

# 6381B BS 7211 / IEC 60502-1 LSZH Cable



Eland Product Group: A1F/LS

## APPLICATION

Flexible single core insulated and sheathed LSZH cable. Suitable for DC power supplies on telecoms equipment and power applications where flexibility is required. For installations where fire, smoke emission and toxic fumes create a potential risk to life and equipment.

## CHARACTERISTICS

**Voltage Rating** U<sub>o</sub>/U  
Up to 35mm<sup>2</sup>: 450/750V  
50mm<sup>2</sup> and above: 0.6/1kV

**Temperature Rating**  
Fixed: 0°C to +90°C

**Minimum Bending Radius**  
Up to 50mm<sup>2</sup>: 3 x overall diameter  
70mm<sup>2</sup> and above: 4 x overall diameter

## CONSTRUCTION

**Conductor**  
Class 5 flexible annealed copper conductor

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

**Sheath**  
LSZH (Low Smoke Zero Halogen)

**Sheath Colour**  
● Blue ● Grey ● Green/Yellow  
Other colours available upon request

## BSI KITEMARK™ TESTED



Cables are tested and verified by The Cable Lab® to confirm they meet the quality standards required of the BSI Cable Testing Verification Kitemark™.

## STANDARDS

BS 7211, IEC 60502-1, EN 60228

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®, 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.



## REGULATORY COMPLIANCE

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation.



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™.





## DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A1FY*/0015LS	1	1.5	0.7	0.8	4.51	31
A1FY*/0025LS	1	2.5	0.7	0.8	4.95	42
A1FY*/004LS	1	4	0.7	0.9	5.65	59
A1FY*/006LS	1	6	0.7	0.9	6.8	82
A1FY*/010LS	1	10	0.7	0.9	7.1	121
A1FY*/016LS	1	16	0.7	0.9	8.4	177
A1FY*/025LS	1	25	0.9	1	10.3	266
A1FY*/035LS	1	35	0.9	1.1	11.5	365
A1FY*/050LS	1	50	1	1.4	14.9	535
A1FY*/070LS	1	70	1.1	1.4	16.3	723
A1FY*/095LS	1	95	1.1	1.5	18.6	940
A1FY*/120LS	1	120	1.2	1.5	20.8	1183
A1FY*/150LS	1	150	1.4	1.6	22.2	1468
A1FY*/185LS	1	185	1.6	1.7	24.3	1785
A1FY*/240LS	1	240	1.7	1.8	27.8	2310

\* Designates the sheath colour. For each Eland Cables part number replace with the colour code as listed below e.g. A1FYBL/BL0015LS = 1.5mm<sup>2</sup> Blue(Blue)

## COLOUR CODES

COLOUR	Blue	Grey	Green/Yellow
CODE	BL/BL	GR/GR	GY/GY

## CONDUCTORS

### Class 5 Stranded Conductors for Single Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MAXIMUM DIAMETER OF WIRES IN CONDUCTOR mm	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km
		Plain Wires
1.5	0.26	13.3
2.5	0.26	7.98
4	0.31	4.95
6	0.31	3.3
10	0.41	1.91
16	0.41	1.21
25	0.41	0.78
35	0.41	0.554
50	0.41	0.386
70	0.51	0.272
95	0.51	0.206
120	0.51	0.161
150	0.51	0.129
185	0.51	0.106
240	0.51	0.0801

The above table is in accordance with EN 60228



## ELECTRICAL CHARACTERISTICS

### Current Carrying Capacity

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	VOLTAGE DROP mV/A/m	CURRENT RATING Amps	
		In Earth	In Air
1.5	26.6	27	41
2.5	15.96	35	55
4	9.9	47	71
6	6.6	59	90
10	3.82	81	124
16	2.42	107	160
25	1.56	144	208
35	1.108	176	250
50	0.772	214	296
70	0.544	270	365
95	0.412	334	438
120	0.322	389	501
150	0.258	446	563
185	0.212	516	639
240	0.1602	618	716

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.