

# YKXS IEC 60502-1 XLPE PVC 0.6/1kV Cable



Eland Product Group: P2Y

## APPLICATION

These power and fixed wiring 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** Uo/U  
0.6/1kV

**Temperature Rating**  
During installation -5°C to +50°C  
Fixed Installation: -20°C to +90°C

**Minimum Bending Radius**  
Fixed: 12 x overall diameter

## CONSTRUCTION

**Conductor**  
RE: Class 1 solid copper conductor  
RM: Class 2 stranded circular or circular compacted  
SM: Class 2 stranded sectoral shaped

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

**Bedding**  
PVC (Polyvinyl Chloride)

**Sheath**  
PVC (Polyvinyl Chloride)

**Core Identification**  
3 core: ● Green/Yellow ● Blue ● Brown  
4 core: ● Green/Yellow ● Brown ● Black ● Grey  
5 core: ● Green/Yellow ● Blue ● Brown ● Black ● Grey  
7 cores and above: ● Black cores and ○ White numbers

**Sheath Colour**  
● Black

## STANDARDS

IEC 60502-1, Generally to PN HD 603, IEC/EN 60228

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 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 2015/65/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 CORES | NOMINAL CROSS SECTIONAL AREA<br>mm <sup>2</sup> | CONDUCTOR TYPE | NOMINAL THICKNESS OF INSULATION<br>mm | NOMINAL THICKNESS OF SHEATH<br>mm | NOMINAL OVERALL DIAMETER<br>mm | NOMINAL WEIGHT<br>kg/km |
|-----------------|--------------|---|----------------|---------------------------------------|-----------------------------------|--------------------------------|-------------------------|
| P2YKXS01016     | 1            | 16  | RM             | 0.7                                   | 1.8                               | 9.8                            | 216                     |
| P2YKXS01025     | 1            | 25  | RM             | 0.9                                   | 1.8                               | 11.5                           | 318                     |
| P2YKXS01035     | 1            | 35  | RM             | 0.9                                   | 1.8                               | 12.6                           | 415                     |
| P2YKXS01050     | 1            | 50  | RM             | 1                                     | 1.8                               | 14.1                           | 543                     |
| P2YKXS01070     | 1            | 70  | RM             | 1.1                                   | 1.8                               | 15.6                           | 746                     |
| P2YKXS01095     | 1            | 95  | RM             | 1.1                                   | 1.8                               | 17.6                           | 1000                    |
| P2YKXS01120     | 1            | 120   | RM             | 1.2                                   | 1.8                               | 19.2                           | 1239                    |
| P2YKXS01150     | 1            | 150   | RM             | 1.4                                   | 1.8                               | 21.2                           | 1515                    |
| P2YKXS01185     | 1            | 185   | RM             | 1.6                                   | 1.8                               | 23.1                           | 1872                    |
| P2YKXS01240     | 1            | 240   | RM             | 1.7                                   | 1.8                               | 25.8                           | 2403                    |
| P2YKXS01300     | 1            | 300   | RM             | 1.8                                   | 1.8                               | 27.8                           | 2974                    |
| P2YKXS01400     | 1            | 400   | RM             | 2                                     | 1.9                               | 31.1                           | 3834                    |
| P2YKXS01500     | 1            | 500   | RM             | 2.2                                   | 2                                 | 34.9                           | 4892                    |
| P2YKXS01630     | 1            | 630   | RM             | 2.8                                   | 2.8                               | 46.6                           | 6544                    |
| P2YKXS020015    | 2            | 1.5   | RE             | 0.7                                   | 1.8                               | 10.1                           | 145                     |
| P2YKXS020025    | 2            | 2.5   | RE             | 0.7                                   | 1.8                               | 10.9                           | 179                     |
| P2YKXS020040    | 2            | 4   | RE             | 0.7                                   | 1.8                               | 11.8                           | 226                     |
| P2YKXS020060    | 2            | 6   | RE             | 0.7                                   | 1.8                               | 12.8                           | 284                     |
| P2YKXS02010     | 2            | 10  | RM             | 0.7                                   | 1.8                               | 15                             | 416                     |
