

# Mineral Insulated 750V Cable



Eland Product Group: **A6M**

## APPLICATION

A 750V heavy duty mineral insulated cable, designed to give the ultimate Fire Performance. Suitable for Oil, Gas and Petroleum industries, airports, emergency lighting systems and fire alarm systems for power and control circuits providing circuit integrity to 950°C.

## CONSTRUCTION

### Conductor

Class 1 Solid plain copper conductor

### Insulation

Magnesium Oxide

### Sheath

Plain copper

## CABLE STANDARDS

BS EN60702 Part 1  
BS 5839-1 Enhanced (26.2e)  
BS 8434-2, BS 6387 C, W and Z  
BS 8491, BS EN 50200-PH 30/60/120  
BS 5266, BS 8519 Cat 1 and 2



The electrical and dimensional properties of this product are measured by the Technical and Quality Assurance department at the Eland Cables laboratory. Cable performance in respect of conductor resistance, construction quality (workmanship), dimensional consistency, and other parameters are verified to published standards and approved product drawings. Conformance to RoHS (Restriction of the use of Hazardous Substances) is determined and confirmed.

## CHARACTERISTICS

### Voltage Rating

750V

### Temperature Rating

-10°C to 250°C

### Minimum Bending Radius

6 x overall diameter

### Sheath Colour

Plain copper

## DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A6M701006PC	1	6	6.4	173
A6M701010PC	1	10	7.3	233
A6M701016PC	1	16	8.3	321
A6M701025PC	1	25	9.6	456
A6M701035PC	1	35	10.7	600
A6M701050PC	1	50	12.1	782
A6M701070PC	1	70	13.7	1087
A6M701095PC	1	95	15.4	1450
A6M701120PC	1	120	16.8	1790
A6M701150PC	1	150	18.4	2130
A6M701185PC	1	185	20.4	2425
A6M701240PC	1	240	23.3	3146
A6M7020015PC	2	1.5	7.9	224
A6M7020025PC	2	2.5	8.7	275
A6M702004PC	2	4	9.8	355
A6M702006PC	2	6	10.9	433
A6M702010PC	2	10	12.7	637
A6M702016PC	2	16	14.7	888
A6M702025PC	2	25	17.1	1175
A6M7030015PC	3	1.5	8.3	253
A6M7030025PC	3	2.5	9.3	324
A6M703004PC	3	4	10.4	416
A6M703006PC	3	6	11.5	530
A6M703010PC	3	10	13.6	783
A6M703016PC	3	16	15.6	1000
A6M703025PC	3	25	18.2	1442
A6M704PP15PC	4	1.5	9.1	303
A6M7040025PC	4	2.5	10.1	358
A6M704004PC	4	4	11.4	517
A6M704006PC	4	6	12.7	658
A6M704010PC	4	10	14.8	980
A6M704016PC	4	16	17.3	1300
A6M704025PC	4	25	20.1	1800
A6M7070015PC	7	1.5	10.8	431
A6M7070025PC	7	2.5	12.1	561
A6M7120025PC	12	2.5	15.6	875
A6M7190015PC	19	1.5	16.6	989

## CONDUCTORS

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km
1.5	12.1
2.5	7.41
4	4.61
6	3.08
10	1.83
16	1.15
25	0.727
35	0.524
50	0.387
70	0.268
95	0.193
120	0.153
150	0.124
185	0.101
240	0.0775

## ELECTRICAL CHARACTERISTICS

### Current Carrying Capacity

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	SINGLE PHASE AC OR DC Amps	THREE PHASE AC Amps
1	6	51	47
1	10	69	63
1	16	92	83
1	25	120	108
1	35	147	132
1	50	182	163
1	70	222	199
1	95	266	238
1	120	306	273
1	150	349	311
1	185	396	353
1	240	463	411
2	1.5	23	-
2	2.5	31	-
2	4	41	-
2	6	51	-
2	10	69	-
2	16	92	-
2	25	120	-
3	1.5	-	19
3	2.5	-	25
3	4	-	33
3	6	-	43
3	10	-	59
3	16	-	77
3	25	-	101

## ELECTRICAL CHARACTERISTICS

## Current Carrying Capacity

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	SINGLE PHASE AC OR DC Amps	THREE PHASE AC Amps
4	1.5	-	19
4	2.5	-	25
4	4	-	33
4	6	-	42
4	10	-	58
4	16	-	77
4	25	-	99
7	1.5	13	-
7	2.5	18	-
12	2.5	14	-
19	1.5	9	-

## Voltage Drop

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	SINGLE PHASE AC OR DC mV/A/M	THREE PHASE AC mV/A/M
1	6	7	6
1	10	4.2	3.6
1	16	2.6	2.3
1	25	1.65	1.45
1	35	1.2	1.05
1	50	0.91	0.79
1	70	0.64	0.55
1	95	0.49	0.41
1	120	0.41	0.33
1	150	0.34	0.29
1	185	0.29	0.25
1	240	0.25	0.21
2	1.5	28	-
2	2.5	17	-
2	4	10	-
2	6	7	-
2	10	4.2	-
2	16	2.6	-
2	25	1.65	-
3	1.5	-	24
3	2.5	-	14
3	4	-	9.1
3	6	-	6
3	10	-	3.6
3	16	-	2.3
3	25	-	1.45

## Voltage Drop

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	SINGLE PHASE AC OR DC mV/A/M	THREE PHASE AC mV/A/M
4	1.5	-	24
4	2.5	-	14
4	4	-	9.1
4	6	-	6
4	10	-	3.6
4	16	-	2.3
4	25	-	1.45
7	1.5	28	-
7	2.5	17	-
12	2.5	17	-
19	1.5	28	-