A big step towards Carbon Zero!





SABorganic S 1000 is available in *Control* and *Data* versions.

It is suitable for use in cable track and moving machine parts.

What is special about SABorganic?

- » up to 45% of cable construction is based on ecological and environmentally friendly raw materials
- » 25% average reduction in CO₂ footprint compared to previous fossil-based products
- » lower cable weights reduces emissions and transportation/operating costs
- » local supply chains for the materials which reduces emissions

Other designs available upon request

What does SABorganic offer?

- » extreme flexibility for almost universal use
- » flame protection acc. to IEC 60332-1-2 (1 kW flame)
- » temperature resistance:
 - » flexible at lower temperatures: -40°C
 - » high temperature: +90°C; short-term up to +125°C (for 2000h)
- » hydrolysis resistance
- » very good oil and chemical resistance
- » ozone resistance according to EN 50396
- » UV and weather resistance according to HD 605
- » torsion resistant (60°/ m)
- » PWIS-free according to MBN 10494 3 and/or VDMA 24364



SABorganic S 1000 Control

ECO-friendly extremely flexible SABIX*/PUR control cable with numbered conductors for continuous movement, available unshielded or shielded





SABorganic S 1000 Control 12x1.5mm² 27740315 **C€**

Marking for SABorganic S 1000 Control 27740315:

SAB BRÖCKSKES · D-VIERSEN · SABorganic S 1000 Control 3x1.5mm² 27740315 €

Application: The control cable SABorganic S 1000 Control is suitable for cable tracks and equipped with an outer jacket made of bio-based PUR material that is mainly obtained from sustainable resources. This reduces the carbon footprint by 25% compared to conventional jacket types. SABorganic S 1000 Control cable is particularly suitable for use in cable track and moveable machine parts. The halogen-free and flame-retardant characteristics of the new jacket material reduce potential fire hazards. SABorganic S 1000 Control cable is also resistant against mineral oil-based lubricants and many chemicals.

	Construction:
Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, class 6
Insulation:	SABIX®
Color code:	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
Stranding:	specially adjusted layering with non-woven tape over each layer
Wrapping:	non-woven tape
Shielding:	tinned copper braiding
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with matte surface
Jacket color:	gray (RAL 7000)



item no.	no. of	outer-ø		cable
	conductors incl. ground	inch ±5%	mm ±5%	weight ≈lbs/mft
multi-condu	ctor cable unst	ielded		
▶ 20 AWG (≈	28/34) • 0.50 n	nm²		
27740505	5	0.213	5.4	28
27740705	7	0.252	6.4	40
27741205	12	0.299	7.6	58
27741805	18	0.354	9.0	84
27742505	25	0.433	11.0	116
► 18 AWG (≈	56/34) • 1.00 n	nm²		
27741210	12	0.358	9.1	99
27741810	18	0.433	11.0	152
► 16 AWG (≈	84/34) • 1.50 n	nm²		
27740315	3	0.236	6.0	42
27740515	5	0.287	7.3	67
► 8 AWG (≈ 3	20/32) • 10.00	mm²		
27740361	3	0.535	13.6	265

	Technical data:
Nominal voltage:	Uo/U 300/500 V
Testing voltage:	conductor/conductor: 1500 V conductor/shielding: 1200 V
Torsion angle:	± 60°/1 m
Min. bending radius: fixed installation: continuously flexing:	3.0 x O.D. 7.5 x O.D.
Temperature range: static: flexing: limited time of use:	-50/+90°C -40/+90°C +125°C (up to 2000h)
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Oil resistance:	very good TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Chemical resistance:	good against acids, alkalines, solvents, hydraulic liquids, etc.
Continuous flexibility:	very good
Sunlight resistance:	acc. to HD 605
Ozone resistance:	acc. to DIN EN 50396
Salt water resistance:	acc. to UL 1309
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	oute inch ±5%	er-ø mm ±5%	cable weight ≈lbs/mft
multi-condu	ctor cable shie	lded		
▶ 20 AWG (≈	28/34) • 0.50 r	nm²		
27841205	12	0.319	8.1	69
▶ 19 AWG (≈	42/34) • 0.75 n	nm²		
27840707	7	0.303	7.7	66
► 18 AWG (≈	56/34) • 1.00 n	nm²		
27842510	25	0.579	14.7	258
► 16 AWG (≈	84/34) • 1.50 n	nm²		
27840315	3	0.256	6.5	52
► 14 AWG (≈	140/34) • 2.50	mm²		
27840325	3	0.315	8.0	79
	Other dimension	ns and colo	rs are availa	able on request



SABorganic S 1000 Data

Eco-friendly extremely flexible SABIX®/PUR data cable with colored conductors or pairs for continuous movement, available unshielded or shielded





SABorganic S 1000 Data 25x0.14mm² 27740402 (6

Marking for SABorganic S 1000 Data 27740402:

SAB BRÖCKSKES · D-VIERSEN · SABorganic S 1000 Data 4x0.25mm² 27740402 (€

Application: The data cable SABorganic S 1000 Data is suitable for cable tracks and equipped with an outer jacket made of bio-based PUR material that is mainly obtained from sustainable resources. This reduces the carbon footprint by 25% compared to conventional types. SABorganic S 1000 Data cable is particularly suitable for use in cable tracks and moveable machine parts. The halogen-free and flame-retardant characteristics of the new jacket material reduce potential fire hazards. SABorganic S 1000 Data cable is also resistant against mineral oil-based lubricants and many chemicals.

