

# CABLES FOR AUTOMATION INDUSTRY






















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# Cables for Automation Industry

## Content

Who we are	.....	4
Applications	.....	5
<b>Cables for Automation Industry</b>		
<b>SABFlex Cable Track Cables</b>		
■ SD 200		extremely flexible TPE/PUR data cable with coloured cores for continuous movement ..... 6
■ S 200		extremely flexible TPE/PUR control cable with numbered cores for continuous movement ..... 7
■ SD 200 C		continuously flexible TPE/PUR data cable with coloured cores and overall copper screen ..... 8
■ S 200 C		continuously flexible TPE/PUR control cable with numbered cores and overall copper screen ..... 9
■ SD 200 C TP		continuously flexible paired TPE/PUR data cable with coloured cores and overall copper screen ..... 10
■ S 910 P		continuously flexible TPE/PUR single conductor ..... 11
■ S 910 CP		continuously flexible TPE/PUR single conductor with overall copper screen ..... 11
■ SD 980 P		continuously flexible TPE/PUR data cable with coloured cores ..... 12
■ S 980 P		continuously flexible TPE/PUR control cable with numbered cores ..... 13
■ SD 980 CP		continuously flexible TPE/PUR data cable with coloured cores and overall copper screen ..... 14
■ S 980 CP		continuously flexible TPE/PUR control cable with numbered cores and overall copper screen ..... 15
■ SD 980 CP TP		continuously flexible paired TPE/PUR data cable with coloured cores and overall copper screen ..... 16
<b>SABServo Servo Cables</b>		
■ SL 860 C		low capacity PVC motor connection cable with overall copper screen 0.6/1 kV ..... 17
■ SL 863 C		low capacity combined PVC motor connection cable with overall copper screen 0.6/1 kVV ..... 18
■ SL 834 C		low capacity PUR motor connection cable with overall copper screen 0.6/1 kV ..... 19
■ SL 871 C		low capacity combined PUR motor connection cable with overall copper screen 0.6/1 kV ..... 20
■ SL 875 C		<b>single cable solution</b> low capacity combined PUR motor connection cable with overall copper screen 0.6/1 kV ..... 21
■ SL 801 C		combined TPE/PUR motor connection cable with overall copper screen 0.6/1 kV ..... 22
■ SL 841 C		combined TPE/PUR motor connection cable with overall copper screen 0.6/1 kV ..... 23
■ SL 823 C		PUR motor connection cable with TPE cores and overall copper screen 0.6/1 kV ..... 24
■ SL 833 C		PUR motor connection cable with TPE cores and overall copper screen 0.6/1 kV ..... 25
■ SL 802 C		TPE/PUR feedback cable and overall copper screen 0.6/1 kV ..... 26
■ SL 803 C		TPE/PUR transmission cable with overall copper screen ..... 26
■ SL 842 C		TPE/PUR feedback cable with overall copper screen ..... 27
■ SL 843 C		TPE/PUR transmission cable with overall copper screen ..... 27
■ SL 839 C		PUR transmission cable with overall copper screen ..... 28
<b>SABFlex Sensor-/Actuator Cables</b>		
■ PUR Sensor cable		suitable for cable tracks ..... 29
<b>SABData Data Cables</b>		
■ Optical waveguide		1 x POF ..... 29
<b>SABRobot Torsion Cables</b>		
■ RT 123		PUR torsion cable, torsion angle up to $\pm 450^\circ$ over 0.5 m ..... 30
■ RT 123 D		PUR torsion cable with overall copper screen, torsion angle up to $\pm 450^\circ$ over 0.5 m ..... 30

# Cables for Automation Industry

## Content

### Tray Cables

■ TR 600 Auto black Type TC, MTW and WTTTC		UV and oil resistant, flexible Tray Cable and Machine-Tool Cable with black cores, suitable for cable tracks .....	31
■ TR 600 HD Type TC-ER		Heavy Duty Tray Cable .....	32
■ TR 600 C HD Type TC-ER		Heavy Duty Tray Cable with overall copper screen .....	32

### SABControl Control and Connection Cables

■ CC 600 P black/blue/red		PUR control cable with numbered black, blue or red cores .....	33
■ CC 600 CP		PUR control cable with numbered cores and overall copper screen .....	34
■ SABIX® A 260 PUR		halogen-free, cold-flexible, oil resistant control cable with numbered cores .....	35

### SABBus Bus Cables

■ S IBS 618		PUR Interbus-S remote/installation remote bus cable for cable tracks .....	36
■ SABIX® IBS 610		halogen-free Interbus-S remote/installation remote bus cable .....	36
■ SABIX® IBS 610 FRNC		halogen-free, flame retardant Interbus-S remote/installation remote bus cable .....	36
■ S PB 634		PUR Profibus-DP cable for cable tracks .....	37
■ PB 633		halogen-free, flexible PE Profibus-DP cable .....	37
■ PB 632		flexible PVC Profibus-DP cable .....	37
■ PB 640		flexible PVC Profibus-DP cable .....	38
■ PB 640 UL		flexible PVC Profibus-DP cable .....	38
■ S PB 640		highly flexible PUR Profibus-DP cable .....	38
■ S PB 640 UL		highly flexible PUR Profibus-DP cable .....	38

### SABBus Industrial Ethernet Cables CAT 5

■ S PN 667		PUR Ethernet cable type C, continuously flexible .....	39
■ S PN 668		PUR Profinet cable type C, continuously flexible, suitable for cable tracks ..	40
■ S PN 669		PUR Profinet cable type C, continuously flexible, suitable for cable tracks ..	40
■ PN 661		halogen-free Profinet cable type B, for flexible applications .....	40
■ S PN 681		PUR Profinet cable type C, continuously flexible, suitable for cable tracks, twisted pairs .....	40

### SABCATLine Industrial Gigabit Ethernet Cables CAT 6 / CAT 6A / CAT 7A

■ CATLine CAT 6 S		PUR CAT 6 Gigabit Ethernet cable, suitable for cable tracks .....	41
■ CATLine CAT 6A S		PUR CAT 6A Gigabit Ethernet cable, suitable for cable tracks .....	41
■ CATLine CAT 6 RT		PUR CAT 6 Gigabit Ethernet cable, suitable for cable tracks/suitable for robots .....	41
■ CATLine CAT 6A RT		PUR CAT 6A Gigabit Ethernet cable, suitable for cable tracks/suitable for robots .....	41
■ CATLine CAT 6A HT		FEP Gigabit Ethernet cable - high temperature resistant .....	42
■ CATLine CAT 7A S		PUR CAT 7A Gigabit Ethernet cable, suitable for cable tracks .....	43
■ CATLine CAT 7A RT		PUR CAT 7A Gigabit Ethernet cable, suitable for robots .....	43
■ CATLine CAT 5e DR		PUR reeling CAT 5e Industrial Ethernet cable .....	44
■ CATLine CAT 6A DR		PUR reeling CAT 6A Gigabit Ethernet cable .....	44
■ CATLine CAT 7A DR		PUR reeling CAT 7A Gigabit Ethernet cable .....	44

### SABCATLine Industrial Gigabit Ethernet Cables - Single Pair Ethernet Cables

■ CATLine SPE C-Track		Single Pair Ethernet cable, suitable for cable tracks .....	45
■ CATLine SPE Robot		Single Pair Ethernet cable, suitable for robots .....	45
■ CATLine SPE HT		Single Pair Ethernet cable, high temperature resistant .....	45
■ CATLine SPE Rugged		Single Pair Ethernet cable for robust indoor and outdoor use .....	46

### SABCATLine SABBus Harnessed Cables

■ CATLine Profinet cable		suitable for cable tracks with M12 plug connectorsn .....	47
■ Profibus cable		suitable for cable tracks with M12 plug connectorsn .....	47

**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 80 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 DIN EN ISO 14001 and DIN ISO 45001, and an energy management system according to DIN EN ISO 50001.

