

# Mineral Insulated 500V Cable



Eland Product Group: **A6M**

## APPLICATION

A 500V light duty mineral insulated cable designed to give the ultimate fire performance. Used in power and control circuits providing circuit integrity to 950°C. Suitable for Oil, Gas and Petroleum industries, airports, emergency lighting system and fire alarm systems.

## CONSTRUCTION

### Conductor

Class 1 Solid plain copper conductor

### Insulation

Magnesium Oxide

### Sheath

Plain copper

## CABLE STANDARDS

BS EN 60702 Part 1  
BS 5266, BS 8519 Cat 1 and 2,  
BS 8434-2, BS 6387 C, W and Z  
BS 8491, BS EN 50200-PH30/60/120  
BS 5839-1 Enhanced (26.2e)



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

500V

### 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
A6M020010PC	2	1	5.1	105
A6M020015PC	2	1.5	5.7	131
A6M020025PC	2	2.5	6.6	180
A6M02004PC	2	4	7.7	262
A6M030010PC	3	1	5.8	136
A6M030015PC	3	1.5	6.4	168
A6M030025PC	3	2.5	7.3	222
A6M040010PC	4	1	6.3	162
A6M040015PC	4	1.5	7	203
A6M040025PC	4	2.5	8.1	286
A6M070015PC	7	1.5	8.4	310
A6M070025PC	7	2.5	9.7	433

## CONDUCTORS

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km
1	18.1
1.5	12.1
2.5	7.41
4	4.61

## 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
2	1	17	-
2	1.5	21	-
2	2.5	28	-
2	4	36	-
3	1	-	14
3	1.5	-	17
3	2.5	-	23
4	1	-	14
4	1.5	-	17
4	2.5	-	23
7	1.5	12	-
7	2.5	16	-

## 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
2	1	42	-
2	1.5	28	-
2	2.5	17	-
2	4	10	-
3	1	-	36
3	1.5	-	24
3	2.5	-	14
4	1	-	36
4	1.5	-	24
4	2.5	-	14
7	1.5	28	-
7	2.5	17	-

\*Method of cable support should withstand a similar temperature and duration to that of the cable.