



## U-1000 R2V/XV/RV Cable



Eland Product Group: A4U

### APPLICATION

These power cables are used for electricity supply in low voltage installation systems. They are well adapted to underground use in industrial applications with an additional mechanical protection. These cables can be fixed on cable trays, within conduits or fixed to walls.

### CHARACTERISTICS

**Voltage Rating** U<sub>o</sub>/U  
0.6/1kV

**Temperature Rating**

During installation -10°C to +50°C  
Fixed installation: -25°C to +90°C

**Minimum Bending Radius**

6 x overall diameter

### CONSTRUCTION

**Conductor**

1.5mm<sup>2</sup> to 4mm<sup>2</sup>: Class 1 solid copper conductor\*  
6mm<sup>2</sup> and above: Class 2 stranded copper conductor  
\*Class 2 stranded conductor available for these sizes on request

**Insulation**

XLPE (Cross-Linked Polyethylene)

**Bedding**

PVC (Polyvinyl Chloride)

**Sheath**

PVC (Polyvinyl Chloride)

**Core Identification**

- 1 core: ● Black
- 2 core: ● Blue ● Brown
- 3 core: ● Blue ● Brown ● Black (1.5mm<sup>2</sup> and 2.5mm<sup>2</sup> only)
- 3 core: ● Brown ● Black ● Grey
- 3 core including earth: ● Brown ● Blue ● Green/Yellow
- 4 core: ● Blue ● Brown ● Black ● Grey
- 4 core including earth: ● Blue ● Brown ● Black ● Green/Yellow
- 5 core: ● Blue ● Brown ● Black ● Grey ● Black
- 5 core including earth: ● Blue ● Brown ● Black ● Grey ● Green/Yellow
- 7 core and higher: ● Black cores with ○ White numbers + ● Green/Yellow

