

Cables

for automation industry

















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Cables for Automation Industry

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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**
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- ▶ **SL 875 C - single cable solution**
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combined TPE/PUR motor connection cable with overall copper screen 0,6/1 kV
- ▶ **SL 842 C**
TPE/PUR feedback cable with overall copper screen
- ▶ **SL 843 C**
TPE/PUR transmission cable with overall copper screen



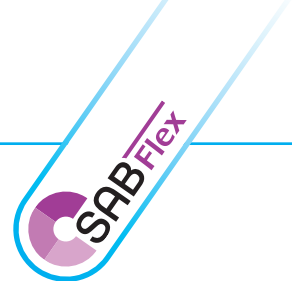
- ▶ **S 200**
extremely flexible TPE/PUR control cable with numbered cores
- ▶ **S 200 C**
continuously flexible TPE/PUR control cable with numbered cores and overall copper screen
- ▶ **SL 801 C**
combined TPE/PUR motor connection cable with overall copper screen 0.6/1 kV
- ▶ **SL 802 C**
TPE/PUR feedback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

Photos: Liebherr Verzahrtechnik GmbH

Cable Track Cable

S 200

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



marking example:

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

Construction:

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

Technical Data:

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

Outstanding features:



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

Also available as hybrid cable for example

3G1,0 + 16 x 0,34 mm²

3G1,0 + 8 x 0,34 mm²

1G0,5 + 4 x 0,34 mm²

Peak operating voltage of data conductors: max. 500 V

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

Other dimensions and colours are possible on request.

further continuously flexible TPE/PUR data and control cables:

SD 200

Item groupe
0774

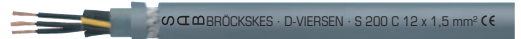
extremely flexible TPE/PUR data cable
with coloured cores for continuous movement



S 200 C

Item groupe
0784

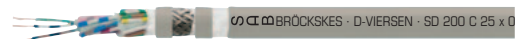
continuously flexible TPE/PUR control cable
with numbered cores and overall copper screen



SD 200 C

Item groupe
0784

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



SD 200 C TP

Item groupe
0789

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



... for more information: www.sab-cable.com

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 example:

SAB BRÖCKSKES · D-VIERSEN · 37681362 16,0 mm² 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 example:

SAB BRÖCKSKES · D-VIERSEN · 37692362 16,0 mm² 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:

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

Technical Data:

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

Outstanding features:



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

S 910 P

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

Other dimensions and colours are possible on request.

S 910 CP

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

Other dimensions and colours are possible on request.



Possible on request:

- with green-yellow insulation

Cable Track Cable

S 980 P

continuously flexible TPE/PUR control cable with numbered cores



marking example:

SAB BRÖCKSKES · D-VIERSEN · 77741812 S 980 P 12 x 0,50 mm² 20 AWG/12c 77742012

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

Construction:

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

Technical Data:

Nominal voltage:	U ₀ /U 300/500 V	
Voltage UL/CSA:	600 V	
Testing voltage:	core/core 2000 V	
Min. bending radius <i>continuously flexible:</i>	7,5 x d	
Radiation resistance:	5 x 10 ⁷ cJ/kg	
Temperature range <i>fixed laying:</i> <i>flexible application:</i>	DIN VDE -50/+90 °C	UL/CSA: up to +80 °C -40/+90 °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, CSA FT1, FT2	
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2	
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.	
Continuous flexibility:	very good	
Absence of harmful substances:	acc. to RoHS directive of the European Union	

Outstanding features:


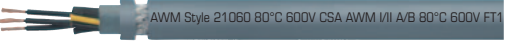




- **PWIS uncritical**
(PWIS = paint-wetting impairment substances)
- **halogen-free**
- **flexible at low temperatures**
- **travel > 10 m is possible**
- **high abrasion resistance**
- **small bending radius**

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

Other dimensions and colours are possible on request.

further continuously flexible TPE/PUR data and control cables:

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

... for more information: www.sab-cable.com

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 example:

SAB BBRÖCKSKES · D-VIERSEN · 08340415 4x1,5mm² 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:

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

Technical data:

Nominal voltage:	U ₀ /U 0.6/1 kV	
Voltage UL/CSA:	1000 V	
Testing voltage:	core/core 4000 V	core/screen 4000 V
Min. bending radius		
fixed laying:	5 x d	
flexible application:	10 x d	
Temperature range	DIN VDE	UL/CSA: up to +80 °C
fixed laying:	-50/+90 °C	
flexible application:	-40/+90 °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, CSA FT1, FT2	
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2	
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.	
Absence of harmful substances:	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



low capacity
for your frequency controlled
drives and motors

item no.	no. of cores x cross section n x mm ²	AWG	largest single wire ø mm	outer-ø ± 10% 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.

