



Eland Product Group: A9N

APPLICATION

These cables are intended for fixed installation in dry and moist rooms as well as in masonry and concrete, in and under plaster; not for underground installation. For installations where fire, smoke emission and toxic fumes create a potential risk to life and equipment.

CHARACTERISTICS

Voltage Rating (U_o/U)
300/500V

Temperature Rating
-5°C to +70°C

Minimum Bending Radius
4 x overall diameter

CONSTRUCTION

Conductor
Class 1 solid, copper conductor

Insulation
XLPE (Cross-Linked Polyethylene) Type 2XI1

Filler
Halogen-free compound

Sheath
Halogen-free thermoplastic polymer compound Type HM2

Core Identification

- 2 Core: ● Blue ● Brown
- 3 core: ● Blue ● Brown ● Green/Yellow
- 4 core: ● Brown ● Black ● Grey ● Green/Yellow
- 5 core: ● Brown ● Black ● Grey ● Blue ● Green/Yellow
- 7 core and above: number coded

Outer Sheath Colour

- Grey

STANDARDS

VDE 0250 part 214

Flame Retardant according to BS EN/IEC 60332-3-24

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.



REGULATORY COMPLIANCE

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation.



This cable meets the requirements of the Low Voltage Directive 2014/35/EU and 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™.





DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A9NHXMH-O1015	1	1.5	5.2	92
A9NHXMH-O1025	1	2.5	5.6	110
A9NHXMH-O1040	1	4	7.1	135
A9NHXMH-O1060	1	6	7.4	160
A9NHXMH-O110	1	10	7.8	215
A9NHXMH-O116	1	16	8.8	295
A9NHXMH-O2015	2	1.5	8.2	110
A9NHXMH-O2025	2	2.5	9	130
A9NHXMH-O2040	2	4	9.8	173
A9NHXMH-J3015	3	1.5	8.6	130
A9NHXMH-J3025	3	2.5	9.5	163
A9NHXMH-J3040	3	4	10.7	235
A9NHXMH-J3060	3	6	12.3	320
A9NHXMH-J310	3	10	14.8	480
A9NHXMH-J316	3	16	19.7	850
A9NHXMH-J4015	4	1.5	9.2	151
A9NHXMH-J4025	4	2.5	10.2	200
A9NHXMH-J4040	4	4	12.2	300
A9NHXMH-J4060	4	6	13.2	395
A9NHXMH-J410	4	10	15.8	595
A9NHXMH-J416	4	16	20	935
A9NHXMH-J5015	5	1.5	9.8	175
A9NHXMH-J5025	5	2.5	10.7	238
A9NHXMH-J5040	5	4	13.2	350
A9NHXMH-J5060	5	6	14.8	480
A9NHXMH-J510	5	10	17.4	710
A9NHXMH-J516	5	16	22	1140
A9NHXMH-J7015	7	1.5	10.2	210
A9NHXMH-J7025	7	2.5	12.2	300

CONDUCTORS

Class 1 Solid Conductors for Single Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	
	Circular, Annealed Copper Conductors	
	Plain Wires	
1.5	12.1	
2.5	7.41	
4	4.61	
6	3.08	
10	1.83	
16	1.15	

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	Circular Compacted	Shaped	Circular, Annealed Copper Conductors
	Cu	Cu	Cu	Plain Wires
1.5	7	6	-	12.1
2.5	7	6	-	7.41
4	7	6	-	4.61
6	7	6	-	3.08
10	7	6	-	1.83
16	7	6	-	1.15

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

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity and Voltage Drop

NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT CARRYING CAPACITY Amps
1.5	19
2.5	25
4	34
6	43
10	61
16	79
240	0.1

Current ratings are based on a conductor operating temperature of 90°C and an ambient air temperature of 45°C and assumes single cable isolated in free air.

NOMINAL CROSS SECTIONAL AREA mm ²	IN A THERMAL INSULATED WALLS Amps		IN INSULATED TUBES ON A WALL Amps		ON A WALL Amps		WITH A SPACE OF MINIMUM 0.3 X DIAMETER TO WALL Amps	
	2 Loaded Cores	3* Loaded Cores	2 Loaded Cores	3* Loaded Cores	2 Loaded Cores	3* Loaded Cores	2 Loaded Cores	3* Loaded Cores
1.5	15.5	13	16.5	15	19.5	17.5	22	18.5
2.5	18.5	17.5	23	20	27	24	30	25
4	25	23	30	27	36	32	40	34
6	32	29	38	34	46	41	51	43
10	43	39	52	46	63	57	70	60
16	57	52	69	62	85	76	94	80
25	75	68	90	80	112	96	119	101
35	92	83	111	99	138	119	148	126

Ambient temperature of 30°C

DE-RATING FACTORS

De-Rating Factor for Ambient Temperature 60°C Thermoplastic or Thermosetting Insulated Cords

AMBIENT TEMPERATURE	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C
DE-RATING FACTOR	1.00	0.94	0.87	0.79	0.71	0.61	0.50	0.35

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.