

# YAKXS Cable

## Aluminium XLPE PVC - 0.6/1kV



Eland Product Group: P9X

### APPLICATION

For fixed installation in buildings, in free air, in ground and in water.

### CHARACTERISTICS

#### Voltage Rating $U_0/U$ (Um)

AC: 0.6/1 (1.2)kV

DC 0.9/1.8kV

#### Test Voltage

4kV

#### Temperature Rating

Flexed: 5°C to +90°C

Fixed: -35°C to +90°C

#### Maximum Short Circuit Temperature

+250°C (max 5 seconds)

#### Minimum Bend Radius

Single core: 15 x overall diameter

Multi core: 12 x overall diameter

### CONSTRUCTION

#### Conductor

Class 2 stranded Aluminium\* conductor

#### Insulation

XLPE (Cross-Linked Polyethylene)

#### Sheath

PVC (Polyvinyl Chloride)

#### Core Identification

**YAKXSzo:** 3 core: ● Blue ● Brown ● Green/Yellow

4 core: ● Brown ● Black ● Grey ● Green/Yellow

**YAKXS:** 2 core: ● Blue ● Brown

3 core: ● Brown ● Black ● Grey

4 core: ● Brown ● Black ● Grey ● Blue

#### Sheath Colour

● Black

Note: Class 1 solid conductors available on request

### STANDARDS

IEC 60502-1, Generally to PN HD 603

Flame retardant according to IEC/EN 60332-1-2

### THE CABLE LAB<sup>®</sup>

AN ISO/IEC 17025 AND IECCE 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 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<sup>®</sup>.





## DIMENSIONS

| ELAND PART NO. | NO. OF CONDUCTOR | NOMINAL CROSS SECTIONAL AREA<br>mm <sup>2</sup> | CONDUCTOR TYPE | NOMINAL OVERALL DIAMETER<br>mm | NOMINAL WEIGHT<br>kg/km |
|----------------|------------------|-------------------------------------------------|----------------|--------------------------------|-------------------------|
| P9X01KV01025   | 1                | 25                                              | RM             | 9.9                            | 132                     |
| P9X01KV01035   | 1                | 35                                              | RM             | 11                             | 166                     |
| P9X01KV01050   | 1                | 50                                              | RM             | 12.5                           | 211                     |
| P9X01KV01070   | 1                | 70                                              | RM             | 14.1                           | 283                     |
| P9X01KV01095   | 1                | 95                                              | RM             | 16.1                           | 376                     |
| P9X01KV01120   | 1                | 120                                             | RM             | 17.5                           | 456                     |
| P9X01KV01150   | 1                | 150                                             | RM             | 19.6                           | 560                     |
| P9X01KV01185   | 1                | 185                                             | RM             | 21.8                           | 697                     |
| P9X01KV01240   | 1                | 240                                             | RM             | 24                             | 878                     |
| P9X01KV01300   | 1                | 300                                             | RM             | 26.7                           | 1073                    |
| P9X01KV01400   | 1                | 400                                             | RM             | 29.7                           | 1347                    |
| P9X01KV01500   | 1                | 500                                             | RM             | 33.1                           | 1705                    |
| P9X01KV01630   | 1                | 630                                             | RM             | 42.8                           | 2705                    |
| P9X01KV03070SM | 3                | 70                                              | SM             | 26.1                           | 903                     |
| P9X01KV03070SE | 3                | 70                                              | SE             | 25.2                           | 859                     |
| P9X01KV09503SM | 3                | 95                                              | SM             | 29.1                           | 1174                    |
| P9X01KV09503SE | 3                | 95                                              | SE             | 27.8                           | 1115                    |
| P9X01KV12003SM | 3                | 120                                             | SM             | 32.2                           | 1446                    |
| P9X01KV12003SE | 3                | 120                                             | SE             | 30.8                           | 1379                    |
| P9X01KV15003SM | 3                | 150                                             | SM             | 36.2                           | 1780                    |
| P9X01KV15003SE | 3                | 150                                             | SE             | 33.9                           | 1685                    |
| P9X01KV18503SM | 3                | 185                                             | SM             | 40.1                           | 2197                    |
| P9X01KV18503SE | 3                | 185                                             | SE             | 37.6                           | 2089                    |
| P9X01KV24003SM | 3                | 240                                             | SM             | 44.9                           | 2782                    |
| P9X01KV24003SE | 3                | 240                                             | SE             | 41.8                           | 2634                    |
| P9X01KV07004SM | 4                | 70                                              | SM             | 29.7                           | 1178                    |
| P9X01KV07004SE | 4                | 70                                              | SE             | 28.8                           | 1126                    |
| P9X01KV09504SM | 4                | 95                                              | SM             | 33.3                           | 1538                    |
| P9X01KV09504SE | 4                | 95                                              | SE             | 32.1                           | 1467                    |
| P9X01KV12004SM | 4                | 120                                             | SM             | 37.2                           | 1903                    |
| P9X01KV12004SE | 4                | 120                                             | SE             | 35.5                           | 1817                    |
| P9X01KV15004SM | 4                | 150                                             | SM             | 41.3                           | 2328                    |
| P9X01KV15004SE | 4                | 150                                             | SE             | 39.4                           | 2223                    |
| P9X01KV18504SM | 4                | 185                                             | SM             | 45.7                           | 2874                    |
| P9X01KV18504SE | 4                | 185                                             | SE             | 43.4                           | 2750                    |
| P9X01KV24004SM | 4                | 240                                             | SM             | 51.2                           | 3646                    |
| P9X01KV24004SE | 4                | 240                                             | SE             | 48                             | 3465                    |



