



Siechem Sietrans GKW S EMC FS 180 Fire Resistant Cables

Application

- ✓ For protected installation inside & outside of rail vehicles and buses.
- ✓ These cables also maintain their function over a limited period in the event of a fire and are suitable for connecting fixed and moving parts such as emergency lamps, flue gas outlets and switchgear.
- ✓ Fire Survival applications.

Features

- ✓ Maintains circuit integrity for 3 hours under fire condition.
- ✓ High temperature resistance for use -40°C up to +120°C
- ✓ Advance performance halogen free
- ✓ Oil and fuel resistance
- ✓ Electron beam cross-linked
- ✓ Halogen free
- ✓ Fire resistance

Product Construction

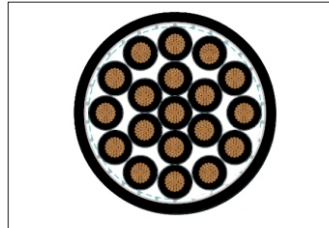
- ✓ Conductor : Annealed Tinned Flexible Copper Conductor
- ✓ Flame Barrier : Phlogopite Tape
- ✓ Insulation : Electron Beam Cross Linked Polyolefin Copolymer (EI 109 acc. to EN 50264-1& EN 50306-1)
- ✓ Insulation Colour : Grey Core with Number Printing
- ✓ Flame Barrier : Phlogopite Tape
- ✓ Shielding : Annealed Tinned Copper
- ✓ Flame Barrier : Phlogopite Tape
- ✓ Outer Sheath : Electron Beam Cross Linked Elastomer Compound (EM 104 acc. to EN 50264-1& EN 50306-1)
- ✓ Sheath Colour : Black

Technical Data

- ✓ Nominal voltage U_0/U : 0.3/0.5 kV AC
- ✓ Max. permissible (i) U_{om} : 0.36 kV AC
Operating voltage (ii) U_m : 0.6 kV AC
(iii) V_0 : 0.45 kV DC
(iv) V_m : 0.9 kV DC
- ✓ Testing voltage : 2kV AC (50Hz / 5min)
- ✓ Max. conductor temperature : +120°C 20,000 H
- ✓ Short circuit temperature : +280°C
- ✓ Min bending radius : OD < 10 mm > 5 x Cable OD
OD > 10 mm > 6 x Cable OD
- ✓ **Fire Safety Performance for Rolling Stock**
(i) EN 45545-2 Hazard Level HL1- HL3
(ii) EN 50264-1
- ✓ Vertical flame : (i) EN 60332-1-2 - Single cable propagation (ii) EN 60332-3-24, EN 60332-3-25 & EN 50305 - Bunched cables
- ✓ Smoke density : EN 61034-2
- ✓ Toxicity of gases : EN 50305
- ✓ Corrosivity of gases : EN 50267-2-2
- ✓ Circuit integrity : EN 50200 : 120 minutes
EN 60331-21 : 180 minutes
- ✓ **Material Properties** (as per EN 50264-3-2)
- ✓ High resistance to cold : EN 60811-504
- ✓ High resistance to oil : EN 60811-404
- ✓ High resistance to fuel : EN 60811-404
- ✓ Resistance to ozone : EN 50264-3-2
- ✓ Limiting oxygen index : ISO 4589-2, ASTM D 2863



