

# NA2XRH Aluminium Conductor IEC 60502-1 XLPE SWA LSZH 0.6/1kV Cable

ARMoured CABLE

CJDL Cable



## ➤ APPLICATION

Multi-core LSZH cable with steel wire armour (SWA). Power and auxiliary fixed wiring cables for use in power networks, underground, outdoor and indoor applications and for use in cable ducting. For installation where fire, smoke emission and toxic fumes create a potential threat to life and equipment.

## ➤ STANDARDS

Generally to BS 6724, IEC 60502-1, EN 50267-2-1, EN 60228  
Flame Retardant according to IEC/EN 60332-1-2, IEC/EN 60332-3-24  
Low Smoke Zero Halogen according to IEC/EN 60754-1/2, IEC/EN 61034-1/2

## ➤ CHARACTERISTICS

**Voltage Rating**  $U_0/U$   
0.6/1kV

**Maximum Operating Temperature**  
Fixed: -5° C to +90° C

**Minimum Bending Radius**  
15 x overall diameter

## ➤ CABLE LABORATORY

We have state-of-the-art laboratory facilities and cutting-edge testing equipment, supported by a strict quality control protocol throughout the entire production process. Every production batch undergoes comprehensive technical tests prior to shipment. Only products that meet the most stringent quality standards are approved for distribution. This ensures our products deliver outstanding stability, reliability and durability, fully complying with customers' technical specifications and requirements.

## ➤ CONSTRUCTION

**Conductor**  
Class 2 stranded aluminium conductor

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

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

**Armour**  
Single core: AWA (Aluminium wire armour)  
All other sizes: SWA (Galvanized round steel wire)

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

## ➤ DEDICATION TO SUSTAINABILITY

At CJDL Cable, we are fully committed to ecological transition and environmental protection. We actively push forward decarbonization goals, steadily moving toward a zero-emission business model.

To this end, we keep pursuing technological innovation to improve energy efficiency and cut pollutant emissions. Meanwhile, we optimize manufacturing processes to reduce environmental impact, securing sound, responsible and sustainable long-term growth for the company.

