



AXLJ-F TT 18/30 (36)kV Single Core Cable



Eland Product Group: C9M

APPLICATION

AXLJ-F TT Single core medium voltage cable for fixed installations outdoors, including direct burial. The cable is longitudinally (conductor) and radially watertight so is suitable for wet soil. The cable is halogen-free, but without fire protection. Variations on metallic screen cross-sectional area sizes offered.

CHARACTERISTICS

Nominal Voltage
18/30 (36)kV

Temperature Rating

Maximum conductor temperature: +90 °C
Max. conductor temperature. short circuit max. 5 s : +250 °C
Minimum temperature during operation: -50 °C
Minimum temperature during handling: -20 °C
Minimum temperature during transport: -40 °C

CONSTRUCTION

Conductor

Class 2 Watertight, circular, stranded aluminium

Conductor screen

Semiconducting XLPE (Cross-linked Polyethylene)

Insulation

XLPE (Cross-linked Polyethylene)

Insulation Screen

Semiconducting XLPE (Cross-linked Polyethylene)

Screen

Copper wires and aluminium foil (CAS). Polyethylene laminated aluminium foil acts as a part of the metallic screen and needs to be connected in cable joints and terminations

Outer Sheath

PE (Polyethylene)

Sheath Colour

● Black

STANDARDS

HD 620 10-M, SS 424 14 16, EN/IEC 60228

THE CABLE LAB[®]

AN ISO/IEC 17025 AND IECCE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.



SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: www.elandcables.com/company/about-us/esg-sustainability



REGULATORY COMPLIANCE

This cable meets the requirements of the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab[®].





DIMENSIONS

ELAND PART NO	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL SCREEN AREA mm ²	NOMINAL CONDUCTOR DIAMETER mm	NOMINAL INSULATION THICKNESS mm	NOMINAL THICKNESS OF AL FOIL mm	NOMINAL SHEATH THICKNESS mm	NOMINAL DIAMETER OVER INSULATION WITHOUT SCREEN mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
C9M30KV101070BK	1	70	16	9,6	8,0	0,2	2,1	25,1	34	964
C9M30KV101095BK	1	95	16	11,1	8,0	0,2	2,1	26,7	35	1094
C9M30KV201095BK	1	95	25	11,1	8,0	0,2	2,1	26,7	36	1128
C9M30KV101120BK	1	120	16	12,6	8,0	0,2	2,1	28,2	37	1231
C9M30KV101150BK	1	150	25	13,9	8,0	0,2	2,2	29,5	38	1360
C9M30KV101185BK	1	185	25	15,6	8,0	0,2	2,2	31,6	40	1584
C9M30KV201185BK	1	185	35	15,6	8,0	0,2	2,2	31,6	41	1597
C9M30KV101240BK	1	240	25	18,0	8,0	0,2	2,2	33,6	43	1751
C9M30KV201240BK	1	240	35	18,0	8,0	0,2	2,3	33,6	43	1829
C9M30KV101300BK	1	300	25	19,8	8,0	0,2	2,3	35,9	45	2039
C9M30KV201300BK	1	300	35	19,8	8,0	0,2	2,3	35,9	45	2074
C9M30KV101400BK	1	400	25	22,4	8,0	0,2	2,3	38,0	48	2273
C9M30KV201400BK	1	400	35	22,4	8,0	0,2	2,5	38,0	48	2319
C9M30KV101500BK	1	500	25	25,7	8,0	0,2	2,5	41,3	51	2766
C9M30KV201500BK	1	500	35	25,7	8,0	0,2	2,6	41,3	51	2797
C9M30KV101630BK	1	630	35	29,3	8,0	0,2	2,7	45,1	55	3360
C9M30KV201630BK	1	630	50	29,3	8,0	0,2	2,8	45,1	56	3550
C9M30KV101800BK	1	800	35	33,2	8,0	0,2	2,9	49,1	59	4111
C9M30KV201800BK	1	800	50	33,2	8,0	0,2	2,9	49,1	60	4219
C9M30KV1011000B	1	1000	35	39,2	8,0	0,2	3,0	55,0	66	4866

MECHANICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	MAX. PULLING FORCE BY PULLING-EYE kN	MAX. PULLING FORCE BY PULLING-STOCKING kN	MINIMUM BENDING RADIUS IN FINAL INSTALLATION, mm
70	3,5	1,1	0,38
95	4,8	1,4	0,41
120	6,0	1,8	0,43
150	7,5	2,3	0,43
185	9,3	2,8	0,44
240	12,0	3,6	0,48
300	15,0	4,5	0,49
400	20	6	0,51
500	20	7,5	0,57
630	20	8,5	0,62
800	20	8,5	0,66
1000	20	8,5	0,74



ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	MAX. DC RESISTANCE OF CONDUCTOR AT 20°C Ω/km	INDUCTANCE PER PHASE. IN TREFOIL FORMATION, CABLES TOUCHING EACH OTHER mH/km
70	0,443	0,44
95	0,320	0,42
120	0,253	0,40
150	0,206	0,39
185	0,164	0,38
240	0,125	0,38
300	0,100	0,35
400	0,0778	0,34
500	0,0605	0,33
630	0,0469	0,31
800	0,0367	0,30
1000	0,0291	0,29

CURRENT RATING

NOMINAL CROSS SECTIONAL AREA / AREA SCREEN mm ²	CABLES IN AIR (25 °C) A				CABLES IN THE GROUND (15°C AND 1,0 K.M/W), INSTALLATION DEPTH 0.7M A								MAXIMUM THERMAL SHORT CIRCUIT CURRENT DURING 1S kA	
	In flat formation, conductor temperature 90°C		In trefoil formation, conductor temperature 90°C		In flat formation, conductor temperature 65°C		In flat formation, conductor temperature 90°C		In trefoil formation, conductor temperature 65°C		In trefoil formation, conductor temperature 90°C		Phase (initial 90°C, final 250°C)	Metal screen Initial 80°C, final 250°C
	Open screen A	Closed screen A	Open screen A	Closed screen A	Open screen A	Closed screen A	Open screen A	Closed screen A	Open screen A	Closed screen A	Open screen A	Closed screen A		
	70/16	265	255	235	235	220	215	260	250	205	200	240	235	6,6
95/16	320	310	285	280	255	250	300	295	240	235	280	275	8,9	2,3
95/25	320	310	285	280	255	250	300	295	240	235	280	275	8,9	3,4
120/16	370	350	330	325	295	280	345	330	270	265	320	310	11,3	2,3
150/25	425	395	380	370	330	315	390	370	305	300	360	355	14,1	3,4
185/25	485	440	430	425	375	350	440	410	345	330	405	390	17,4	3,4
185/35	485	440	430	425	375	350	440	410	345	330	405	390	17,4	4,7
240/25	570	515	505	490	435	395	510	465	395	385	465	455	22,6	3,4
240/35	570	515	505	490	435	395	510	465	395	385	465	455	22,6	4,7
300/25	650	580	580	565	485	440	570	515	445	435	525	510	28,3	3,4
300/35	650	580	580	565	485	440	570	515	445	435	525	510	28,3	4,7
400/25	790	680	695	680	570	500	670	590	525	510	615	600	37,8	3,4
400/35	790	680	695	680	570	500	670	590	525	510	615	600	37,8	4,7
500/25	920	755	800	775	645	550	760	650	590	570	695	670	47,2	3,4
500/35	920	755	800	775	645	550	760	650	590	570	695	670	47,2	4,7
630/35	1040	840	915	880	720	610	850	715	665	635	780	745	59,5	4,7
630/50	1040	840	915	880	720	610	850	715	665	635	780	745	59,5	7,4
800/35	1220	950	1045	1010	805	650	-	-	725	695	-	-	75,6	4,7
800/50	1220	950	1045	1010	805	650	-	-	725	695	-	-	75,6	7,4
1000/35	1390	1060	1170	1130	900	700	-	-	800	760	-	-	94,5	4,7



CURRENT RATING

NOMINAL CROSS SECTIONAL AREA mm ²	CABLES IN AIR (25 °C) A				CABLES IN THE GROUND (15°C AND 1,0 K.M/W), INSTALLATION DEPTH 0.7M A								MAXIMUM THERMAL SHORT CIRCUIT CURRENT DURING 1S kA	
	In flat formation, conductor temperature 90°C		In trefoil formation, conductor temperature 90°C		In flat formation, conductor temperature 65°C		In flat formation, conductor temperature 90°C		In trefoil formation, conductor temperature 65°C		In trefoil formation, conductor temperature 90°C		Phase (initial 90°C, final 250°C)	Metal screen Initial 80°C, final 250°C
	Open screen A	Closed screen A	Open screen A	Closed screen A	Open screen A	Closed screen A	Open screen A	Closed screen A	Open screen A	Closed screen A	Open screen A	Closed screen A		
300	650	580	580	565	485	440	570	515	445	435	525	510	28,3	4,7
400	790	680	695	680	570	500	670	590	525	510	615	600	37,8	3,4
400	790	680	695	680	570	500	670	590	525	510	615	600	37,8	4,7
500	920	755	800	775	645	550	760	650	590	570	695	670	47,2	3,4
500	920	755	800	775	645	550	760	650	590	570	695	670	47,2	4,7
630	1040	840	915	880	720	610	850	715	665	635	780	745	59,5	4,7
630	1040	840	915	880	720	610	850	715	665	635	780	745	59,5	7,4
800	1220	950	1045	1010	805	650	-	-	725	695	-	-	75,6	4,7
800	1220	950	1045	1010	805	650	-	-	725	695	-	-	75,6	7,4
1000	1390	1060	1170	1130	900	700	-	-	800	760	-	-	94,5	4,7