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

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 proved burnchamber and laboratory within the company.
EMPLOYEES/WORKERS:	Approx. 430 at the plant in Viersen, 550 worldwide
YEARLY SALES:	Approx. 95 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



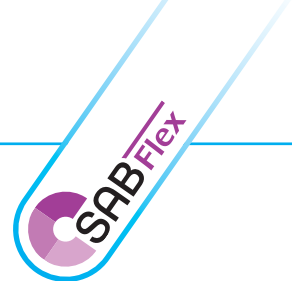
- ▶ **S 200**  
extremely flexible TPE/PUR control cable with numbered cores
- ▶ **S 200 C**  
continuously flexible TPE/PUR control cable with numbered cores and overall copper screen
- ▶ **SL 801 C**  
combined TPE/PUR motor connection cable with overall copper screen 0.6/1 kV
- ▶ **SL 802 C**  
TPE/PUR 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

## SD 200

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



BRÖCKSKES · D-VIERSEN · SD 200 25 x 0,14 mm<sup>2</sup> CE



Marking for SD 200 07742501:

SAB BRÖCKSKES · D-VIERSEN · SD 200 25 x 0,14 mm<sup>2</sup> CE

### Construction:

<b>Conductor:</b>	bare copper strands, extra fine wires
<b>Insulation:</b>	TPE
<b>Colour code:</b>	with reference to DIN 47100
<b>Stranding:</b>	specially adjusted layering with non-woven tape over each layer
<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>	grey (RAL 7032)

### Technical Data:

<b>Peak operating voltage:</b>	max. 350 V acc. to VDE 0812
<b>Testing voltage:</b>	core/core 1500 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 - 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>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**

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
07740201	2 x 0,14	0,11	3,2	2,7	11
07740301	3 x 0,14	0,11	3,3	4,0	13
07740401	4 x 0,14	0,11	3,6	5,4	15
07740501	5 x 0,14	0,11	3,8	6,7	18
07740701	7 x 0,14	0,11	4,4	9,4	24
07741001	10 x 0,14	0,11	5,1	13,4	30
07741201	12 x 0,14	0,11	5,2	16,1	34
07741401	14 x 0,14	0,11	5,5	18,8	38
07741801	18 x 0,14	0,11	6,0	24,2	48
07742501	25 x 0,14	0,11	7,1	33,6	63
07743201	32 x 0,14	0,11	7,6	43,0	78
07740202	2 x 0,25	0,11	3,5	4,8	15
07740302	3 x 0,25	0,11	3,7	7,2	18
07740402	4 x 0,25	0,11	3,9	9,6	21
07740502	5 x 0,25	0,11	4,2	12,0	25
07740702	7 x 0,25	0,11	4,9	16,8	34
07741002	10 x 0,25	0,11	5,7	24,0	43

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
07741202	12 x 0,25	0,11	5,8	28,8	49
07741402	14 x 0,25	0,11	6,1	33,6	56
07741802	18 x 0,25	0,11	6,8	43,2	71
07742502	25 x 0,25	0,11	8,1	60,0	94
07743202	32 x 0,25	0,11	8,8	76,8	120
07740203	2 x 0,34	0,11	3,7	6,5	17
07740303	3 x 0,34	0,11	3,9	9,8	21
07740403	4 x 0,34	0,11	4,2	13,1	25
07740503	5 x 0,34	0,11	4,5	16,3	30
07740703	7 x 0,34	0,11	5,2	22,8	41
07741003	10 x 0,34	0,11	6,1	32,6	52
07741203	12 x 0,34	0,11	6,3	39,2	60
07741403	14 x 0,34	0,11	6,6	45,7	69
07741803	18 x 0,34	0,11	7,3	58,8	87
07742503	25 x 0,34	0,11	8,9	81,6	119
07743203	32 x 0,34	0,11	9,5	104,4	149

Other dimensions and colours are possible on request.



### Possible on request:

- in dimensions  
0,50 mm<sup>2</sup> and 0,75 mm<sup>2</sup>

# Cable Track Cable

## S 200

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



Marking for S 200 07440161:  
SAB BRÖCKSKES · D-VIERSEN · S 200 1 x 10,0 mm² CE



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, TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
<b>Sheath colour:</b>	grey (RAL 7000)

### 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

### 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 - 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>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

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
07740305	3 x 0,50	0,16	5,1	14,4	34
07740505	5 x 0,50	0,16	6,0	24,0	50
07740705	7 x 0,50	0,16	6,9	33,6	67
07741205	12 x 0,50	0,16	8,3	57,6	98
07741805	18 x 0,50	0,16	9,9	86,4	145
07742505	25 x 0,50	0,16	11,9	120,0	196
07740307	3 x 0,75	0,16	5,7	21,6	45
07740507	5 x 0,75	0,16	6,7	36,0	66
07740707	7 x 0,75	0,16	7,7	50,4	90
07741207	12 x 0,75	0,16	9,6	86,4	137
07741807	18 x 0,75	0,16	11,3	129,6	201
07742507	25 x 0,75	0,16	13,9	180,0	277
07740310	3 x 1,00	0,16	6,1	28,8	55
07740510	5 x 1,00	0,16	7,2	48,0	83
07740710	7 x 1,00	0,16	8,4	67,2	114
07741210	12 x 1,00	0,16	10,4	115,2	173
07741810	18 x 1,00	0,16	12,3	172,8	256
07742510	25 x 1,00	0,16	15,1	240,0	353
07740315	3 x 1,50	0,16	6,7	43,2	73
07740515	5 x 1,50	0,16	8,0	72,0	112
07740715	7 x 1,50	0,16	9,6	100,8	157
07741215	12 x 1,50	0,16	11,9	172,8	243
07741815	18 x 1,50	0,16	14,2	259,2	364

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
07742515	25 x 1,50	0,16	17,1	360,0	493
07746515	65 x 1,50	0,16	26,0	936,0	1241
07740325	3 x 2,50	0,16	8,5	72,0	116
07740525	5 x 2,50	0,16	10,4	120,0	182
07740725	7 x 2,50	0,16	12,4	168,0	255
07741225	12 x 2,50	0,16	15,8	288,0	405
07741825	18 x 2,50	0,16	18,6	432,0	596
07742525	25 x 2,50	0,16	22,7	600,0	814
07740340	3 x 4,00	0,16	9,8	115,2	169
07740540	5 x 4,00	0,16	12,1	192,0	272
07740740	7 x 4,00	0,16	14,6	268,8	389
07740360	3 x 6,00	0,21	11,7	172,8	246
07740560	5 x 6,00	0,21	14,5	288,0	400
07740760	7 x 6,00	0,21	17,3	403,2	561
07740161	1 x 10,0	0,21	7,1	96,0	117
07740361	3 x 10,0	0,21	14,5	288,0	407
07740561	5 x 10,0	0,21	17,2	480,0	627
07740162	1 x 16,0	0,21	8,3	153,6	177
07740362	3 x 16,0	0,21	17,2	460,8	604
07740562	5 x 16,0	0,21	21,2	768,0	978
07740163	1 x 25,0	0,21	9,9	240,0	270
07740363	3 x 25,0	0,21	20,6	720,0	920
07740563	5 x 25,0	0,21	25,4	1200,0	1485
07740164	1 x 35,0	0,21	11,5	336,0	362
07740564	5 x 35,0	0,21	29,4	1680,0	2010
07740165	1 x 50,0	0,31	14,0	480,0	531
07740166	1 x 70,0	0,31	16,7	672,0	744
07740167	1 x 95,0	0,31	20,5	912,0	1020
07740168	1 x 120,0	0,31	21,5	1152,0	1244
07740169	1 x 150,0	0,31	24,6	1440,0	1584
07740170	1 x 185,0	0,41	26,7	1776,0	1920
07740171	1 x 240,0	0,41	30,1	2304,0	2458

Other dimensions and colours are possible on request.