## DIMENSIONS

| NO. OF CORES | NOMINAL CROSS SECTIONAL AREA<br>mm <sup>2</sup> | NOMINAL INSULATION THICKNESS<br>mm | NOMINAL OUTER SHEATH THICKNESS<br>mm | NOMINAL OUTER DIAMETER<br>mm | NOMINAL WEIGHT<br>kg/km |
|--------------|-------------------------------------------------|------------------------------------|--------------------------------------|------------------------------|-------------------------|
| 1            | 70                                              | 1.1                                | 1.3                                  | 19.6                         | 525                     |
| 1            | 95                                              | 1.1                                | 1.3                                  | 21.1                         | 620                     |
| 1            | 120                                             | 1.2                                | 1.3                                  | 22.7                         | 730                     |
| 1            | 150                                             | 1.4                                | 1.4                                  | 26.2                         | 935                     |
| 1            | 185                                             | 1.6                                | 1.5                                  | 27.7                         | 1085                    |
| 1            | 240                                             | 1.7                                | 1.5                                  | 30.3                         | 1310                    |
| 1            | 300                                             | 1.8                                | 1.6                                  | 33                           | 1560                    |
| 1            | 400                                             | 2                                  | 1.7                                  | 36.9                         | 1995                    |
| 1            | 500                                             | 2.2                                | 1.7                                  | 40.3                         | 2375                    |
| 1            | 630                                             | 2.4                                | 1.8                                  | 44.8                         | 2963                    |
| 2            | 25                                              | 0.9                                | 1.3                                  | 23.2                         | 850                     |
| 2            | 35                                              | 0.9                                | 1.4                                  | 26.4                         | 1165                    |
| 2            | 50                                              | 1                                  | 1.6                                  | 29.8                         | 1390                    |
| 2            | 70                                              | 1.1                                | 1.7                                  | 34.3                         | 1925                    |
| 2            | 95                                              | 1.1                                | 1.7                                  | 37.3                         | 2270                    |
| 2            | 150                                             | 1.4                                | 1.8                                  | 45.9                         | 2945                    |
| 2            | 185                                             | 1.6                                | 2                                    | 50                           | 3990                    |
| 2            | 240                                             | 1.7                                | 2.1                                  | 55.4                         | 4760                    |
| 2            | 300                                             | 1.8                                | 2.1                                  | 60.8                         | 5600                    |
| 3            | 25                                              | 0.9                                | 1.4                                  | 25.4                         | 1100                    |
| 3            | 35                                              | 0.9                                | 1.5                                  | 28                           | 1300                    |
| 3            | 50                                              | 1                                  | 1.5                                  | 28.1                         | 1370                    |
| 3            | 70                                              | 1.1                                | 1.6                                  | 31.6                         | 1700                    |
| 3            | 95                                              | 1.1                                | 1.7                                  | 35.6                         | 2215                    |
| 3            | 120                                             | 1.2                                | 1.8                                  | 39                           | 2610                    |
| 3            | 150                                             | 1.4                                | 1.9                                  | 43.1                         | 3485                    |
| 3            | 185                                             | 1.6                                | 2                                    | 47.1                         | 4065                    |
| 3            | 240                                             | 1.7                                | 2.1                                  | 52                           | 4900                    |
| 3            | 300                                             | 1.8                                | 2.2                                  | 57.1                         | 5750                    |
| 3            | 400                                             | 2                                  | 2.4                                  | 64.3                         | 7105                    |
| 4            | 25                                              | 0.9                                | 1.4                                  | 27.4                         | 1265                    |
| 4            | 35                                              | 0.9                                | 1.5                                  | 30.3                         | 1520                    |
| 4            | 50                                              | 1                                  | 1.6                                  | 31.8                         | 1655                    |
| 4            | 70                                              | 1.1                                | 1.7                                  | 36.6                         | 2320                    |
| 4            | 95                                              | 1.1                                | 1.8                                  | 39.3                         | 2755                    |
| 4            | 120                                             | 1.2                                | 1.9                                  | 44.4                         | 3635                    |
| 4            | 150                                             | 1.4                                | 2                                    | 48.9                         | 4280                    |
| 4            | 185                                             | 1.6                                | 2.1                                  | 53.7                         | 5025                    |
| 4            | 240                                             | 1.7                                | 2.2                                  | 59.7                         | 6105                    |
| 4            | 300                                             | 1.8                                | 2.4                                  | 65.3                         | 7315                    |
| 5            | 25                                              | 0.9                                | 1.5                                  | 29.7                         | 1530                    |
| 5            | 35                                              | 0.9                                | 1.6                                  | 32.9                         | 1830                    |
| 5            | 50                                              | 1                                  | 1.7                                  | 37.8                         | 2535                    |
| 5            | 70                                              | 1.1                                | 1.8                                  | 43                           | 3250                    |

Laying conditions at trefoil formation are as below:

