

3GKW-MW/S EMC 0.6/1KV Medium Wall Screened Multicore

Applications

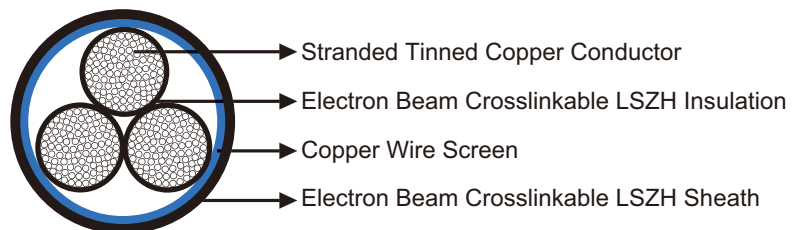
Multi core power and control cable designed for protected, fixed installation inside and outside railway vehicles for connecting fixed and moving parts in direct current and alternating voltage technology, especially converter technology.



Standard

- BS 6853 -1a
- DIN 5510-2 1-4
- NFF 16-101 F0

Construction



- **Conductors:** Circular Class 5

stranded tinned copper to IEC60228/VDE 0295.

- **Insulation:** Electron beam crosslinkable LSZH compound.
- **Screen:** Copper wire screen.
- **Sheath:** Electron beam crosslinkable LSZH compound.

Electrical Characteristics at 20°C

Nominal Conductor Cross Section	mm ²	1.5	2.5	4.0	10	16	25	35	50
Maximum Conductor Resistance	Ω/km	13.7	8.21	5.09	1.95	1.24	0.795	0.565	0.393
Voltage Rating	KV	0.6/1							

Mechanical and Thermal Properties

Minimum Bending Radius: 4xOD (Static); 8xOD (Flexing)

Temperature Range: -60°C ~+120°C (Static); -40°C ~+90°C (Flexing)

Short Circuit Temperature: +280°C

➤ Dimensions and Weight

No. of cores& Nominal Conductor Cross Sectional Area No.×mm ²	Number and Nominal Diameter of Strands No/mm		Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
2×0.5	19/0.18	16/0.20	0.5	6.6	68
3×0.5	19/0.18	16/0.20	0.5	6.9	75
4×0.5	19/0.18	16/0.20	0.5	7.5	81
5×0.5	19/0.18	16/0.20	0.5	8.2	93
6×0.5	19/0.18	16/0.20	0.5	8.8	111
7×0.5	19/0.18	16/0.20	0.5	9.8	125
8×0.5	19/0.18	16/0.20	0.5	10.3	143
9×0.5	19/0.18	16/0.20	0.5	10.8	149
10×0.5	19/0.18	16/0.20	0.5	11.0	154
12×0.5	19/0.18	16/0.20	0.5	12.3	175
14×0.5	19/0.18	16/0.20	0.5	13.0	198
15×0.5	19/0.18	16/0.20	0.5	13.4	210
16×0.5	19/0.18	16/0.20	0.5	13.7	223
20×0.5	19/0.18	16/0.20	0.5	14.0	274
24×0.5	19/0.18	16/0.20	0.5	14.2	310
27×0.5	19/0.18	16/0.20	0.5	14.5	343
9×2×0.5	19/0.18	16/0.20	0.5	20.6	540
2×0.75	19/0.21	24/0.20	0.5	7.2	80
3×0.75	19/0.21	24/0.20	0.5	7.5	90
4×0.75	19/0.21	24/0.20	0.5	8.3	116
5×0.75	19/0.21	24/0.20	0.5	9.1	133
6×0.75	19/0.21	24/0.20	0.5	9.9	165
7×0.75	19/0.21	24/0.20	0.5	10.7	186
8×0.75	19/0.21	24/0.20	0.5	11.5	194
9×0.75	19/0.21	24/0.20	0.5	12.3	220
10×0.75	19/0.21	24/0.20	0.5	12.6	250
12×0.75	19/0.21	24/0.20	0.5	13.2	278
14×0.75	19/0.21	24/0.20	0.5	13.8	300
16×0.75	19/0.21	24/0.20	0.5	14.4	348
20×0.75	19/0.21	24/0.20	0.5	14.5	354
24×0.75	19/0.21	24/0.20	0.5	15.6	401
27×0.75	19/0.21	24/0.20	0.5	16.3	459
5×2×0.75	19/0.21	24/0.20	0.5	16.0	350
2×1.0	32/0.20		0.55	7.4	93
3×1.0	32/0.20		0.55	8.1	114
4×1.0	32/0.20		0.55	8.8	140
5×1.0	32/0.20		0.55	9.8	158
6×1.0	32/0.20		0.55	10.8	170
7×1.0	32/0.20		0.55	11.8	189
8×1.0	32/0.20		0.55	11.8	219
9×1.0	32/0.20		0.55	12.0	223
10×1.0	32/0.20		0.55	12.2	234



