

# Halogen-free Cables

## SABIX® R flex

continuously flexible SABIX® Rail cable with numbered cores



BRÖCKSKES · D-VIERSEN · SABIX® R flex 5G0,75 mm² CE



Marking for SABIX® R flex 66701105:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R flex 5G0,75 mm² CE

**Application:** Suitable for flexible and protected installation in the interior for door control or in protecting tubes for outdoor laying at the bogie, railway machines or as connection cable between the waggons. Appropriate for light and medium mechanical stress.

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### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 6
<b>Insulation:</b>	special Polymer
<b>Colour code:</b>	black cores with consecutive numbers acc. to EN 50334 + VDE 0293-334, green-yellow earth wire from 3 cores. Twisted pairs type without green-yellow earth wire
<b>Stranding:</b>	in layers resp. pairwise
<b>Wrapping:</b>	foil
<b>Screen:</b>	tinned copper braiding (if existing)
<b>Sheath material:</b>	SABIX® Ultra
<b>Sheath colour:</b>	black (RAL 9005)

### Outstanding features:



- halogen-free
- continuously flexible
- good EMC characteristics
- no flame propagation
- flame retardant and self-extinguishing
- good ozone, UV and weather resistance
- good oil and fuel resistance
- good acid and alkalines resistance
- fulfils fire protection requirements R15 (EL1A) and R16 (EL1B) acc. to EN 45545-2
- for hazard levels HL1-2
- flame retardant acc. to UN/ECE R118

### Technical Data:

<b>Nominal voltage:</b>	Uo/U 300/500 V	
<b>Testing voltage:</b>	core/core 2000 V	core/screen 2000 V
<b>Min. bending radius</b>	unshielded	shielded
<i>fixed laying:</i>	4 x d	5 x d
<i>flexible application:</i>	6 x d	10 x d
<i>continuously flexible:</i>	12 x d	15 x d
<b>Temperature range</b>	-50/+90 °C	
<i>fixed laying:</i>	-40/+90 °C	
<i>flexible application:</i>		
<b>Halogen-free:</b>	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0,5% acc. to IEC 60754-1. pH-value is > 4,3 acc. to IEC 60754-2. Conductivity is < 10,0 µS/mm acc. to IEC 60754-2. Fluoric content < 0,1% acc. to IEC 60684-2.	
<b>Fire performance:</b>	No flame propagation acc. to IEC 60332-3-24 + VDE 0482-332-3-24 resp. IEC 60332-3-25 + VDE 0482-332-3-25 and EN 50305 + VDE 0260-305 section 9.1.2. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2. Flame retardant acc. to ISO 6722 (UN/ECE R118)	
<b>Toxicity:</b>	acc. to EN 50305 + VDE 0260-305	
<b>Smoke density:</b>	acc. to IEC 61034 + VDE 0482-1034	
<b>Oil and fuel resistance:</b>	acc. to EN 50264-1 + VDE 0260-264-1	
<b>Flexibility:</b>	very good	
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“	

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
<b>multi-core cable screened</b>					
66701002	2 x 0,50	0,16	5,3	24,8	46
66701003	3 x 0,50	0,16	5,5	29,8	51
66701005	5 x 0,50	0,16	6,5	40,3	71
66701007	7 x 0,50	0,16	7,4	53,8	91
66701018	18 x 0,50	0,16	10,8	132,5	200
66701032	32 x 0,50	0,16	13,7	214,5	317
66701103	3 x 0,75	0,16	6,1	37,7	62
66701104	4 x 0,75	0,16	6,7	46,2	76
66701105	5 x 0,75	0,16	7,2	55,9	90
66701125	25 x 0,75	0,16	14,5	242,3	351
66701204	4 x 1,00	0,16	6,9	56,0	87
66701207	7 x 1,00	0,16	8,7	90,1	137
66701212	12 x 1,00	0,16	11,0	161,6	224
66701303	3 x 1,50	0,16	7,1	61,0	92
66701304	4 x 1,50	0,16	7,6	78,0	111
66701305	5 x 1,50	0,16	8,5	94,8	137
66701318	18 x 1,50	0,16	14,4	321,3	417
66701404	4 x 2,50	0,16	9,7	122,5	174
66701405	5 x 2,50	0,16	11,0	166,4	235
66701407	7 x 2,50	0,16	13,2	288,3	324
66701412	12 x 2,50	0,16	15,7	356,2	465
66701504	4 x 4,00	0,16	11,4	200,6	260
66701604	4 x 6,00	0,21	13,9	291,6	380
66701704	4 x 10,00	0,21	16,8	483,2	605
66701804	4 x 16,00	0,21	20,2	730,4	885
66701904	4 x 25,00	0,21	24,1	1113,6	1293

Other dimensions and colours are possible on request.

item no.	no. of cores x cross section n x mm²	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
<b>multi-core cable unscreened</b>					
66700002	2 x 0,50	0,16	4,6	9,6	31
66700004	4 x 0,50	0,16	5,4	19,2	47
66700007	7 x 0,50	0,16	6,9	33,6	76
66700012	12 x 0,50	0,16	8,4	57,6	113
66700018	18 x 0,50	0,16	9,9	86,4	160
66700032	32 x 0,50	0,16	12,8	153,6	267
66700103	3 x 0,75	0,16	5,6	21,6	51
66700105	5 x 0,75	0,16	6,7	36,0	75
66700125	25 x 0,75	0,16	13,8	180,0	303
66700202	2 x 1,00	0,16	5,7	19,2	49
66700273	73 x 1,00	0,16	23,0	700,8	989
66700303	3 x 1,50	0,16	6,6	43,2	81
66700307	7 x 1,50	0,16	9,4	100,8	167
66700318	18 x 1,50	0,16	13,7	259,2	376

Other dimensions and colours are possible on request.

item no.	no. of pairs x cross section n x 2 x mm²	largest single wire ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
<b>multi-pair cable screened</b>					
66703002	2 x 2 x 0,50	0,16	7,0	36,9	69
66703003	3 x 2 x 0,50	0,16	8,0	49,4	90
66703004	4 x 2 x 0,50	0,16	10,0	65,3	121
66703006	6 x 2 x 0,50	0,16	10,4	103,4	161
66703008	8 x 2 x 0,50	0,16	12,5	129,4	229
66703012	12 x 2 x 0,50	0,16	14,3	177,1	278
66703103	3 x 2 x 0,75	0,16	8,9	69,2	113
66703108	8 x 2 x 0,75	0,16	14,6	177,6	306
66703202	2 x 2 x 1,00	0,16	8,9	64,4	111
66703203	3 x 2 x 1,00	0,16	9,5	89,9	135
66703206	6 x 2 x 1,00	0,16	12,6	168,0	249
66703208	8 x 2 x 1,00	0,16	15,1	220,8	357
66703302	2 x 2 x 1,50	0,16	10,3	103,2	157
66703304	4 x 2 x 1,50	0,16	12,7	168,1	243
66703306	6 x 2 x 1,50	0,16	14,3	234,7	345

Other dimensions and colours are possible on request.

