

# IEC 60502-1 AL/XLPE/MDPE 1.8/3 (3.6)kV Cable



## CHARACTERISTICS

### Voltage Rating

1.8/3 (3.6)kV

### Temperature Range

Maximum Conductor Operating Temperature: +90°C

Maximum Conductor Temperature During S.C: +250°C

### Minimum Bending Radius

15 x Overall Diameter

## CONSTRUCTION

### Conductor

Class 2 Stranded Plain Aluminium Circular Compact Conductor

### Insulation

XLPE (Cross linked Polyethylene)

### Sheath

MDPE (Low Density Polyethylene)

### Sheath Colour

● Black

## STANDARDS

IEC 60502-1, IEC 60228

## THE CABLE LAB<sup>®</sup>

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](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 INSULATION THICKNESS mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OUTER DIAMETER mm	NOMINAL WEIGHT kg/km
A9O2Y3KV01016	1	16	2	1.1	11.5	125
A9O2Y3KV01025	1	25	2	1.1	12.6	160
A9O2Y3KV01035	1	35	2	1.1	13.7	195
A9O2Y3KV01050	1	50	2	1.1	15	240
A9O2Y3KV01070	1	70	2	1.2	16.8	325
A9O2Y3KV01095	1	95	2	1.2	18.3	400
A9O2Y3KV01120	1	120	2	1.3	19.9	490
A9O2Y3KV01150	1	150	2	1.3	22.1	590
A9O2Y3KV01185	1	185	2	1.4	23.2	705
A9O2Y3KV01240	1	240	2	1.5	25.8	875
A9O2Y3KV01300	1	300	2	1.5	28.2	1065
A9O2Y3KV01400	1	400	2	1.6	30.9	1330
A9O2Y3KV01500	1	500	2.2	1.7	34.9	1680
A9O2Y3KV01630	1	630	2.4	1.8	39	2165
A9O2Y3KV01800	1	800	2.6	1.9	44.4	2800
A9O2Y3KV011000	1	1000	2.8	2	51.3	3535

## ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/Km	MAXIMUM CONDUCTOR AC RESISTANCE AT 50 Hz Ω/Km	COPPER SCREEN SCC For 1 second KA	CURRENT CAPACITY RATING		
				Laid in ground	Laid in duct	Laid in free air
16	1.91	2.435	1.51	106	77	89
25	1.2	1.53	2.36	136	99	117
35	0.868	1.107	3.31	163	119	143
50	0.641	0.817	4.72	192	142	174
70	0.443	0.565	6.61	236	176	220
95	0.32	0.408	13.59	281	213	269
120	0.253	0.323	17.17	321	245	315
150	0.206	0.263	21.46	359	277	360
185	0.164	0.209	26.47	408	318	417
240	0.125	0.159	34.34	474	375	498
300	0.1	0.128	42.93	536	430	578
400	0.0778	0.099	57.23	613	497	680
500	0.0605	0.077	71.54	699	579	801
630	0.469	0.06	90.14	795	670	936
800	0.0367	0.047	114.47	897	769	1090
1000	0.0291	0.037	143.08	999	878	1260

Laying conditions at trefoil formation are as below:

- Soil thermal resistivity: 120°C.Cm/Watt
- Burial depth: 0.5m
- Ground Temperature: 15°C | Air temperature: 25°C | Frequency: 50Hz

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.