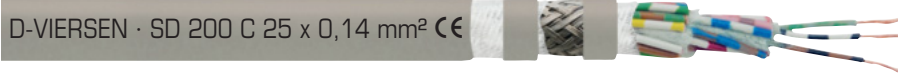
### Possible on request:

- singlecore  
with green-yellow insulation  
and black outer sheath  
or 0,6/1 kV

# Cable Track Cable

## SD 200 C

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



Marking for SD 200 C 07842501:

SAB BRÜCKSKES · D-VIERSEN · SD 200 C 25 x 0,14 mm<sup>2</sup> CE

### Construction:

<b>Conductor:</b>	bare copper strands, extra fine wires
<b>Insulation:</b>	TPE
<b>Colour code:</b>	with reference to DIN 47100
<b>Stranding:</b>	specially adjusted layering with non-woven tape over each layer
<b>Wrapping:</b>	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>	grey (RAL 7032)

### Outstanding features:



- **PWIS uncritical**  
(PWIS = paint-wetting impairment substances)
- **flexible at low temperatures**
- **halogen-free**
- **travel > 10 m is possible**
- **good EMC characteristics**
- **high abrasion resistance**

### Technical Data:

<b>Peak operating voltage:</b>	max. 350 V acc. to VDE 0812
<b>Testing voltage:</b>	core/core 1500 V core/screen 1200 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 - 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>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

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
07840201	2 x 0,14	0,11	3,7	13,0	19
07840301	3 x 0,14	0,11	3,8	14,3	21
07840401	4 x 0,14	0,11	4,1	15,7	24
07840501	5 x 0,14	0,11	4,3	17,1	27
07840701	7 x 0,14	0,11	4,9	23,4	36
07841201	12 x 0,14	0,11	5,7	32,1	47
07841801	18 x 0,14	0,11	6,5	43,8	64
07842501	25 x 0,14	0,11	7,6	57,3	82
07843201	32 x 0,14	0,11	8,3	69,1	103
07840202	2 x 0,25	0,11	4,0	15,1	22
07840302	3 x 0,25	0,11	4,2	17,6	26
07840402	4 x 0,25	0,11	4,4	23,4	32
07840502	5 x 0,25	0,11	4,7	25,9	36
07840702	7 x 0,25	0,11	5,4	32,7	47
07841202	12 x 0,25	0,11	6,4	48,3	65
07841802	18 x 0,25	0,11	7,3	64,7	88
07842502	25 x 0,25	0,11	8,8	86,3	117
07843202	32 x 0,25	0,11	9,3	105,9	142
07840203	2 x 0,34	0,11	4,2	16,9	25
07840303	3 x 0,34	0,11	4,4	23,6	31
07840403	4 x 0,34	0,11	4,7	27,0	36
07840503	5 x 0,34	0,11	5,0	30,3	41

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
07840703	7 x 0,34	0,11	5,7	38,9	54
07841203	12 x 0,34	0,11	6,7	58,8	75
07841803	18 x 0,34	0,11	7,8	82,5	105
07842503	25 x 0,34	0,11	9,4	110,7	141
07843203	32 x 0,34	0,11	10,2	152,1	182
07840250	2 x 0,50	0,11	4,8	23,5	32
07840350	3 x 0,50	0,11	5,0	28,4	39
07840450	4 x 0,50	0,11	5,4	35,1	47
07840550	5 x 0,50	0,11	5,8	40,1	55
07840750	7 x 0,50	0,11	6,7	53,3	74
07841250	12 x 0,50	0,11	8,0	81,4	104
07841850	18 x 0,50	0,11	9,5	115,6	152
07842550	25 x 0,50	0,11	11,8	174,4	219
07840275	2 x 0,75	0,11	5,4	30,3	41
07840375	3 x 0,75	0,11	5,7	37,6	50
07840475	4 x 0,75	0,11	6,1	46,5	60
07840575	5 x 0,75	0,11	6,6	55,6	73
07840775	7 x 0,75	0,11	7,7	74,1	99
07841275	12 x 0,75	0,11	9,5	115,6	146
07841875	18 x 0,75	0,11	11,6	183,9	231
07842575	25 x 0,75	0,11	14,3	266,0	326

Other dimensions and colours are possible on request.



# Cable Track Cable

## S 200 C

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



Marking for S 200 C 07840161:  
SAB BRÖCKSKES · D-VIERSEN · S 200 C 1 x 10,0 mm² CE



Marking for S 200 C 07841215:  
SAB BRÖCKSKES · D-VIERSEN · S 200 C 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>Inner sheath:</b>	SABIX®
<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>	grey (RAL 7000)

### Outstanding features:



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

### Technical Data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage:</b>	core/core 2000 V core/screen 2000 V
<b>Min. bending radius continuously flexible:</b>	7,5 x d
<b>Radiation resistance:</b>	1 x 10 <sup>7</sup> cJ/kg
<b>Temperature range fixed laying:</b>	-50/+90 °C
<b>flexible application:</b>	-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

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
07840305	3 x 0,50	0,16	7,0	43,6	58
07840505	5 x 0,50	0,16	7,9	61,5	77
07840705	7 x 0,50	0,16	9,0	74,1	101
07841205	12 x 0,50	0,16	10,6	108,2	151
07841805	18 x 0,50	0,16	12,2	143,0	203
07842505	25 x 0,50	0,16	14,8	217,0	299
07840307	3 x 0,75	0,16	7,6	54,1	70
07840507	5 x 0,75	0,16	8,8	74,3	98
07840707	7 x 0,75	0,16	9,8	92,3	123
07841207	12 x 0,75	0,16	11,9	142,4	192
07841807	18 x 0,75	0,16	14,2	215,3	294
07842507	25 x 0,75	0,16	16,6	289,7	386
07840310	3 x 1,00	0,16	8,0	66,4	82
07840510	5 x 1,00	0,16	9,3	89,0	114
07840710	7 x 1,00	0,16	10,7	117,9	159
07841210	12 x 1,00	0,16	12,8	174,9	239
07841810	18 x 1,00	0,16	15,2	270,2	353
07842510	25 x 1,00	0,16	18,4	367,5	481
07840315	3 x 1,50	0,16	8,8	81,5	104
07840515	5 x 1,50	0,16	10,1	122,2	145
07840715	7 x 1,50	0,16	11,9	156,8	206
07841215	12 x 1,50	0,16	14,7	269,7	341
07841815	18 x 1,50	0,16	16,9	369,2	465

