



Siechem Sietrans GKW S 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

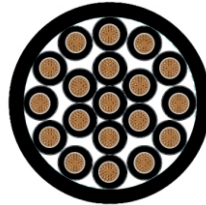
- ✓ Conductor : Annealed Tinned Flexible Copper Conductor
- ✓ Flame Barrier : Phlogopite Tape
- ✓ Insulation : Electron Beam Cross Linked Polyolefin Copolymer
- ✓ Insulation Colour : Grey Core with Number Printing
- ✓ Flame Barrier : Phlogopite Tape
- ✓ Outer Sheath : Electron Beam Cross Linked Elastomer Compound
- ✓ 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 < 10mm > 5 x Cable OD
OD < 10mm > 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
- ✓ Halogen free : EN 50267-2-1 & EN 60684-2
- ✓ 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
		ALSTOM			



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.
A5460602	2 X 0.5	16 X 0.20	0.93	40.1	5.9 ± 0.6	52
A5460603	3 X 0.5	16 X 0.20	0.93	40.1	6.2 ± 0.6	61
A5460604	4 X 0.5	16 X 0.20	0.93	40.1	6.9 ± 0.7	75
A5460605	5 X 0.5	16 X 0.20	0.93	40.1	7.6 ± 0.8	89
A5460606	6 X 0.5	16 X 0.20	0.93	40.1	8.4 ± 0.8	108
A5460607	7 X 0.5	16 X 0.20	0.93	40.1	8.6 ± 0.9	119
A5460608	8 X 0.5	16 X 0.20	0.93	40.1	9.6 ± 1.0	139
A5460609	9 X 0.5	16 X 0.20	0.93	40.1	10.4 ± 1.0	160
A5460610	10 X 0.5	16 X 0.20	0.93	40.1	10.9 ± 1.1	176
A5460612	12 X 0.5	16 X 0.20	0.93	40.1	11.4 ± 1.1	199
A5460614	14 X 0.5	16 X 0.20	0.93	40.1	12.0 ± 1.2	226
A5460616	16 X 0.5	16 X 0.20	0.93	40.1	12.7 ± 1.3	255
A5460620	20 X 0.5	16 X 0.20	0.93	40.1	14.2 ± 1.4	313
A5460624	24 X 0.5	16 X 0.20	0.93	40.1	15.7 ± 1.6	375
A5460627	27 X 0.5	16 X 0.20	0.93	40.1	16.1 ± 1.6	408
A5460802	2 X 0.75	24 X 0.20	1.14	26.7	6.5 ± 0.7	65
A5460803	3 X 0.75	24 X 0.20	1.14	26.7	6.9 ± 0.7	77
A5460804	4 X 0.75	24 X 0.20	1.14	26.7	7.7 ± 0.8	97
A5460805	5 X 0.75	24 X 0.20	1.14	26.7	8.6 ± 0.9	117