2D View



		ISO 9001	ISO 14001	AS 9100	ISO 45001

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Part Number	No. of Cores X Cross Section (Nos) X (mm ²)	Conductor Construction No of Strands X Strand Dia (Nos) X (mm)	Nominal Conductor Diameter (mm)	Max Conductor Resistance at 20°C (Ω/km)	Nominal Overall Diameter (mm)	Cable Weight (Kg/Km) Approx.
A5470602	2 X 0.5	16 X 0.20	0.93	40.1	6.4 ± 0.6	68
A5470602P	2P X 0.5	16 X 0.20	0.93	40.1	10.4 ± 0.5	125
A5470603	3 X 0.5	16 X 0.20	0.93	40.1	6.8 ± 0.7	78
A5470603P	3P X 0.5	16 X 0.20	0.93	40.1	11.0 ± 0.5	150
A5470604	4 X 0.5	16 X 0.20	0.93	40.1	7.4 ± 0.7	93
A547064P	4P X 0.5	16 X 0.20	0.93	40.1	12.2 ± 0.5	185
A5470605	5 X 0.5	16 X 0.20	0.93	40.1	8.1 ± 0.8	110
A5470605P	5P X 0.5	16 X 0.20	0.93	40.1	13.4 ± 0.5	220
A5470606	6 X 0.5	16 X 0.20	0.93	40.1	9.0 ± 0.9	130
A5470607	7 X 0.5	16 X 0.20	0.93	40.1	9.1 ± 0.9	140
A5470608	8 X 0.5	16 X 0.20	0.93	40.1	10.1 ± 1.0	165
A5470609	9 X 0.5	16 X 0.20	0.93	40.1	11.0 ± 1.1	186
A5470610	10 X 0.5	16 X 0.20	0.93	40.1	11.5 ± 1.2	205
A5470612	12 X 0.5	16 X 0.20	0.93	40.1	11.9 ± 1.2	230
A5470614	14 X 0.5	16 X 0.20	0.93	40.1	12.5 ± 1.3	260
A5470616	16 X 0.5	16 X 0.20	0.93	40.1	13.3 ± 1.3	290
A5470616G	16G X 0.5	16 X 0.20	0.93	40.1	13.3 ± 1.3	290
A5470620	20 X 0.5	16 X 0.20	0.93	40.1	14.7 ± 1.5	350
A5470620G	20G X 0.5	16 X 0.20	0.93	40.1	14.7 ± 1.5	350
A5470624	24 X 0.5	16 X 0.20	0.93	40.1	16.2 ± 1.6	415
A5470627	27 X 0.5	16 X 0.20	0.93	40.1	16.7 ± 1.7	450

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S	Sheathed
EMC	Shielding
FS	Fire Resistant



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Part Number	No. of Cores X Cross Section (Nos) X (mm ²)	Conductor Construction No of Strands X Strand Dia. (Nos) X (mm)	Nominal Conductor Diameter (mm)	Max Conductor Resistance at 20°C (Ω/km)	Nominal Overall Diameter (mm)	Cable Weight (Kg/Km) Approx.
A5470802	2 X 0.75	24 X 0.20	1.14	26.7	7.0 ± 0.7	82
A5470803	3 X 0.75	24 X 0.20	1.14	26.7	7.4 ± 0.7	96
A5470804	4 X 0.75	24 X 0.20	1.14	26.7	8.2 ± 0.8	115
A5470805	5 X 0.75	24 X 0.20	1.14	26.7	9.1 ± 0.9	140
A5470806	6 X 0.75	24 X 0.20	1.14	26.7	10.0 ± 1.0	165
A5470807	7 X 0.75	24 X 0.20	1.14	26.7	10.2 ± 1.0	180
A5470808	8 X 0.75	24 X 0.20	1.14	26.7	11.2 ± 1.1	210
A5470809	9 X 0.75	24 X 0.20	1.14	26.7	12.2 ± 1.2	240
A5470810	10 X 0.75	24 X 0.20	1.14	26.7	12.8 ± 1.3	260
A5470812	12 X 0.75	24 X 0.20	1.14	26.7	13.3 ± 1.3	295
A5470814	14 X 0.75	24 X 0.20	1.14	26.7	14.0 ± 1.4	330
A5470816	16 X 0.75	24 X 0.20	1.14	26.7	14.8 ± 1.5	370
A5470820	20 X 0.75	24 X 0.20	1.14	26.7	16.4 ± 1.6	450
A5470824	24 X 0.75	24 X 0.20	1.14	26.7	18.1 ± 1.8	535
A5470824G	24G X 0.75	24 X 0.20	1.14	26.7	18.1 ± 1.8	535
A5470827	27 X 0.75	24 X 0.20	1.14	26.7	18.6 ± 1.9	580
A5470827G	27G X 0.75	24 X 0.20	1.14	26.7	18.6 ± 1.9	580
A5471002	2 X 1	32 X 0.20	1.31	20.0	7.7 ± 0.8	98
A5471003	3 X 1	32 X 0.20	1.31	20.0	8.1 ± 0.8	115
A5471004	4 X 1	32 X 0.20	1.31	20.0	9.0 ± 0.9	140
A5471004G	4G X 1	32 X 0.20	1.31	20.0	9.0 ± 0.9	140
A5471005	5 X 1	32 X 0.20	1.31	20.0	10.0 ± 1.0	170
A5471006	6 X 1	32 X 0.20	1.31	20.0	10.9 ± 1.1	195
A5471007	7 X 1	32 X 0.20	1.31	20.0	11.1 ± 1.1	215
A5471008	8 X 1	32 X 0.20	1.31	20.0	12.3 ± 1.2	250
A5471009	9 X 1	32 X 0.20	1.31	20.0	13.3 ± 1.3	285
A5471010	10 X 1	32 X 0.20	1.31	20.0	14.0 ± 1.4	315
A5471012	12 X 1	32 X 0.20	1.31	20.0	14.5 ± 1.5	355
A5471012G	12G X 1	32 X 0.20	1.31	20.0	14.5 ± 1.5	355
A5471014	14 X 1	32 X 0.20	1.31	20.0	15.3 ± 1.5	400
A5471016	16 X 1	32 X 0.20	1.31	20.0	16.2 ± 1.6	450
A5471020	20 X 1	32 X 0.20	1.31	20.0	18.0 ± 1.8	545
A5471020G	20G X 1	32 X 0.20	1.31	20.0	18.0 ± 1.8	545
A5471024	24 X 1	32 X 0.20	1.31	20.0	19.9 ± 2.0	650
A5471027	27 X 1	32 X 0.20	1.31	20.0	20.4 ± 2.0	710
A5471302	2 X 1.5	30 X 0.25	1.59	13.7	8.5 ± 0.9	120
A5471303	3 X 1.5	30 X 0.25	1.59	13.7	9.0 ± 0.9	145
A5471304	4 X 1.5	30 X 0.25	1.59	13.7	10.0 ± 1.0	180
A5471305	5 X 1.5	30 X 0.25	1.59	13.7	11.0 ± 1.1	215
A5471306	6 X 1.5	30 X 0.25	1.59	13.7	12.1 ± 1.2	250
A5471307	7 X 1.5	30 X 0.25	1.59	13.7	12.3 ± 1.2	275
A5471307G	7G X 1.5	30 X 0.25	1.59	13.7	12.3 ± 1.2	275
A5471308	8 X 1.5	30 X 0.25	1.59	13.7	13.6 ± 1.4	320
A5471309	9 X 1.5	30 X 0.25	1.59	13.7	14.8 ± 1.5	365
A5471310	10 X 1.5	30 X 0.25	1.59	13.7	15.5 ± 1.6	400
A5471312	12 X 1.5	30 X 0.25	1.59	13.7	16.1 ± 1.6	455
A5471312G	12G X 1.5	30 X 0.25	1.59	13.7	16.1 ± 1.6	455