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
07842515	25 x 1,50	0,16	20,4	493,4	633
07840325	3 x 2,50	0,16	10,6	122,8	159
07840525	5 x 2,50	0,16	12,6	179,6	236
07840725	7 x 2,50	0,16	15,0	265,2	335
07841225	12 x 2,50	0,16	18,5	417,1	525
07841825	18 x 2,50	0,16	21,8	571,4	739
07842525	25 x 2,50	0,16	26,0	780,8	1004
07840340	3 x 4,00	0,16	12,1	172,9	224
07840540	5 x 4,00	0,16	15,0	289,2	357
07840740	7 x 4,00	0,16	18,0	396,3	486
07840360	3 x 6,00	0,21	14,6	258,8	334
07840560	5 x 6,00	0,21	17,2	398,4	485
07840760	7 x 6,00	0,21	20,6	537,3	615
07840161	1 x 10,0	0,21	7,7	117,5	135
07840361	3 x 10,0	0,21	17,4	392,9	502
07840561	5 x 10,0	0,21	20,5	615,5	731
07840162	1 x 16,0	0,21	9,1	179,9	206
07840362	3 x 16,0	0,21	20,7	598,4	724
07840562	5 x 16,0	0,21	24,7	947,1	1101
07840163	1 x 25,0	0,21	10,7	287,7	306
07840363	3 x 25,0	0,21	23,9	898,2	1047
07840563	5 x 25,0	0,21	29,1	1400,1	1610
07840164	1 x 35,0	0,21	12,5	390,6	408
07840564	5 x 35,0	0,21	33,1	1915,1	2119
07840165	1 x 50,0	0,31	14,9	577,2	601
07840166	1 x 70,0	0,31	17,7	783,1	826
07840167	1 x 95,0	0,31	21,5	1051,2	1122
07840168	1 x 120,0	0,31	22,7	1293,1	1356
07840169	1 x 150,0	0,31	26,2	1611,0	1712
07840170	1 x 185,0	0,41	27,9	1952,4	2059
07840171	1 x 240,0	0,41	31,3	2507,0	2617

Other dimensions and colours are possible on request.



### Possible on request:

- singlecore with green-yellow insulation and black outer sheath or 0,6/1 kV



# Cable Track Cable

## SD 200 C TP

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



Marking for SD 200 C TP 07890350:

SAB BRÜCKSKES · D-VIERSEN · SD 200 C TP 3 x 2 x 0,5 mm² CE

### Construction:

<b>Conductor:</b>	bare copper strands, extra fine wires
<b>Insulation:</b>	TPE
<b>Colour code:</b>	with reference to DIN 47100
<b>Stranding:</b>	cores twisted to pairs, pairs twisted in specially adjusted layering with non-woven tape over each layer
<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>	grey (RAL 7032)

### Technical Data:

<b>Peak operating voltage:</b>	max. 350 V acc. to VDE 0812
<b>Testing voltage:</b>	core/core 1500 V core/screen 1200 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**
- **good EMC characteristics**
- **high abrasion resistance**

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07890214	2 x 2 x 0,14	0,11	4,6	17,4	28
07890314	3 x 2 x 0,14	0,11	5,1	20,2	32
07890414	4 x 2 x 0,14	0,11	5,8	24,7	39
07890514	5 x 2 x 0,14	0,11	6,2	28,8	46
07890614	6 x 2 x 0,14	0,11	6,4	31,5	53
07890714	7 x 2 x 0,14	0,11	6,7	35,9	59
07891014	10 x 2 x 0,14	0,11	7,9	47,5	72
07891414	14 x 2 x 0,14	0,11	9,0	62,7	96
07891814	18 x 2 x 0,14	0,11	10,0	89,6	129
07892514	25 x 2 x 0,14	0,11	11,7	114,3	170
07890225	2 x 2 x 0,25	0,11	5,1	21,8	35
07890325	3 x 2 x 0,25	0,11	5,7	28,3	44
07890425	4 x 2 x 0,25	0,11	6,4	36,1	52
07890525	5 x 2 x 0,25	0,11	6,9	41,1	61
07890625	6 x 2 x 0,25	0,11	7,1	47,3	69
07890725	7 x 2 x 0,25	0,11	7,4	54,1	82
07891025	10 x 2 x 0,25	0,11	8,9	70,8	101
07891425	14 x 2 x 0,25	0,11	10,9	108,7	153
07891825	18 x 2 x 0,25	0,11	11,6	133,4	189
07892525	25 x 2 x 0,25	0,11	13,8	171,9	262
07890234	2 x 2 x 0,34	0,11	5,4	20,3	40
07890334	3 x 2 x 0,34	0,11	6,0	34,9	52
07890434	4 x 2 x 0,34	0,11	6,9	43,2	63
07890534	5 x 2 x 0,34	0,11	7,4	53,1	73

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
07890734	7 x 2 x 0,34	0,11	8,0	66,4	94
07891034	10 x 2 x 0,34	0,11	9,6	90,5	121
07891434	14 x 2 x 0,34	0,11	11,6	138,3	181
07891834	18 x 2 x 0,34	0,11	12,5	169,2	223
07892534	25 x 2 x 0,34	0,11	14,7	247,3	313
07890250	2 x 2 x 0,50	0,11	6,3	34,6	52
07890350	3 x 2 x 0,50	0,11	6,9	47,3	68
07890450	4 x 2 x 0,50	0,11	7,9	61,4	85
07890550	5 x 2 x 0,50	0,11	8,8	73,1	103
07890750	7 x 2 x 0,50	0,11	9,4	108,4	136
07891050	10 x 2 x 0,50	0,11	11,3	143,3	189
07891450	14 x 2 x 0,50	0,11	13,5	191,7	256
07891850	18 x 2 x 0,50	0,11	14,7	257,8	335
07892550	25 x 2 x 0,50	0,11	17,0	336,5	436
07890275	2 x 2 x 0,75	0,11	7,2	47,4	69
07890375	3 x 2 x 0,75	0,11	7,9	66,2	85
07890475	4 x 2 x 0,75	0,11	8,9	101,0	109
07890575	5 x 2 x 0,75	0,11	10,8	118,8	159
07890775	7 x 2 x 0,75	0,11	11,6	148,0	213
07891075	10 x 2 x 0,75	0,11	13,5	228,0	267
07891475	14 x 2 x 0,75	0,11	16,1	296,9	372
07891875	18 x 2 x 0,75	0,11	17,3	366,1	463
07892575	25 x 2 x 0,75	0,11	20,1	480,5	606

Other dimensions and colours are possible on request.

