



## Siechem Sietrans GKW US FS 180 Fire Resistant Cables

### Application

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

### Features

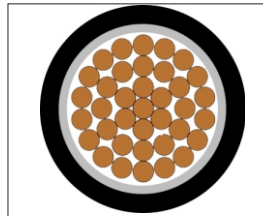
- ✓ Maintains circuit integrity for 3 hours under fire condition.
- ✓ High temperature resistance for use -40°C up to +120°C
- ✓ Oil and fuel resistant
- ✓ Electron beam cross-linked
- ✓ Halogen free
- ✓ Fire resistance

### Product Construction

- ✓ Conductor : Annealed Tinned Flexible Copper Conductor
- ✓ Flame Barrier : Phlogopite Tape
- ✓ Insulation : Electron Beam Cross Linked Polyolefin Copolymer
- ✓ Colour : Grey and as per customer order



### 2D View



### Technical Data

- ✓ Nominal voltage  $U_0/U$  : 0.3/0.5 kV AC
- ✓ Max. permissible : (i)  $U_{0m}$  : 0.36 kV AC operating voltage (ii)  $U_m$  : 0.6 kV AC (iii)  $V_s$  : 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 : > 3 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 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)
  - ✓ Resistance to ozone : EN 50264-3-1
  - ✓ Resistance to oil : EN 50305
  - ✓ Resistance to fuel : EN 50305
  - ✓ Resistance to acid : EN 50264-3-1
  - ✓ Resistance to alkalis : EN 50264-3-1
  - ✓ Limiting oxygen index : ISO 4589-2, ASTM D 2863
  - ✓ NFPF -130

Approvals	Accreditations	Certifications

Siechem Sietrans GKW US FS 180



Part Number	No. of Cores X Cross Section (Nos) X (mm <sup>2</sup> )	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.
A54506XX	1 X 0.5	16 X 0.20	0.93	40.1	2.13 ± 0.2	10
A54508XX	1 X 0.75	24 X 0.20	1.14	26.7	2.34 ± 0.2	13
A54510XX	1 X 1	32 X 0.20	1.31	20.0	2.61 ± 0.3	16
A54513XX	1 X 1.5	30 X 0.25	1.59	13.7	2.88 ± 0.3	22
A54516XX	1 X 2.5	50 X 0.25	2.05	8.21	3.43 ± 0.3	33

Note : XX\* : Please add last two digits in the part number as per the colour code given hereunder replacing XX while ordering.

Red - 01	Yellow - 02	Blue - 03	Black - 04	Green - 05	Yellow-Green - 06	Grey - 07	Brown - 08	White - 09	Orange - 10	Violet - 11
Chocolate - 12	Tan - 13	Charcoal - 14	LT Blue - 15	DK Grey - 16	LT Green - 17	DK Green - 18	DK Blue - 19	Purple - 20	Pink - 21	

✓ \*\* We have obtained various approvals, accreditations, and certifications — some of which may not be relevant to this catalog.

GKW/ US FS	
G	Electron Beam Cross linked
K	Cold Resistant
W	Heat Resistant
US	Unsheathed
FS	Fire resistant



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