

Besilen® - Silicone Cables

R 107

highly flexible Besilen® insulated HV single core

EN 45545-2

Nominal voltage up to
Uo/U 1.8/3 kV

SAB Rail

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

marking example:

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

KES · D-VIERSEN · R 107 1,8/3 kV 95,0mm² 6107-1894

marking example:

SAB BRÜCKSKES · D-VIERSEN · R 107 1,8/3 kV 95,0mm² 6107-1894

RoHS
FREE

PFAS
FREE

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) or translucent

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

On request with tinned copper strands!

Technical data:

Nominal voltage:	Uo/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“

slate-gray outer sheath

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.

translucent outer sheath

item no.	nominal cross section mm ²	largest single wire ø mm	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
61071888	10,00	0,07	10,0	96,0	172
61071889	16,00	0,07	10,3	153,6	222
61071890	25,00	0,10	12,1	240,0	328
61071891	35,00	0,10	13,8	336,0	435
61071892	50,00	0,10	15,7	480,0	591
61071893	70,00	0,10	17,7	672,0	788
61071894	95,00	0,10	19,2	912,0	1041
61071895	120,00	0,10	20,9	1152,0	1281
61071896	150,00	0,10	24,1	1440,0	1588
61071897	185,00	0,15	25,3	1776,0	1912
61071898	240,00	0,15	29,8	2304,0	2476
61071899	300,00	0,15	31,7	2880,0	3094

Other dimensions and colours are possible on request.