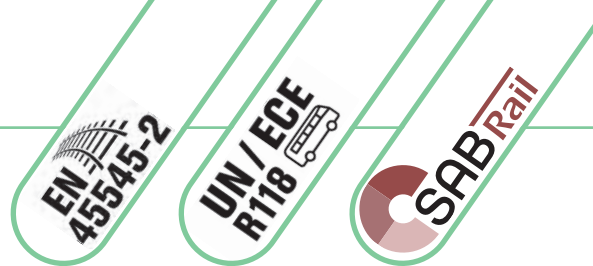


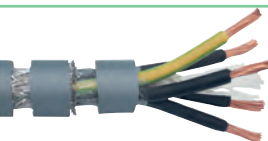
# Halogen-free Cables

## SABIX® R 638 FRNC

SABIX® Rail - Control cable with numbered conductors and overall tinned copper shield



KES · D-VIERSEN · SABIX® R 638 FRNC 5 x 1.5 mm<sup>2</sup> CE



Marking for SABIX® R 638 FRNC 66380515:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 638 FRNC 5 x 1.5 mm<sup>2</sup> CE

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334 + VDE 0293-334, green/yellow ground from 3 conductors
<b>Stranding:</b>	in layers
<b>Wrapping:</b>	foil
<b>Shielding:</b>	tinned copper braiding
<b>Jacket material:</b>	special SABIX®
<b>Jacket color:</b>	gray (RAL 7000)

### Technical data:

<b>Nominal voltage:</b>	Uo/U 300/500 V
<b>Testing voltage:</b>	conductor/conductor: 3000 V conductor/shielding: 2000 V
<b>Min. bending radius:</b>	<i>fixed installation:</i> 5 x O.D. <i>free movement:</i> 10 x O.D.
<b>Temperature range:</b>	<b>DIN VDE</b> <i>static:</i> -40/+90°C <i>flexible:</i> -30/+90°C
<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. Fluorine content < 0.1% acc. to IEC 60684-2
<b>Burning characteristics:</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>Flexibility:</b>	good
<b>Approvals:</b>	CE, RoHS
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page O/30

### Outstanding features:

- low smoke halogen-free (LSHF)
- good EMC characteristics\*
- no flame propagation
- flame retardant and self-extinguishing
- fulfills fire protection requirements R15 (EL1A)  
acc. to EN 45545-2 for hazard levels HL1-3
- flame retardant acc. to UN/ECE R118

\*copper braiding should be connected circularly to optimize the EMC characteristics

item no.	no. of conductors incl. ground	outer-ø		cable weight ≈lbs/mft
		±10% inch	±10% mm	
<b>▶ 20 AWG (≈ 16/32) • 0.50 mm<sup>2</sup></b>				
66380205	2	0.209	5.3	26
66380305	3	0.220	5.6	30
66380405	4	0.244	6.2	41
66380505	5	0.264	6.7	47
66380705	7	0.283	7.2	54
66381205	12	0.378	9.6	101
66381805	18	0.449	11.4	138
66382505	25	0.543	13.8	183
<b>▶ 19 AWG (≈ 23/32) • 0.75 mm<sup>2</sup></b>				
66380207	2	0.240	6.1	34
66380307	3	0.252	6.4	41
66380407	4	0.272	6.9	49
66380507	5	0.303	7.7	65
66380707	7	0.327	8.3	81
66381207	12	0.441	11.2	130
66381807	18	0.524	13.3	188
66382507	25	0.638	16.2	265

item no.	no. of conductors incl. ground	outer-ø		cable weight ≈lbs/mft
		±10% inch	±10% mm	
<b>▶ 18 AWG (≈ 30/32) • 1.00 mm<sup>2</sup></b>				
66380210	2	0.248	6.3	38
66380310	3	0.260	6.6	46
66380410	4	0.280	7.1	63
66380510	5	0.315	8.0	74
66380710	7	0.339	8.6	93
66381210	12	0.465	11.8	152
66381810	18	0.543	13.8	212
66382510	25	0.661	16.8	305
<b>▶ 16 AWG (≈ 27-29/30) • 1.50 mm<sup>2</sup></b>				
66380215	2	0.272	6.9	42
66380315	3	0.283	7.2	60
66380415	4	0.319	8.1	74
66380515	5	0.354	9.0	91
66380715	7	0.382	9.7	120
66381215	12	0.547	13.9	202
66381815	18	0.618	15.7	305
66382515	25	0.752	19.1	412

item no.	no. of conductors incl. ground	outer-ø		cable weight ≈lbs/mft
		±10% inch	±10% mm	
<b>▶ 14 AWG (≈ 46/30) • 2.50 mm<sup>2</sup></b>				
66380225	2	0.327	8.3	67
66380325	3	0.354	9.0	86
66380425	4	0.382	9.7	110
66380525	5	0.433	11.0	144
66380725	7	0.476	12.1	185
66381225	12	0.646	16.4	313
66381825	18	0.760	19.3	447
66382525	25	0.921	23.4	626
<b>▶ 12 AWG (≈ 52/28) • 4.00 mm<sup>2</sup></b>				
66380440	4	0.453	11.5	168
66380540	5	0.504	12.8	208
<b>▶ 10 AWG (≈ 78/28) • 6.00 mm<sup>2</sup></b>				
66380460	4	0.535	13.6	237
66380560	5	0.594	15.1	282
<b>▶ 8 AWG (≈ 77/26) • 10.00 mm<sup>2</sup></b>				
66380461	4	0.701	17.8	414
<b>▶ 6 AWG (≈ 122/26) • 16.00 mm<sup>2</sup></b>				
66380462	4	0.862	21.9	616

Other dimensions and colors are available on request