# 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 -40/+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>	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.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	AWG/ MCM	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
37681340	1 x 4,00	0,16	12 (224/34)	6,6	38,4	69
37681360	1 x 6,00	0,21	10 (186/32)	7,5	57,6	94
37681361	1 x 10,00	0,21	8 (320/32)	8,4	96,0	138
37681362	1 x 16,00	0,21	6 (512/32)	9,9	153,6	206
37681363	1 x 25,00	0,21	4 (798/32)	11,1	240,0	296
37681364	1 x 35,00	0,21	2 (1083/32)	12,6	336,0	390
37681365	1 x 50,00	0,31	1 (703/28)	14,7	480,0	554
37681366	1 x 70,00	0,31	2/0 (988/28)	17,0	672,0	771
37681367	1 x 95,00	0,31	3/0 (1340/28)	20,4	912,0	1024
37681368	1 x 120,00	0,31	4/0 (1680/28)	23,0	1152,0	1318
37681369	1 x 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.	no. of cores x cross section n x mm <sup>2</sup>	largest single wire ø mm	AWG/ MCM	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
37692340	1 x 4,00	0,16	12 (224/34)	7,1	54,5	83
37692360	1 x 6,00	0,21	10 (186/32)	8,0	77,3	112
37692361	1 x 10,00	0,21	8 (320/32)	8,9	119,7	157
37692362	1 x 16,00	0,21	6 (512/32)	10,3	182,6	227
37692363	1 x 25,00	0,21	4 (798/32)	11,7	293,9	335
37692364	1 x 35,00	0,21	2 (1083/32)	13,3	395,7	434
37692365	1 x 50,00	0,31	1 (703/28)	15,8	577,7	631
37692366	1 x 70,00	0,31	2/0 (988/28)	17,9	783,2	840
37692367	1 x 95,00	0,31	3/0 (1340/28)	22,9	1051,4	1193
37692368	1 x 120,00	0,31	4/0 (1680/28)	23,9	1293,3	1421
37692369	1 x 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

## SD 980 P

continuously flexible TPE/PUR data cable with coloured cores



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



Marking for SD 980 P 77742501:

SAB BRÖCKSKES · D-VIERSEN · 77742501 25 x 0,14 mm<sup>2</sup> SD 980 P 26 AWG/25c 77742625

AWM Style 21198 80°C 300V CSA AWM I/II A/B 80°C 300V FT1 FT2 CE

### Construction:

<b>Conductor:</b>	bare copper strands, extra fine wires
<b>Insulation:</b>	TPE
<b>Colour code:</b>	with reference to DIN 47100
<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 7032)

### 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	
<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> -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, CSA FT1 (acc. to dimension), 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:



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

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
77740301	3 x 0,14	0,11	3,8	4,0	16
77740401	4 x 0,14	0,11	4,1	5,4	19
77740501	5 x 0,14	0,11	4,5	6,7	23
77740701	7 x 0,14	0,11	4,9	9,4	28
77741001	10 x 0,14	0,11	5,6	13,4	36
77741401	14 x 0,14	0,11	6,0	18,8	45
77741801	18 x 0,14	0,11	6,6	24,2	54
77742501	25 x 0,14	0,11	7,6	33,6	71
77740302	3 x 0,25	0,11	4,2	7,2	21
77740402	4 x 0,25	0,11	4,4	9,6	25
77740502	5 x 0,25	0,11	4,8	12,0	30
77740702	7 x 0,25	0,11	5,4	16,8	37

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
77741002	10 x 0,25	0,11	6,2	24,0	49
77741402	14 x 0,25	0,11	6,6	33,6	62
77741802	18 x 0,25	0,11	7,3	43,2	77
77742502	25 x 0,25	0,11	8,6	60,0	102
77740303	3 x 0,34	0,11	4,4	9,8	24
77740403	4 x 0,34	0,11	4,7	13,1	29
77740503	5 x 0,34	0,11	5,2	16,3	35
77740703	7 x 0,34	0,11	5,8	22,8	44
77741003	10 x 0,34	0,11	6,6	32,6	59
77741403	14 x 0,34	0,11	7,1	45,7	75
77741803	18 x 0,34	0,11	7,8	58,8	93
77742503	25 x 0,34	0,11	9,2	81,6	124

Other dimensions and colours are possible on request.



### Possible on request:

- in dimensions  
0,50 mm<sup>2</sup> and 0,75 mm<sup>2</sup>
- with coloured cores  
with reference to colour code US 2

# 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> -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, 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:



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

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
77743405	34 x 0,50	0,16	16,2	163,2	338
77745005	50 x 0,50	0,16	18,8	240,0	474
77746105	61 x 0,50	0,16	21,0	292,8	583
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
77741207	12 x 0,75	0,16	11,2	86,4	164
77741807	18 x 0,75	0,16	13,3	129,6	230
77742507	25 x 0,75	0,16	15,7	180,0	312
77743407	34 x 0,75	0,16	17,7	244,8	405
77745007	50 x 0,75	0,16	20,7	360,0	579
77746107	61 x 0,75	0,16	24,0	439,2	752
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
77741210	12 x 1,00	0,16	11,7	115,2	195
77741810	18 x 1,00	0,16	13,7	172,8	275
77742510	25 x 1,00	0,16	16,3	240,0	375
77743410	34 x 1,00	0,16	18,4	326,4	493
77745010	50 x 1,00	0,16	22,9	480,0	760
77746110	61 x 1,00	0,16	25,0	585,6	905
77740315	3 x 1,50	0,16	8,0	43,2	87
77740415	4 x 1,50	0,16	8,9	57,6	108

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
77740515	5 x 1,50	0,16	9,4	72,0	131
77740715	7 x 1,50	0,16	10,9	100,8	168
77741215	12 x 1,50	0,16	13,0	172,8	261
77741815	18 x 1,50	0,16	14,3	259,2	367
77742515	25 x 1,50	0,16	18,3	360,0	512
77743415	34 x 1,50	0,16	20,6	489,6	680
77745015	50 x 1,50	0,16	25,3	720,0	1026
77746115	61 x 1,50	0,16	27,7	878,4	1228
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
77741225	12 x 2,50	0,16	15,7	288,0	400
77741825	18 x 2,50	0,16	18,6	432,0	577
77742525	25 x 2,50	0,16	23,5	600,0	847
77740340	3 x 4,00	0,16	10,5	115,2	221
77740440	4 x 4,00	0,16	11,5	153,6	242
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.

# Cable Track Cable

## SD 980 CP

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



Marking for SD 980 CP 77842501:

SAB BRÜCKSKES · D-VIERSEN · 77842501 25 x 0,14 mm<sup>2</sup> SD 980 CP 26 AWG/25c 77842625

AWM Style 21198 80°C 300V CSA AWM I/II A/B 80°C 300V FT1 FT2 CE

### Construction:

<b>Conductor:</b>	bare copper strands, extra fine wires
<b>Insulation:</b>	TPE
<b>Colour code:</b>	with reference to DIN 47100
<b>Stranding:</b>	specially adjusted layering with netting tape over each layer
<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>	grey (RAL 7032)

### 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> <i>continuously flexible:</i>	7,5 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>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 (acc. to dimension), FT2	
<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>Continuous flexibility:</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)
- halogen-free
- flexible at low temperatures
- travel > 10 m is possible
- high abrasion resistance
- small bending radius
- good EMC characteristics

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
77840301	3 x 0,14	0,11	4,2	14,3	24
77840401	4 x 0,14	0,11	4,5	15,7	27
77840501	5 x 0,14	0,11	4,9	20,6	33
77840701	7 x 0,14	0,11	5,3	23,4	38
77841001	10 x 0,14	0,11	6,0	29,4	47
77841401	14 x 0,14	0,11	6,4	34,9	55
77841801	18 x 0,14	0,11	7,0	43,8	68
77842501	25 x 0,14	0,11	8,0	57,3	88
77840302	3 x 0,25	0,11	4,6	17,6	29
77840402	4 x 0,25	0,11	4,8	20,0	32
77840502	5 x 0,25	0,11	5,2	25,9	40
77840702	7 x 0,25	0,11	5,8	30,9	47

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
77841002	10 x 0,25	0,11	6,6	41,7	61
77841402	14 x 0,25	0,11	7,0	53,2	76
77841802	18 x 0,25	0,11	7,8	64,7	91
77842502	25 x 0,25	0,11	9,0	86,3	120
77840303	3 x 0,34	0,11	4,8	20,2	32
77840403	4 x 0,34	0,11	5,1	26,9	39
77840503	5 x 0,34	0,11	5,6	30,4	44
77840703	7 x 0,34	0,11	6,2	38,9	55
77841003	10 x 0,34	0,11	7,0	52,2	72
77841403	14 x 0,34	0,11	7,5	67,0	89
77841803	18 x 0,34	0,11	8,2	82,5	108
77842503	25 x 0,34	0,11	9,6	110,7	142

Other dimensions and colours are possible on request.



