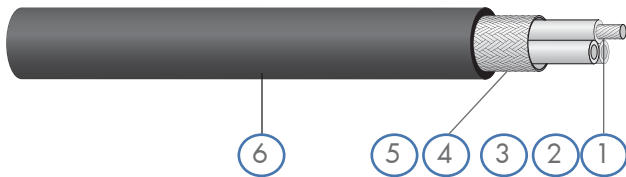


RADOX® 3 GWK/S EMC

Multi Core screened

Conductor	EN 60228, class 5	Voltage rating	600/1000 V AC
Number of conductors	2 - 42		900/1500 V DC
Cross section	0.5 - 50 mm ²	Temperature range	-40 °C to +120 °C



Composition of cable

1. Cores	3 GWK	colours: grey, numbered or grey, numbered with yellowgreen
2. Fillers (optional)	RADOX	
3. Separator(s) (optional)	tape	
4. EMC screen	tin plated copper braid	
5. Separator	tape	
6. Sheath	RADOX GWK S	colour: black

Characteristics and specialities

- Excellent screening properties
- Resistance to oil, diesel oil, abrasion, ozone and weathering
- Soldering resistant
- Easy to strip
- Flexible

Application

- Typical applications include carriage wiring, terminal boxes, power supply to various systems and ground connections inside railway rolling stock at fixed or sporadic moving installations.
- Guidelines for selection and the installation are described in the standards EN 50355 and EN 50343.

Standards

Standard	Fire protection on railway vehicles	
BS 6853	Category	int. Ia, Ib, II / ext. Ia, Ib, II
CEN/TS 45545		
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		

For further technical details please refer to our data sheet.

