

# Halogen-free Cables

## SABIX® R 605 FRNC SABIX® Rail - Data cable



D-VIERSEN · SABIX® R 605 FRNC 32 x 0.5 mm<sup>2</sup> CE



Marking for SABIX® R 605 FRNC 66053250:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 605 FRNC 32 x 0.5 mm<sup>2</sup> CE



### Construction:

<b>Conductor:</b>	bare copper strands with reference to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Color code:</b>	DIN 47100, see page O/26
<b>Stranding:</b>	in layers
<b>Jacket material:</b>	special SABIX®
<b>Jacket color:</b>	grayish tan (RAL 7032)

### Outstanding features:

- low smoke halogen-free (LSHF)
- no flame propagation
- flame retardant and self-extinguishing
- fulfills fire protection requirements R15 (EL1A)  
acc. to EN 45545-2 for hazard levels HL1-3
- fulfills fire protection requirements acc. to NFPA 130 section 8.6.7.1.1 and section 12.2.1 (1) \*
- flame retardant acc. to UN/ECE R118

### Technical data:

<b>Nominal voltage:</b>	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
<b>Testing voltage:</b>	conductor/conductor: 1500 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>	
<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. Fluoric 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 UL 1685 section 12, FT4/IEEE 1202.* 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, EAC, RoHS
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page O/30

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
<b>▶ 26 AWG (≈ 18/38) ▪ 0.14 mm<sup>2</sup></b>				
66050214	2	0.122	3.1	9
66050314	3	0.130	3.3	10
66050414	4	0.138	3.5	12
66050514	5	0.150	3.8	14
66050714	7	0.161	4.1	17
66050814	8	0.197	5.0	22
66051214	12	0.209	5.3	26
66051414	14	0.217	5.5	28
66051614	16	0.236	6.0	34
66051814	18	0.248	6.3	38
66052114	21	0.272	6.9	44
66052414	24	0.287	7.3	47
66052714	27	0.303	7.7	54
66053014	30	0.311	7.9	58
66053214	32	0.323	8.2	62
66053614	36	0.335	8.5	68
66054014	40	0.358	9.1	75
66054414	44	0.374	9.5	80
66055014	50	0.406	10.3	95
66056114	61	0.429	10.9	111

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
<b>▶ 24 AWG (≈ 14/34) ▪ 0.25 mm<sup>2</sup></b>				
66050225	2	0.134	3.4	11
66050325	3	0.142	3.6	13
66050425	4	0.154	3.9	16
66050525	5	0.165	4.2	19
66050725	7	0.181	4.6	24
66050825	8	0.205	5.2	29
66051225	12	0.240	6.1	38
66051425	14	0.252	6.4	43
66051625	16	0.264	6.7	48
66051825	18	0.280	7.1	54
66052125	21	0.311	7.9	65
66052425	24	0.331	8.4	70
66052725	27	0.339	8.6	77
66053025	30	0.350	8.9	84
66053225	32	0.362	9.2	89
66053625	36	0.394	10.0	105
66054025	40	0.417	10.6	116
66054425	44	0.437	11.1	124
66055025	50	0.457	11.6	137
66056125	61	0.484	12.3	162

item no.	no. of conductors incl. ground	nominal outer-ø		cable weight ≈lbs/mft
		inch ±5%	mm ±5%	
<b>▶ 22 AWG (≈ 7/30) ▪ 0.34 mm<sup>2</sup></b>				
66050234	2	0.157	4.0	16
66050334	3	0.165	4.2	18
66050434	4	0.181	4.6	22
66050534	5	0.197	5.0	27
66050734	7	0.217	5.5	33
66050834	8	0.256	6.5	42
66051234	12	0.287	7.3	54
66051434	14	0.311	7.9	63
66051634	16	0.327	8.3	71
66051834	18	0.346	8.8	79
66052134	21	0.394	10.0	98
66052434	24	0.417	10.6	105
66052734	27	0.425	10.8	116
66053034	30	0.441	11.2	126
66053234	32	0.457	11.6	134
66053634	36	0.476	12.1	148
66054034	40	0.508	12.9	164
66054434	44	0.531	13.5	175
66055034	50	0.571	14.5	204
66056134	61	0.606	15.4	241

\* NFPA 130 / FT4 only up to outer-ø < 13 mm (0.512").

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item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
<b>► 20 AWG (≈ 16/32) ▪ 0.50 mm<sup>2</sup></b>				
66050250	2	0.169	4.3	19
66050350	3	0.177	4.5	22
66050450	4	0.193	4.9	27
66050550	5	0.213	5.4	33
66050750	7	0.240	6.1	42
66050850	8	0.280	7.1	53
66051250	12	0.319	8.1	69
66051450	14	0.335	8.5	77
66051650	16	0.354	9.0	88
66051850	18	0.374	9.5	97
66052150	21	0.429	10.9	121
66052450	24	0.453	11.5	131
66052750	27	0.461	11.7	143
66053050	30	0.476	12.1	156
66053250	32	0.496	12.6	167
66053650	36	0.516	13.1	184
66054450	44	0.594	15.1	229
66055050	50	0.618	15.7	276
66056150	61	0.657	16.7	301

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
<b>► 19 AWG (≈ 23/32) ▪ 0.75 mm<sup>2</sup></b>				
66050275	2	0.193	4.9	26
66050375	3	0.205	5.2	30
66050475	4	0.232	5.9	39
66050575	5	0.252	6.4	47
66050775	7	0.276	7.0	58
66050875	8	0.327	8.3	75
66051275	12	0.370	9.4	95
66051475	14	0.406	10.3	114
66051675	16	0.425	10.8	129
66051875	18	0.449	11.4	143
66052175	21	0.492	12.5	167
66052475	24	0.524	13.3	181
66052775	27	0.535	13.6	200
66053075	30	0.571	14.5	228
66053275	32	0.591	15.0	242
66053675	36	0.614	15.6	268
66054075	40	0.657	16.7	298
66054475	44	0.689	17.5	319
66055075	50	0.720	18.3	356
66056175	61	0.780	19.8	435

item no.	no. of conductors incl. ground	nominal outer-ø inch ±5%	mm ±5%	cable weight ≈lbs/mft
<b>► 18 AWG (≈ 30/32) ▪ 1.00 mm<sup>2</sup></b>				
66050280	2	0.201	5.1	29
66050380	3	0.213	5.4	36
66050480	4	0.240	6.1	46
66050580	5	0.264	6.7	55
66050680	6	0.287	7.3	65
66050780	7	0.287	7.3	70
<b>► 16 AWG (≈ 27-29/30) ▪ 1.50 mm<sup>2</sup></b>				
66050285	2	0.220	5.6	37
66050385	3	0.240	6.1	48
66050485	4	0.264	6.7	58
66050585	5	0.303	7.7	76
66050685	6	0.331	8.4	90
66050785	7	0.331	8.4	97

Other dimensions and colors are available on request

\* NFPA 130 / FT4 only up to outer-ø < 13 mm (0.512").