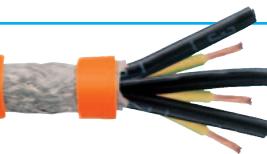
Servo Motor Cables

SL 835 C

symmetrical motor connection cable with optimized EMC characteristics 0.6/1 kV



AWM Style 21223 I/II A/B 80°C 1000V FT1 FT2 E172204 CE



marking example:

SAB BRÖCKSKES · D-VIERSEN · 0835-0315 SL 835 C 3x1,5mm²+3G0,25mm² cULus AWM Style 21223 I/II A/B 80°C 1000V FT1 FT2 E172204 CE

Construction:

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

Technical data:

Nominal voltage:	U ₀ /U 0.6/1 kV	
Voltage UL/cUL:	1000 V	
Testing voltage:	core/core 4000 V	core/screen 4000 V
Min. bending radius		
fixed laying:	5 x d	
flexible application:	10 x d	
Temperature range	DIN VDE	UL/cUL: up to +80 °C
fixed laying:	-50/+90 °C	
flexible application:	-40/+90 °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, cUL FT1, FT2	
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2	
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.	
Weather resistance:	very good	
Absence of harmful substances:	acc. to RoHS directive of the European Union	

Outstanding features:



- UL/cUL recognized
- 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

EMC optimised by low capacity and earth symmetrical cable construction



item no.	dimension	largest single wire ø mm	outer-ø approx. mm	copper figure kg/km	cable weight ≈ kg/km
08350315	3 x 1,50 + 3 G 0,25	0,16	9,2	76,8	121
08350325	3 x 2,50 + 3 G 0,50	0,16	11,5	138,2	202
08350340	3 x 4,00 + 3 G 0,75	0,16	12,7	197,0	264
08350360	3 x 6,00 + 3 G 1,00	0,21	14,2	263,7	341
08350370	3 x 10,00 + 3 G 1,50	0,21	16,5	430,7	523
08350380	3 x 16,00 + 3 G 2,50	0,21	19,8	649,4	772
08350390	3 x 25,00 + 3 G 4,00	0,21	22,8	973,2	1096
08350395	3 x 35,00 + 3 G 6,00	0,21	26,4	1345,8	1526
08350396	3 x 50,00 + 3 G 10,0	0,31	30,7	1926,7	2180

Other dimensions and colours are possible on request.

high symmetry and low coupling for low capacity power transmission at frequency converters



Servo Motor Cables

SL 893 C

low capacity PUR incremental encoder and feedback cable with overall copper screen



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



marking example:

SAB BRÖCKSKES · D-VIERSEN · 0893-0003 SL 893 C 5x2x0,25 mm²+2x0,50 mm² DESINA cULus AWM Style 20233 I/II A/B 80°C 300V FT1 FT2 CE

Construction:

Conductor:	tinned copper strands with reference to VDE 0812 + IEC 60228, VDE 0295, class 6
Insulation:	special polymer
Colour code:	coloured
Stranding:	cores/pairs twisted together in layers <i>acc. to dimension:</i>
Screen:	wrapped with tinned copper braiding
Inner sheath:	special polymer
Wrapping:	non-woven tape or foil
Screen:	tinned copper braiding
Wrapping:	non-woven tape or foil
Sheath material:	PUR
Sheath colour:	green (RAL 6018) or orange (RAL 2003)

Technical data:

Peak operating voltage:	30 V (UL AWM Style 20236) or 300 V (UL AWM Style 20233)	
Testing voltage:	core/core 600 V (at 30 V) core/screen 600 V (at 30 V) core/core 2000 V (at 300 V) core/screen 2000 V (at 300 V)	
Min. bending radius		
<i>fixed laying:</i>	5 x d	
<i>flexible application:</i>	10 x d	
Temperature range	DIN VDE	UL/cUL: up to +80 °C
<i>fixed laying:</i>	-50/+90 °C	
<i>flexible application:</i>	-40/+90 °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, cUL FT1, FT2	
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2	
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.	
Weather resistance:	very good	
Absence of harmful substances:	acc. to RoHS directive of the European Union	

Outstanding features:



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



suitable for resolvers, encoders and position signaling cable

item no.	dimension	peak operating voltage	sheath colour	outer-ø mm	copper figure kg/km	cable weight ≈ kg/km
08930001	2 x 2 x 0,15 + 2 x 0,38	30 V	green	6,8 ± 0,3	46,9	62
08930002	2 x 2 x 0,20 + 2 x 0,38 DRIVE CLiQ	30 V	green	6,8 ± 0,3	34,9	57
08930003	5 x 2 x 0,25 + 2 x 0,50	300 V	green	8,1 ± 0,3	57,3	85
08930004	(2x0,14) C + 6 x 2 x 0,14 + 2 x 0,50	300 V	green	8,8 ± 0,3	64,2	94
08930005	3 x 2 x 0,14 + 2 x 0,38	30 V	green	7,0 ± 0,3	49,6	67
08930006	4 x 2 x 0,14 + 4 x 0,50	300 V	green	8,5 ± 0,3	56,9	104
08930007	4 x 2 x 0,25 + 2 x 0,50	300 V	orange	8,8 ± 0,3	54,7	93
08930008	4 x 2 x 0,25 + 2 x 1,0	300 V	orange	8,2 ± 0,3	63,4	93
08930009	4 x 2 x 0,38 + 4 x 0,50	30 V	green	8,9 ± 0,3	71,8	106
08930010	3 x (2x0,14) D + 4 x 0,14 + 4 x 0,22 + 2 x 0,50	30 V	green	9,6 ± 0,3	72,1	108

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



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



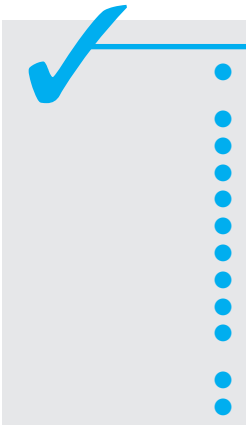
marking example:

SAB BRÖCKSKES · D-VIERSEN · 08750105 SL 875 C 4G1,5 mm² (1000V) + (2 x 1,0 mm²)C (1000V) + (2x22AWG)C (1000V)

