

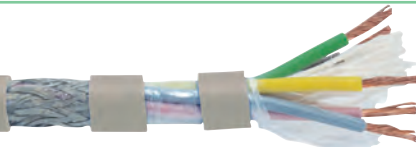
Halogen-free Cables

SABIX® R 615 FRNC

SABIX® Rail - Data cable with overall tinned copper shield



SEN · SABIX® R 615 FRNC 5 x 0.5 mm² CE



Marking for SABIX® R 615 FRNC 66150550:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 615 FRNC 5 x 0.5 mm² CE

Construction:

Conductor:	bare copper strands with reference to IEC 60228, VDE 0295, class 5
Insulation:	special SABIX®
Color code:	DIN 47100, see next page
Stranding:	in layers
Wrapping:	foil
Shielding:	tinned copper braiding
Jacket material:	special SABIX®
Jacket color:	grayish tan (RAL 7032)

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
- fulfills fire protection requirements acc. to NFPA 130 section 8.6.7.1.1 and section 12.2.1 (1) *
- tested acc. to American ASTM standard
- flame retardant acc. to UN/ECE R118

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

Technical data:

Peak operating voltage:	< 24 AWG = max. 350 V ≥ 24 AWG = max. 500 V
Testing voltage:	conductor/conductor: 1500 V conductor/shielding: 1200 V
Min. bending radius:	5 x O.D. <i>fixed installation:</i> 10 x O.D. <i>free movement:</i>
Temperature range:	DIN VDE <i>static:</i> -40/+90°C <i>flexible:</i> -30/+90°C
Halogen-free:	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
Burning characteristics:	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. * Burning tests acc. to ASTM E 162-09. Flame retardant acc. to ISO 6722 (UN/ECE R118)
Toxicity:	acc. to EN 50305+ VDE 0260-305
Smoke density:	acc. to IEC 61034 + VDE 0482-1034 + ASTM E 662-09
Flexibility:	good
Approvals:	CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

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item no.	no. of conductors	outer-ø		cable weight ≈lbs/mft
		±10% inch	±10% mm	
▶ 26 AWG (≈ 18/38) ▪ 0.14 mm²				
66150214	2	0.142	3.6	14
66150314	3	0.150	3.8	15
66150414	4	0.157	4.0	16
66150514	5	0.169	4.3	19
66150714	7	0.181	4.6	22
66150814	8	0.213	5.4	29
66151014	10	0.228	5.8	32
66151214	12	0.244	6.2	36
66151414	14	0.252	6.4	40
66151614	16	0.264	6.7	45
66151814	18	0.276	7.0	48
66152114	21	0.299	7.6	56
66152414	24	0.315	8.0	60
66152714	27	0.339	8.6	70
66153014	30	0.346	8.8	75
66153214	32	0.358	9.1	79
66153614	36	0.370	9.4	86
66154014	40	0.394	10.0	95
66154414	44	0.417	10.6	109
66155014	50	0.433	11.0	118
66155214	52	0.433	11.0	120
66156114	61	0.457	11.6	136

item no.	no. of conductors	outer-ø		cable weight ≈lbs/mft
		±10% inch	±10% mm	
▶ 24 AWG (≈ 14/34) ▪ 0.25 mm²				
66150225	2	0.154	3.9	16
66150325	3	0.161	4.1	17
66150425	4	0.173	4.4	21
66150525	5	0.193	4.9	26
66150725	7	0.209	5.3	31
66150825	8	0.240	6.1	39
66151025	10	0.260	6.6	43
66151225	12	0.268	6.8	48
66151425	14	0.280	7.1	54
66151625	16	0.291	7.4	60
66151825	18	0.307	7.8	66
66152125	21	0.346	8.8	82
66152425	24	0.366	9.3	87
66152725	27	0.374	9.5	95
66153025	30	0.386	9.8	102
66153225	32	0.398	10.1	108
66153625	36	0.421	10.7	127
66154025	40	0.445	11.3	140
66154425	44	0.465	11.8	148
66155025	50	0.500	12.7	171
66155225	52	0.500	12.7	175
66156125	61	0.528	13.4	198

item no.	no. of conductors	outer-ø		cable weight ≈lbs/mft
		±10% inch	±10% mm	
▶ 22 AWG (≈ 7/30) ▪ 0.34 mm²				
66150234	2	0.177	4.5	21
66150334	3	0.193	4.9	24
66150434	4	0.209	5.3	29
66150534	5	0.224	5.7	34
66150734	7	0.252	6.4	42
66150834	8	0.283	7.2	52
66151034	10	0.307	7.8	58
66151234	12	0.315	8.0	65
66151434	14	0.346	8.8	79
66151634	16	0.362	9.2	87
66151834	18	0.382	9.7	97
66152134	21	0.421	10.7	119
66152434	24	0.445	11.3	130
66152734	27	0.453	11.5	139
66153034	30	0.469	11.9	149
66153234	32	0.500	12.7	166
66153634	36	0.520	13.2	183
66154034	40	0.551	14.0	202
66154434	44	0.575	14.6	214
66155034	50	0.622	15.8	259
66155234	52	0.622	15.8	265
66156134	61	0.657	16.7	246

