

# NA2XH Cable

## IEC 60502-1 AL/XLPE/LSZH 1.8/3 (3.6)kV



### APPLICATION

XLPE insulated and halogen-free thermoplastic compound sheathed power and auxiliary fixed wiring cables for the supply of electrical energy. Installations where fire and emissions of smoke and toxic fumes create a potential threat. Not suitable for use in water.

### CHARACTERISTICS

**Voltage Rating**  
1.8/3 (3.6)kV

#### Temperature Range

Maximum Conductor Operating Temperature: +90°C  
Maximum Conductor Temperature During S.C: +250°C

**Minimum Bending Radius**  
15 x Overall Diameter

### CONSTRUCTION

**Conductor**  
Class 2 Stranded Plain Aluminium Circular Compact Conductor

**Insulation**  
XLPE (Cross linked Polyethylene)

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

**Sheath Colour**  
● Black

### STANDARDS

IEC 60502-1, IEC 60228

### THE CABLE LAB<sup>®</sup>

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](http://www.elandcables.com/company/about-us/esg-sustainability)



### 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, the RoHS Directive 2015/863/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab<sup>®</sup>.





## DIMENSIONS

| ELAND PART NO. | NO. OF CORES | NOMINAL CROSS SECTIONAL AREA<br>mm <sup>2</sup> | NOMINAL INSULATION THICKNESS<br>mm | NOMINAL SHEATH THICKNESS<br>mm | NOMINAL OUTER DIAMETER<br>mm | NOMINAL WEIGHT<br>kg/km |
|----------------|--------------|---|------------------------------------|--------------------------------|------------------------------|-------------------------|
| A90H3KV01016   | 1            | 16  | 2                                  | 1.4                            | 14                           | 240                     |
| A90H3KV01025   | 1            | 25  | 2                                  | 1.4                            | 15.1                         | 285                     |
| A90H3KV01035   | 1            | 35  | 2                                  | 1.4                            | 16.2                         | 330                     |
| A90H3KV01050   | 1            | 50  | 2                                  | 1.4                            | 17.5                         | 390                     |
| A90H3KV01070   | 1            | 70  | 2                                  | 1.5                            | 19.3                         | 490                     |
| A90H3KV01095   | 1            | 95  | 2                                  | 1.5                            | 20.8                         | 580                     |
| A90H3KV01120   | 1            | 120   | 2                                  | 1.6                            | 22.4                         | 690                     |
| A90H3KV01150   | 1            | 150   | 2                                  | 1.6                            | 24.6                         | 810                     |
| A90H3KV01185   | 1            | 185   | 2                                  | 1.7                            | 25.7                         | 940                     |
| A90H3KV01240   | 1            | 240   | 2                                  | 1.8                            | 28.3                         | 1140                    |
| A90H3KV01300   | 1            | 300   | 2                                  | 1.8                            | 30.6                         | 1355                    |
| A90H3KV01400   | 1            | 400   | 2                                  | 1.9                            | 33.5                         | 1660                    |
| A90H3KV01500   | 1            | 500   | 2.2                                | 2                              | 38.2                         | 2135                    |
| A90H3KV01630   | 1            | 630   | 2.4                                | 2.2                            | 42.5                         | 2700                    |
| A90H3KV01800   | 1            | 800   | 2.6                                | 2.3                            | 47.9                         | 3420                    |
| A90H3KV011000  | 1            | 1000  | 2.8                                | 2.4                            | 54.8                         | 4255                    |

## ELECTRICAL CHARACTERISTICS

| NOMINAL CROSS SECTIONAL AREA<br>mm <sup>2</sup> | MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C<br>Ω/Km | MAXIMUM CONDUCTOR AC RESISTANCE AT 50 Hz<br>Ω/Km | COPPER SCREEN SCC<br>For 1 second KA | CURRENT CAPACITY RATING |              |                  |
|---|---|--|--------------------------------------|-------------------------|--------------|------------------|
|   |   |  |                                      | Laid in ground          | Laid in duct | Laid in free air |
| 16  | 1.91  | 2.435  | 1.51                                 | 87                      | 66           | 63               |
| 25  | 1.2   | 1.53   | 2.36                                 | 110                     | 84           | 95               |
| 35  | 0.868   | 1.107  | 3.31                                 | 131                     | 105          | 121              |
| 50  | 0.641   | 0.817  | 4.72                                 | 155                     | 121          | 147              |
| 70  | 0.443   | 0.565  | 6.61                                 | 189                     | 152          | 179              |
| 95  | 0.32  | 0.408  | 13.59                                | 226                     | 179          | 215              |
| 120   | 0.253   | 0.323  | 17.17                                | 263                     | 215          | 242              |
| 150   | 0.206   | 0.263  | 21.46                                | 294                     | 236          | 299              |
| 185   | 0.164   | 0.209  | 26.47                                | 336                     | 267          | 336              |
| 240   | 0.125   | 0.159  | 34.34                                | 389                     | 315          | 399              |
| 300   | 0.1   | 0.128  | 42.93                                | 436                     | 357          | 462              |
| 400   | 0.0778  | 0.099  | 57.23                                | 504                     | 410          | 541              |
| 500   | 0.0605  | 0.077  | 71.54                                | 567                     | 467          | 630              |
| 630   | 0.469   | 0.06   | 90.14                                | 646                     | 536          | 746              |
| 800   | 0.0367  | 0.047  | 114.47                               | 704                     | 599          | 851              |
| 1000  | 0.0291  | 0.037  | 143.08                               | 767                     | 651          | 966              |

Laying conditions at trefoil formation are as below:

- Soil thermal resistivity: 120°C.Cm/Watt
- Burial depth: 0.5m
- Ground Temperature: 15°C | Air temperature: 25°C | Frequency: 50Hz

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.