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

Construction:	
Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6 < 0,50 mm ² with to VDE 0812
Insulation:	special polymer
Colour code:	item 087501 .. 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 item 087505 .. supply cores: black, blue, brown, green-yellow control cores: white-blue, white-green feedback: white-green, brown-green + grey, pink, yellow, violet
Stranding:	control cores pairwise, item 087501 .. feedbackcores pairwise item 087505 .. feedbackcores 0,09 mm ² pairwise pairs with cores 0,24 mm ² in layers optimally stranded
Wrapping:	non-woven tape resp. foil
Screen:	elements with tinned copper braiding item 087501 .. feedbackcores additional alu foil
Wrapping:	non-woven tape resp. foil
Stranding:	screened elements and supply cores in layers optimally stranded
Wrapping:	non-woven tape
Sheath material:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
Sheath colour:	orange (RAL 2003)

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



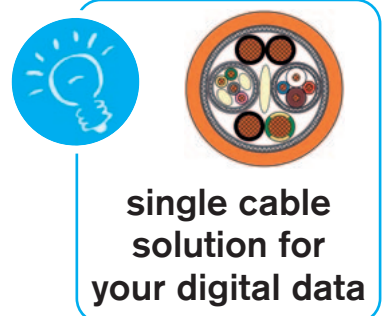
Outstanding features:

- 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
- very good oil resistance
- 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
acc. to SICK HIPERFACE DSL*				
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
acc. to HEIDENHAIN HMC6*				
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.
DESINA* is a registered trademark of the German Machine Tool Builders' Association.



DESINA



Servo Motor Cables

SL 891 C

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



marking example:

SAB BRÖCKSKES · D-VIERSEN · 0891-1415 SL 891 C 4x1,5mm²+(2x1,5mm²) cULus AWM Style 21223 I/II A/B 80°C 1000V FT1 FT2 E172204 CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	SABIX®
Colour code:	Bosch Rexroth supply cores: black, number coded 1-3 and a green-yellow earth wire, control cores: black, number coded 5-8 Siemens supply cores: core 1: black, (U/L1/C/L+) core 2: black, (V/L2) core 3: black, (W/L3/D/L-) and a green-yellow earth wire control cores: black BR1, white BR2
Stranding:	control cores: twisted to pairs
Wrapping:	control cores: alu-foil
Screen:	control cores: wrapped with tinned copper braiding
Wrapping:	control cores: foil
Stranding:	screened control pairs and supply cores twisted together with fillers in layers
Wrapping:	non-woven tape
Screen:	tinned copper braiding
Wrapping:	non-woven tape
Sheath material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with mat surface
Sheath colour:	orange (RAL 2003)

Technical data:

Nominal voltage:	supply cores: U _o /U 0.6/1 kV
Peak operating voltage:	control cores: max. 350 V
Voltage UL/cUL:	1000 V
Testing voltage:	supply cores: core/core 4000 V core/screen 4000 V control cores: core/core 2000 V core/screen 2000 V
Min. bending radius	
fixed laying:	5 x d
flexible application:	10 x d
Temperature range	DIN VDE UL/cUL: up to +80 °C
fixed laying:	-50/+90 °C
flexible application:	-40/+90 °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, cUL FT1, FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.
Weather resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union

**low capacity solution
for your
servo drive system**

Outstanding features:



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

item no.	dimension	outer-ø ± 0,80 mm	copper figure kg/km	cable weight ≈ kg/km
08910415	4 x 1,50 + 2 x (2 x 0,75)	11,4	166,5	211
08910425	4 x 2,50 + 2 x (2 x 1,00)	13,1	225,2	276
08910441	4 x 4,00 + (2 x 1,00) + (2 x 1,50)	15,0	303,2	373
08910461	4 x 6,00 + (2 x 1,00) + (2 x 1,50)	17,1	422,9	497
08910471	4 x 10,00 + (2 x 1,00) + (2 x 1,50)	19,3	581,3	692
08910485	4 x 16,00 + 2 x (2 x 1,50)	22,9	860,1	1012
08910490	4 x 25,00 + 2 x (2 x 1,50)	28,2	1240,8	1447
08911410	4 x 1,00 + (2 x 0,50)	9,0	88,2	120
08911415	4 x 1,50 + (2 x 1,50)	10,7	150,5	189
08911416	4 x 1,50 + (2 x 0,50)	9,5	108,0	142
08911425	4 x 2,50 + (2 x 1,50)	12,2	195,5	244
08911440	4 x 4,00 + (2 x 1,50)	13,6	262,1	317
08911460	4 x 6,00 + (2 x 1,50)	16,3	376,8	450
08911470	4 x 10,00 + (2 x 1,50)	18,5	544,0	657
08911480	4 x 16,00 + (2 x 1,50)	22,1	797,1	946
08911490	4 x 25,00 + (2 x 1,50)	26,2	1170,6	1354

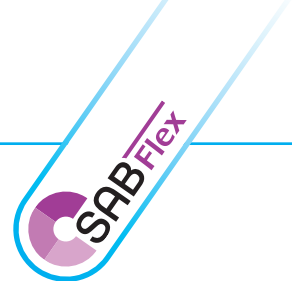
Other dimensions and colours are possible on request.

