



**ELAND[®]
CABLES**

NR/PS/ELP/00008 25/44kV Graphite Covered MDPE Cable



Eland Product Group: A9M

APPLICATION

Cable used to distribute three phase a.c. electrical power to 25kV – 0V – 25kV autotransformer systems on AC electrified lines

CHARACTERISTICS

Voltage Rating Uo/U
25/44kV

Temperature Rating
-25°C to +90°C

Minimum Bending Radius

Fixed: 15 x overall diameter
(12 x overall diameter adjacent to joints or terminations provided that bending is carefully controlled by use of former)

CONSTRUCTION

Conductor

Class 2 compacted circular stranded copper conductor

Conductor Screen

Extruded semi-conductive XLPE (Cross-Linked Polyethylene), solidly bonded

Insulation

XLPE (Cross-Linked Polyethylene)

Insulation Screen

Extruded semi-conductive XLPE (Cross-Linked Polyethylene), strippable

Bedding Tape

Water swellable semi-conductive tape

Screen (83mm²)

Copper wire screen, helically wound with equalising copper tape

Separator

Water swellable tape

Sheath

MDPE (Medium Density Polyethylene) Graphite Coated

Sheath Colour

● Black

CABLE THIRD-PARTY ACCREDITATION



Network Rail (NR) certified and PADS listed as meeting the requirements for installation within their network

STANDARDS

NR/PS/ELP/00008 (previously RT/E/PS/00008) BS 6622, BS 6234, BS 7454, BS EN/IEC 60502-2, BS EN/IEC 60840

ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



8578



FS 672069



EMS 672067



OHS 672066

REGULATORY COMPLIANCE

This cable meets the requirements of the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.



KM 634267





DIMENSIONS

ELAND PART NO.	NETWORK RAIL PART NO. / PADS	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL THICKNESS OF CONDUCTOR SCREEN mm	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF INSULATION SCREEN mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
6/148030	0006/148030	1	400	0.9	12	0.5	61	6212
6/148024	0006/148024	1	630	0.9	12	0.5	66.7	10080

The above table is in accordance with BS EN 60228 (previously BS 6360)

Class 2 Stranded Conductors for Single Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA mm ²	MINIMUM NO. OF WIRES IN CONDUCTOR		MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	
	Circular Compacted		Annealed Copper Conductor	
	Cu		Plain Wires	
400	61		0.0407	
630	61		0.0283	

The above table is in accordance with BS EN 60228 (previously BS 6360)

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	CONTINUOUS CURRENT RATING Amps				CAPACITANCE µF/km	INDUCTANCE mH/km		SHORT CIRCUIT RATING FOR 1 SEC kAmps	
	In Ground		In Air			Trefoil	Flat	Conductor	Screen
	Trefoil	Flat	Trefoil	Flat					
400	673	686	816	895	0.22	0.34	0.56	57.2	13.15
630	854	871	1140	1236	0.26	0.31	0.49	90.1	13.15

Permitted current rating of cables is calculated to IEC 287, considering the following data:

Ground Laying Depth	0.7m
Specific Resistance of Ground	1 ^o km/W
Ground Temperature	15°C
Ambient Temperature in Free Air	25°C
Maximum Conductor Temperature	90°C
Conductor Temperature of Short Circuit Current	250°C
Screen Temperature of Short Circuit Current	350°C

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.