**Sheath Colour**

- Black

### STANDARDS

NF C 32-321, IEC 60502-1, NF C 32-070 C2

Flame Retardant according to IEC 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<br>mm <sup>2</sup> | NOMINAL THICKNESS OF INSULATION<br>mm | NOMINAL THICKNESS OF SHEATH<br>mm | NOMINAL OVERALL DIAMETER<br>mm | NOMINAL WEIGHT<br>kg/km |
|----------------|--------------|-------------------------------------------------|---------------------------------------|-----------------------------------|--------------------------------|-------------------------|
| A4U01015       | 1            | 1.5                                             | 0.7                                   | 1.1                               | 6.6                            | 45                      |
| A4U01025       | 1            | 2.5                                             | 0.7                                   | 1.1                               | 7                              | 55                      |
| A4U01040       | 1            | 4                                               | 0.7                                   | 1.1                               | 7.6                            | 75                      |
| A4U01060       | 1            | 6                                               | 0.7                                   | 1.1                               | 8.2                            | 100                     |
| A4U0110        | 1            | 10                                              | 0.7                                   | 1.1                               | 9.2                            | 140                     |
| A4U0116        | 1            | 16                                              | 0.7                                   | 1.4                               | 10.5                           | 205                     |
| A4U0125        | 1            | 25                                              | 0.9                                   | 1.4                               | 12.5                           | 315                     |
| A4U0135        | 1            | 35                                              | 0.9                                   | 1.4                               | 13.5                           | 400                     |
| A4U0150        | 1            | 50                                              | 1                                     | 1.4                               | 15                             | 530                     |
| A4U0170        | 1            | 70                                              | 1.1                                   | 1.4                               | 17                             | 725                     |
| A4U0195        | 1            | 95                                              | 1.1                                   | 1.5                               | 19                             | 985                     |
| A4U01120       | 1            | 120                                             | 1.2                                   | 1.5                               | 21                             | 1260                    |
| A4U01150       | 1            | 150                                             | 1.4                                   | 1.6                               | 23                             | 1520                    |
| A4U01185       | 1            | 185                                             | 1.6                                   | 1.6                               | 25.5                           | 1940                    |
| A4U01240       | 1            | 240                                             | 1.7                                   | 1.7                               | 28.5                           | 2310                    |
| A4U01300       | 1            | 300                                             | 1.8                                   | 1.8                               | 31                             | 3200                    |
| A4U01400       | 1            | 400                                             | 2                                     | 1.9                               | 34.2                           | 3931                    |
| A4U01500       | 1            | 500                                             | 2.2                                   | 2                                 | 38                             | 5020                    |
| A4U01630       | 1            | 630                                             | 2.4                                   | 2.3                               | 44                             | 5324                    |
| A4U02015       | 2            | 1.5                                             | 0.7                                   | 1.8                               | 10.5                           | 115                     |
| A4U02025       | 2            | 2.5                                             | 0.7                                   | 1.8                               | 11.5                           | 145                     |
| A4U02040       | 2            | 4                                               | 0.7                                   | 1.8                               | 13                             | 195                     |
| A4U02060       | 2            | 6                                               | 0.7                                   | 1.8                               | 14                             | 265                     |
| A4U0210        | 2            | 10                                              | 0.7                                   | 1.8                               | 16                             | 390                     |
| A4U0216        | 2            | 16                                              | 0.7                                   | 1.8                               | 18.5                           | 560                     |
| A4U0225        | 2            | 25                                              | 0.9                                   | 1.8                               | 22                             | 850                     |
| A4U0235        | 2            | 35                                              | 0.9                                   | 1.8                               | 24.5                           | 1080                    |
| A4U03015       | 3            | 1.5                                             | 0.7                                   | 1.8                               | 11                             | 130                     |
| A4U03025       | 3            | 2.5                                             | 0.7                                   | 1.8                               | 12.5                           | 170                     |
| A4U03040       | 3            | 4                                               | 0.7                                   | 1.8                               | 13.5                           | 230                     |
| A4U03060       | 3            | 6                                               | 0.7                                   | 1.8                               | 15                             | 325                     |
| A4U0310        | 3            | 10                                              | 0.7                                   | 1.8                               | 17                             | 485                     |
| A4U0316        | 3            | 16                                              | 0.7                                   | 1.8                               | 19.5                           | 705                     |
| A4U0325        | 3            | 25                                              | 0.9                                   | 1.8                               | 23.5                           | 1080                    |
| A4U0335        | 3            | 35                                              | 0.9                                   | 1.8                               | 26                             | 1390                    |
| A4U0350        | 3            | 50                                              | 1                                     | 1.8                               | 29                             | 1840                    |
| A4U0370        | 3            | 70                                              | 1.1                                   | 1.9                               | 34                             | 2540                    |
| A4U0395        | 3            | 95                                              | 1.1                                   | 2                                 | 38.5                           | 3430                    |
| A4U03120       | 3            | 120                                             | 1.2                                   | 2.1                               | 42.5                           | 4440                    |
| A4U03150       | 3            | 150                                             | 1.4                                   | 2.3                               | 47.5                           | 5380                    |
| A4U03185       | 3            | 185                                             | 1.6                                   | 2.4                               | 55                             | 6920                    |
| A4U03240       | 3            | 240                                             | 1.7                                   | 2.6                               | 59.5                           | 8420                    |
| A4U03300       | 3            | 300                                             | 1.8                                   | 2.8                               | 66                             | 11300                   |
| A4U0350+35     | 3+E          | 50 + 1 x 35                                     | 1                                     | 1.8                               | 31.1                           | 2160                    |
| A4U0370+50     | 3+E          | 70 + 1 x 50                                     | 1.1                                   | 2                                 | 36.2                           | 3010                    |
| A4U03095+50    | 3+E          | 95 + 1 x 50                                     | 1.1                                   | 2.1                               | 40.6                           | 3960                    |
| A4U03120+70    | 3+E          | 120 + 1 x 70                                    | 1.2                                   | 2.2                               | 45.4                           | 5160                    |
| A4U03150+70    | 3+E          | 150 + 1 x 70                                    | 1.4                                   | 2.3                               | 49.5                           | 6150                    |