GKW S FS	
G	Electron Beam Cross linked
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A5460806	6 X 0.75	24 X 0.20	1.14	26.7	9.4 ± 0.9	139
A5460807	7 X 0.75	24 X 0.20	1.14	26.7	9.6 ± 1.0	154
A5460808	8 X 0.75	24 X 0.20	1.14	26.7	10.7 ± 1.1	180
A5460809	9 X 0.75	24 X 0.20	1.14	26.7	11.7 ± 1.2	206
A5460810	10 X 0.75	24 X 0.20	1.14	26.7	12.2 ± 1.2	227
A5460812	12 X 0.75	24 X 0.20	1.14	26.7	12.7 ± 1.3	258
A5460814	14 X 0.75	24 X 0.20	1.14	26.7	13.4 ± 1.3	293
A5460816	16 X 0.75	24 X 0.20	1.14	26.7	14.2 ± 1.4	331
A5460820	20 X 0.75	24 X 0.20	1.14	26.7	15.9 ± 1.6	407
A5460824	24 X 0.75	24 X 0.20	1.14	26.7	17.6 ± 1.8	488
A5460827	27 X 0.75	24 X 0.20	1.14	26.7	18.1 ± 1.8	533
A5461002	2 X 1	32 X 0.20	1.31	20.0	7.1 ± 0.7	79
A5461003	3 X 1	32 X 0.20	1.31	20.0	7.6 ± 0.8	94
A5461004	4 X 1	32 X 0.20	1.31	20.0	8.5 ± 0.9	119
A5461004G	4G X 1	32 X 0.20	1.31	20.0	8.5 ± 0.9	119
A5461005	5 X 1	32 X 0.20	1.31	20.0	9.4 ± 0.9	143
A5461006	6 X 1	32 X 0.20	1.31	20.0	10.3 ± 1.0	169
A5461007	7 X 1	32 X 0.20	1.31	20.0	10.5 ± 1.1	188
A5461008	8 X 1	32 X 0.20	1.31	20.0	11.7 ± 1.2	220
A5461009	9 X 1	32 X 0.20	1.31	20.0	12.8 ± 1.3	252
A5461010	10 X 1	32 X 0.20	1.31	20.0	13.4 ± 1.3	278
A5461012	12 X 1	32 X 0.20	1.31	20.0	14.0 ± 1.4	316
A5461012G	12 G X 1	32 X 0.20	1.31	20.0	14.0 ± 1.4	316
A5461014	14 X 1	32 X 0.20	1.31	20.0	14.7 ± 1.5	359
A5461016	16 X 1	32 X 0.20	1.31	20.0	15.6 ± 1.6	406
A5461020	20 X 1	32 X 0.20	1.31	20.0	17.4 ± 1.7	500
A5461020G	20G X 1	32 X 0.20	1.31	20.0	17.4 ± 1.7	500
A5461024	24 X 1	32 X 0.20	1.31	20.0	19.3 ± 1.9	600
A5461024G	24G X 1	32 X 0.20	1.31	20.0	19.3 ± 1.9	600
A5461027	27 X 1	32 X 0.20	1.31	20.0	19.8 ± 2.0	656
A5461302	2 X 1.5	30 X 0.25	1.59	13.7	8.0 ± 0.8	101
A5461303	3 X 1.5	30 X 0.25	1.59	13.7	8.5 ± 0.9	123
A5461303G	3G X 1.5	30 X 0.25	1.59	13.7	8.5 ± 0.9	123
A5461304	4 X 1.5	30 X 0.25	1.59	13.7	9.5 ± 1.0	154
A5461305	5 X 1.5	30 X 0.25	1.59	13.7	10.5 ± 1.1	185
A5461305G	5G X 1.5	30 X 0.25	1.59	13.7	10.5 ± 1.1	185
A5461306	6 X 1.5	30 X 0.25	1.59	13.7	11.5 ± 1.2	221
A5461307	7 X 1.5	30 X 0.25	1.59	13.7	11.7 ± 1.2	245
A5461307G	7G x 1.5	30 X 0.25	1.59	13.7	11.7 ± 1.2	245
A5461308	8 X 1.5	30 X 0.25	1.59	13.7	13.1 ± 1.3	287
A5461309	9 X 1.5	30 X 0.25	1.59	13.7	14.3 ± 1.4	328
A5461310	10 X 1.5	30 X 0.25	1.59	13.7	15.0 ± 1.5	362
A5461312	12 X 1.5	30 X 0.25	1.59	13.7	15.6 ± 1.6	414
A5461312G	12G X 1.5	30 X 0.25	1.59	13.7	15.6 ± 1.6	414
A5461314	14 X 1.5	30 X 0.25	1.59	13.7	16.5 ± 1.7	471
A5461316	16 X 1.5	30 X 0.25	1.59	13.7	17.4 ± 1.7	532
A5461320	20 X 1.5	30 X 0.25	1.59	13.7	19.5 ± 2.0	657
A5461324	24 X 1.5	30 X 0.25	1.59	13.7	21.6 ± 2.2	790
A5461324G	24G X 1.5	30 X 0.25	1.59	13.7	21.6 ± 2.2	790
A5461327	27 X 1.5	30 X 0.25	1.59	13.7	22.2 ± 2.2	865
A5461327G	27G X 1.5	30 X 0.25	1.59	13.7	22.2 ± 2.2	865

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A5461602	2 X 2.5	50 X 0.25	2.05	8.21	9.2 ± 0.9	140
A5461603	3 x 2.5	50 X 0.25	2.05	8.21	9.7 ± 1.0	172
A5461604	4 X 2.5	50 X 0.25	2.05	8.21	10.9 ± 1.1	217
A5461605	5 X 2.5	50 X 0.25	2.05	8.21	12.1 ± 1.2	261
A5461606	6 X 2.5	50 X 0.25	2.05	8.21	13.3 ± 1.3	312
A5461607	7 X 2.5	50 X 0.25	2.05	8.21	13.5 ± 1.4	347
A5461608	8 X 2.5	50 X 0.25	2.05	8.21	15.1 ± 1.5	406
A5461609	9 X 2.5	50 X 0.25	2.05	8.21	16.5 ± 1.7	464
A5461610	10 X 2.5	50 X 0.25	2.05	8.21	17.3 ± 1.7	513
A5461612	12 X 2.5	50 X 0.25	2.05	8.21	18.0 ± 1.8	588
A5461612G	12G X 2.5	50 X 0.25	2.05	8.21	18.0 ± 1.8	588
A5461614	14 X 2.5	50 X 0.25	2.05	8.21	19.0 ± 1.9	672
A5461616	16 X 2.5	50 X 0.25	2.05	8.21	20.1 ± 2.0	760
A5461620	20 X 2.5	50 X 0.25	2.05	8.21	22.5 ± 2.3	941
A5461624	24 X 2.5	50 X 0.25	2.05	8.21	25.0 ± 2.5	1133
A5461627	27 X 2.5	50 X 0.25	2.05	8.21	25.7 ± 2.6	1243

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