

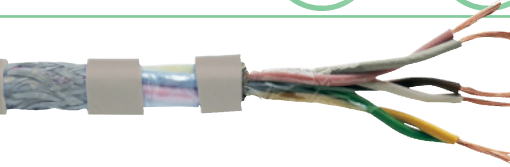
# Halogen-free Cables

## SABIX® R 645 FRNC TP

SABIX® Rail Data paired with overall copper screen



645 FRNC TP 3 x 2 x 0,25 mm<sup>2</sup> CE



Marking for SABIX® R 645 FRNC TP 66450325:

SAB BRÜCKSKES · D-VIERSEN · SABIX® R 645 FRNC TP 3 x 2 x 0,25 mm<sup>2</sup> CE

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### Construction:

<b>Conductor:</b>	bare copper strands with reference to IEC 60228, VDE 0295, class 5
<b>Insulation:</b>	special SABIX®
<b>Colour code:</b>	with reference to DIN 47100
<b>Stranding:</b>	pairwise, pairs in layers
<b>Wrapping:</b>	foil
<b>Screen:</b>	tinned copper braiding
<b>Sheath material:</b>	special SABIX®
<b>Sheath colour:</b>	grey (RAL 7032)

### Outstanding features:



- halogen-free
- no flame propagation
- good EMC characteristics
- flame retardant and self-extinguishing
- fulfils fire protection requirements R15 (EL1A) acc. to EN 45545-2 for hazard levels HL1-3
- fulfils 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
- good transmission rates and crosstalk attenuation

### Technical Data:

<b>Peak operating voltage:</b>	< 0,25 mm <sup>2</sup> = max. 350 V ≥ 0,25 mm <sup>2</sup> = max. 500 V
<b>Testing voltage:</b>	core/core 1500 V core/screen 1200 V
<b>Min. bending radius</b>	
fixed laying:	5 x d
flexible application:	10 x d
<b>Temperature range</b>	
fixed laying:	-40/+90 °C
flexible application:	-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>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 UL 1685 section 12, FT4/IEEE 1202. Burning tests acc. to ASTM E 162-09. 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 + ASTM E 662-09
<b>Flexibility:</b>	good
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union, see chapter N „Technical data“

Tested at reference types.

item no	no. of pairs x cross section n x 2 x mm <sup>2</sup>	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈kg/km
66450214	2 x 2 x 0,14	5,2	19,1	38
66450314	3 x 2 x 0,14	5,7	23,4	44
66450414	4 x 2 x 0,14	6,5	27,8	54
66450514	5 x 2 x 0,14	7,0	31,9	64
66450614	6 x 2 x 0,14	7,2	36,2	71
66450814	8 x 2 x 0,14	7,8	43,4	83
66451014	10 x 2 x 0,14	8,9	50,6	105
66451214	12 x 2 x 0,14	9,7	58,2	121
66451614	16 x 2 x 0,14	10,5	71,4	147
66451814	18 x 2 x 0,14	11,1	92,8	174
66452414	24 x 2 x 0,14	12,8	114,8	223
66450225	2 x 2 x 0,25	5,7	24,9	46
66450325	3 x 2 x 0,25	6,4	31,4	61
66450425	4 x 2 x 0,25	7,2	39,3	72
66450525	5 x 2 x 0,25	7,7	45,8	83
66450625	6 x 2 x 0,25	7,9	50,7	92
66450825	8 x 2 x 0,25	9,0	62,1	119
66451025	10 x 2 x 0,25	9,8	73,9	138
66451225	12 x 2 x 0,25	10,9	102,3	173
66451625	16 x 2 x 0,25	11,9	126,8	213
66451825	18 x 2 x 0,25	12,7	136,6	245
66452425	24 x 2 x 0,25	14,2	170,3	296
66450234	2 x 2 x 0,34	6,8	31,5	63
66450334	3 x 2 x 0,34	7,4	39,7	79
66450434	4 x 2 x 0,34	8,8	49,8	102
66450534	5 x 2 x 0,34	9,5	58,5	121
66450634	6 x 2 x 0,34	9,7	65,1	125

item no	no. of pairs x cross section n x 2 x mm <sup>2</sup>	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈kg/km
66450834	8 x 2 x 0,34	10,6	80,7	159
66451234	12 x 2 x 0,34	13,4	133,1	248
66451634	16 x 2 x 0,34	14,6	165,0	305
66451834	18 x 2 x 0,34	15,1	178,3	334
66452434	24 x 2 x 0,34	17,6	255,1	449
66450250	2 x 2 x 0,50	7,2	39,3	72
66450350	3 x 2 x 0,50	7,9	50,1	92
66450450	4 x 2 x 0,50	9,4	64,6	119
66450550	5 x 2 x 0,50	10,2	76,3	141
66450650	6 x 2 x 0,50	10,4	86,0	155
66450850	8 x 2 x 0,50	11,4	126,6	179
66451050	10 x 2 x 0,50	13,2	146,5	252
66451250	12 x 2 x 0,50	14,4	175,6	294
66451650	16 x 2 x 0,50	16,3	241,3	380
66451850	18 x 2 x 0,50	16,9	261,0	436
66452450	24 x 2 x 0,50	19,0	330,4	508
66450275	2 x 2 x 0,75	8,5	52,4	102
66450375	3 x 2 x 0,75	9,4	69,4	128
66450475	4 x 2 x 0,75	10,9	101,9	166
66450575	5 x 2 x 0,75	11,7	121,9	201
66450675	6 x 2 x 0,75	12,5	136,5	239
66450875	8 x 2 x 0,75	13,7	170,1	279
66451275	12 x 2 x 0,75	17,1	261,2	419
66451675	16 x 2 x 0,75	18,6	329,9	522
66451875	18 x 2 x 0,75	19,3	369,3	580
66452475	24 x 2 x 0,75	21,8	469,2	714

NFPA 130 / FT4 only up to outer-ø < 13 mm.  
Other dimensions and colours are possible on request.