	Construction:
Conductor:	bare copper strands, extra fine wires
Insulation:	SABIX®
Color code:	DIN 47100
Stranding:	specially adjusted layering with non-woven tape over each layer
Wrapping:	non-woven tape
Shielding:	tinned copper braiding
Jacket material:	PUR, TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2 with matte surface
Jacket color:	gray (RAL 7000)

_	Outstanding features:
•	reduced carbon footprint low capacity construction sustainable plastic materials free from paint wetting impairment substances (PWIS-free) flexible at low temperatures halogen-free flame retardant and self-extinguishing travel> 10 m is possible high abrasion resistance small bending radius
•	small outer diameter

	Technical data:			
Peak operating voltage:	max. 350 V			
Testing voltage:	conductor/conductor: 1500 V conductor/shielding: 1200 V			
Torsion angle:	± 60°/1 m			
Min. bending radius: fixed installation: continuously flexing:	3.0 x O.D. 7.5 x O.D.			
Temperature range: static: flexing: limited time of use:	-50/+90°C -40/+90°C +125°C (up to 2000h)			
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1			
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2			
Oil resistance:	very good TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2			
Chemical resistance:	good against acids, alkalines, solvents, hydraulic liquids, etc.			
Continuous flexibility:	very good			
Sunlight resistance:	acc. to HD 605			
Ozone resistance:	acc. to DIN EN 50396			
Salt water resistance:	acc. to UL 1309			
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30			

item no.	no. of conductors	oute inch ±5%	er-ø mm ±5%	cable weight ≈lbs/mft		
multi-cond	multi-conductor cable unshielded					
► 24 AWG (≈ 32/38) • 0.25 mm ²						
27740402	4	0.142	3.6	12		
27740702	7	0.181	4.6	20		
► 22 AWG (≈ 42/38) • 0.34 mm ²						
27740403	4	0.154	3.9	15		
(Other dimensions and colors are available on request					

item no.	no. of	oute	er-ø	cable	
	conductors	inch ±5%	mm ±5%	weight ≈lbs/mft	
multi-condu	ictor cable sh	ielded			
► 26 AWG (≈	18/38) • 0.14	mm²			
27841201	12	0.213	5.4	29	
► 24 AWG (≈	32/38) • 0.25	mm²			
27840402	4	0.161	4.1	18	
27840502	5	0.177	4.5	23	
► 22 AWG (≈ 42/38) = 0.34 mm ²					
27841803	18	0.303	7.7	68	
▶ 20 AWG (≈ 28/34) • 0.50 mm ²					
27840550	5	0.217	5.5	34	
► 19 AWG (≈	▶ 19 AWG (≈ 42/34) • 0.75 mm ²				
27840475	4	0.244	6.2	42	
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Other dimensions and colors are available on requi	est
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item no.	no. of	oute	r-ø	cable
	pairs	inch ±5%	mm ±5%	weight ≈lbs/mft
multi-pair cable	shielded			
► 26 AWG (≈ 18/3	38) • 0.14	ŀ mm²		
27890314	3	0.189	4.8	20
27891014	10	0.299	7.6	46
► 24 AWG (≈ 32/	38) • 0.25	5 mm²		
27890225	2	0.189	4.8	22
27890525	5	0.268	6.8	40
27890625	6	0.276	7.0	46
► 22 AWG (≈ 42/	38) • 0.34	4 mm²		
27890434	4	0.268	6.8	39
► 20 AWG (≈ 28/	34) • 0.50	0 mm²		
27890250	2	0.236	6.0	34
27890350	3	0.268	6.8	44

Other dimensions and colors are available on request

DIN 47100 color code- conductors:

#1- white, #2- brown, #3- green, #4- yellow, #5- gray, #6- pink, #7- blue, #8- red, #9- black, #10- violet, #11- gray-pink, #12- red-blue, #13- white-green, #14- brown-green, #15- white-yellow, #16- yellow-brown, #17- white-gray, #18- gray-brown

DIN 47100 color code- pairs:

#1- white/brown, #2- green/yellow, #3- gray/pink, #4- blue/red, #5- black/purple, #6- gray-pink/red-blue, #7- white-green/brown-green, #8- white-yellow/yellow-brown, #9- white-gray/gray-brown, #10- white-pink/pink-brown

