

# IEC 60502-1 AL/XLPE/PVC 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

PVC (Polyvinyl Chloride)

### 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 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 2015/853/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
A9O3KV01016	1	16	2	1.1	10.9	140
A9O3KV01025	1	25	2	1.1	12	180
A9O3KV01035	1	35	2	1.1	13.1	215
A9O3KV01050	1	50	2	1.1	14.4	265
A9O3KV01070	1	70	2	1.2	16.2	350
A9O3KV01095	1	95	2	1.2	17.7	430
A9O3KV01120	1	120	2	1.3	19.3	530
A9O3KV01150	1	150	2	1.3	21.5	635
A9O3KV01185	1	185	2	1.4	22.6	750
A9O3KV01240	1	240	2	1.5	25.2	935
A9O3KV01300	1	300	2	1.5	27.5	1125
A9O3KV01400	1	400	2	1.6	30.4	1410
A9O3KV01500	1	500	2.2	1.7	34.3	1775
A9O3KV01630	1	630	2.4	1.8	38.4	2280
A9O3KV01800	1	800	2.6	1.9	43.8	2945
A9O3KV011000	1	1000	2.8	2	50.7	3710

## 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 RATING		
				Laid in ground	Laid in duct	Laid in free air
16	1.91	2.435	1.51	102	74	85
25	1.2	1.53	2.36	131	96	112
35	0.868	1.107	3.31	157	115	137
50	0.641	0.817	4.72	185	137	166
70	0.443	0.565	6.61	227	170	210
95	0.32	0.408	13.59	271	205	257
120	0.253	0.323	17.17	309	236	300
150	0.206	0.263	21.46	346	267	343
185	0.164	0.209	26.47	393	306	398
240	0.125	0.159	34.34	456	361	475
300	0.1	0.128	42.93	516	414	551
400	0.0778	0.099	57.23	590	478	648
500	0.0605	0.077	71.54	673	557	763
630	0.469	0.06	90.14	765	645	892
800	0.0367	0.047	114.47	863	740	1039
1000	0.0291	0.037	143.08	961	845	1200

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.