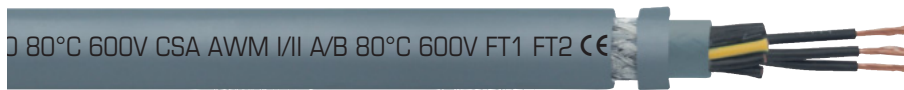
### Possible on request:

- in dimensions  
0,50 mm<sup>2</sup> and 0,75 mm<sup>2</sup>
- with coloured cores  
with reference to colour code US 2

# Cable Track Cable

## S 980 CP

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



Marking for S 980 CP 77840715:

SAB BRÜCKSKES · D-VIERSEN · 77841205 12 x 0,5 mm<sup>2</sup> S 980 CP 20 AWG/7c 77842012

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
<b>Inner sheath:</b>	special SABIX®
<b>Wrapping:</b>	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>	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 continuously flexible:</b>	7,5 x d
<b>Radiation resistance:</b>	5 x 10 <sup>7</sup> cJ/kg
<b>Temperature range</b>	<b>DIN VDE</b> UL/CSA: up to +80 °C
<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>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 - 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>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>
●	<b>good EMC characteristics</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
77840305	3 x 0,50	0,16	8,6	35,9	86
77840405	4 x 0,50	0,16	9,0	42,9	98
77840505	5 x 0,50	0,16	9,7	50,2	112
77840705	7 x 0,50	0,16	10,8	62,8	137
77841205	12 x 0,50	0,16	12,6	112,1	204
77841805	18 x 0,50	0,16	14,7	172,4	286
77842505	25 x 0,50	0,16	17,1	230,2	380
77843005	30 x 0,50	0,16	18,0	255,2	434
77843605	36 x 0,50	0,16	19,2	296,9	498
77840307	3 x 0,75	0,16	9,0	45,3	96
77840407	4 x 0,75	0,16	9,5	55,0	110
77840507	5 x 0,75	0,16	10,3	65,0	127
77840707	7 x 0,75	0,16	11,7	104,3	172
77841207	12 x 0,75	0,16	13,8	146,2	254
77841807	18 x 0,75	0,16	16,0	227,5	354
77842507	25 x 0,75	0,16	18,7	303,4	455
77843007	30 x 0,75	0,16	19,0	339,8	522
77843607	36 x 0,75	0,16	20,4	384,9	599
77840310	3 x 1,00	0,16	9,2	52,6	105
77840410	4 x 1,00	0,16	9,8	64,7	122
77840510	5 x 1,00	0,16	10,5	77,1	141
77840710	7 x 1,00	0,16	12,1	121,4	192
77841210	12 x 1,00	0,16	14,2	200,8	299
77841810	18 x 1,00	0,16	16,1	270,8	401
77842510	25 x 1,00	0,16	19,3	364,3	521
77843010	30 x 1,00	0,16	19,7	412,9	603
77843610	36 x 1,00	0,16	22,8	484,8	776
77840315	3 x 1,50	0,16	9,5	69,4	119
77840415	4 x 1,50	0,16	10,8	86,8	152
77840515	5 x 1,50	0,16	11,5	119,8	189

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
77840715	7 x 1,50	0,16	13,2	160,4	250
77841215	12 x 1,50	0,16	15,7	270,4	384
77841815	18 x 1,50	0,16	18,0	370,8	515
77842515	25 x 1,50	0,16	23,1	499,7	776
77843015	30 x 1,50	0,16	23,5	572,5	865
77843615	36 x 1,50	0,16	24,9	685,5	1004
77840325	3 x 2,50	0,16	11,4	119,7	183
77840425	4 x 2,50	0,16	12,1	150,2	218
77840525	5 x 2,50	0,16	13,4	179,7	260
77840725	7 x 2,50	0,16	15,5	265,4	369
77841225	12 x 2,50	0,16	18,7	411,4	559
77841825	18 x 2,50	0,16	23,4	572,3	843
77842525	25 x 2,50	0,16	27,2	772,8	1079
77840340	3 x 4,00	0,16	12,6	169,7	249
77840440	4 x 4,00	0,16	13,8	213,6	305
77840540	5 x 4,00	0,16	15,2	289,3	374
77840360	3 x 6,00	0,21	14,7	258,8	349
77840460	4 x 6,00	0,21	15,8	328,3	437
77840560	5 x 6,00	0,21	17,3	398,4	497
77840361	3 x 10,0	0,21	18,8	411,5	553
77840461	4 x 10,0	0,21	20,5	509,9	681
77840561	5 x 10,0	0,21	24,3	645,7	903
77840362	3 x 16,0	0,21	22,3	601,1	786
77840462	4 x 16,0	0,21	25,2	782,2	1046
77840562	5 x 16,0	0,21	28,2	943,3	1257
77840463	4 x 25,0	0,21	29,7	1155,1	1504
77840563	5 x 25,0	0,21	32,6	1406,1	1802
77840464	4 x 35,0	0,21	33,2	1552,5	1918
77840564	5 x 35,0	0,21	36,5	1914,1	2299

Other dimensions and colours are possible on request.

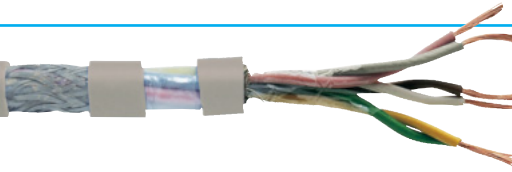
# Cable Track Cable

## SD 980 CP TP

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



WM I/II A/B 80°C 300V FT1 FT2 CE



Marking for SD 980 CP TP 77890725:

SAB BRÜCKSKES · D-VIERSEN · 77890325 3 x 2 x 0,25 mm<sup>2</sup> SD 980 CP TP 24 AWG/3pr 77892403

AWM Style 21198 80°C 300V CSA AWM I/II A/B 80°C 300V FT1 FT2 CE

### Construction:

<b>Conductor:</b>	bare copper strands, extra fine wires
<b>Insulation:</b>	TPE
<b>Colour code:</b>	with reference to DIN 47100
<b>Stranding:</b>	cores twisted to pairs, pairs twisted in specially adjusted layering with netting tape over each layer
<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>	grey (RAL 7032)

### 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> <i>continuously flexible:</i>	7,5 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>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 (acc. to dimension), FT2	
<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>Continuous flexibility:</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)
- **halogen-free**
- **flexible at low temperatures**
- **travel > 10 m is possible**
- **high abrasion resistance**
- **small bending radius**
- **good EMC characteristics**

