

4GKW-AXplus-DW EMC 1.8/3KV Dual Wall Screened Single Core

Applications

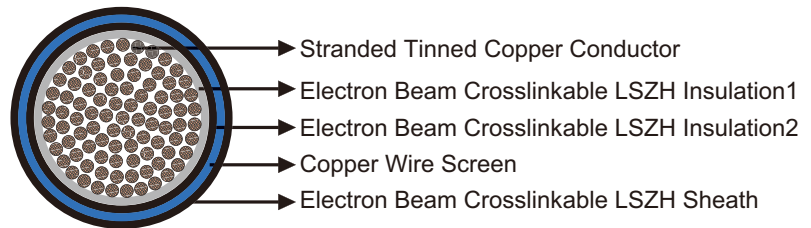
Single core power and control cable designed for protected, fixed installation inside and outside railway vehicles for connecting fixed and moving parts in direct current and alternating voltage technology, especially converter technology.



Standard

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

Construction



- **Conductors:** Circular Class 5 stranded tinned copper to IEC60228/VDE 0295.
- **Insulation1:** Electron beam crosslinkable LSZH compound.
- **Insulation2:** 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	6.0	10	16	25	35	50
Maximum Conductor Resistance	Ω/km	13.7	8.21	5.09	3.39	1.95	1.24	0.795	0.565	0.393
Voltage Rating	KV	1.8/3								

Nominal Conductor Cross Section	mm ²	70	95	120	150	185	240	300	400
Maximum Conductor Resistance	Ω/km	0.277	0.21	0.164	0.132	0.108	0.0817	0.0654	0.0495
Voltage Rating	KV	1.8/3							

cables.com ↘ 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

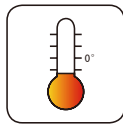
No. of cores & Nominal Conductor Cross Sectional Area No. x mm ²	Number and Nominal Diameter of Strands No/mm		Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
1x1.0	32/0.20		0.7	4.6	38
1x1.5	30/0.25		0.8	5.2	47
1x2.5	50/0.25		0.9	5.8	63
1x4	56/0.30		1.0	6.7	89
1x6	84/0.30		1.1	7.4	123
1x10	80/0.40		1.2	9.0	178
1x16	119/0.41	126/0.40	1.5	11.2	280
1x25	182/0.41	196/0.40	1.8	13.4	371
1x35	266/0.41	276/0.40	2.0	14.8	492
1x50	378/0.41	396/0.40	2.2	16.8	693
1x70	348/0.51	360/0.50	2.1	19.0	913
1x95	444/0.51	475/0.50	2.3	20.7	1160
1x120	551/0.51	608/0.50	2.4	23.4	1441
1x150	722/0.51	756/0.50	2.6	25.9	1730
1x185	874/0.52	925/0.50	2.8	27.8	2088
1x240	1147/0.51	1221/0.50	2.9	31.2	2908
1x300	1443/0.51	1525/0.50	3.0	34.2	3375
1x400	1887/0.50	2013/0.50	3.4	37.1	4250



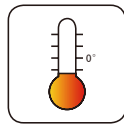
Impact Resistant



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



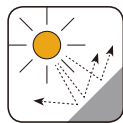
Low Corrosivity
EN 50267-2-2/NF C32-074
IEC 60754-2/NF C20-453



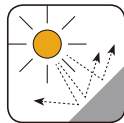
IRM 903 Fuel Oil Resistant



IRM 902 Mineral Oil Resistant



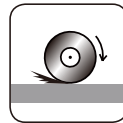
UV Resistant



Ozone Resistant



Acid and Alkali Resistant



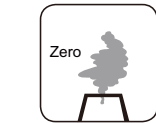
Abrasion Resistant



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