Cable type	Conductor		Core		Screen		Cable	Conductor resistance		I _k **	Z _T	Capacitance		Fire load	Weight		Item no.
	n x mm ²	constr.* n x mm	d _{nom.} mm	d _{nom.} mm	d _{max.} mm	size mm ²		d mm	conductor R ₂₀ max. Ω/km			screen R ₂₀ max. Ω/km	max. Ω/m		core/core C pF/m	core/ screen C pF/m	
2 x 0.5	19 x 0.18	0.90	2.00	4.6	1.3	6.6 ± 0.3	40.1	16.1	510	170	170	300	510	2.3	6.84	12561219	
4 x 0.5	19 x 0.18	0.90	2.00	5.8	1.7	7.5 ± 0.3	40.1	11.3	650	120	170	300	700	3.6	10.20	12561221	
7 x 0.5	19 x 0.18	0.90	2.00	7.8	2.8	9.8 ± 0.3	40.1	7.33	1080	80	170	300	1090	6.3	14.50	12561224	
15 x 0.5	19 x 0.18	0.90	2.00	10.6	5.1	13.4 ± 0.4	40.1	4.12	1970	60	170	300	2160	12.5	24.00	12567597	
9 x 2 x 0.5	19 x 0.18	0.90	2.00	17.0	10.6	20.6 ± 0.5	40.1	2.0	4090	40	170	300	6300	19.2	54.10	12568527	
3 x 0.75	24 x 0.21	1.10	2.20	5.4	1.7	7.5 ± 0.3	26.7	11.9	650	130	170	300	720	3.7	9.40	12561229	
6 x 0.75	24 x 0.21	1.10	2.20	7.7	3.3	9.9 ± 0.3	26.7	6.15	1200	80	170	300	1080	7.2	16.50	12561232	
9 x 0.75	24 x 0.21	1.10	2.20	10.0	5.1	12.3 ± 0.4	26.7	3.71	1950	70	170	300	1630	11.4	24.30	12561234	
16 x 0.75	24 x 0.21	1.10	2.20	11.7	5.9	14.4 ± 0.4	26.7	3.47	2250	60	170	300	2200	16.9	34.80	12562206	
5 x 2 x 0.75	24 x 0.21	1.10	2.20	12.8	8.0	16.0 ± 0.5	26.7	2.61	3000	55	170	300	2250	15.4	35.40	12566117	
4 x 1	37 x 0.18	1.22	2.45	7.0	2.8	8.8 ± 0.3	20.0	6.81	1080	90	190	330	860	6.4	14.00	12559724	
7 x 1	37 x 0.18	1.22	2.45	9.4	3.7	11.8 ± 0.4	20.0	4.98	1400	65	190	330	1430	10.0	22.60	12559727	
3 x 1.5	30 x 0.26	1.50	2.70	6.8	2.5	8.6 ± 0.3	13.7	7.62	960	90	190	330	770	6.4	12.40	12559729	
5 x 1.5	30 x 0.26	1.50	2.70	8.6	3.2	10.9 ± 0.4	13.7	6.14	1230	70	190	330	1240	9.9	20.80	12559731	
9 x 1.5	30 x 0.26	1.50	2.70	12.5	7.9	14.9 ± 0.4	13.7	2.43	3000	50	190	330	2050	19.2	40.90	12559844	
16 x 1.5	30 x 0.26	1.50	2.70	14.5	9.1	17.5 ± 0.5	13.7	2.09	3500	50	190	330	3030	30.3	56.00	12559846	
6 x 2 x 1.5	30 x 0.26	1.50	2.70	15.9	9.1	18.9 ± 0.4	14.2	2.10	3500	55	190	330	3050	25.0	54.00	12559855	
2 x 2.5	61 x 0.23	1.95	3.30	7.6	2.8	9.6 ± 0.3	8.21	7.23	1080	80	200	350	840	6.9	16.00	12559734	
4 x 2.5	61 x 0.23	1.95	3.30	9.2	3.2	11.3 ± 0.4	8.21	5.74	1230	70	200	350	1230	12.1	22.20	12559736	
7 x 2.5	61 x 0.23	1.95	3.30	12.1	5.9	14.8 ± 0.4	8.21	3.20	2250	50	200	350	2000	21.3	40.00	12559739	
3 x 4	61 x 0.29	2.45	3.95	9.5	3.7	11.8 ± 0.4	5.09	5.12	1400	60	200	350	1400	14.4	26.00	12559743	
5 x 4	61 x 0.29	2.45	3.95	12.3	5.5	14.7 ± 0.4	5.09	3.20	2100	60	200	350	1980	23.6	44.00	12561508	
3 x 6	84 x 0.30	2.95	4.70	11.4	5.1	13.8 ± 0.4	3.39	3.74	1950	50	230	400	2240	21.8	37.00	12559744	
5 x 6	84 x 0.30	2.95	4.70	14.1	9.1	17.4 ± 0.5	3.39	2.14	3500	50	230	400	2690	36.0	62.00	12559849	
3 x 10	80 x 0.40	3.90	5.85	14.1	7.8	17.1 ± 0.5	1.95	2.40	3000	50	230	400	4050	36.3	58.00	12559746	
4 x 10	80 x 0.40	3.90	5.85	16.1	10.2	19.2 ± 0.5	1.95	1.86	3900	50	230	400	5560	43.1	75.00	12559747	
5 x 10	80 x 0.40	3.90	5.85	17.8	10.5	21.1 ± 0.5	1.95	1.87	4050	50	230	400	4670	56.8	85.00	12562116	
3 x 16	119 x 0.40	5.30	7.30	17.3	10.2	20.5 ± 0.5	1.24	1.87	3900	50	230	400	4790	52.0	82.00	12559749	
2 x 25	182 x 0.40	6.60	8.90	19.1	12.0	22.9 ± 0.5	0.795	1.72	4550	50	230	400	4900	53.6	99.00	12566322	
3 x 35	266 x 0.40	7.80	10.2	23.6	15.1	27.9 ± 0.6	0.565	1.26	5800	50	230	400	8850	108	160.00	12559751	
6 x 35	266 x 0.40	7.80	10.2	33.4	35.2	39.7 ± 0.7	0.565	0.59	13590	50	230	400	15600	162	339.00	12565410	
2 x 50	378 x 0.40	9.30	11.9	25.0	15.2	29.8 ± 0.6	0.393	1.28	5850	50	230	400	21000	106	176.00	12560868	

* Typical value x single wire diameter

** 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

S = GWK S sheath

EMC = Electromagnetic Compatibility