



# AXLJ-F TT 12/20 (24)kV 3-core Cable



Eland Product Group: C9M

## APPLICATION

Medium-voltage cable for fixed installations outdoors suitable for direct burial. The AXLJ-F TT Cable is longitudinally (conductor) and radially watertight, with a PE sheath that whilst halogen free offers no fire protection. The 3-core cable is triangular rather than circular, with fillers to provide shape.

## CHARACTERISTICS

### 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)

### Metallic Screen

Copper wires with Copper equalising tape

### Radial Waterblocking

Al/PET (Aluminium Foil/Plastic laminate)

### Outer Sheath

PE (Polyethylene)

### Sheath Colour

● Black

## STANDARDS

HD 620 10 M, SS 424 14 16, EN/IEC 60228,  
 SGS Fimko FI 40519

## THE CABLE LAB<sup>®</sup>

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](http://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<sup>®</sup>.





## DIMENSIONS

ELAND PART NO	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL SCREEN AREA mm <sup>2</sup>	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
C9M20KV103025BK	3	25	16	5.9	5.5	0.2	2.6	17.1	48	1407
C9M20KV103050BK	3	50	16	8.0	5.5	0.2	2.8	19.2	53	1783
C9M20KV103070BK	3	70	16	9.6	5.5	0.2	-	20.9	56	2072
C9M20KV103095BK	3	95	16	11.1	5.5	0.2	3.0	22.3	60	2429
C9M20KV203095BK	3	95	25	11.1	5.5	0.2	3.0	22.3	60	2481
C9M20KV103120BK	3	120	16	12.6	5.5	0.2	3.1	24.0	63	2788
C9M20KV103150BK	3	150	25	13.9	5.5	0.2	3.2	25.1	66	3176
C9M20KV103185BK	3	185	25	15.6	5.5	0.2	-	27.2	71	3684
C9M20KV103240BK	3	240	25	18.0	5.5	0.2	3.5	29.2	76	4367
C9M20KV203240BK	3	240	35	18.0	5.5	0.2	3.5	29.2	76	4447
C9M20KV103300BK	3	300	35	19.8	5.5	0.2	3.6	31	80	5149

## MECHANICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MAX. PULLING FORCE BY PULLING-EYE kN	MAX. PULLING FORCE BY PULLING-STOCKING kN	MINIMUM BENDING RADIUS IN FINAL INSTALLATION. mm
25	3.8	1.1	0.21
50	7.5	2.3	0.23
70	10.5	3.2	0.23
95	14.3	4.3	0.26
120	18.0	5.4	0.26
150	20.0	6.8	0.29
185	20.0	8.3	0.29
240	20.0	8.5	0.34
300	20	8.5	0.69

## ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MAX. DC RESISTANCE OF CONDUCTOR AT 20°C Ω/km	INDUCTANCE PER PHASE. IN TREFOIL FORMATION. CABLES TOUCHING EACH OTHER mH/km
25	1.20	0.41
50	0.641	0.37
70	0.443	0.36
95	0.320	0.34
120	0.253	0.33
150	0.206	0.31
185	0.164	0.30
240	0.125	0.29
300	0.100	0.28



## CURRENT RATING

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	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 trefoil formation. conductor temperature 90°C temperature 90°C		In trefoil formation. conductor temperature 65°C		Phase (initial 90°C. final 250°C)	Metal screen
	Closed screen A		Closed screen A			Closed screen A
25	-	100	115	2.3	2.3	
50	160	145	170	4.7	2.3	
70	190	175	205	6.6	2.3	
95/16	230	205	240	8.9	2.3	
95/25	230	205	240	8.9	3.4	
120	265	230	270	11.3	2.3	
150	305	260	310	14.1	3.4	
185	340	290	345	17.4	3.4	
240/25	400	340	400	22.6	3.4	
240/35	400	340	400	22.6	4.7	
300	460	380	450	28.3	4.7	