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A5471314	14 X 1.5	30 X 0.25	1.59	13.7	17.0 ± 1.7	515
A5471316	16 X 1.5	30 X 0.25	1.59	13.7	18.0 ± 1.8	580
A5471320	20 X 1.5	30 X 0.25	1.59	13.7	20.0 ± 2.0	710
A5471324	24 X 1.5	30 X 0.25	1.59	13.7	22.2 ± 2.2	850
A5471327	27 X 1.5	30 X 0.25	1.59	13.7	22.7 ± 2.3	925
A5471602	2 X 2.5	50 X 0.25	2.05	8.21	9.7 ± 1.0	165
A5471603	3 X 2.5	50 X 0.25	2.05	8.21	10.3 ± 1.0	200
A5471604	4 X 2.5	50 X 0.25	2.05	8.21	11.4 ± 1.1	250
A5471605	5 X 2.5	50 X 0.25	2.05	8.21	12.6 ± 1.3	295
A5471606	6 X 2.5	50 X 0.25	2.05	8.21	13.8 ± 1.4	350
A5471607	7 X 2.5	50 X 0.25	2.05	8.21	14.0 ± 1.4	380
A5471608	8 X 2.5	50 X 0.25	2.05	8.21	15.6 ± 1.6	450
A5471609	9 X 2.5	50 X 0.25	2.05	8.21	17.0 ± 1.7	510
A5471610	10 X 2.5	50 X 0.25	2.05	8.21	17.8 ± 1.8	560
A5471612	12 X 2.5	50 X 0.25	2.05	8.21	18.5 ± 1.9	640
A5471612G	12G X 2.5	50 X 0.25	2.05	8.21	18.5 ± 1.9	640
A5471614	14 X 2.5	50 X 0.25	2.05	8.21	19.5 ± 2.0	725
A5471616	16 X 2.5	50 X 0.25	2.05	8.21	20.7 ± 2.1	815
A5471620	20 X 2.5	50 X 0.25	2.05	8.21	23.1 ± 2.3	1000
A5471624	24 X 2.5	50 X 0.25	2.05	8.21	25.6 ± 2.6	1200
A5471627	27 X 2.5	50 X 0.25	2.05	8.21	26.2 ± 2.6	1315

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