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
77890214	2 x 2 x 0,14	0,11	5,1	19,3	34
77890314	3 x 2 x 0,14	0,11	5,6	22,1	39
77890414	4 x 2 x 0,14	0,11	6,3	26,8	47
77890514	5 x 2 x 0,14	0,11	6,7	31,1	53
77890714	7 x 2 x 0,14	0,11	7,2	38,5	64
77891014	10 x 2 x 0,14	0,11	8,4	50,7	83
77891414	14 x 2 x 0,14	0,11	9,3	66,6	105
77891814	18 x 2 x 0,14	0,11	10,3	96,0	136
77892514	25 x 2 x 0,14	0,11	11,7	121,6	174
77890225	2 x 2 x 0,25	0,11	5,6	23,6	42
77890325	3 x 2 x 0,25	0,11	6,2	30,4	52
77890425	4 x 2 x 0,25	0,11	6,9	38,7	60
77890525	5 x 2 x 0,25	0,11	7,4	43,8	68
77890725	7 x 2 x 0,25	0,11	7,9	57,2	85
77891025	10 x 2 x 0,25	0,11	9,2	74,3	110
77891425	14 x 2 x 0,25	0,11	10,9	115,1	157
77891825	18 x 2 x 0,25	0,11	11,6	140,7	188
77892525	25 x 2 x 0,25	0,11	14,0	205,5	275
77890234	2 x 2 x 0,34	0,11	5,9	29,0	48
77890334	3 x 2 x 0,34	0,11	6,5	37,2	60
77890434	4 x 2 x 0,34	0,11	7,4	45,9	72
77890534	5 x 2 x 0,34	0,11	7,9	56,3	81
77890734	7 x 2 x 0,34	0,11	8,5	69,5	98

item no.	no. of pairs x cross section n x 2 x mm <sup>2</sup>	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
77891034	10 x 2 x 0,34	0,11	9,9	94,5	130
77891434	14 x 2 x 0,34	0,11	11,6	145,7	186
77891834	18 x 2 x 0,34	0,11	12,5	177,1	223
77892534	25 x 2 x 0,34	0,11	14,7	260,3	320
77890250	2 x 2 x 0,50	0,11	6,8	36,9	60
77890350	3 x 2 x 0,50	0,11	7,6	50,2	79
77890450	4 x 2 x 0,50	0,11	8,7	64,6	98
77890550	5 x 2 x 0,50	0,11	9,4	77,0	113
77890750	7 x 2 x 0,50	0,11	10,3	114,8	148
77891050	10 x 2 x 0,50	0,11	12,1	150,6	197
77891450	14 x 2 x 0,50	0,11	14,3	220,4	282
77891850	18 x 2 x 0,50	0,11	16,1	270,8	363
77892550	25 x 2 x 0,50	0,11	18,0	351,3	460
77890275	2 x 2 x 0,75	0,11	7,7	50,2	79
77890375	3 x 2 x 0,75	0,11	8,8	69,4	98
77890475	4 x 2 x 0,75	0,11	9,9	86,8	121
77890575	5 x 2 x 0,75	0,11	11,1	126,0	161
77890775	7 x 2 x 0,75	0,11	11,9	155,3	189
77891075	10 x 2 x 0,75	0,11	14,7	241,1	303
77891475	14 x 2 x 0,75	0,11	17,3	312,0	403
77891875	18 x 2 x 0,75	0,11	18,6	382,6	486
77892575	25 x 2 x 0,75	0,11	22,7	499,0	704

Other dimensions and colours are possible on request.



### Possible on request:

- with coloured cores  
with reference to colour code US 3



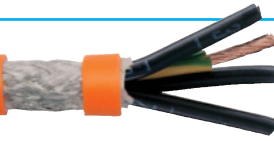
# Servo Motor Cables

## 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.

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

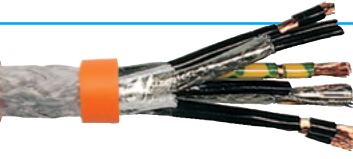
# Servo Motor Cables

## 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.

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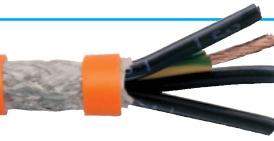
# Servo Motor Cables

## 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-VIERSEN · 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.

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

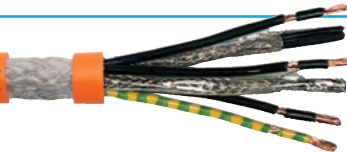
# Servo Motor Cables

## 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 <i>flexible application:</i> -40/+90 °C	<b>UL/CSA:</b> up to +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 - 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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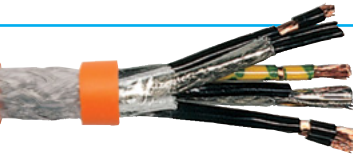
# Servo Motor Cables

## 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> <b>CSA:</b>	1000 V ≥ 0,5 mm <sup>2</sup> 1000 V < 0,5 mm <sup>2</sup> 300 V
<b>Testing voltage:</b>	supply cores + control cores feedbackcores	core/core 4000 V core/screen 4000 V 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

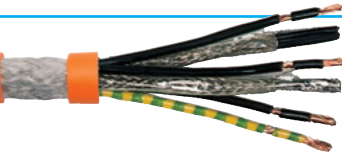
## SL 801 C

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 BRÜCKSKES · 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
- 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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INDRAMAT® is a registered trademark of Bosch Rexroth AG. It is only used for comparative purposes.  
DESINA® is a registered trademark of the German Machine Tool Builders' Association.

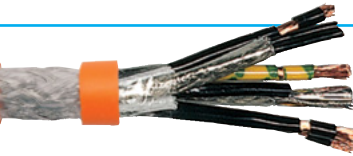
# Servo Motor Cables

## 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 fixed laying: flexible application: continuously flexible: 10 x d 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/+90 °C flexible application: -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

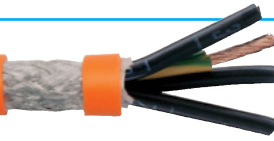
## SL 823 C

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



CE EAC RoHS

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.



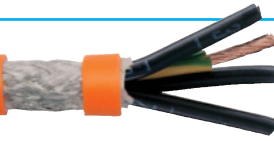
# Servo Motor Cables

## 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/+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 - 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

BRÖCKSKES · 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
- 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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www.sab-cable.com

# 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 BRÖCKSKES · 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 BRÖCKSKES · 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 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
	<i>acc. to dimension:</i>
<b>Screen:</b>	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> green (RAL 6018)

## Technical data:

<b>Peak operating voltage</b>	max. 500 V	
<b>SL 842 C:</b>	max. 350 V	
<b>SL 843 C:</b>		
<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	

## 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



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
<b>motor feedback cable</b>						
08420050	9 x 0,50	orange	0,16	8,8 ± 0,3	72,6	104
<b>transmission cable</b>						
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 mm² **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
- 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.

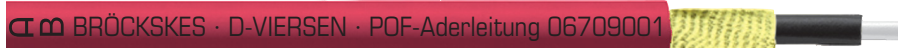


PUR Sensor cable also possible with reticulated by irradiation outer sheath! Item group 0355

# 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



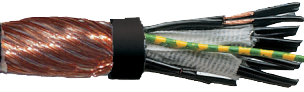
**RT 123**

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, TPU 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 -40/+90 °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 - 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>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
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.

