

Highly dynamic cables

SABdynamic 910 Control

continuously flexible SABIX®/PUR control cable, suitable for robots, robust, oil resistant and flame retardant with numbered cores

low capacity

SABFlex



Marking example:

SAB BRÜCKSKES · D-VIERSEN · SABdynamic 910 Control 25G1,0mm² cULus AWM Style 21223 AWM I/II A/B 80°C 600V FT1 FT2 0910-2510 CE

Construction:

Conductor:	bare copper strands acc. to IEC 60228, VDE 0295, Klasse 6
Insulation:	SABIX®
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 non-woven tape over each layer, from 15 cores twisted to bundles
Sheath material:	PUR with mat surface
Sheath colour:	black (RAL 9005)

Outstanding features:

- » cULus recognized
- » PWIS uncritical
(PWIS = paint-wetting impairment substances)
- » low capacity
- » suitable for robots
- » extremely large temperature range
- » halogen-free
- » high abrasion resistance
- » suitable for long travel
- » small bending radius
- » small outer diameter
- » PFAS free

Technical Data:

Nominal voltage:	U ₀ /U 300/500 V	
Voltage cULus:	600 V	
Testing voltage:	core/core 2000 V	
torsion cycles:	up to ± 180°/m > 10 million up to ± 360°/m > 5 million	
Min. bending radius		
<i>fixed laying:</i>	3 x d	
<i>flexible application:</i>	≤ 5 m 7,5 x d > 5 m 10 x d	
bending cycles:	> 10 million	
Temperature range	DIN VDE	cULus: 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, cULus 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	
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 chapter N „Technical data“	

item no.	no. of cores x cross section n x mm ²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
09100205	2 x 0,50	0,16	4,7	9,6	26
09102505	25 x 0,50	0,16	14,4	120,0	264
09100407	4 x 0,75	0,16	5,8	28,8	49
09100507	5 x 0,75	0,16	6,3	36,0	60
09100707	7 x 0,75	0,16	7,4	50,4	77
09101207	12 x 0,75	0,16	8,9	86,4	121
09101807	18 x 0,75	0,16	13,8	129,6	238
09102507	25 x 0,75	0,16	15,7	180,0	321
09100210	2 x 1,00	0,16	5,3	19,2	38
09100710	7 x 1,00	0,16	7,8	67,2	102
09101210	12 x 1,00	0,16	9,3	115,2	151

item no.	no. of cores x cross section n x mm ²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
09101810	18 x 1,00	0,16	15,1	172,8	302
09102510	25 x 1,00	0,16	16,8	240,0	395
09103610	36 x 1,00	0,16	20,0	345,6	568
09100215	2 x 1,50	0,16	5,9	28,8	50
09100315	3 x 1,50	0,16	6,2	43,2	64
09100415	4 x 1,50	0,16	6,7	57,6	81
09100715	7 x 1,50	0,16	8,6	100,8	140
09101515	15 x 1,50	0,16	15,6	216,0	338
09102515	25 x 1,50	0,16	19,1	360,0	549
09103415	34 x 1,50	0,16	22,7	489,6	753
09100425	4 x 2,50	0,16	8,5	96,0	130

Other dimensions and colours are possible on request.