

6381 LSZH Cable

Eland Product Group A1F LS

Application

For installation where fire, smoke emission and toxic fumes create a potential threat to life and equipment. Suitable for D.C. power supplies on Telecom equipment and power applications where flexibility is required. The cables produce no corrosive gases when burnt which is important where electronic equipment is installed.

Conductor

Class 5 flexible annealed plain copper conductors to BS EN 60228:2005 (previously BS6360)

Insulation

XLPE (Cross-Linked Polyethylene)

Sheath

LSZH (Low Smoke Zero Halogen)

Sheath Colour (Insulation Colour)

Blue (Blue), Grey (Grey), Green/Yellow (Green/Yellow), Brown (Brown), Special colours to order

Voltage Rating

600/1000V

Temperature Rating

0°C to 90°C

Minimum Bending Radius

Up to 50mm²: 3 x overall diameter
Above 70mm²: 4 x overall diameter



Dimensions

| Eland Part Number | No. of Cores x Nominal Cross Sectional Area mm ² | Nominal Thickness of Insulation mm | Nominal Thickness of Sheath mm | Nominal Overall Diameter mm | Nominal Weight kg/Km |
|-------------------|---|------------------------------------|--------------------------------|-----------------------------|----------------------|
| A1FY*/0015LS | 1 x 1.5 | 0.9 | 0.8 | 5.2 | 42 |
| A1FY*/0025LS | 1 x 2.5 | 0.9 | 0.8 | 5.7 | 54 |
| A1FY*/004LS | 1 x 4.0 | 1.0 | 0.9 | 6.6 | 77 |
| A1FY*/006LS | 1 x 6.0 | 1.1 | 0.9 | 7.3 | 102 |
| A1FY*/010LS | 1 x 10.0 | 1.2 | 1.0 | 8.6 | 160 |
| A1FY*/016LS | 1 x 16.0 | 1.2 | 1.0 | 9.6 | 210 |
| A1FY*/025LS | 1 x 25.0 | 1.4 | 1.1 | 11.5 | 320 |
| A1FY*/035LS | 1 x 35.0 | 1.4 | 1.1 | 12.8 | 420 |
| A1FY*/050LS | 1 x 50.0 | 1.4 | 1.4 | 14.9 | 590 |
| A1FY*/070LS | 1 x 70.0 | 1.4 | 1.4 | 17.2 | 810 |
| A1FY*/095LS | 1 x 95.0 | 1.6 | 1.5 | 18.6 | 1020 |
| A1FY*/120LS | 1 x 120.0 | 1.6 | 1.8 | 20.8 | 1285 |
| A1FY*/150LS | 1 x 150.0 | 1.8 | 1.8 | 23.1 | 1610 |
| A1FY*/185LS | 1 x 185.0 | 2.0 | 1.8 | 25.3 | 1940 |
| A1FY*/240LS | 1 x 240.0 | 2.2 | 1.8 | 27.8 | 2480 |
| A1FY*/300LS | 1 x 300.0 | 2.4 | 2.0 | 31.2 | 3050 |
| A1FY*/400LS | 1 x 400.0 | 2.6 | 2.1 | 35.3 | 4035 |
| A1FY*/500LS | 1 x 500.0 | 2.8 | 2.2 | 38.8 | 4970 |
| A1FY*/630LS | 1 x 630.0 | 2.8 | 2.4 | 43.8 | 6510 |

* Eland Part numbers shown above designate the sheath colour (*). For each colour substitute * for a colour code as; Blue: BL/BL, Grey: GR/GR, Green/Yellow: G/Y, Brown: BR/BR



Conductors

Class 5 flexible Copper Conductors for Single Core and Multi-Core cables

| 1 | 2 | 3 |
|--|---|---|
| Nominal Cross Sectional Area mm ² | Maximum Diameter of Wires in Conductor mm | Maximum Resistance of Conductor at 20°C Plain Wires ohms/Km |
| 1.5 | 0.26 | 13.3000 |
| 2.5 | 0.26 | 7.9800 |
| 4.0 | 0.31 | 4.9500 |
| 6.0 | 0.31 | 3.3000 |
| 10.0 | 0.41 | 1.9100 |
| 16.0 | 0.41 | 1.2100 |
| 25.0 | 0.41 | 0.7800 |
| 35.0 | 0.41 | 0.5540 |
| 50.0 | 0.41 | 0.3860 |
| 70.0 | 0.51 | 0.2720 |
| 95.0 | 0.51 | 0.2060 |
| 120.0 | 0.51 | 0.1610 |
| 150.0 | 0.51 | 0.1290 |
| 185.0 | 0.51 | 0.1060 |
| 240.0 | 0.51 | 0.0801 |
| 300.0 | 0.51 | 0.0641 |
| 400.0 | 0.51 | 0.0486 |
| 500.0 | 0.61 | 0.0384 |
| 630.0 | 0.61 | 0.0287 |

Table in accordance with BS EN 60228:2005 (previously BS6360)

Datasheet Continues »

Electrical Characteristics

Current Carrying Capacity (amperes) and Resistance Values (ohms per kilometre)

| Nominal Cross Sectional Area mm ² | Voltage Drop mV/A/m | Current Rating in Earth Amps | Current Rating in Air Amps |
|---|------------------------|---------------------------------|-------------------------------|
| 1.5 | 26.6000 | 27 | 41 |
| 2.5 | 15.9600 | 35 | 55 |
| 4.0 | 9.9000 | 47 | 71 |
| 6.0 | 6.6000 | 59 | 90 |
| 10.0 | 3.8200 | 81 | 124 |
| 16.0 | 2.4200 | 107 | 160 |
| 25.0 | 1.5600 | 144 | 208 |
| 35.0 | 1.1080 | 176 | 250 |
| 50.0 | 0.7720 | 214 | 296 |
| 70.0 | 0.5440 | 270 | 365 |
| 95.0 | 0.4120 | 334 | 438 |
| 120.0 | 0.3220 | 389 | 501 |
| 150.0 | 0.2580 | 446 | 563 |
| 185.0 | 0.2120 | 516 | 639 |
| 240.0 | 0.1602 | 618 | 716 |
| 300.0 | 0.1282 | 711 | 845 |
| 400.0 | 0.0972 | 843 | 975 |
| 500.0 | 0.0768 | 994 | 1125 |
| 630.0 | 0.0574 | 1102 | 1230 |