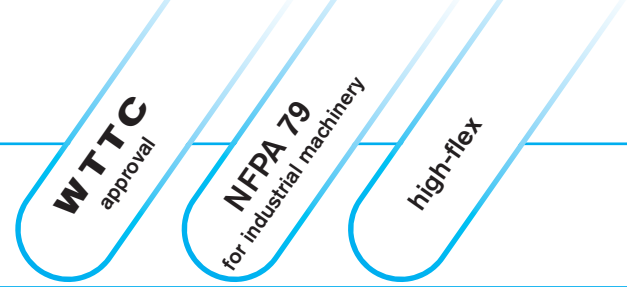


**Also suitable  
for applications on robots!**

# 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



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>Color 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 color:</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>Color 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, color black
<b>TR 600 C HD Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	TPE
<b>Sheath color:</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.	dimensions	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.	dimensions	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

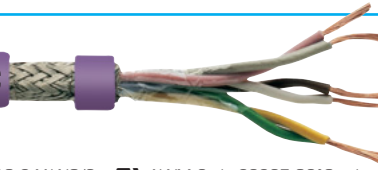
**S IBS 618** PUR Interbus-S cable  
for cable tracks with UL recognition

**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 3x2x0,25mm<sup>2</sup> 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 mm <sup>2</sup>	3 x 2 x 0,22 mm <sup>2</sup>	
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 mm <sup>2</sup>	8,5	35,9	82
56103221	SABIX® IBS 610	3 x 2 x 0,22 mm <sup>2</sup>	7,0	31,3	53
66103221	SABIX® IBS 610 FRNC	3 x 2 x 0,22 mm <sup>2</sup>	7,0	31,3	62

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

Other dimensions and colours are possible on request.

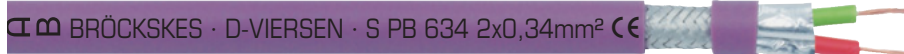
# Profibus-DP Cables acc. to IEC 61158-2



**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 BRÖCKSKES · D-VIERSEN · S PB 634 2x0,34mm<sup>2</sup> 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.

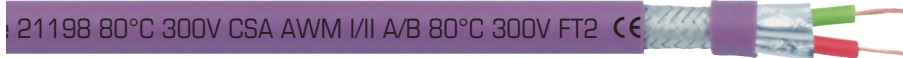
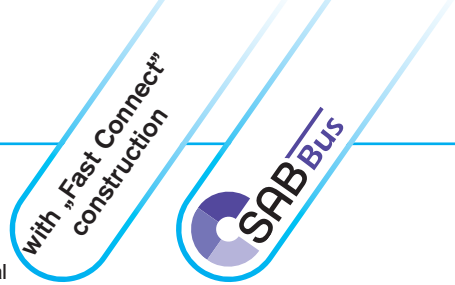
# Profibus-DP Cables acc. to IEC 61158-2

**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>	redilac (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 ± 5%	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

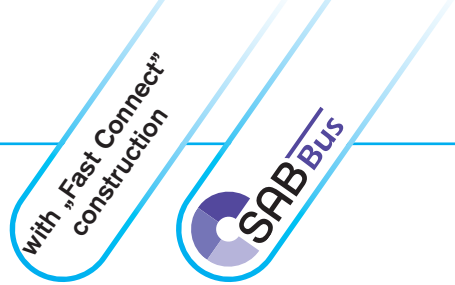
Other dimensions and colours are possible on request.

**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



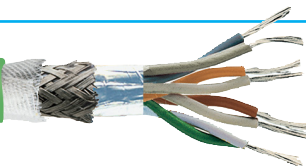
**S PN 668** Profinet type C, continuously flexible

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

**PN 661** Profinet type B, for flexible applications 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!





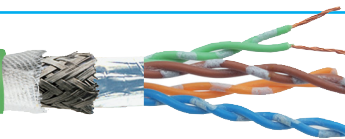
# Industrial Ethernet Cables



**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!

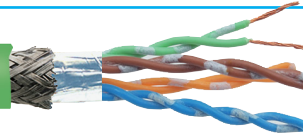




## CATLine CAT 6A HT

Gigabit Ethernet cable – high temperature resistant

1631-4631 AWM Style 21618 150°C 600V



Marking for CATLine CAT 6A HT 16314631:

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

### 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 cable tracks, 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!

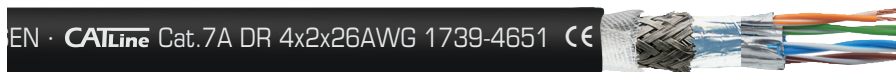
CABLE  
ASSEMBLY  
POSSIBLE

# 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**

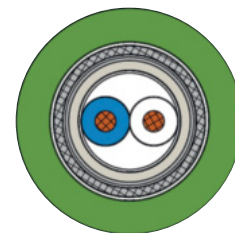
# Industrial Ethernet Cables



**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 BRÖCKSKES · 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 26 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 (similar RAL 6017)

<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 number:</b>	1777-1630	1787-1630	1721-1620
<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 CD IEC 61156-12 ED1 03/19. Bandwidth 1 - 600 MHz.		
<b>UL Style:</b>	20549		4535
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union		

**Outstanding features C-Track / Robot:**

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

**Outstanding features SPE HT:**

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

item no.	type	dimension	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈kg/km
17771630	CATLine SPE C-Track	2 x 26/7 AWG	5,3	16,9	37
17871630	CATLine SPE Robot	2 x 26/7 AWG	5,3	16,9	37
17211620	CATLine SPE HT	2 x 26/7 AWG	4,9	14,3	37

Other dimensions and colours are possible on request.

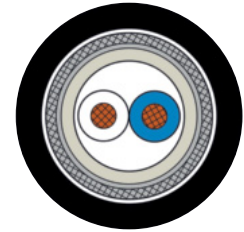
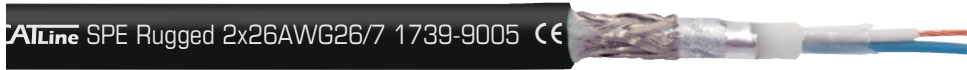


# Industrial Ethernet Cables



## 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 CD IEC 61156-12 ED1 03/19. Bandwidth 1 - 600 MHz.
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

item no.	type	dimension	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈kg/km
17399005	CATLine SPE Rugged	2 x 26/7 AWG	4,4	16,9	32

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:

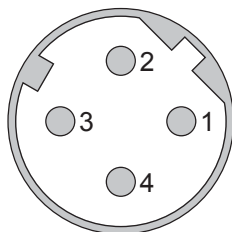
<b>Conductor:</b>	tinned copper strands
<b>Insulation:</b>	special polymer
<b>Screen:</b>	alu foil and tinned copper braiding
<b>Sheath material:</b>	PUR
<b>Sheath colour:</b>	green (RAL 6018)

### 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:

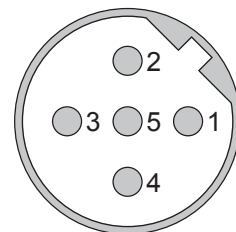
<b>Conductor:</b>	bare copper strands
<b>Insulation:</b>	TPK
<b>Screen:</b>	alu foil and tinned copper braiding
<b>Sheath material:</b>	PUR
<b>Sheath colour:</b>	red lilac (RAL 4001)

### 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

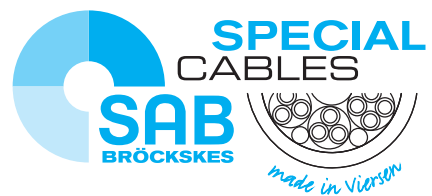
### Pin configuration:

<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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