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

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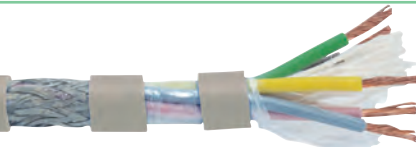
EN 45545-2

NFPA 130

UN/ECE R118

SAB Rail

SEN · SABIX® R 615 FRNC 5 x 0.5 mm² CE



Marking for SABIX® R 615 FRNC 66150550:

SAB BRÖCKSKES · D-VIERSEN · SABIX® R 615 FRNC 5 x 0.5 mm² CE

item no.	no. of conductors	outer-ø		cable weight ≈lbs/mft
		±10% inch	±10% mm	
▶ 20 AWG (≈ 16/32) ▪ 0.50 mm²				
66150250	2	0.197	5.0	26
66150350	3	0.205	5.2	28
66150450	4	0.220	5.6	34
66150550	5	0.248	6.3	42
66150750	7	0.268	6.8	51
66150850	8	0.307	7.8	63
66151050	10	0.346	8.8	76
66151250	12	0.354	9.0	85
66151450	14	0.370	9.4	93
66151650	16	0.390	9.9	105
66151850	18	0.417	10.6	124
66152150	21	0.457	11.6	148
66152450	24	0.496	12.6	161
66152750	27	0.504	12.8	175
66153050	30	0.520	13.2	190
66153250	32	0.539	13.7	201
66153650	36	0.559	14.2	222
66154450	44	0.646	16.4	284
66155050	50	0.669	17.0	315
66156150	61	0.709	18.0	363

item no.	no. of conductors	outer-ø		cable weight ≈lbs/mft
		±10% inch	±10% mm	
▶ 19 AWG (≈ 23/32) ▪ 0.75 mm²				
66150275	2	0.220	5.6	32
66150375	3	0.240	6.1	38
66150475	4	0.260	6.6	50
66150575	5	0.280	7.1	54
66150775	7	0.303	7.7	68
66150875	8	0.362	9.2	89
66151275	12	0.413	10.5	120
66151475	14	0.433	11.0	133
66151675	16	0.453	11.5	151
66151875	18	0.488	12.4	173
66152175	21	0.535	13.6	200
66152475	24	0.567	14.4	218
66152775	27	0.579	14.7	237
66153075	30	0.622	15.8	280
66153275	32	0.642	16.3	296
66153675	36	0.665	16.9	322

item no.	no. of conductors	outer-ø		cable weight ≈lbs/mft
		±10% inch	±10% mm	
▶ 18 AWG (≈ 30/32) ▪ 1.00 mm²				
66150280	2	0.228	5.8	36
66150380	3	0.248	6.3	44
66150480	4	0.268	6.8	52
66150580	5	0.291	7.4	64
66150680	6	0.315	8.0	75
66150780	7	0.315	8.0	79
▶ 16 AWG (≈ 27-29/30) ▪ 1.50 mm²				
66150285	2	0.260	6.6	48
66150385	3	0.268	6.8	60
66150485	4	0.291	7.4	66
66150585	5	0.339	8.6	87
66150685	6	0.366	9.3	102
66150785	7	0.366	9.3	109

Other dimensions and colors are available on request

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

DIN 47100 color code:

#1- white, #2- brown, #3- green, #4- yellow, #5- gray, #6- pink, #7- blue, #8- red, #9- black, #10- violet, #11- gray-pink, #12- red-blue, #13- white-green, #14- brown-green, #15- white-yellow, #16- yellow-brown, #17- white-gray, #18- gray-brown, #19- white-pink, #20- pink-brown, #21- white-blue, #22- brown-blue, #23- white-red, #24- brown-red, #25- white-black, #26- brown-black, #27- gray-green, #28- yellow-gray, #29- pink-green, #30- yellow-pink, #31- green-blue, #32- yellow-blue, #33- green-red, #34- yellow-red, #35- green-black, #36- yellow-black, #37- gray-blue, #38- pink-blue, #39- gray-red, #40- pink-red, #41- gray-black, #42- pink-black, #43- blue-black, #44- red-black, #45- white-brown-black, #46- yellow-green-black, #47- gray-pink-black, #48- red-blue-black, #49- white-green-black, #50- brown-green-black, #51- white-yellow-black, #52- yellow-brown-black, #53- white-gray-black, #54- gray-brown-black, #55- white-pink-black, #56- pink-brown-black, #57- white-blue-black, #58- brown-blue-black, #59- white-red-black, #60- brown-red-black, #61- black-white