| P2YKXS02016     | 2            | 16  | RM             | 0.7                                   | 1.8                               | 17                             | 581                     |
| P2YKXS02025     | 2            | 25  | RM             | 0.9                                   | 1.8                               | 20.4                           | 859                     |
| P2YKXS02035     | 2            | 35  | RM             | 0.9                                   | 1.8                               | 22.5                           | 1109                    |
| P2YKXS030015    | 3            | 1.5   | RE             | 0.7                                   | 1.8                               | 10.5                           | 162                     |
| P2YKXS030025    | 3            | 2.5   | RE             | 0.7                                   | 1.8                               | 11.4                           | 205                     |
| P2YKXS030040    | 3            | 4   | RE             | 0.7                                   | 1.8                               | 12.4                           | 265                     |
| P2YKXS030060    | 3            | 6   | RE             | 0.7                                   | 1.8                               | 13.4                           | 338                     |
| P2YKXS03010     | 3            | 10  | RM             | 0.7                                   | 1.8                               | 15.8                           | 505                     |
| P2YKXS03016     | 3            | 16  | RM             | 0.7                                   | 1.8                               | 18                             | 719                     |
| P2YKXS03025     | 3            | 25  | RM             | 0.9                                   | 1.8                               | 21.6                           | 1072                    |
| P2YKXS03035     | 3            | 35  | RM             | 0.9                                   | 1.8                               | 23.9                           | 1403                    |
| P2YKXS03050     | 3            | 50  | SM             | 1                                     | 1.9                               | 23.8                           | 1581                    |
| P2YKXS0316/10   | 3            | 16/10   | SM             | 0.7                                   | 1.8                               | 19.8                           | 875.5                   |
| P2YKXS03025/16  | 3            | 25/16   | SM             | 0.9/0.7                               | 1.8                               | 22.4                           | 1223                    |
| P2YKXS03035/16  | 3            | 35/16   | SM             | 0.9/0.7                               | 1.8                               | 24.3                           | 1557                    |
| P2YKXS03050/25  | 3            | 50/25   | SM             | 1/0.9                                 | 1.9                               | 26.9                           | 1863                    |
| P2YKXS03070/35  | 3            | 70/35   | SM             | 1.1/0.9                               | 2                                 | 30                             | 2594                    |
| P2YKXS03095/50  | 3            | 95/50   | SM             | 1.1/1                                 | 2.2                               | 33.8                           | 3505                    |
| P2YKXS03120/70  | 3            | 120/70  | SM             | 1.2/1.1                               | 2.3                               | 37                             | 4440                    |
| P2YKXS03150/70  | 3            | 150/70  | SM             | 1.4/1.1                               | 2.4                               | 41.6                           | 5333                    |
| P2YKXS03185/95  | 3            | 185/95  | SM             | 1.6/1.1                               | 2.6                               | 45.8                           | 6701                    |
| P2YKXS03240/120 | 3            | 240/120   | SM             | 1.7/1.2                               | 2.8                               | 51.6                           | 8674                    |
| P2YKXS03300/150 | 3            | 300/150   | SM             | 1.8/1.4                               | 3                                 | 67.2                           | 10624                   |
| P2YKXS040015    | 4            | 1.5   | RE             | 0.7                                   | 1.8                               | 11.3                           | 188                     |
| P2YKXS040025    | 4            | 2.5   | RE             | 0.7                                   | 1.8                               | 12.2                           | 240                     |
| P2YKXS040040    | 4            | 4   | RE             | 0.7                                   | 1.8                               | 13.3                           | 314                     |

