

Single core Fire resistant cable BS 6387



Eland Product Group: A3F

APPLICATION

For use in fixed installations, where cable is protected by conduit or trunking.
Fire resistant cables intended to provide circuit integrity in case of fire.

CHARACTERISTICS

Voltage Rating

450/750V

Temperature Rating

-5°C to +90°C

Maximum short-circuit conductor temperature: +250°C

Minimum Bending Radius

6 x overall diameter

CONSTRUCTION

Conductor

Class 2 Circular or compacted circular, stranded, annealed copper conductor

Primary Insulation

Fire resistant mica tape with a glass cloth

Insulation

Special thermosetting LSZH (Low Smoke Zero Halogen) compound EI5 type

Core Identification

● Green/Yellow, ● Blue, ● Black, ● Brown, ● Grey, ● Red, ● Yellow

CABLE THIRD-PARTY ACCREDITATION

We supply BASEC approved products

Cables are tested and certified 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 EN 60228, BS EN 50363-5

Fire resistance: IEC 60331-21 Circuit integrity - tested 90 min. at 950°C

BS EN 60331-3 Circuit integrity – tested 120min. at 830°C

BS 6387¹ Category C – resistance to fire: 3 h at 950°C

Category W – resistance to fire with water: 15 min at 650°C plus 15 min with water spray

Category Z – resistance to fire with mechanical shock: 15 min at 950°C

Flame propagation: BS EN 60332-1-2

Smoke density: BS EN 61034-2

Corrosive and acid gases emission: BS EN 60754-1²⁾ HCl content < 0.5%, BS EN 60754-2²⁾ pH ≥ 4.3 & conductivity ≤ 10 μSmm⁻¹

1) Category C, W, Z for cables up to and including 95 mm². Category C for cables above and including 120 mm².

2) BS EN 60754-1 & BS EN 60754-2 standards replace BS EN 50267-2-1

THE CABLE LAB[®]

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



SCIENCE
BASED
TARGETS

BUSINESS
AMBITION FOR 1.5°C



REGULATORY COMPLIANCE

This cable meets the requirements of the Low Voltage Directive 2014/35/EU, the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab[®].





DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL THICKNESS OF INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A3F750V010015**	1	1.5	0.7	3.76	27.1
A3F750V010025**	1	2.5	0.8	4.39	39.8
A3F750V010040**	1	4	0.8	4.91	55.42
A3F750V010060**	1	6	0.8	5.27	74.2

** Designates the sheath colour. For each Eland Cables part number replace with the colour code as listed below. e.g. A3F750V010015BK = 1.5mm² Black

COLOUR CODE

COLOUR	Green/Yellow	Blue	Black	Brown	Grey	Red	Yellow
CODE	GY	BL	BK	BR	GR	RD	YW

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	MAX. CONDUCTOR RESISTANCE AT 20°C ohm/km	SHORT CIRCUIT CURRENT RATINGS (1 SEC) amps	CURRENT RATING* TWO CABLES, SINGLE PHASE A.C. OR D.C. amps	CURRENT RATING* THREE OR FOUR CABLES, THREE PHASE A.C. amps	VOLTAGE DROP** TWO CABLES D.C. mV/A/m	VOLTAGE DROP** TWO CABLES, SINGLE PHASE A.C. mV/A/m	VOLTAGE DROP** THREE OR FOUR CABLES, THREE PHASE A.C. mV/A/m
1.5	12.1	210	23	20	31	31	27
2.5	7.41	350	31	28	19	19	16
4	4.61	570	42	37	12	12	10
6	3.08	850	54	48	7.9	7.9	6.8

* Installation reference method 3 (enclosed in conduit on a wall or in trunking etc.), as per BS 7671, Appendix 4, Conductor operating temperature 90°C, Ambient temperature 30°C

** Installation reference methods 3 and 4 (enclosed in conduit, etc., in or on a wall) as per BS 7671, Appendix 4, Conductor operating temperature 90°C, Ambient temperature 30°C

CORRECTION FACTORS FOR AMBIENT TEMPERATURE

Ambient Temperature, °C	25	30	35	40	45	50	55	60	65	70	75	80	85
Correction Factor	1.02	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65	0.58	0.50	0.41	0.29

CORRECTION FACTORS FOR GROUPS

Number of Circuits	2	3	4	5	6	7	8	9	10	12	14	16	18
Correction Factor	0.80	0.70	0.65	0.60	0.57	0.54	0.52	0.50	0.48	0.45	0.43	0.41	0.39

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.