

# Standard Fire Resistant Cable BS7629-1



Eland Product Group: A6F

## APPLICATION

Standard fire resistant cables for use primarily in fire detection, fire alarm, voice alarm, and emergency lighting circuits. These cables are designed to continue to operate for a period of time in a fire situation. 'Standard' fire resistance is recommended for general use.

## CHARACTERISTICS

**Voltage Rating** U<sub>o</sub>/U  
300/500V

**Temperature Rating**  
-40°C to +90°C

**Minimum Bending Radius**  
6 x overall diameter

## CONSTRUCTION

### Conductor

1.5mm<sup>2</sup> - 2.5mm<sup>2</sup>: Class 1 solid conductor  
4mm<sup>2</sup>: Class 2 stranded conductor

### Insulation

High performance fire resistant silicone rubber

### Overall Screen

Al/PET (Aluminium/Polyester Tape)

### Circuit Protective Conductor

Tinned copper

### Outer Sheath

LSZH (Low Smoke Zero Halogen)

### Core Identification

2 cores: ● Blue ● Brown + Bare Earth  
3 cores: ● Brown ● Black ● Grey + Bare Earth  
4 cores: ● Blue ● Brown ● Black ● Grey

### Sheath Colour

● Red ○ White

## CABLE THIRD-PARTY ACCREDITATION



Cables are tested and accredited by BASEC, The British Approvals Service for Cables

### We supply LPCB certified products

Certified by the Loss Prevention Certification Board (LPCB) for security and fire protection and listed in Red Book Live

## STANDARDS

BS 7629-1, BS 5839-1, BS EN/IEC 60754-1/2, BS EN 61034-2, BS EN 50200-PH30, PH60, PH90, PH120, BS 6387, BS 5266-1, BS 8519, BS EN 60228

## ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, 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 Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.



KM 036287





## DIMENSIONS

### Class 1 Solid Plain Conductor

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	EARTH WIRE CONSTRUCTION n° /mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A6F02015*	2	1.5	1/1.38	8	95
A6F02025*	2	2.5	1/1.75	9.4	130
A6F02040*	2	4	7/0.85	11.5	200
A6F03015*	3	1.5	1/1.38	8.5	115
A6F03025*	3	2.5	1/1.75	10	170
A6F03040*	3	4	7/0.85	12.2	260
A6F04015*	4	1.5	1/1.38	9.4	140
A6F04025*	4	2.5	1/1.75	11	210
A6F04040*	4	4	7/0.85	13.5	330

\* Designates the sheath colour. For each Eland Cables part number replace with the colour code e.g. A6F02040RD – 4mm<sup>2</sup> Red

## ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CONDUCTOR RESISTANCE AT 20°C Ω/km	INSULATION RESISTANCE AT 20°C MΩXkm	NOMINAL CAPACITANCE pF/m	
			Core / Core	Core / Screen
1	18.1	300	100	170
1.5	12.1	300	110	190
2.5	7.41	300	130	220
4	4.61	300	160	270

## CURRENT CARRYING CAPACITY

### Clipped Direct

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CURRENT RATING Amps	
	2 Core	3 and 4 Core
1	19	17
1.5	24	22
2.5	33	30
4	45	40

### In Conduit or in Cable Tray

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CURRENT RATING Amps	
	2 Core	3 and 4 Core
1	17	15
1.5	22	19.5
2.5	30	26
4	40	35



## VOLTAGE DROP

### Clipped Direct

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	VOLTAGE DROP mV/A/m	
	2 Core	3 and 4 Core
1	45	39
1.5	30	26
2.5	18	15
4	11	10

### In Conduit or in Cable Tray

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	VOLTAGE DROP mV/A/m	
	2 Core	3 and 4 Core
1	45	39
1.5	30	26
2.5	18	15
4	11	10

## DE-RATING FACTORS

AMBIENT TEMPERATURE	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C
DE-RATING FACTOR	1.04	1.00	0.95	0.90	0.85	0.80	0.74	0.67	0.60

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.