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

Sensor-/Actuator Cable

PUR Sensor cable

suitable for cable tracks



marking example:

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

Construction:

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

Outstanding features:



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

Technical Data:

Nominal voltage:	Uo/U 300/500 V
Testing voltage:	core/core 2000 V
Min. bending radius	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
<i>continuously flexible:</i>	12 x d
Radiation resistance:	5 x 10 ⁶ cJ/kg
Temperature range	
<i>fixed laying:</i>	-40/+90 °C
<i>flexible application:</i>	-20/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Oil resistance:	very good - TPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.
Absence of harmful substances:	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 ² 16 x 0,50 3 x 1,00	11,7 ± 0,3	105,6	168	39,0 19,5
07489002	9 x 0,50 3 x 1,00	9,5 ± 0,3	72,0	117	39,0 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



SAB BRÖCKSKES · D-VIERSEN · POF-Aderleitung 06709001

Construction:

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

Outstanding features:



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

Technical Data:

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





RT 123

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



marking example:

SAB BRÖCKSKES · D-VIERSEN · 07951815 18x1,5mm² RT 123 16 AWG/18c 07951618

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

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

Technical data:	
Peak operating voltage 0,14 mm ² - 0,34 mm ² :	max. 350 V
Nominal voltage from 0,50 mm ² :	U ₀ /U 300/500 V
Voltage UL/CSA 0,14 mm ² - 0,34 mm ² :	300 V
Voltage UL/CSA from 0,50 mm ² :	600 V
Testing voltage 0,14 mm ² - 0,34 mm ² :	core/core 1500 V
Testing voltage from 0,50 mm ² :	core/core 3000 V
Torsion angle:	up to $\pm 450^\circ/0.5$ m
Min. bending radius <i>continuously flexible:</i> <i>from 34 cores:</i>	12 x d 20 x d
Radiation resistance:	5 x 10 ⁷ cJ/kg
Temperature range <i>fixed laying:</i> <i>flexible application:</i>	DIN VDE -50/+90 °C UL/CSA: up to +80 °C -40/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL VW-1, CSA FT1, FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.
Continuous flexibility:	very good
Absence of harmful substances:	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

item no.	no. of cores x cross section n x mm ²	largest single wire ø mm	outer-ø $\pm 10\%$ 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

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

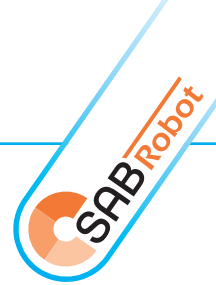
Also suitable for applications on robots!

Other dimensions and colours are possible on request.

Torsion Cables

RT 123 D

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



marking example:

SAB BRÖCKSKES · D-VIERSEN · 07961815 18x1,5mm² RT 123 D 16 AWG/18c 07961618

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

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

Technical data:	
Peak operating voltage 0,14 mm ² - 0,34 mm ² :	max. 350 V
Nominal voltage from 0,50 mm ² :	U ₀ /U 300/500 V
Voltage UL/CSA: 0,14 mm ² - 0,34 mm ² :	300 V
Voltage UL/CSA: from 0,50 mm ² :	600 V
Testing voltage 0,14 mm ² - 0,34 mm ² :	core/core 1500 V core/screen 1200 V
Testing voltage from 0,50 mm ² :	core/core 3000 V core/screen 2000 V
Torsion angle:	up to $\pm 450^\circ/0.5$ m
Min. bending radius <i>continuously flexible:</i> <i>from 3-4 cores:</i>	12 x d 20 x d
Radiation resistance:	5 x 10 ⁷ cJ/kg
Temperature range <i>fixed laying:</i> <i>flexible application:</i>	DIN VDE UL/CSA: up to +80 °C -50/+90 °C -40/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL VW-1, CSA FT1, FT2
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chem. resistance:	good against acids, alkalines, solvents, hydraulic liquids etc.
Continuous flexibility:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union

Outstanding features:	
	<ul style="list-style-type: none"> ● rugged and reliable ● torsion angle up to $\pm 450^\circ$ over 0.5 m ● UL recognized, CSA approval

item no.	no. of cores x cross section n x mm ²	largest single wire ø mm	outer-ø $\pm 10\%$ 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.

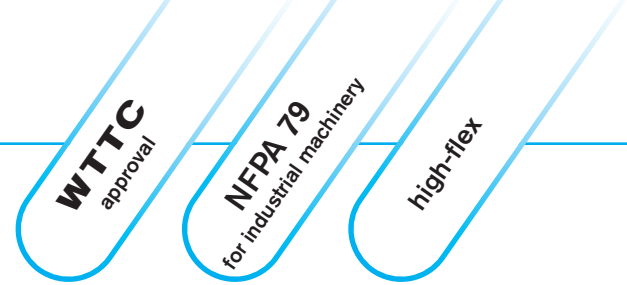


Also suitable
for applications on robots!

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 example:

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:

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

Technical data:

Voltage	600 V	
UL-AWM / (UL) / c(UL):	1000 V	
(UL) WTTC:		
Testing voltage:	AWG 18-10 = 6000 V AWG 8-2 = 7500 V	
Min. bending radius		
<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	
Radiation resistance:	8 x 10 ⁷ cJ/kg	
Temperature:	UL-AWM: up to +105 °C -25 °C	(UL) / c(UL): up to +90 °C
<i>fixed laying:</i>		
Burning characteristics:	(UL) FT4 + c(UL) FT1, FT2, FT4	
Oil resistance I:	yes	
Sunlight resistance:	yes	
Exposed Runs:	yes	
Direct Burial:	yes	
Machinery Area:	yes	
Absence of harmful substances:	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:

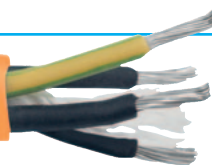
- with blue or red cores

Tray Cables

TR 600 HD Type TC-ER

Heavy Duty Tray Cable

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



marking example:

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:

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

Technical data:

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

Outstanding features:



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

Possible on request:



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

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

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

Other dimensions and colours are possible on request.

