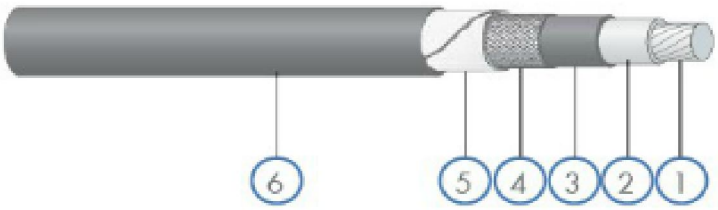
RADOX® 4 GKW-AX 1800V MM S

Conductor	EN 60228, class 5	Voltage rating	1800/3000V AC
Number of conductors	1		2700/4500V DC
Cross section	1.5 - 400 mm²	Temperature range	-40 °C to +120 °C



Composition of cable

1.	Conductor	stranded tin plated copper
2.	Insulation	RADOXEI 110, colour: white
3.	Sheath	RADOXEI 109 , colour: black
4.	EMC screen	tin plated copper braid
5.	Separator	tape
6.	Sheath	RADOXEM 104 , colour: black

Characteristics and specialities

- Fully meet the requirements of material level M according to EN 50264-1
  - extra low temperature
  - extra oil resistant
  - extra fuel resistance
- Resistance to ozone and weathering
- Large product range
- High screening effectiveness

Application

- For protected connections of fixed and sporadic moving parts inside and outside of rolling stock.
- Guidelines for selections and the installation are described in the standards EN 50355 and EN50343.

Standards

Standard	Fire protection on railway vehicles	
BS 6853	category	int. Ia, Ib, II / ext. Ia, Ib, II
EN 45545-2		
DIN 5510-2	protection level	1, 2, 3, 4
NF F 16-101	class, category	C / F0, int. A1, A2, B / ext. A1, A2, B
UNI CEI 11170-3		

For further technical details please refer to our data sheet.

single core screened

Cross section	Con-ductor	Core	Screen		Cable	Conductor resistance		I_K	I	Z_T	Capa-citance	Fire load	Weight		Item no.
mm^2	$d_{max.}$ mm	$d_{max.}$ mm	$d_{max.}$ mm	cross section mm^2	d mm	conductor R_{20} max. Ω/km	screen R_{20} max. Ω/km	screen A	screen A	max. mΩ/m	C pF/m	nom. kJ/m	copper kg/100m	cable kg/100m	
1.5	1.50	3.35	3.7	0.9	5.20 ± 0.15	13.7	21.33	355	18	100	254	363	2.1	4.8	12556535
2.5	1.95	3.90	4.8	1.0	5.80 ± 0.15	8.21	18.66	405	20	100	292	440	3.2	6.3	12556536
4	2.40	4.50	5.1	1.3	6.70 ± 0.15	5.09	14.14	529	24	100	322	584	4.6	8.9	12556537
6	2.93	5.20	5.7	1.5	7.40 ± 0.15	3.39	12.43	606	26	100	350	701	6.5	12	12556538
10	3.89	6.40	7.1	2.0	9.00 ± 0.2	1.95	9.48	795	30	100	392	1003	11	18	12556539
16	5.30	8.40	9.3	3.5	11.2 ± 0.2	1.24	5.70	1363	42	100	447	1489	17	28	12556540
25	6.60	10.20	11.2	4.2	13.4 ± 0.25	0.795	4.62	1637	48	100	451	2181	25	40	12556541
35	7.80	11.70	12.7	4.9	14.8 ± 0.25	0.565	3.98	1907	52	100	489	2557	35	51	12556542
50	9.30	13.50	14.7	5.6	16.8 ± 0.3	0.393	3.50	2182	57	100	512	3138	48	70	12556543
70	11.4	15.80	16.9	8.0	19.0 ± 0.3	0.277	2.67	3120	67	100	619	3867	69	92	12556544
95	12.8	17.50	18.6	9.2	20.7 ± 0.3	0.210	2.34	3564	73	100	640	4228	87	116	12556545
120	14.9	19.80	21.0	10.2	23.4 ± 0.3	0.164	2.10	3960	78	100	650	5471	104	145	12556546
150	16.8	22.10	23.6	15.7	25.9 ± 0.3	0.132	1.33	6066	103	100	719	6143	142	183	12556547
185	18.3	24.00	25.5	15.7	27.8 ± 0.3	0.108	1.37	6066	101	100	725	7034	168	213	12556548
240	21.1	27.00	28.9	20.7	31.2 ± 0.3	0.0817	0.93	8023	129	100	791	8606	221	291	12556549
300	23.7	29.90	31.8	22.1	34.2 ± 0.3	0.0654	0.95	8560	127	100	918	9618	276	337	12558471
400	27.3	34.10	35.9	35.7	39.5 0.5	0.05	0.59	13790	176	70	1115	15320	380	480	84134935

Short-circuit current rating of screen acc. to IEC 60949 (adiabatic), duration of short-circuit 0.1 s, initial temperature +90 °C, final temperature +200 °C.
Permissible continuous current of screen under standard conditions of current rating acc. to table current rating 4/9GKW-AX single core cables 557 578.