| ELAND PART NO. | NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup> | CONDUCTOR TYPE | NOMINAL THICKNESS OF INSULATION mm | NOMINAL THICKNESS OF SHEATH mm | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT kg/km |
|----------------|--------------|--|----------------|------------------------------------|--------------------------------|-----------------------------|----------------------|
| P2YKXS040060   | 4            | 6  | RE             | 0.7                                | 1.8                            | 14.5                        | 408                  |
| P2YKXS04010    | 4            | 10   | RE             | 0.7                                | 1.8                            | 17.1                        | 615                  |
| P2YKXS04016    | 4            | 16   | RE             | 0.7                                | 1.8                            | 19.6                        | 885                  |
| P2YKXS04025    | 4            | 25   | RE             | 0.9                                | 1.8                            | 23.7                        | 1330                 |
| P2YKXS04035    | 4            | 35   | RE             | 0.9                                | 1.8                            | 26.2                        | 1758                 |
| P2YKXS04050    | 4            | 50   | SM             | 1                                  | 2                              | 27.1                        | 2082                 |
| P2YKXS04070    | 4            | 70   | SM             | 1.1                                | 2.1                            | 31.4                        | 2937                 |
| P2YKXS04095    | 4            | 95   | SM             | 1.1                                | 2.2                            | 35                          | 3955                 |
| P2YKXS04120    | 4            | 120  | SM             | 1.2                                | 2.4                            | 39.3                        | 4979                 |
| P2YKXS04150    | 4            | 150  | SM             | 1.4                                | 2.6                            | 43.6                        | 6129                 |
| P2YKXS04185    | 4            | 185  | SM             | 1.6                                | 2.7                            | 48                          | 7591                 |
| P2YKXS04240    | 4            | 240  | SM             | 1.7                                | 2.9                            | 53.9                        | 9875                 |
| P2YKXS050015   | 5            | 1.5  | RE             | 0.7                                | 1.8                            | 12.1                        | 218                  |
| P2YKXS050025   | 5            | 2.5  | RE             | 0.7                                | 1.8                            | 13.1                        | 281                  |
| P2YKXS050040   | 5            | 4  | RE             | 0.7                                | 1.8                            | 14.3                        | 372                  |
| P2YKXS050060   | 5            | 6  | RE             | 0.7                                | 1.8                            | 15.6                        | 486                  |
| P2YKXS05010    | 5            | 10   | RM             | 0.7                                | 1.8                            | 18.6                        | 740                  |
| P2YKXS05016    | 5            | 16   | RM             | 0.7                                | 1.8                            | 21.3                        | 1071                 |
| P2YKXS05025    | 5            | 25   | RM             | 0.9                                | 1.8                            | 25.9                        | 1619                 |
| P2YKXS05035    | 5            | 35   | RM             | 0.9                                | 1.8                            | 28.8                        | 2138                 |
| P2YKXS05050    | 5            | 50   | RM             | 1                                  | 2.1                            | 29.4                        | 2578                 |
| P2YKXS05070    | 5            | 70   | RM             | 1.1                                | 2.2                            | 33.7                        | 3616                 |
| P2YKXS05095    | 5            | 95   | RM             | 1.1                                | 2.4                            | 38.6                        | 4933                 |
| P2YKXS05120    | 5            | 120  | RM             | 1.2                                | 2.5                            | 42.6                        | 6153                 |
| P2YKXS05150    | 5            | 150  | RM             | 1.4                                | 2.7                            | 47.7                        | 7587                 |
| P2YKXS05185    | 5            | 185  | RM             | 1.6                                | 2.9                            | 52.8                        | 9454                 |
| P2YKXS05240    | 5            | 240  | RM             | 1.7                                | 3.1                            | 58.7                        | 12242                |
| P2YKXS100015   | 10           | 1.5  | RE             | 0.7                                | 1.8                            | 15.6                        | 357                  |
| P2YKXS100025   | 10           | 2.5  | RE             | 0.7                                | 1.8                            | 17.2                        | 475                  |
| P2YKXS100040   | 10           | 4  | RE             | 0.7                                | 1.8                            | 19                          | 646                  |
| P2YKXS120015   | 12           | 1.5  | RE             | 0.7                                | 1.8                            | 16.1                        | 394                  |
| P2YKXS120025   | 12           | 2.5  | RE             | 0.7                                | 1.8                            | 17.6                        | 528                  |
| P2YKXS140015   | 14           | 1.5  | RE             | 0.7                                | 1.8                            | 16.8                        | 436                  |
| P2YKXS140025   | 14           | 2.5  | RE             | 0.7                                | 1.8                            | 18.5                        | 592                  |
| P2YKXS160040   | 16           | 4  | RM             | 0.7                                | 1.8                            | 23                          | 971                  |
| P2YKXS190015   | 19           | 1.5  | RE             | 0.7                                | 1.8                            | 18.4                        | 543                  |
| P2YKXS190025   | 19           | 2.5  | RE             | 0.7                                | 1.8                            | 20.3                        | 746                  |
| P2YKXS240015   | 24           | 1.5  | RE             | 0.7                                | 1.8                            | 21.2                        | 675                  |
| P2YKXS240025   | 24           | 2.5  | RE             | 0.7                                | 1.8                            | 23.4                        | 931                  |
| P2YKXS300015   | 30           | 1.5  | RE             | 0.7                                | 1.8                            | 22.3                        | 788                  |
| P2YKXS300025   | 30           | 2.5  | RM             | 0.7                                | 1.8                            | 26.3                        | 1164                 |
| P2YKXS400015   | 40           | 1.5  | RE             | 0.7                                | 1.8                            | 24.6                        | 995                  |
| P2YKXS400025   | 40           | 2.5  | RE             | 0.7                                | 1.9                            | 27.5                        | 1416                 |