Tray Cables

TR 600 C HD Type TC-ER

Heavy Duty Tray Cable with overall copper screen

600V FT4 CSA AWM I/II AB SOC 90C 600V FT4 RoHS CE



marking example:

SAB NORTH AMERICA TR 600 C HD 16 AWG 4c P/N 32401604 (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:

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

Technical data:

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

Outstanding features:



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

Possible on request:



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

item no.	dimension	outer-ø ± 5% mm	cable weight ≈ kg/km
	AWG		
32401803	18/3c	9,7	148
32401804	18/4c	10,4	168
32401805	18/5c	10,9	187
32401807	18/7c	11,6	224
32401812	18/12c	15,1	372
32401818	18/18c	17,6	542
32401825	18/25c	19,7	742
32401603	16/3c	10,3	166
32401604	16/4c	10,5	159
32401605	16/5c	11,7	229
32401607	16/7c	12,4	271
32401612	16/12c	16,3	448
32401618	16/18c	19,1	632
32401625	16/25c	22,4	846
32401403	14/3c	11,4	205
32401404	14/4c	12,2	221
32401407	14/7c	14,8	382
32401204	12/4c	13,3	323
32401205	12/5c	15,2	404
32401004	10/4c	17,7	544
32400804	8/4c	23,6	861
32400604	6/4c	26,0	1180
32400404	4/4c	30,6	1723
32400204	2/4c	35,1	2351
32400104	1/4c	39,3	4192

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



marking example:

SAB BRÜCKSKES · D-VIERSEN · 02610415 4x1,5mm² 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:

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

Technical data:

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

Outstanding features:



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



Possible on request:

- with overall copper screen

item no.	no. of cores x cross section n x mm ²	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 ²	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.



blue cores: item group 0263

red cores: item group 0264



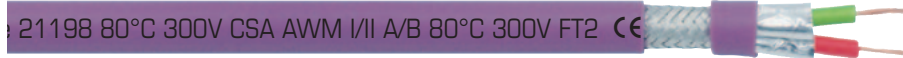
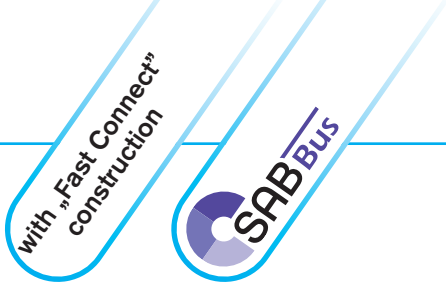
Profibus-DP Cables

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 example:

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

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

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

Outstanding features:

- short assembling time
- avoidance of connection errors

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

Other dimensions and colours are possible on request.

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

Industrial Ethernet Cables Profinet

S PN 667

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

With „Fast Connect“
construction



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



marking example:

SAB BRÖCKSKES · 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:

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

Technical data:

Peak operating voltage:	max. 350 V
Voltage UL/CSA:	300 V
Testing voltage:	core/core 2000 V core/screen 2000 V
Min. bending radius	
fixed laying:	5 x d
flexible application:	10 x d
continuously flexible:	15 x d
Temperature range	UL/CSA: up to +80 °C
fixed laying:	-40/+70 °C
flexible application:	-40/+70 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Characteristic impedance:	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)
UL Style:	21198
Application:	suitable for EtherCAT and EtherNET/IP applications
Absence of harmful substances:	acc. to RoHS directive of the European Union

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

Other dimensions and colours are possible on request.

For extreme bending stress - conductor construction 19 wires:

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

Other dimensions and colours are possible on request.



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

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



Industrial Ethernet Cables Profinet

S PN 668 Profinet type C, continuously flexible

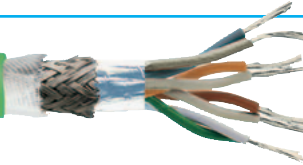
PN 661 Profinet type B, for flexible applications with UL recognition

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

S PN 681 Ethernet cable type C, continuously flexible



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



marking example:

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

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

Technical data:	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
Item number:	0668-2202	0669-2202	0661-2202	0681-2604
Peak operating voltage:	max. 350 V			
Voltage UL:	---	300 V		---
Testing voltage				
core/core:	1500 V	2000 V		1500 V
core/screen:	1200 V	2000 V		1200 V
Min. bending radius				
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
Temperature range VDE				
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
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1			
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2		---	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Characteristic impedance:	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)			
UL Style:	---	21198	21080	---
Application:	suitable for EtherCAT and EtherNET/IP applications			
Absence of harmful substances:	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 10!

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 example:

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



Construction:	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>
Dimension:	4 x 2 x 26 AWG			
Conductor:	bare copper strands, fine wires			
Insulation:	special polymer			
Colour code:	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown			
Stranding:	cores twisted to pairs, pairs together			
Wrapping:	non-woven tape			
Screen:	alu foil and tinned copper braiding			
Wrapping:	non-woven tape			
Sheath material:	PUR			
Sheath colour:	green (similar RAL 6018)			

Technical data:	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>
Item number:	1677-4630	1677-4631	1687-4630	1687-4631
Peak operating voltage:	max. 90 V			
Voltage UL/CSA:	300 V			
Testing voltage				
core/core:	2000 V			
core/screen:	2000 V			
Min. bending radius				
fixed laying:	5 x d			
flexible application:	10 x d			
continuously flexible:	15 x d			
Torsion angle:	---		up to ± 180°/m	
Temperature range VDE	UL/CSA: up to +80 °C			
fixed laying:	-40/+70 °C			
flexible application:	-40/+70 °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 UL Horizontal Flame Test FT2			
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2			
Characteristic impedance (100 MHz):	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
Flexibility:	very good			
UL Style:	20549			
Application:	suitable for EtherCAT and EtherNET/IP applications			
Absence of harmful substances:	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!**

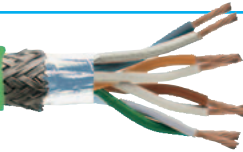
Also possible
as harnessed cable
with M12 or RJ 45 plug!



