



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 (Uo/U)
300/500V

Temperature Rating
-5°C to +70°C

Minimum Bending Radius
1.5mm² to 10mm²: 4x overall diameter (red. to 2x OD at termination)
16mm² and above: 5 x overall diameter (red. to 3x OD at termination)

CONSTRUCTION

Conductor
1.5mm² to 10mm²: Class 1 solid Copper
16mm² to 25mm²: Class 2 stranded Copper

Insulation
XLPE (Cross-Linked Polyethylene) Type 2X11

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 IEC/EN 60332-3-24

THE CABLE LAB®

AN ISO/IEC 17025 AND IECEE 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 is compliant with European Regulation EN 50575, the Construction Products Regulation.



This cable meets the requirements of the Low Voltage Directive 2014/35/EU, 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	CONDUCTOR CLASS	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A9NHXMH-O1015	1	1.5	1	5.2	92
A9NHXMH-O1025	1	2.5	1	5.6	110
A9NHXMH-O1040	1	4	1	7.1	135
A9NHXMH-O1060	1	6	1	7.4	160
A9NHXMH-O110	1	10	1	7.8	215
A9NHXMH-O116	1	16	2	8.8	295
A9NHXMH-O2015	2	1.5	1	8.2	110
A9NHXMH-O2025	2	2.5	1	9.0	130
A9NHXMH-O2040	2	4	1	9.8	173
A9NHXMH-J3015	3	1.5	1	8.7	120
A9NHXMH-J3025	3	2.5	1	9.6	159
A9NHXMH-J3040	3	4	1	11.0	223
A9NHXMH-J3060	3	6	1	12.5	320
A9NHXMH-J310	3	10	1	15.0	520
A9NHXMH-J316	3	16	2	19.7	850
A9NHXMH-J4015	4	1.5	1	9.2	151
A9NHXMH-J4025	4	2.5	1	10.2	200
A9NHXMH-J4040	4	4	1	12.2	300
A9NHXMH-J4060	4	6	1	13.2	395
A9NHXMH-J410	4	10	1	15.8	595
A9NHXMH-J416	4	16	2	20.0	935
A9NHXMH-J5015	5	1.5	1	10.0	168
A9NHXMH-J5025	5	2.5	1	11.1	238
A9NHXMH-J5040	5	4	1	13.6	350
A9NHXMH-J5060	5	6	1	15.0	480
A9NHXMH-J510	5	10	1	17.7	773
A9NHXMH-J516	5	16	2	22.0	1290
A9NHXMH-J525	5	25	2	27.0	1725
A9NHXMH-J7015	7	1.5	1	10.2	210
A9NHXMH-J7025	7	2.5	1	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

The above table is in accordance with EN 60228



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, Annealed Copper Conductors	
	Cu		Plain Wires	
16	7		1.15	
25	7		0.727	

The above table is in accordance with EN 60228

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity (BS7671 18th Ed. Table 4E2A)

Conductor cross-sectional area	Reference Method A (enclosed in conduit in thermally insulating wall etc.)		Reference Method B (enclosed in conduit on a wall or in trunking etc.)		Reference Method C (clipped direct)		Reference Method E (free air or on a perforated cable tray etc, horizontal or vertical)	
	1 two-core cable*, single-phase AC or DC	1 three- or four-core cable three-phase AC	1 two-core cable*, single-phase AC or DC	1 three- or four-core cable three-phase AC	1 two-core cable*, single-phase AC or DC	1 three- or four-core cable three-phase AC	1 two-core cable*, single-phase AC or DC	1 three- or four-core cable three-phase AC
	2	3	4	5	6	7	8	9
(mm ²)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
1.5	18.5	16.5	22	19.5	24	22	26	23
2.5	25	22	30	26	33	30	36	32
4	33	30	40	35	45	40	49	42
6	42	38	51	44	58	52	63	54
10	57	51	69	60	80	71	86	75
16	76	68	91	80	107	96	115	100
25	99	89	119	105	138	119	149	127

Multicore 90°C thermosetting insulated and thermoplastic sheathed cables, non-armoured (COPPER CONDUCTORS)

Ambient temperature: 30°C Conductor operating temperature: 90°C

- Where it is intended to connect the cables in this table to equipment or accessories designed to operate at a temperature lower than the maximum operating temperature of the cable, the cables should be rated at the maximum operating temperature of the equipment or accessory (see Regulation 512.1.5).
- Where it is intended to group a cable in this table with other cables, the cable should be rated at the lowest of the maximum operating temperatures of any of the cables in the group (see Regulation 512.1.5).
- For cables having flexible conductors see section 2.4 of this appendix for adjustment factors for current-carrying capacity and voltage drop.

VOLTAGE DROP (per ampere per metre) (BS7671 18th Ed. Table 4E2B)

Conductor cross-sectional area	Two-core cable DC	Two-core cable, single-phase AC	Three- or four-core cable, three-phase AC
	2	3	4
(mm ²)	(mV/A/m)	(mV/A/m)	(mV/A/m)
1	46	46	40
1.5	31	31	27
2.5	19	19	16
4	12	12	10
6	7.9	7.9	6.8
10	4.7	4.7	4.0
16	2.9	2.9	2.5

Conductor operating temperature: 90°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.