No. of cores& Nominal Conductor Cross Sectional Area No.×mm ²	Number and Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
12×1.0	32/0.20	0.55	12.5	268
14×1.0	32/0.20	0.55	13.2	305
16×1.0	32/0.20	0.55	13.9	339
20×1.0	32/0.20	0.55	15.6	430
24×1.0	32/0.20	0.55	17.1	511
27×1.0	32/0.20	0.55	17.7	560
2×1.5	30/0.25	0.55	8.1	114
3×1.5	30/0.25	0.55	8.6	124
4×1.5	30/0.25	0.55	9.9	139
5×1.5	30/0.25	0.55	10.9	150
6×1.5	30/0.25	0.55	11.7	173
7×1.5	30/0.25	0.55	13.2	203
8×1.5	30/0.25	0.55	14.6	243
9×1.5	30/0.25	0.55	14.9	274
10×1.5	30/0.25	0.55	15.5	299
12×1.5	30/0.25	0.55	16.2	342
14×1.5	30/0.25	0.55	16.8	390
16×1.5	30/0.25	0.55	17.5	560
20×1.5	30/0.25	0.55	17.6	614
24×1.5	30/0.25	0.55	19.3	670
27×1.5	30/0.25	0.55	19.9	734
6×2×1.5	30/0.25	0.55	18.9	540
2×2.5	50/0.25	0.6	9.6	160
3×2.5	50/0.25	0.6	10.5	200
4×2.5	50/0.25	0.6	11.3	220
5×2.5	50/0.25	0.6	12.7	250
6×2.5	50/0.25	0.6	13.7	345
7×2.5	50/0.25	0.6	14.8	400
8×2.5	50/0.25	0.6	14.9	410
9×2.5	50/0.25	0.6	16.0	437
10×2.5	50/0.25	0.6	16.0	461
12×2.5	50/0.25	0.6	16.8	531
14×2.5	50/0.25	0.6	17.7	601
16×2.5	50/0.25	0.6	19.0	691
20×2.5	50/0.25	0.6	23.3	969
24×2.5	50/0.25	0.6	23.5	1004
27×2.5	50/0.25	0.6	24.0	1104
2×4	56/0.30	0.65	10.8	216
3×4	56/0.30	0.65	11.8	260
4×4	56/0.30	0.65	13.3	345
5×4	56/0.30	0.65	14.7	440
5×4	56/0.30	0.65	14.7	460
5×4	56/0.30	0.65	15.7	485
5×4	56/0.30	0.65	17.2	584
5×4	56/0.30	0.65	18.3	605

Caledonian Railway Cables

TRACTION CABLES

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No. of cores& Nominal Conductor Cross Sectional Area No.×mm ²	Number and Nominal Diameter of Strands No/mm		Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
5×4	56/0.30		0.65	18.3	641
12×4	56/0.30		0.65	19.5	760
2×6	84/0.30		0.7	12.1	291
3×6	84/0.30		0.7	13.8	370
4×6	84/0.30		0.7	16.3	458
5×6	84/0.30		0.7	17.4	620
6×6	84/0.30		0.7	17.4	640
7×6	84/0.30		0.7	17.8	673
8×6	84/0.30		0.7	19.4	774
9×6	84/0.30		0.7	20.7	820
10×6	84/0.30		0.7	20.7	875
12×6	84/0.30		0.7	21.8	1026
2×10	80/0.40		0.8	14.3	432
3×10	80/0.40		0.8	17.1	580
4×10	80/0.40		0.8	19.2	750
5×10	80/0.40		0.8	21.1	850
6×10	80/0.40		0.8	21.9	875
7×10	80/0.40		0.8	22.8	1019
8×10	80/0.40		0.8	23.7	1190
2×16	119/0.40	126/0.40	0.9	18.2	660
3×16	119/0.40	126/0.40	0.9	20.5	820
4×16	119/0.40	126/0.40	0.9	20.4	874
5×16	119/0.40	126/0.40	0.9	22.7	1083
6×16	119/0.40	126/0.40	0.9	24.9	1294
7×16	119/0.40	126/0.40	0.9	27.1	1521
8×16	119/0.40	126/0.40	0.9	29.6	1808
2×25	182/0.40	196/0.40	1.0	22.9	990
3×25	182/0.40	196/0.40	1.0	24.4	1075
4×25	182/0.40	196/0.40	1.0	25.2	1404
5×25	182/0.40	196/0.40	1.0	27.0	1750
3×35	266/0.40	276/0.40	1.1	27.9	1600
6×35	266/0.40	276/0.40	1.1	39.7	3350
2×50	378/0.40	396/0.40	1.2	29.8	1760



Impact Resistant



Highly Flexible



Cold Resistant



Soldering Heat Resistant



Low Temperature Resistant



Corona Resistant



Fire Retardant
NF C32-070-2.2(C1)
IEC 60332-3/EN50266



Flame Retardant
NF C32-070-2.1(C2)
IEC 60332-1/EN 50265-2-1



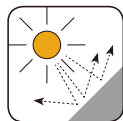
Low Corrosivity
EN 50267-2-2/NF C32-074
IEC 60754-2/NF C20-453



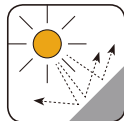
IRM 903 Fuel Oil Resistant



IRM 902 Mineral Oil Resistant



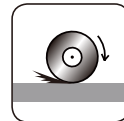
UV Resistant



Ozone Resistant



Acid and Alkali Resistant



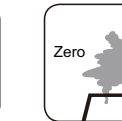
Abrasion Resistant



Low Smoke Emission
IEC 61034/NFC20-902
EN 50268/NF C32-073



Low Toxicity



Zero Halogen
IEC 60754-1/NF C20-454
EN 50267-2-1