

# HALOGEN-FREE CABLES



## SABIX® R 600 FRNC SABIX® Rail Control with numbered conductors



Marking for SABIX® R 600 FRNC 66001215:  
SAB BRÖCKSKES · D-VIERSEN · SABIX® R 600 FRNC 12 G 1.5 mm² CE

Our specially developed for rail vehicles control cable SABIX® R 600 FRNC with suitable external materials tested according to DIN EN 45545-2 are particularly suited for flexible installation in rail vehicles. For these cables, the stringent requirements have been confirmed in accordance with DIN EN 45545-2.

### Construction:

<b>Conductor:</b>	bare copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	black conductors with consecutive numbers acc. to EN 50334; green-yellow earth wire from 3 conductors
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	special SABIX®
<b>Jacket color:</b>	gray

### Technical data:

<b>Nominal voltage:</b>	U <sub>0</sub> /U 300/500 V
<b>Testing voltage U:</b>	3000 V
<b>Min. bending radius</b>	
<i>fixed laying:</i>	4 x O. D.
<i>flexible application:</i>	6 x O. D.
<b>Temperature range</b>	
<i>fixed laying:</i>	-40/+90°C
<i>flexible application:</i>	-30/+90°C
<b>Zero halogen:</b>	acc. to EN 50306-1 + EN 50264-1 are fulfilled. Development of HCl is < 0.5% acc. to DIN EN 50267-2-1. pH-value is > 4.3 acc. to DIN EN 50267-2-2. Conductivity is < 10.0 µS/mm acc. to DIN EN 50267-2-2. Fluoric content < 0.1% acc. to DIN EN 60684-2.
<b>Burning characteristics:</b>	No flame propagation acc. to DIN EN 60332-3-24, DIN EN 60332-3-25 and DIN EN 50305 section 9.1.2. Flame retardant and self-extinguishing acc. to DIN EN 60332-1-2.
<b>Toxicity:</b>	acc. to DIN EN 50305
<b>Smoke density:</b>	acc. to DIN EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page O/29

### Outstanding features:

- halogen-free
- no flame propagation
- flame retardant and self-extinguishing
- fulfills fire protection requirements R15 (EL1A) acc. to DIN EN 45545-2 for hazard levels HL1-3

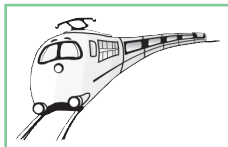
item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 20 AWG (≈ 16/32) • 0.50 mm²</b>				
66000205	2	0.189	4.8	22
66000305	3	0.201	5.1	26
66000405	4	0.217	5.5	31
66000505	5	0.244	6.2	38
66000705	7	0.264	6.7	46
66001005	10	0.339	8.6	65
66001205	12	0.358	9.1	74
66001805	18	0.421	10.7	114
66002505	25	0.508	12.9	149
66003205	32	0.551	14.0	193
66004205	42	0.618	15.7	245
66006105	61	0.728	18.5	343

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 19 AWG (≈ 23/32) • 0.75 mm²</b>				
66000207	2	0.213	5.4	30
66000307	3	0.224	5.7	34
66000407	4	0.252	6.4	42
66000507	5	0.276	7.0	52
66000707	7	0.307	7.8	65
66001007	10	0.394	10.0	97
66001207	12	0.413	10.5	110
66001807	18	0.488	12.4	155
66002507	25	0.594	15.1	212
66003207	32	0.646	16.4	261
66004207	42	0.724	18.4	346
66006107	61	0.850	21.6	485

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 18 AWG (≈ 30/32) • 1.00 mm²</b>				
66000210	2	0.220	5.6	34
66000310	3	0.240	6.1	42
66000410	4	0.260	6.6	51
66000510	5	0.295	7.5	63
66000710	7	0.319	8.1	79
66001010	10	0.417	10.6	116
66001210	12	0.429	10.9	132
66001810	18	0.508	12.9	188
66002510	25	0.618	15.7	256
66003210	32	0.673	17.1	327
66004210	42	0.764	19.4	414
66006110	61	0.894	22.7	587

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Tested at reference types.



**Especially for use in rail vehicles**





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<b>Toxicity:</b>	acc. to DIN EN 50305
<b>Smoke density:</b>	acc. to DIN EN 61034
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page O/29

Tested at reference types.

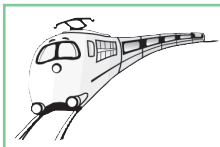
item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 16 AWG (≈ 27-29/30) • 1.50 mm<sup>2</sup></b>				
66000215	2	0.252	6.4	46
66000315	3	0.268	6.8	54
66000415	4	0.299	7.6	67
66000515	5	0.327	8.3	83
66000715	7	0.362	9.2	114
66001015	10	0.472	12.0	154
66001215	12	0.488	12.4	177
66001815	18	0.583	14.8	194
66002515	25	0.709	18.0	361
66003215	32	0.768	19.5	444
66004215	42	0.866	22.0	583
66006115	61	1.016	25.8	818
<b>▶ 14 AWG (≈ 46/30) • 2.50 mm<sup>2</sup></b>				
66000225	2	0.307	7.8	71
66000325	3	0.350	8.9	85
66000425	4	0.362	9.2	104
66000525	5	0.398	10.1	134
66000725	7	0.441	11.2	169
66001025	10	0.583	14.8	243
66001225	12	0.602	15.3	280
66001825	18	0.717	18.2	413
66002525	25	0.878	22.3	562

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 12 AWG (≈ 52/28) • 4.00 mm<sup>2</sup></b>				
66000340	3	0.382	9.7	124
66000440	4	0.425	10.8	157
66000540	5	0.476	12.1	195
66000740	7	0.528	13.4	252
<b>▶ 10 AWG (≈ 78/28) • 6.00 mm<sup>2</sup></b>				
66000360	3	0.449	11.4	181
66000460	4	0.500	12.7	226
66000560	5	0.559	14.2	279
66000760	7	0.618	15.7	366
<b>▶ 8 AWG (≈ 77/26) • 10.00 mm<sup>2</sup></b>				
66000461	4	0.657	16.7	389
66000561	5	0.732	18.6	497
66000761	7	0.815	20.7	654

item no.	no. of conductors incl. ground	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
<b>▶ 6 AWG (≈ 122/26) • 16.00 mm<sup>2</sup></b>				
66000462	4	0.811	20.6	596
66000562	5	0.906	23.0	743
66000762	7	1.004	25.5	971
<b>▶ 4 AWG (≈ 190/26) • 25.00 mm<sup>2</sup></b>				
66000463	4	0.980	24.9	933
66000563	5	1.106	28.1	1176
<b>▶ 2 AWG (≈ 272/26) • 35.00 mm<sup>2</sup></b>				
66000464	4	1.134	28.8	1295
66000564	5	1.280	32.5	1622

Other dimensions and colors are possible on request.

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