## CONDUCTORS

### Class 1 Solid Conductors for Single-Core and Multi-Core Cables

| NOMINAL CROSS SECTIONAL AREA<br>mm <sup>2</sup> | MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C<br>ohms/km |
|---|--|
|   | Circular, Annealed Copper Conductors<br>Plain      |
| 0.5   | 36   |
| 0.75  | 24.5   |
| 1   | 18.1   |
| 1.5   | 12.1   |
| 2.5   | 7.41   |
| 4   | 4.61   |
| 6   | 3.08   |

### Class 2 Stranded Conductors for Single-Core and Multi-Core Cables

| NOMINAL CROSS SECTIONAL AREA<br>mm <sup>2</sup> | MINIMUM NO. OF WIRES IN THE CONDUCTOR |                    | MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C<br>ohms/km |
|---|---------------------------------------|--------------------|--|
|   | Circular                              | Circular Compacted | Annealed Copper Conductors                         |
|   | Cu                                    | Cu                 | Plain Wires  |
| 4   | 7                                     | 6                  | 4.51   |
| 6   | 7                                     | 6                  | 3.08   |
| 10  | 7                                     | 6                  | 1.83   |
| 16  | 7                                     | 6                  | 1.15   |
| 25  | 7                                     | 6                  | 0.727  |
| 35  | 7                                     | 6                  | 0.524  |
| 50  | 19                                    | 6                  | 0.387  |
| 70  | 19                                    | 12                 | 0.268  |
| 95  | 19                                    | 15                 | 0.193  |
| 120   | 37                                    | 18                 | 0.153  |
| 150   | 37                                    | 18                 | 0.124  |
| 185   | 37                                    | 30                 | 0.0991   |
| 240   | 37                                    | 34                 | 0.0754   |
| 300   | 61                                    | 34                 | 0.0601   |
| 400   | 61                                    | 53                 | 0.0470   |
| 500   | 61                                    | 53                 | 0.0366   |

## ELECTRICAL CHARACTERISTICS

### Current Carrying Capacity at 30°C

| NOMINAL CROSS SECTIONAL AREA<br>mm <sup>2</sup> | SINGLE CORE |         |        |         | 2 - 40 CORE<br>Amps |        |
|---|-------------|---------|--------|---------|---------------------|--------|
|   | In Ground   |         | In Air |         | In Ground           | In Air |
|   | Flat        | Trefoil | Flat   | Trefoil |                     |        |
| 1.5   | -           | -       | -      | -       | 31                  | 24     |
| 2.5   | -           | -       | -      | -       | 40                  | 32     |
| 4   | 82          | 54      | 57     | 44      | 52                  | 42     |
| 6   | 102         | 67      | 72     | 56      | 64                  | 53     |
| 10  | 136         | 89      | 99     | 77      | 86                  | 74     |
| 16  | 176         | 115     | 131    | 102     | 112                 | 98     |
| 25  | 229         | 148     | 177    | 138     | 145                 | 133    |
| 35  | 275         | 177     | 217    | 170     | 174                 | 162    |
| 50  | 326         | 209     | 265    | 207     | 206                 | 197    |
| 70  | 400         | 256     | 336    | 263     | 254                 | 250    |
| 95  | 480         | 307     | 415    | 325     | 305                 | 308    |
| 120   | 548         | 349     | 485    | 380     | 348                 | 359    |
| 150   | 616         | 393     | 557    | 437     | 392                 | 412    |
| 185   | 698         | 445     | 646    | 507     | 444                 | 475    |
| 240   | 815         | 517     | 774    | 604     | 517                 | 564    |
| 300   | 927         | 663     | 901    | 697     | 585                 | 649    |
| 400   | 1064        | 749     | 1060   | 811     | -                   | -      |
| 500   | 1227        | 843     | 1252   | 940     | -                   | -      |

## DE-RATING FACTORS

### For Ground Temperatures other than 20°C

| AIR TEMPERATURE  | 10°C | 15°C | 20°C | 25°C | 30°C | 35°C | 40°C | 45°C | 50°C |
|------------------|------|------|------|------|------|------|------|------|------|
| DE-RATING FACTOR | 1.07 | 1.04 | 1.00 | 0.96 | 0.93 | 0.89 | 0.85 | 0.80 | 0.76 |

### For Air Temperatures other than 30°C

| AIR TEMPERATURE  | 20°C | 25°C | 30°C | 35°C | 40°C | 45°C | 50°C | 55°C | 60°C |
|------------------|------|------|------|------|------|------|------|------|------|
| DE-RATING FACTOR | 1.08 | 1.04 | 1.00 | 0.96 | 0.91 | 0.87 | 0.82 | 0.76 | 0.71 |

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.