CATLine CAT 6A HT

Gigabit Ethernet cable – high temperature resistant

6AWG 1631-4631 AWM Style 21618 150°C 600V CE



marking example:

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

Construction:

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

Technical data:

Peak operating voltage:	max. 90 V	
Voltage UL:	FEP: 600 V	
Testing voltage:	FEP: core/core 2000 V core/screen 2000 V	PFA: core/core 750 V core/screen 750 V
Min. bending radius	5 x d	
<i>fixed laying:</i>	5 x d	
<i>flexible application:</i>	10 x d	
Temperature range	FEP: UL: up to +150 °C -90/+180 °C	PFA: -90/+250 °C
<i>fixed laying:</i>	-90/+180 °C	
<i>flexible application:</i>	-55/+180 °C	
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, FEP: UL VW1	
Oil resistance:	very good	
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds	
Characteristic impedance:	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-10-2 (CAT 6A)	
UL Style:	FEP: 21618	
Application:	suitable for EtherCAT and EtherNET/IP applications	
Absence of harmful substances:	acc. to RoHS directive of the European Union	

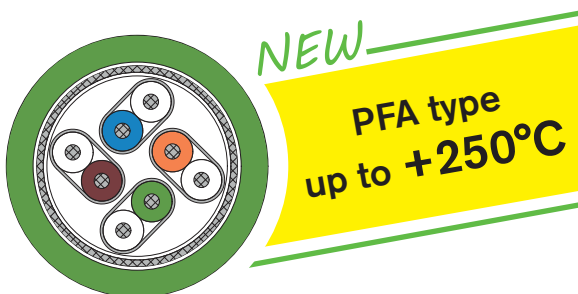
Outstanding features:



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

item no.	type	material	dimension	max. core-ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈kg/km
16314631	CATLine CAT 6A HT	FEP	4 x 2 x 26 AWG	1,05	5,8	29,7	54
16324631	CATLine CAT 6A HT	PFA	4 x 2 x 26 AWG	1,05	5,5	27,3	49

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 example:

SAB BRÖCKSKES · 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



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

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



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

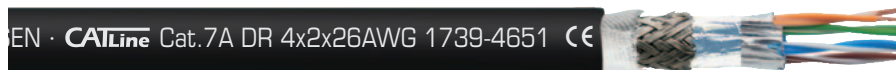


Industrial Ethernet Cables

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

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

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



marking example:

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

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

Technical data:	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>
Item number:	1539-4651	1639-4651	1739-4651
Peak operating voltage:	max. 90 V		
Testing voltage core/core: core/screen:	750 V 750 V		
Min. bending radius	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
Temperature range VDE fixed laying: flexible application:	-50/+90 °C -40/+90 °C		
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1		
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2		
Characteristic impedance (100 MHz):	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
Weather resistance:	very good		
Application:	suitable for EtherCAT and EtherNET/IP applications		
Absence of harmful substances:	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!

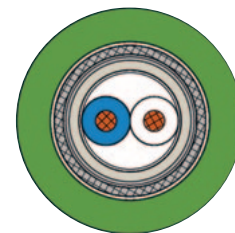


Industrial Ethernet Cables



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



marking example:

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



Construction:	CATLine SPE C-Track <i>suitable for cable tracks</i>	CATLine SPE Robot <i>suitable for robots</i>
Dimension:	2 x 26/7 AWG, 2 x 22/19 AWG	
Conductor:	bare copper strands	
Insulation:	special polymer	
Colour code:	white, blue	
Stranding:	twisted to pairs	
Inner sheath:	SABIX®	
Screen:	alu foil and tinned copper braiding	
Wrapping:	non-woven tape	
Sheath material:	PUR	
Sheath colour:	green (similar RAL 6018)	

Technical data:	CATLine SPE C-Track <i>suitable for cable tracks</i>	CATLine SPE Robot <i>suitable for robots</i>
Item number:	1777-1630, 1777-1230	1787-1630, 1787-1230
Peak operating voltage:	max. 90 V	
Voltage UL:	300 V	
Testing voltage		
core/core:	2000 V	
core/screen:	2000 V	
Min. bending radius		
fixed laying:	5 x d	
flexible application:	10 x d	
continuously flexible:	15 x d	
Torsion angle:	---	up to ± 180°/m
Temperature range	UL: up to +80 °C	
fixed laying:	-40/+70 °C	
flexible application:	-40/+70 °C	
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1	
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2	
Characteristic impedance:	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to IEC 61156-12. Bandwidth 1 - 600 MHz.	
UL Style:	20549	
Absence of harmful substances:	acc. to RoHS directive of the European Union	

item no.	type	dimension	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈kg/km
17771630	CATLine SPE C-Track	2 x 26/7 AWG	4,6	16,9	29
17771230	CATLine SPE C-Track	2 x 22/19 AWG	5,7	22,7	40
17871630	CATLine SPE Robot	2 x 26/7 AWG	4,6	16,9	29
17871230	CATLine SPE Robot	2 x 22/19 AWG	5,7	22,7	40

Other dimensions and colours are possible on request.



