

## BS 6622 3.8/6.6kV Cable



Eland Product Group: A9M

### APPLICATION

Armoured power distribution cables for external and direct burial applications in power networks.

### CHARACTERISTICS

**Voltage Rating** U<sub>0</sub>/U (Um)  
3.8/6.6 (7.2) kV

**Test Voltage** (AC)  
15kV

**Temperature Rating**  
Maximum operating temperature: 90°C  
Maximum short circuit temperature: 250°C

**Minimum Bending Radius**  
Single core: 15x overall diameter  
Multi core: 12 x overall diameter

(Single core 12 x overall diameter and 3 core 10 x overall diameter where bends are positioned adjacent to a joint or termination provided that the bending is carefully controlled by the use of a former)

### CONSTRUCTION

**Conductor**  
Class 2 stranded compacted copper conductor

**Conductor Screen**  
Semi-conductive XLPE (Cross-Linked Polyethylene)

**Insulation**  
XLPE (Cross-Linked Polyethylene)

**Insulation Screen**  
Semi-conductive XLPE (Cross-Linked Polyethylene)

**Metallic Screen**  
Concentric copper wires and copper tape

**Separator**  
Binding tape

**Inner Sheath**  
PVC (Polyvinyl Chloride)

**Armour**  
Single core: AWA (Aluminium Wire)  
Multi core: SWA (Galvanised steel wire)

**Sheath**  
PVC (Polyvinyl Chloride)

**Sheath Colour**  
● Red

### STANDARDS

BS 6622, IEC/EN 60228, IEC 60502-2  
Flame Retardant according to IEC/EN 60332-1-2,

### ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab<sup>®</sup>, 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.



8578

FS 672069

EMS 672067

OHS 672066

### REGULATORY COMPLIANCE

This cable meets the requirements of the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab<sup>®</sup> as meeting the requirements of the BSI RoHS Trusted Kitemark<sup>™</sup>.



KM 636267



## DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A9M066KV01035R	1	35	24.30	1.023
A9M066KV01050R	1	50	25.50	1.171
A9M066KV01070R	1	70	27.30	1.418
A9M066KV01095R	1	95	29.20	1.719
A9M066KV01120R	1	120	31.10	2.013
A9M066KV01150R	1	150	32.30	2.386
A9M066KV01185R	1	185	35.00	2.866
A9M066KV01240R	1	240	37.70	3.486
A9M066KV01300R	1	300	41.70	4.256
A9M066KV01400R	1	400	47.10	5.406
A9M066KV01500R	1	500	51.90	6.693
A9M066KV01630R	1	630	55.80	8.212
A9M066KV03050R	3	50	48	4500
A9M066KV03070R	3	70	52	5500
A9M066KV03095R	3	95	56	6500
A9M066KV03120R	3	120	60	7500
A9M066KV03150R	3	150	63	8500
A9M066KV03185R	3	185	67	10000
A9M066KV03240R	3	240	74	13000
A9M066KV03300R	3	300	80	15500
A9M066KV03400R	3	400	89	19000

## ELECTRICAL CHARACTERISTICS

### Single Core

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	OPERATING INDUCTANCE mH/km		OPERATING CAPACITY uF/km	CONTINUOUS CURRENT RATING Amps			
			Flat	Trefoil		In Ground at 20°C		In Air at 30°C	
						Flat	Trefoil	Flat	Trefoil
1	35	0.524	0.748	0.401	0.266	201	191	238	199
1	50	0.387	0.719	0.381	0.297	241	227	285	241
1	70	0.268	0.684	0.357	0.339	301	277	356	301
1	95	0.193	0.659	0.342	0.381	364	331	435	365
1	120	0.153	0.636	0.327	0.416	424	379	496	419
1	150	0.124	0.620	0.319	0.454	479	422	554	479
1	185	0.0991	0.602	0.310	0.495	549	476	637	543
1	240	0.0754	0.579	0.300	0.556	595	550	746	640
1	300	0.0601	0.562	0.295	0.617	626	591	831	722
1	400	0.0470	0.543	0.290	0.681	675	662	920	827
1	500	0.0366	0.525	0.283	0.758	748	744	1043	949
1	630	0.0283	0.507	0.276	0.853	981	856	1180	1076



## ELECTRICAL CHARACTERISTICS

### Multi Core

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	OPERATING INDUCTANCE mH/km	OPERATING CAPACITY uF/km	CONTINUOUS CURRENT RATING Amps	
					In Ground at 20°C	In Air at 30°C
3	50	0.387	0.33	0.30	208	196
3	70	0.268	0.31	0.35	255	249
3	95	0.193	0.29	0.39	307	307
3	120	0.153	0.28	0.43	353	353
3	150	0.124	0.28	0.47	396	406
3	185	0.0991	0.27	0.51	447	464
3	240	0.0754	0.26	0.55	523	548
3	300	0.0601	0.26	0.57	581	632
3	400	0.0470	0.26	0.59	653	726