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ELAND  
CABLES

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|----------------|--------------|-------------------------------------------------|---------------------------------------|-----------------------------------|--------------------------------|-------------------------|
| A4U03185+70    | 3+E          | 185 + 1 x 70                                    | 1.6                                   | 2.5                               | 54.4                           | 7780                    |
| A4U03240+95    | 3+E          | 240 + 1 x 95                                    | 1.7                                   | 2.7                               | 61.5                           | 9550                    |
| A4U04015       | 4            | 1.5                                             | 0.7                                   | 1.8                               | 12                             | 150                     |
| A4U04025       | 4            | 2.5                                             | 0.7                                   | 1.8                               | 13                             | 205                     |
| A4U04040       | 4            | 4                                               | 0.7                                   | 1.8                               | 14.5                           | 280                     |
| A4U04060       | 4            | 6                                               | 0.7                                   | 1.8                               | 16                             | 390                     |
| A4U0410        | 4            | 10                                              | 0.7                                   | 1.8                               | 18.5                           | 590                     |
| A4U0416        | 4            | 16                                              | 0.7                                   | 1.8                               | 21                             | 870                     |
| A4U0425        | 4            | 25                                              | 0.9                                   | 1.8                               | 25.5                           | 1365                    |
| A4U0435        | 4            | 35                                              | 0.9                                   | 1.8                               | 28.5                           | 1760                    |
| A4U0450        | 4            | 50                                              | 1                                     | 1.9                               | 32.5                           | 2460                    |
| A4U0470        | 4            | 70                                              | 1.1                                   | 2                                 | 37.5                           | 3442                    |
| A4U0495        | 4            | 95                                              | 1.1                                   | 2.1                               | 42.5                           | 4690                    |
| A4U04120       | 4            | 120                                             | 1.2                                   | 2.3                               | 47.5                           | 6119                    |
| A4U04150       | 4            | 150                                             | 1.4                                   | 2.4                               | 52.5                           | 7405                    |
| A4U04185       | 4            | 185                                             | 1.6                                   | 2.6                               | 59                             | 8820                    |
| A4U04240       | 4            | 240                                             | 1.7                                   | 2.8                               | 66.5                           | 11865                   |
| A4U04300       | 4            | 300                                             | 1.8                                   | 3                                 | 75.5                           | 14716                   |
| A4U05015       | 5            | 1.5                                             | 0.7                                   | 1.8                               | 12.5                           | 225                     |
| A4U05025       | 5            | 2.5                                             | 0.7                                   | 1.8                               | 13.5                           | 290                     |
| A4U0510        | 5            | 10                                              | 0.7                                   | 1.8                               | 19                             | 775                     |
| A4U0516        | 5            | 16                                              | 0.7                                   | 1.8                               | 21.5                           | 1135                    |
| A4U0525        | 5            | 25                                              | 0.9                                   | 1.8                               | 27                             | 1780                    |
| A4U0535        | 5            | 35                                              | 0.9                                   | 1.8                               | 34                             | 2069                    |
| A4U0550        | 5            | 50                                              | 1                                     | 1.9                               | 36                             | 2755                    |
| A4U0570        | 5            | 70                                              | 1.1                                   | 2                                 | 43                             | 3925                    |
| A4U0595        | 5            | 95                                              | 1.1                                   | 2.1                               | 47                             | 5336                    |
| A4U07015       | 7            | 1.5                                             | 0.7                                   | 1.8                               | 13.5                           | 220                     |
| A4U07025       | 7            | 2.5                                             | 0.7                                   | 1.8                               | 15                             | 310                     |
| A4U12015       | 12           | 1.5                                             | 0.7                                   | 1.8                               | 17                             | 370                     |
| A4U12025       | 12           | 2.5                                             | 0.7                                   | 1.8                               | 19.5                           | 525                     |
| A4U19015       | 19           | 1.5                                             | 0.7                                   | 1.8                               | 19.5                           | 560                     |
| A4U19025       | 19           | 2.5                                             | 0.7                                   | 1.8                               | 22.5                           | 745                     |
| A4U24015       | 24           | 1.5                                             | 0.7                                   | 1.8                               | 22.5                           | 745                     |
| A4U24025       | 24           | 2.5                                             | 0.7                                   | 1.8                               | 22.5                           | 710                     |
| A4U27015       | 27           | 1.5                                             | 0.7                                   | 1.8                               | 23.5                           | 1000                    |
| A4U27025       | 27           | 2.5                                             | 0.7                                   | 1.8                               | 26                             | 1000                    |
| A4U37015       | 37           | 1.5                                             | 0.7                                   | 1.8                               | 25.5                           | 972                     |
| A4U37025       | 37           | 2.5                                             | 0.7                                   | 1.8                               | 29.5                           | 1350                    |