Outstanding features:

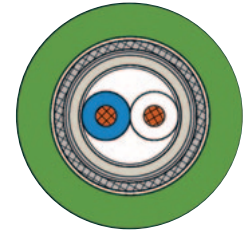
- UL recognized
- low cabling effort
- short latency periods
- small outer diameter
- PWIS uncritical
(PWIS = paint-wetting impairment substances)

Industrial Ethernet Cables



CATLine SPE HT

Single Pair Ethernet cable, high temperature resistant



marking example:

SAB BRÖCKSKES · D-VIERSEN · CATLine SPE HT 2xAWG26/7 1721-1620 CE

Construction:

Conductor:	bare copper strands
Insulation:	TPFP
Colour code:	white, blue
Stranding:	twisted to pairs
Inner sheath:	TPFP
Screen:	alu foil and tinned copper braiding
Sheath material:	Besilen®
Sheath colour:	green

Technical data:

Peak operating voltage:	max. 90 V
Testing voltage:	core/core 2000 V core/screen 2000 V
Min. bending radius	
fixed laying:	5 x d
flexible application:	10 x d
Temperature range	
fixed laying:	-40/+180 °C
flexible application:	-25/+180 °C
Temperature range conductor:	up to +180 °C
Characteristic impedance:	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to IEC 61156-12. Bandwidth 1 - 600 MHz.
Absence of harmful substances:	acc. to RoHS directive of the European Union

Outstanding features:



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

item no.	type	dimension	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈kg/km
17211620	CATLine SPE HT	2 x 26/7 AWG	4,4	14,3	34
17211220	CATLine SPE HT	2 x 22/7 AWG	5,3	22,6	45

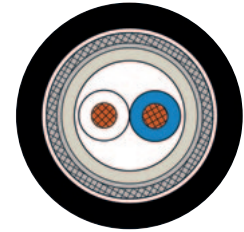
Other dimensions and colours are possible on request.

Industrial Ethernet Cables



CATLine SPE Rugged

Single Pair Ethernet cable for robust indoor and outdoor use



marking example:

SAB BRÜCKSKES · D-VIERSEN · CATLine SPE Rugged 2xAWG26/7 1719-1620 CE

Construction:

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

Outstanding features:



- flexible up to -40 °C
- absolutely weather resistant
- very easy installation
- small bending radius

Technical data:

Peak operating voltage:	max. 90 V
Testing voltage:	core/core 750 V core/screen 750 V
Min. bending radius	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	12 x d
Temperature range	
<i>fixed laying:</i>	-50/+90 °C / +125 °C/2500 h
<i>flexible application:</i>	-40/+90 °C / +125 °C/2500 h
Temperature range conductor:	up to +180 °C
Oil resistance:	very good - TMPU acc. to EN 50363-10-2
Fuel resistance:	good
Battery acid resistance:	good
UV resistance:	acc. to HD 605
Ozone resistance:	acc. to EN 50396
Characteristic impedance:	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to IEC 61156-12. Bandwidth 1 - 600 MHz.
Absence of harmful substances:	acc. to RoHS directive of the European Union

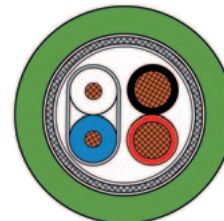
item no.	type	dimension	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈kg/km
17191620	CATLine SPE Rugged	2 x 26/7 AWG	4,5	16,9	29
17191220	CATLine SPE Rugged	2 x 22/7 AWG	5,7	22,7	39

Other dimensions and colours are possible on request.



CATLine SPE C-Track Hybrid

Single Pair Ethernet cable, suitable for cable tracks with power supply and UL recognition



marking example:

SAB BRÖCKSKES · D-VIERSEN · CATLine SPE C-Track Hybrid 2xAWG26/7+2xAWG18 1707-4267 AWM Style 2023 80°C 300V CE

Construction:

Conductor:	bare copper strands
Insulation:	SPE-element: special polymer energy supply: special polymer
Colour code:	SPE-element: white, blue energy supply: red, black
Stranding:	twisted to pairs
Screen:	alu foil white, blue
Stranding:	together
Screen:	tinned copper braiding
Wrapping :	TPFP
Sheath material:	PUR
Sheath colour:	green (similar RAL 6018)

Outstanding features:



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

Technical data:

Peak operating voltage:	max. 90 V
Testing UL:	300 V
Testing voltage:	core/core 2000 V core/screen 2000 V
Min. bending radius	
fixed laying:	5 x d
flexible application:	10 x d
continuously flexible:	15 x d
Temperature range	UL: up to +80 °C
fixed laying:	-40/+70 °C
flexible application:	-40/+70 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Oil resistance:	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Characteristic impedance:	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to IEC 61156-12. Bandwidth 1 - 600 MHz.
Data transfer:	1 Gbit up to zu 40 m
UL Style:	20549
Absence of harmful substances:	acc. to RoHS directive of the European Union

item no.	type	dimension	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈kg/km
17074267	CATLine SPE C-Track Hybrid	2 x 26/7 AWG + 2 x AWG 18	6,2	38,2	66
17076267	CATLine SPE C-Track Hybrid	2 x 22/7 AWG + 2 x AWG 18	7,5	43,5	77

