



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

Applications

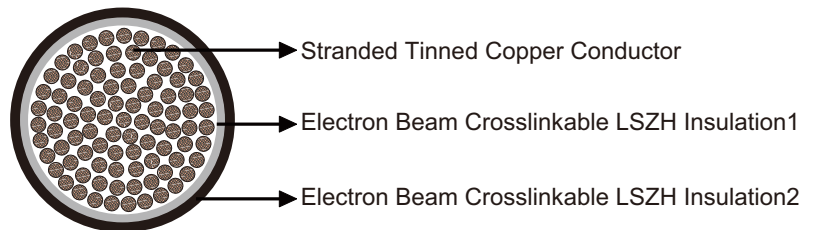
Single core power and control cable designed for protected, fixed installation inside and outside railway vehicles for connecting fixed and moving parts in direct current and alternating voltage technology, especially converter technology.



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.
- **Insulation1:** Electron beam crosslinkable LSZH compound.
- **Insulation2:** Electron beam crosslinkable LSZH compound.

Electrical Characteristics at 20°C

Nominal Conductor Cross Section	mm ²	1.0	1.5	2.5	4.0	6.0	10	16	25	35	50
Maximum Conductor Resistance	Ω/km	20.0	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	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	1.8/3.0							

Mechanical and Thermal Properties

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




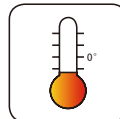







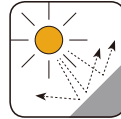
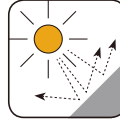




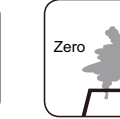
Temperature Range: -60°C ~+120°C (Static); -40°C ~+90°C (for flexible installation)

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
1×1.0	32/0.20		0.7	2.8	17
1×1.5	30/0.25		0.8	3.2	23
1×2.0	37/0.26		0.8	3.55	28
1×2.5	50/0.25		0.9	3.75	34
1×4.0	56/0.30		1.0	4.5	53
1×6.0	84/0.30		1.1	5.1	74
1×10	80/0.40		1.2	6.35	118
1×16	119/0.41	126/0.40	1.5	8.3	180
1×25	182/0.41	196/0.40	1.8	10.2	274
1×35	266/0.41	276/0.40	2.0	11.7	379
1×50	378/0.41	396/0.40	2.2	13.6	550
1×70	348/0.51	360/0.50	2.1	15.6	730
1×95	444/0.51	475/0.50	2.3	17.3	940
1×120	551/0.51	608/0.50	2.4	19.6	1180
1×150	722/0.51	756/0.50	2.6	21.9	1510
1×185	874/0.51	925/0.50	2.8	23.8	1802
1×240	1147/0.51	1221/0.50	2.9	26.9	2290
1×300	1443/0.51	1525/0.50	3.0	29.7	2928
1×400	2016/0.51	2013/0.50	3.4	35.8	4040

 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