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

## ELECTRICAL CHARACTERISTICS

| NO. OF CORES | NOMINAL CROSS SECTIONAL AREA<br>mm <sup>2</sup> | MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C | MAXIMUM CONDUCTOR AC RESISTANCE AT 50 HZ | CONDUCTOR S.C.C FOR 1 SECOND KA | CURRENT RATING |              |                  |
|--------------|-------------------------------------------------|-----------------------------------------|------------------------------------------|---------------------------------|----------------|--------------|------------------|
|              |                                                 |                                         |                                          |                                 | LAID IN GROUND | LAID IN DUCT | LAID IN FREE AIR |
| 1            | 70                                              | 0.443                                   | 0.565                                    | 6.61                            | 220            | 171          | 236              |
| 1            | 95                                              | 0.32                                    | 0.408                                    | 8.98                            | 262            | 205          | 288              |
| 1            | 120                                             | 0.253                                   | 0.323                                    | 11.34                           | 298            | 235          | 333              |
| 1            | 150                                             | 0.206                                   | 0.263                                    | 14.17                           | 333            | 265          | 378              |
| 1            | 185                                             | 0.164                                   | 0.209                                    | 17.48                           | 376            | 301          | 436              |
| 1            | 240                                             | 0.125                                   | 0.159                                    | 22.68                           | 433            | 352          | 516              |
| 1            | 300                                             | 0.1                                     | 0.128                                    | 28.35                           | 487            | 401          | 592              |
| 1            | 400                                             | 0.0778                                  | 0.099                                    | 37.79                           | 549            | 459          | 688              |
| 1            | 500                                             | 0.0605                                  | 0.077                                    | 47.24                           | 619            | 526          | 795              |
| 1            | 630                                             | 0.0469                                  | 0.06                                     | 59.52                           | 693            | 598          | 911              |
| 2            | 25                                              | 1.2                                     | 1.53                                     | 3.58                            | 139            | 103          | 131              |
| 2            | 35                                              | 0.868                                   | 1.107                                    | 5.01                            | 167            | 123          | 160              |
| 2            | 50                                              | 0.641                                   | 0.817                                    | 7.15                            | 199            | 148          | 195              |
| 2            | 70                                              | 0.443                                   | 0.565                                    | 10.02                           | 243            | 184          | 244              |
| 2            | 95                                              | 0.32                                    | 0.408                                    | 13.59                           | 292            | 222          | 300              |
| 2            | 150                                             | 0.206                                   | 0.263                                    | 21.46                           | 372            | 288          | 394              |
| 2            | 185                                             | 0.164                                   | 0.209                                    | 26.47                           | 420            | 332          | 455              |
| 2            | 240                                             | 0.125                                   | 0.159                                    | 34.34                           | 487            | 387          | 537              |
| 2            | 300                                             | 0.1                                     | 0.128                                    | 42.93                           | 590            | 475          | 586              |
| 3            | 25                                              | 1.2                                     | 1.53                                     | 2.36                            | 112            | 84           | 108              |
| 3            | 35                                              | 0.868                                   | 1.107                                    | 3.31                            | 135            | 101          | 131              |
| 3            | 50                                              | 0.641                                   | 0.817                                    | 4.72                            | 161            | 120          | 157              |
| 3            | 70                                              | 0.443                                   | 0.565                                    | 6.61                            | 199            | 149          | 199              |
| 3            | 95                                              | 0.32                                    | 0.408                                    | 8.98                            | 238            | 180          | 242              |
| 3            | 120                                             | 0.253                                   | 0.323                                    | 11.34                           | 271            | 207          | 282              |
| 3            | 150                                             | 0.206                                   | 0.263                                    | 14.17                           | 302            | 235          | 319              |
| 3            | 185                                             | 0.164                                   | 0.209                                    | 17.48                           | 342            | 268          | 367              |
| 3            | 240                                             | 0.125                                   | 0.159                                    | 22.68                           | 396            | 313          | 433              |
| 3            | 300                                             | 0.1                                     | 0.128                                    | 28.35                           | 445            | 356          | 496              |
| 3            | 400                                             | 0.0778                                  | 0.099                                    | 37.79                           | 509            | 412          | 578              |
| 4            | 25                                              | 1.2                                     | 1.53                                     | 3.58                            | 114            | 86           | 110              |
| 4            | 35                                              | 0.868                                   | 1.107                                    | 5.01                            | 137            | 104          | 135              |
| 4            | 50                                              | 0.641                                   | 0.817                                    | 7.15                            | 166            | 124          | 164              |
| 4            | 70                                              | 0.443                                   | 0.565                                    | 10.02                           | 203            | 155          | 208              |
| 4            | 95                                              | 0.32                                    | 0.408                                    | 13.59                           | 243            | 185          | 253              |
| 4            | 120                                             | 0.253                                   | 0.323                                    | 17.17                           | 276            | 215          | 294              |
| 4            | 150                                             | 0.206                                   | 0.263                                    | 21.46                           | 310            | 243          | 336              |
| 4            | 185                                             | 0.164                                   | 0.209                                    | 26.47                           | 351            | 278          | 386              |
| 4            | 240                                             | 0.125                                   | 0.159                                    | 34.34                           | 405            | 326          | 454              |
| 4            | 300                                             | 0.1                                     | 0.128                                    | 42.93                           | 456            | 369          | 520              |
| 5            | 25                                              | 1.2                                     | 1.53                                     | 3.58                            | 114            | 86           | 110              |
| 5            | 35                                              | 0.868                                   | 1.107                                    | 5.01                            | 137            | 104          | 135              |
| 5            | 50                                              | 0.641                                   | 0.817                                    | 7.15                            | 166            | 124          | 164              |
| 5            | 70                                              | 0.443                                   | 0.565                                    | 10.02                           | 203            | 155          | 208              |

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.