



Eland EV Connection Cable



APPLICATION

Class 5 flexible power cable for use internally and externally in free air, in pipes and ducts, on masonry and in metal structures. Enhanced DC Power rating makes it ideal for high-powered charging stations. Suitable for installations with possibility of water immersion (AD7). G16 quality HEPR insulation with low corrosive gas emission and low fire propagation properties.

CHARACTERISTICS

Voltage Rating U_o/U (Um)

AC: 0.6/1 (1.2)kV

DC: 1.8/1.8 (1.8)kV

Test Voltage

AC: 4kV

DC: 9.6kV

Temperature Rating

Operating: -15°C to +90°C

Minimum Installation Temperature: 0°C

Maximum Short Circuit Temperature:

- 240 mm²: +250°C

- Above 240 mm²: +220°C

Minimum Bending Radius

Power Flexible Cables: 4 x Overall Diameter

Control Flexible Cables: 6 x Overall Diameter

CONSTRUCTION

Conductor

Conductor

Class 5 Flexible Copper

Insulation

Elastomeric Mixture Insulation (Type G16)

Filler

Non-Fibrous, Non Hygroscopic

Outer Sheath

PVC (Polyvinyl Chloride) Type R16

Core Identification

1 Core: ● Black

Sheath Colour

● Light Grey

BSI KITEMARK™ TESTED



KM 662609

Cables are tested and verified by The Cable Lab[®] to confirm they meet the quality standards required of the BSI Cable Testing Verification Kitemark[™].

STANDARDS

EN 50620, IEC 62893, IEC 60502-1, EN 50575:2014, EN 50575/A1:2016

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



SCIENCE
BASED
TARGETS

**BUSINESS
AMBITION FOR 1.5°C**



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 2015/85/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab[®].



DIMENSIONAL & MECHANICAL CHARACTERISTICS

ELAND PART NO	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL CONDUCTOR DIAMETER mm	NOMINAL INSULATION THICKNESS mm	MAXIMUM OUTER DIAMETER mm	NOMINAL WEIGHT kg/km	MAXIMUM PULLING STRESS N/ mm ²
B2E010040GR	1	4	2.6	0.7	9.30	82	50
B2E010060GR	1	6	3.4	0.7	9.90	101	50
B2E01010GR	1	10	4.4	0.7	10.9	152	50
B2E01016GR	1	16	5.7	0.7	11.4	211	50
B2E01025GR	1	25	6.9	0.9	13.2	301	50
B2E01035GR	1	35	8.1	0.9	14.6	396	50
B2E01050GR	1	50	9.8	1	16.4	556	50
B2E01070GR	1	70	11.6	1.1	17.3	761	50
B2E01095GR	1	95	13.3	1.1	20.4	991	50
B2E01120GR	1	120	15.1	1.2	22.4	1219	50
B2E01150GR	1	150	16.8	1.4	24.8	1517	50
B2E01185GR	1	185	18.6	1.6	27.2	1821	50
B2E01240GR	1	240	21.4	1.7	30.4	2366	50
B2E01300GR	1	300	23.9	1.8	33.0	2947	50
B2E01400GR	1	400	27,5	2	37.7	3870	50

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL ELECTRICAL RESISTANCE AT 20° C Ω/km
4	4.95
6	3.3
10	1.91
16	1.21
25	0.78
35	0.554
50	0.386
70	0.272
95	0.206
120	0.161
150	0.129
185	0.106
240	0.0801
300	0.0641
400	0.0486

CURRENT CARRYING CAPACITY

NOMINAL CONDUCTOR CROSS SECTIONAL AREA mm ²	IN INDIVIDUAL DUCTS IN GROUND		TREFOIL FORMATION, IN ONE DUCT IN GROUND	IN CONDUIT IN AIR		IN AIR	
	Two Loaded Cores, Single Phase A.C Or D.C. Laid Horizontal And Spaced	Three Loaded Cores, Three Phase A.C. Laid Horizontal And Spaced	Three Loaded Cores, Three Phase A.C.	Two Loaded Cores, Single Phase A.C Or D.C. Laid Horizontal And Spaced	Three Loaded Cores, Three Phase A.C. Laid Horizontal And Spaced	Two Loaded Cores, Single Phase A.C Or D.C.	Three Loaded Cores, Three Phase A.C.
4	44	40	35	42	37	45	37
6	54	49	44	54	48	58	48
10	73	67	59	75	66	80	71
16	95	85	77	100	88	107	96
25	122	110	100	133	117	161	135
35	148	133	121	164	144	200	169
50	182	163	150	198	175	242	207
70	222	198	184	253	222	310	268
95	261	233	217	306	169	377	328
120	301	268	251	354	312	437	383
150	343	304	287	393	342	504	444
185	385	340	323	449	384	575	510
240	450	397	379	528	450	679	607
300	509	448	429	603	514	783	703
400	592	519	500	683	584	940	823

Current Carrying Capacity For In Ducts Based On: CEI-UNEL 35026

Conductor Operating Temperature: 90°C | Ground Temperature: 20°C

Depth of Lay: 0.8m

Soil Thermal Resistivity: 1.5K.m/W

Current Carrying Capacity For In Conduit & In Air Based On: 60364-5-52 / 18th Edition

Conductor Operating Temperature: 90°C | Ambient Air Temperature: 30°C