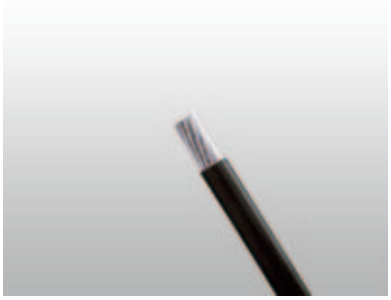
4GKW-AXplus-DW FE180 1.8/3KV
Dual Wall Single Core

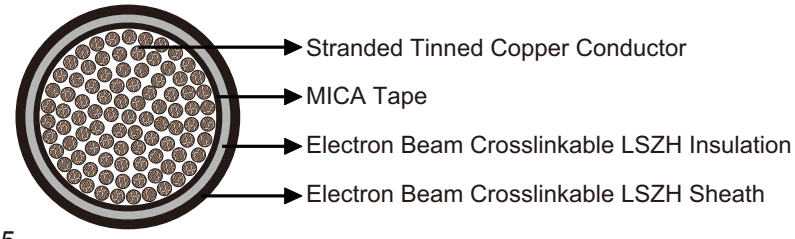
↘ Applications

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.
- **Flame Barrier:** MICA tape.
- **Insulation:** Electron beam crosslinkable LSZH compound.
- **Sheath:** Electron beam crosslinkable LSZH compound.

↘ Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	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	1.8/3.0								

Nominal Conductor Cross Section	mm²	70	95	120	150	185	240
Maximum Conductor Resistance	Ω/km	0.277	0.21	0.164	0.132	0.108	0.0817
Voltage Rating	KV	1.8/3.0					

↘ Mechanical and Thermal Properties

Minimum Bending Radius: 4xOD (Static); 6xOD (Flexing)

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

Short Circuit Temperature: +280℃

↘ Dimensions and Weight

No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	Number and Nominal Diameter of Strands No/mm		Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
1×1.5	30/0.25		1.05	4.90	38
1×2.5	50/0.25		1.15	5.35	50
1×4	56/0.30		1.25	6.10	88
1×6	84/0.30		1.30	7.00	93
1×10	80/0.40		1.30	8.10	142
1×16	119/0.41	126/0.40	1.15	9.30	210
1×25	182/0.41	196/0.40	1.50	10.8	290
1×35	266/0.41	276/0.40	1.50	12.1	400
1×50	378/0.41	396/0.40	1.60	13.8	561
1×70	348/0.51	360/0.50	1.70	16.2	760
1×95	444/0.51	475/0.50	1.90	18.0	980
1×120	551/0.51	608/0.50	1.60	20.2	1212
1×150	722/0.51	756/0.50	2.20	22.7	1520
1×185	874/0.51	925/0.50	2.40	24.6	1830
1×240	1147/0.51	1221/0.50	2.50	27.6	2411


Impact Resistant


Highly Flexible


Cold Resistant


Soldering Heat Resistant


Low Temperature Resistant


Acid and Alkali Resistant


IRM 903 Fuel Oil Resistant


IRM 902 Mineral Oil Resistant

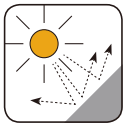

Corona Resistant


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


UV Resistant


Ozone 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

Insulation Integrity FE180