## ELECTRICAL CHARACTERISTICS

| NOMINAL CROSS SECTIONAL AREA<br>mm <sup>2</sup> | 1 CORE<br>Amps |        | 2 CORE<br>Amps |        | 5 CORE<br>Amps |        |
|-------------------------------------------------|----------------|--------|----------------|--------|----------------|--------|
|                                                 | Air            | Ground | Air            | Ground | Air            | Ground |
| 1.5                                             | 24             | 31     | 26             | 37     | 23             | 31     |
| 2.5                                             | 33             | 41     | 36             | 48     | 31             | 41     |
| 4                                               | 45             | 59     | 49             | 63     | 42             | 53     |
| 6                                               | 58             | 74     | 63             | 80     | 54             | 66     |
| 10                                              | 80             | 101    | 89             | 104    | 75             | 87     |
| 16                                              | 107            | 128    | 115            | 136    | 100            | 113    |
| 25                                              | 138            | 144    | 149            | 173    | 127            | 144    |
| 35                                              | 169            | 174    | 185            | 208    | 158            | 174    |
| 50                                              | 207            | 206    | -              | -      | 192            | 206    |
| 70                                              | 268            | 254    | -              | -      | 246            | 254    |
| 95                                              | 328            | 301    | -              | -      | 298            | 301    |
| 120                                             | 382            | 345    | -              | -      | 346            | 343    |
| 150                                             | 441            | 387    | -              | -      | 395            | 395    |
| 185                                             | 506            | 454    | -              | -      | 430            | 454    |
| 240                                             | 599            | 501    | -              | -      | 538            | 301    |
| 300                                             | 693            | 565    | -              | -      | 621            | 565    |
| 400                                             | -              | 639    | -              | -      | -              | -      |
| 500                                             | -              | 713    | -              | -      | -              | -      |
| 650                                             | -              | 785    | -              | -      | -              | -      |

## VOLTAGE DROP

| NOMINAL CROSS SECTIONAL AREA<br>mm <sup>2</sup> | SINGLE CORE AC SINGLE-PHASE<br>V/A km |                  | 2 CORE AC SINGLE-PHASE<br>V/A km |                  | 3 CORE AC SINGLE-PHASE<br>V/A km |                  |
|-------------------------------------------------|---------------------------------------|------------------|----------------------------------|------------------|----------------------------------|------------------|
|                                                 | cos $\theta$ 1                        | cos $\theta$ 0.8 | cos $\theta$ 1                   | cos $\theta$ 0.8 | cos $\theta$ 1                   | cos $\theta$ 0.8 |
| 1                                               | 44.2                                  | 35.6             | 45                               | 36.1             | 39                               | 31.3             |
| 1.5                                             | 29.7                                  | 23.9             | 30.2                             | 24.3             | 26.1                             | 21               |
| 2.5                                             | 17.8                                  | 14.4             | 18.2                             | 14.7             | 15.7                             | 12.7             |
| 4                                               | 11.1                                  | 9.08             | 11.4                             | 9.21             | 9.85                             | 7.98             |
| 6                                               | 7.41                                  | 6.10             | 7.56                             | 6.16             | 6.54                             | 5.34             |
| 10                                              | 4.47                                  | 3.72             | 4.55                             | 3.73             | 3.94                             | 3.24             |
| 16                                              | 2.82                                  | 2.39             | 2.87                             | 2.36             | 2.48                             | 2.07             |
| 25                                              | 1.78                                  | 1.55             | 1.81                             | 1.55             | 1.57                             | 1.34             |
| 35                                              | 1.28                                  | 1.15             | 1.31                             | 1.14             | 1.13                             | 0.988            |
| 50                                              | 0.947                                 | 0.878            | 0.967                            | 0.966            | 0.838                            | 0.750            |
| 70                                              | 0.656                                 | 0.641            | 0.699                            | 0.624            | 0.579                            | 0.541            |
| 95                                              | 0.473                                 | 0.434            | 0.484                            | 0.476            | 0.419                            | 0.412            |
| 120                                             | 0.375                                 | 0.413            | 0.383                            | 0.394            | 0.332                            | 0.342            |
| 150                                             | 0.306                                 | 0.356            | 0.314                            | 0.341            | 0.272                            | 0.295            |
| 185                                             | 0.246                                 | 0.306            | 0.251                            | 0.289            | 0.217                            | 0.250            |
| 240                                             | 0.189                                 | 0.259            | 0.193                            | 0.245            | 0.167                            | 0.212            |
| 300                                             | 0.152                                 | 0.229            | 0.156                            | 0.215            | 0.135                            | 0.186            |

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.