

N2XS(FL)2Y XLPE MDPE 8.7/15 (17.5)kV Cable



Eland Product Group: A9X

APPLICATION

Medium voltage power cables for distribution networks and generation units, suitable for external installation including direct in ground and in buried cable ducts. UV Resistant.

CHARACTERISTICS

Voltage Rating U₀/U
8.7/15 (17.5)kV

Temperature Rating
Maximum Conductor Operating Temperature: 90°C
Maximum Screen Operating Temperature: 80°C
Maximum Conductor Temperature During S.C.: 250°C

Minimum Bending Radius
20 x Outer Diameter

CONSTRUCTION

Conductor
Class 2 Stranded Circular Compacted Copper

Inner Semi Conductor
Extruded Inner Semi Conductor (Bonded Type)

Insulation
XLPE (Cross-Linked Polyethylene) 90°C

Outer Semi Conductor
Extruded Outer Semi Conductor (Strippable Type)

Semi Conductive Water Blocking Tape

Screen
Copper Wires and Open Helix Copper Tape

Non-Conductive Water Blocking Tape

Tape
Aluminium Tape

Outer Sheath
MDPE (Medium Density Polyethylene)

Sheath Colour
● Red ● Black

STANDARDS

IEC 60502-2, IEC 60228
UV Resistant

THE CABLE LAB[®]

AN ISO/IEC 17025 AND IEC EE 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



REGULATORY COMPLIANCE

This cable meets the requirements of 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 SCREEN CROSS SECTIONAL AREA mm ² | NOMINAL INSULATION THICKNESS mm | NOMINAL SHEATH THICKNESS mm | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT kg/km |
|----------------|--------------|---|--|------------------------------------|--------------------------------|--------------------------------|-------------------------|
| A9XFL15KV1050 | 1 | 50 | 16 | 4.5 | 1.7 | 26.6 | 1008 |
| A9XFL15KV1070 | 1 | 70 | 16 | 4.5 | 1.8 | 28.6 | 1243 |
| A9XFL15KV1095 | 1 | 95 | 16 | 4.5 | 1.8 | 29.9 | 1505 |
| A9XFL15KV1120 | 1 | 120 | 16 | 4.5 | 1.9 | 31.5 | 1768 |
| A9XF 15KV1150 | 1 | 150 | 25 | 4.5 | 2 | 33.5 | 2155 |
| A9XFL15KV1185 | 1 | 185 | 25 | 4.5 | 2 | 35 | 2501 |
| A9XFL15KV1240 | 1 | 240 | 25 | 4.5 | 2.1 | 37.4 | 3086 |
| A9XF15KV1300 | 1 | 300 | 25 | 4.5 | 2.2 | 40 | 3675 |
| A9XFL15KV1400 | 1 | 400 | 35 | 4.5 | 2.3 | 43 | 4609 |
| A9XFL15KV1500 | 1 | 500 | 35 | 4.5 | 2.4 | 46.6 | 5619 |
| A9XFL15KV1630 | 1 | 630 | 35 | 4.5 | 2.5 | 51.5 | 7060 |
| A9XFL15KV1800 | 1 | 800 | 35 | 4.5 | 2.6 | 55.8 | 8863 |

ELECTRICAL CHARACTERISTICS

| NOMINAL CROSS SECTIONAL AREA mm ² | MAXIMUM CONDUCTOR DC RESISTANCE AT 20 °C Ω/Km | MAXIMUM CONDUCTOR AC RESISTANCE AT OPERATING TEMP. AND 50HZ Ω/Km | CAPACITANCE μF/Km | CHARGING CURRENT A/Km | DIELECTRIC LOSSES W/Km | REACTANCE AT 50 HZ ohm/km | CONDUCTOR S.C.C FOR 1 SEC KA | COPPER SCREEN S.C.C FOR 1 SEC KA | CURRENT RATING A | |
|---|--|---|----------------------|--------------------------|---------------------------|------------------------------|---------------------------------|-------------------------------------|---------------------|------------------|
| | | | | | | | | | Laid in ground | Laid in free air |
| 50 | 0.387 | 0.494 | 0.214 | 0.586 | 20.37 | 0.135 | 7.15 | 1.75 | 210 | 221 |
| 70 | 0.268 | 0.342 | 0.245 | 0.67 | 23.29 | 0.127 | 10.01 | 1.75 | 254 | 278 |
| 95 | 0.193 | 0.247 | 0.267 | 0.73 | 25.39 | 0.122 | 13.585 | 1.75 | 302 | 336 |
| 120 | 0.153 | 0.196 | 0.29 | 0.794 | 27.64 | 0.118 | 17.16 | 1.75 | 342 | 389 |
| 150 | 0.124 | 0.159 | 0.317 | 0.868 | 30.20 | 0.114 | 21.45 | 2.73 | 383 | 440 |
| 185 | 0.0991 | 0.128 | 0.343 | 0.937 | 32.59 | 0.110 | 26.455 | 2.73 | 432 | 506 |
| 240 | 0.0754 | 0.098 | 0.383 | 1.047 | 36.42 | 0.105 | 34.32 | 2.73 | 497 | 599 |
| 300 | 0.0601 | 0.078 | 0.423 | 1.156 | 40.23 | 0.102 | 42.9 | 2.73 | 558 | 690 |
| 400 | 0.047 | 0.062 | 0.466 | 1.275 | 44.35 | 0.098 | 57.2 | 3.82 | 625 | 794 |
| 500 | 0.0366 | 0.049 | 0.523 | 1.429 | 49.74 | 0.095 | 71.5 | 3.82 | 703 | 914 |
| 630 | 0.0283 | 0.039 | 0.601 | 1.643 | 57.17 | 0.093 | 90.09 | 3.82 | 780 | 1037 |
| 800 | 0.0221 | 0.032 | 0.669 | 1.829 | 63.65 | 0.090 | 114.4 | 3.82 | 850 | 1166 |