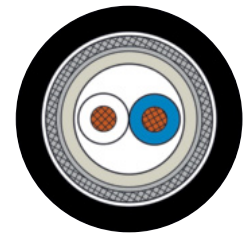
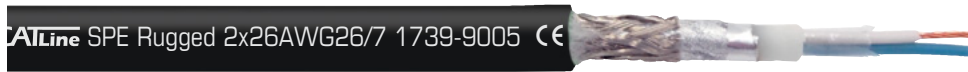
### SPE HT

- UL recognized
- high temperature resistant
- flame retardant and self-extinguishing
- very easy installation



## CATLine SPE Rugged

Single Pair Ethernet cable for robust indoor and outdoor use



Marking for CATLine SPE Rugged 17399005:

SAB BRÖCKSKES · D-VIERSEN · CATLine SPE Rugged 2xAWG26/7 1739-9005 CE

### Construction:

<b>Conductor:</b>	bare copper strands, 7 wires
<b>Insulation:</b>	TPFK
<b>Colour code:</b>	white, blue
<b>Stranding:</b>	twisted to pairs
<b>Inner sheath:</b>	TPFK
<b>Screen:</b>	alu foil and tinned copper braiding
<b>Wrapping:</b>	non-woven tape
<b>Sheath material:</b>	PUR 420 with mat surface
<b>Sheath colour:</b>	black (RAL 9005)

### Outstanding features:



- flexible up to -45 °C
- absolutely weather resistant
- very easy installation
- small bending radius

### Technical data:

<b>Peak operating voltage:</b>	max. 90 V
<b>Testing voltage:</b>	core/core 750 V core/screen 750 V
<b>Min. bending radius</b>	
fixed laying:	5 x d
flexible application:	12 x d
<b>Temperature range</b>	
fixed laying:	-50/+90 °C / +125 °C/2500 h
flexible application:	-45/+90 °C / +125 °C/2500 h
<b>Temperature range conductor:</b>	up to +180 °C
<b>Oil resistance:</b>	very good - TMPU acc. to EN 50363-10-2
<b>Fuel resistance:</b>	good
<b>Battery acid resistance:</b>	good
<b>UV resistance:</b>	acc. to HD 605 S1
<b>Ozone resistance:</b>	acc. to EN 50396
<b>Saltwater resistance:</b>	acc. to UL 1309
<b>Characteristic impedance:</b>	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to IEC 61156-12. Bandwidth 1 - 600 MHz.
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

item group	type	dimension	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈kg/km
1739	CATLine SPE Rugged	2 x 28/7 AWG	3,9	12,1	23
1739	CATLine SPE Rugged	2 x 26/7 AWG	4,4	16,9	32
1739	CATLine SPE Rugged	2 x 24/7 AWG	5,0	18,4	38
1739	CATLine SPE Rugged	2 x 22/7 AWG	5,5	22,5	39

Other dimensions and colours are possible on request.

# Harnessed Cables

## CATLine Profinet cable

suitable for cable tracks  
with M12 male connectors



INNOVATIVE SOLUTIONS  
FOR PROFINET WIRING

**Application:** For the field bus wiring of Profinet field bus systems in industrial sectors. This cable type is used for example in cable chain applications for automation and machine and plant construction with rough environments. The PUR outer sheath is resistant against rough environmental conditions.

### Construction:

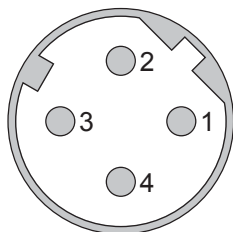
<b>Conductor:</b>	tinned copper strands
<b>Insulation:</b>	special polymer
<b>Screen:</b>	alu foil and tinned copper braiding
<b>Sheath material:</b>	PUR
<b>Sheath colour:</b>	green (RAL 6018)

### Technical Data:

<b>Min. bending radius</b> <i>continuously flexible:</i>	15 x d
<b>Temperature range</b> <i>flexible application:</i> <i>fixed laying:</i>	-20/+70 °C -30/+70 °C
<b>Special feature:</b>	Characteristic impedance 100Ω ± 10Ω CAT 5 with reference to EN 50173-1, oil resistant, suitable for cable tracks

### Pin configuration:

<b>Pin1:</b>	yellow
<b>Pin2:</b>	white
<b>Pin3:</b>	orange
<b>Pin4:</b>	blue
<b>Housing:</b>	screen



### Plug types:

- M12 plug(male) 4-pole, D-coded
- M12 socket (female) 4-pole, D-coded  
straight or tilted  
moulded or mounted

## Profibus cable

suitable for cable tracks  
with M12 male connectors



PROFIBUS CABLES  
FOR CABLE CHAIN APPLICATIONS

**Application:** For the field bus wiring in automation technique. These bus cables transfer Profibus signals with different cable and plug combinations. The PUR cable for cable chain applications is resistant against rough environmental conditions in industrial applications.

### Construction:

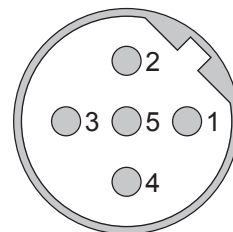
<b>Conductor:</b>	bare copper strands
<b>Insulation:</b>	TPK
<b>Screen:</b>	alu foil and tinned copper braiding
<b>Sheath material:</b>	PUR
<b>Sheath colour:</b>	red lilac (RAL 4001)

### Technical Data:

<b>Min. bending radius</b> <i>continuously flexible:</i>	12 x d
<b>Temperature range</b> <i>flexible application:</i> <i>fixed laying:</i>	-40/+80 °C -40/+80 °C
<b>Special feature:</b>	Characteristic impedance at 3 - 20 MHz: 150Ω ± 10% with reference to IEC 61158-2, oil resistant, suitable for cable tracks

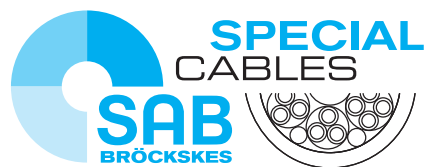
### Pin configuration:

<b>Pin1:</b>	n.o.*
<b>Pin2:</b>	green
<b>Pin3:</b>	n.o.*
<b>Pin4:</b>	red
<b>Pin5:</b>	n.o.*
<b>Housing:</b>	screen



### Plug types:

- M12 plug(male) 5-pole, B-coded
- M12 socket (female) 5-pole, B-coded  
straight or tilted  
moulded or mounted



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