## ELECTRICAL CHARACTERISTICS

### Current Carrying Capacity In Air

| INSTALLATIONS                                |  <sup>1)</sup> |  |  |
|----------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| NO. OF LOADED CORES                          | 1                                                                                               | 3                                                                                   | 3                                                                                   |
| NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup> | LAYING IN AIR AT 30°C A                                                                         |                                                                                     |                                                                                     |
| 25                                           | 136                                                                                             | 102                                                                                 | 106                                                                                 |
| 35                                           | 166                                                                                             | 126                                                                                 | 130                                                                                 |
| 50                                           | 205                                                                                             | 149                                                                                 | 161                                                                                 |
| 70                                           | 260                                                                                             | 191                                                                                 | 204                                                                                 |
| 95                                           | 321                                                                                             | 234                                                                                 | 252                                                                                 |
| 120                                          | 376                                                                                             | 273                                                                                 | 295                                                                                 |
| 150                                          | 431                                                                                             | 311                                                                                 | 339                                                                                 |
| 185                                          | 501                                                                                             | 360                                                                                 | 395                                                                                 |
| 240                                          | 600                                                                                             | 427                                                                                 | 472                                                                                 |
| 300                                          | 696                                                                                             | 507                                                                                 | 547                                                                                 |
| 400                                          | 821                                                                                             | 600                                                                                 | 643                                                                                 |
| 500                                          | 971                                                                                             | 695                                                                                 | 754                                                                                 |
| 630                                          | 1151                                                                                            | -                                                                                   | 882                                                                                 |
| 800                                          | 1355                                                                                            | -                                                                                   | 1019                                                                                |

<sup>1)</sup> Rated Current for direct current systems with a far-distanced return conductor.

\* The above is taken from DIN VDE 0276-603, DIN VDE 0276-627, HD 603 51, HD 627 51. The conversion factors for deviating ambient temperature defined in DIN VDE 0298 P4

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.



## ELECTRICAL CHARACTERISTICS

### Current Carrying Capacity In Ground

| INSTALLATIONS                                |  |  |  |
|----------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| NO. OF LOADED CORES                          | 1                                                                                 | 3                                                                                   | 3                                                                                   |
| NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup> | LAYING IN GROUND AT 20°C A                                                        |                                                                                     |                                                                                     |
| 25                                           | 177                                                                               | 112                                                                                 | 114                                                                                 |
| 35                                           | 212                                                                               | 135                                                                                 | 136                                                                                 |
| 50                                           | 252                                                                               | 158                                                                                 | 162                                                                                 |
| 70                                           | 310                                                                               | 196                                                                                 | 199                                                                                 |
| 95                                           | 372                                                                               | 234                                                                                 | 238                                                                                 |
| 120                                          | 425                                                                               | 268                                                                                 | 272                                                                                 |
| 150                                          | 476                                                                               | 300                                                                                 | 305                                                                                 |
| 185                                          | 541                                                                               | 342                                                                                 | 347                                                                                 |
| 240                                          | 631                                                                               | 398                                                                                 | 404                                                                                 |
| 300                                          | 716                                                                               | 457                                                                                 | 457                                                                                 |
| 400                                          | 825                                                                               | 529                                                                                 | 525                                                                                 |
| 500                                          | 952                                                                               | 609                                                                                 | 601                                                                                 |
| 630                                          | 1102                                                                              | -                                                                                   | 687                                                                                 |
| 800                                          | 1267                                                                              | -                                                                                   | 776                                                                                 |
| 1000                                         | 1448                                                                              | -                                                                                   | 865                                                                                 |

<sup>1)</sup> Rated Current for direct current systems with a far-distanced return conductor.

Installation conditions:

Air Temperature 30°C

Ground Temperature 20°C

Soil thermal resistivity, dried-out soil 2.5 Km/W

Soil thermal resistivity, moist soil 1.0 Km/W

Laying depth 0.7 m

## DE-RATING FACTORS

| AMBIENT TEMPERATURE | 10   | 10   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|---------------------|------|------|------|------|------|------|------|------|------|
| RATING FACTOR       | 1.15 | 1.15 | 1.08 | 1.04 | 1.00 | 0.96 | 0.91 | 0.87 | 0.82 |

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