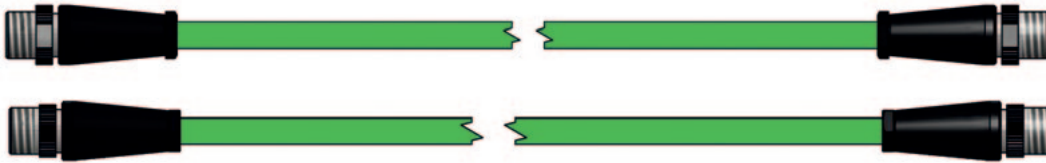
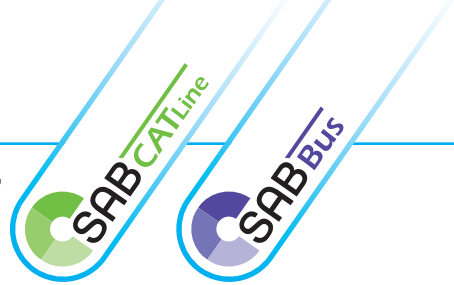
Other dimensions and colours are possible on request.

Harnessed cables

CATLine CAT 6A S - IE connection cable S PN 667 - PN connection cable

Industrial Ethernet cable, suitable for cable tracks, with moulded M12 male connector at both sides

Profinet cable, suitable for cable tracks type C, with moulded M12 connector at both sides



CATLine CAT 6A S - IE connection cable

Application: IE system cable for continuously flexible application, e.g. in cable tracks in industrial environment.

S PN 667 - PN connection cable

Application: PN system cable Cat.5 for continuously flexible application, e.g. in cable tracks in industrial environment.

Technical Data:

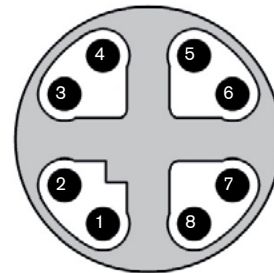
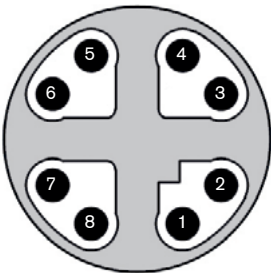
Temperature range:	-40 °C to +70 °C	
Voltage:	IE connection cable 48 V	PN connection cable 25 V
Protection class:	IP67 in stretched condition	
IE connection cable Connection side 1:	M12 X-coded, male connector, straight, moulded with vibration seal	
IE connection cable Connection side 2:	M12 X-coded, male connector, straight, moulded with vibration seal	
PN connection cable Connection side 1:	M12 D-coded, straight, moulded with vibration seal	
PN connection cable Connection side 2:	M12 D-coded, straight, moulded with vibration seal	
Marking:	yellow marking tube with marking: item number - order number - length - certification mark	

Cable characteristics:

SAB item no.:	CATLine CAT 6A S L1677-4631	S PN 667 L0667-2202
Dimension:	CATLine CAT 6A S 4 x 2 x 26 AWG	S PN 667 2 x 2 x 22 AWG
Conductor :	CATLine CAT 6A S bare copper strands, fine wires	S PN 667 bare copper strands, 7 wires
Insulation:	special polymer	
Screen:	alu foil and tinned copper braiding	
Outer sheath:	PUR, green (similar RAL 6018)	
Outer diameter:	CATLine CAT 6A S 7,1 mm ± 10%	S PN 667 6,5 mm ± 0,2 mm
Approvals:	UL/CSA	
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2	
Min. bending radius flexible application: continuously flexible:	CATLine CAT 6A S 10 x d 15 x d	S PN 667 5 x d 15 x d

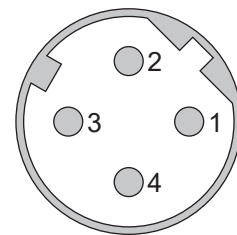
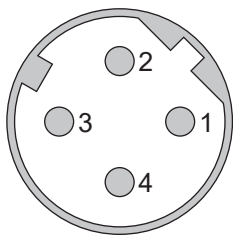
IE connection cable connection: Diagram/pin assignment

side 1	1:1	side 2
M12 connector	core	M12 connector
pin 1	white-orange	pin 1
pin 2	orange	pin 2
pin 3	white-green	pin 3
pin 4	green	pin 4
pin 5	white-brown	pin 5
pin 6	brown	pin 6
pin 7	white-blue	pin 7
pin 8	blue	pin 8
housing	screen	housing



PN connection cable connection: Diagram/pin assignment

side 1	1:1	side 2
M12 connector	core	M12 connector
pin 1	yellow	pin 1
pin 2	white	pin 2
pin 3	orange	pin 3
pin 4	blue	pin 4
housing	screen	housing

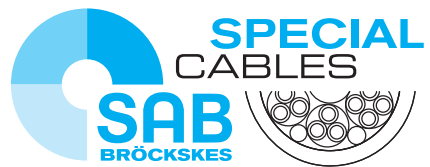


CATLine CAT 6A S - IE connection cable: Item no. with length code

length	item no.: S1677-4020-____	length	item no.: S1677-4020-____
0,5 m	00050	7,5 m	00750
1,0 m	00100	10,0 m	01000
2,0 m	00200	15,0 m	01500
3,0 m	00300	20,0 m	02000
5,0 m	00500	25,0 m	02500

S PN 667 - PN connection cable: Item no. with length code

length	item no.: S0667-4002-____	length	item no.: S0667-4002-____
0,5 m	00050	7,5 m	00750
1,0 m	00100	10,0 m	01000
2,0 m	00200	15,0 m	01500
3,0 m	00300	20,0 m	02000
5,0 m	00500	25,0 m	02500



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