

Besilen® - Silicone Cables

R 107

highly flexible Besilen® insulated HV single core

EN 45545-2

Nominal voltage up to
U₀/U 1.8/3 kV

SAB Rail

ES · D-VIERSEN · R 107 1,8/3 kV 95,0mm² 6107-0894

RoHS FREE PFAS FREE

marking example:

SAB BRÜCKSKES · D-VIERSEN · R 107 1,8/3 kV 95,0mm² 6107-0894

Application: Highly flexible single conductor for current or ground connection in railway technology.

Construction:

Conductor: bare copper strands, extremely fine wires
Insulation: Besilen® EI2
 acc. to EN 50363-1 + VDE 0207-363-1
Colour: slate-gray (RAL 7015)

Outstanding features:

- » extremely flexible
- » fulfils fire protection requirements acc. to EN 45545-2 / from 1,50 - 10,00 mm²: R15 (EL1A) HL 1 / R16 (EL1B) HL 1-2 from 16,00 mm²: R15 (EL1A) HL 1-2 / R16 (EL1B) HL 1-3
- » halogen-free
- » heat resistant
- » flexible at low temperatures
- » flame retardant and self-extinguishing
- » good ozone, UV and weather resistance
- » PFAS free

Technical data:

Nominal voltage: U₀/U 1,8/3,0 kV
Testing voltage: 6500 V
Current-carrying capacity: acc. to VDE 0298-4

Min. bending radius
fixed laying: 2 x d
flexible application: 4 x d

Temperature range
fixed laying: -50/+180 °C
flexible application: -25/+180 °C
short-time use: +250 °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 IEC 60754-2. Conductivity is < 10,0 μS/mm acc. to IEC 60754-2. Fluoric content < 0,1% acc. to IEC 60684-2.

Fire performance: 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

Toxicity: acc. to EN 50305 + VDE 0260-305

Smoke density: acc. to IEC 61034 + VDE 0482-1034

Weather resistance: very good

Ozone resistance: acc. to EN 50382-2 + VDE 0260-382-2

Oil resistance: good

Absence of harmful substances: acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	nominal cross section mm ²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
61070882	1,50	0,07	6,9	14,4	62
61070884	2,50	0,07	7,4	24,0	76
61070886	4,00	0,07	8,1	38,4	97
61070887	6,00	0,07	8,5	57,6	119
61070888	10,00	0,07	10,0	96,0	172
61070889	16,00	0,07	10,3	153,6	222
61070890	25,00	0,10	12,1	240,0	328
61070891	35,00	0,10	13,8	336,0	435
61070892	50,00	0,10	15,7	480,0	591
61070893	70,00	0,10	17,7	672,0	788
61070894	95,00	0,10	19,2	912,0	1041
61070895	120,00	0,10	20,9	1152,0	1281
61070896	150,00	0,10	24,1	1440,0	1588
61070897	185,00	0,15	25,3	1776,0	1912
61070898	240,00	0,15	29,8	2304,0	2476
61070899	300,00	0,15	31,7	2880,0	3094

Other dimensions and colours are possible on request.

On request with tinned copper strands!

Also available with copper braiding as R 108!