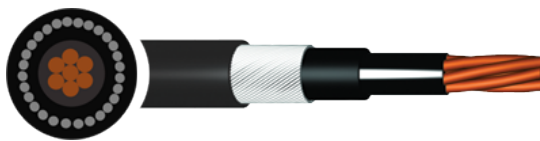


## 6941X Single Core Cathodic Protection Cable BS5467 XLPE,SWA,PVC - 6mm<sup>2</sup> to 185mm<sup>2</sup>



### Description

6941X is a single core armoured cathodic protection PVC cable. It is used in Cathodic Systems (for protection from corrosion). The Cathodic range of cables are used for protecting against electrolytic and galvanic corrosion of objects like underground tanks and pipelines and other submerged or buried metal structures.

### Key Features



**Voltage Rating**  
600/1000 Volts



**Minimum Bending Radius**  
8 x Overall Diameter



**Temperature Limits**  
Fixed: -25°C to +90°C

### Standards

- BS EN/IEC 60228
- BS EN/IEC 60332-1-2
- BS EN/IEC 60502-1
- Generally to BS5467

### Construction

- **Conductor:** Class 2 stranded copper conductor
- **Insulation:** Cross Linked polyethylene (XLPE)
- **Armour:** Steel Wire Armour (SWA)
- **Outer Sheath:** Polyvinyl Chloride (PVC)
- **Sheath Colour:** Black

### QA Lab

#### Cleveland Cable Test & Training Lab

Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.



### CPR

Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.



### Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.



### ecovadis

Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

### ecovadis

6941X Single Core Cathodic Protection Cable BS5467 XLPE,SWA,PVC - 6mm² to 185mm² - Dimensions

| Reference | Conductor Size (mm2) | No Of Cores | Stranding(mm) | Overall Diameter(mm) | Weight(Kg/Km) | Gland Size |
|-----------|----------------------|-------------|---------------|----------------------|---------------|------------|
| 6941X6    | 6                    | 1           | 7/1.04        | 11.5                 | 285           | 20/16      |
| 6941X10   | 10                   | 1           | 7/1.35        | 12.5                 | 355           | 20/16      |
| 6941X16   | 16                   | 1           | 7/1.70        | 13.5                 | 435           | 20S        |
| 6941X25   | 25                   | 1           | 7/2.14        | 15                   | 585           | 20S        |
| 6941X35   | 35                   | 1           | 7/2.52        | 16                   | 685           | 20         |
| 6941X50   | 50                   | 1           | 19/1.18       | 17.5                 | 835           | 20         |
| 6941X70   | 70                   | 1           | 19/2.14       | 19.5                 | 1080          | 20         |
| 6941X95   | 95                   | 1           | 19/2.52       | 21.6                 | 1375          | 25         |
| 6941X120  | 120                  | 1           | 37/2.03       | 23.4                 | 1685          | 25         |
| 6941X150  | 150                  | 1           | 37/2.25       | 26.4                 | 2120          | 25         |
| 6941X185  | 185                  | 1           | 37/2.52       | 28.9                 | 2505          | 32         |

CURRENT-CARRYING CAPACITY (amperes)

Ambient temperature: 30°C  
Conductor operating temperature:90°C

| Conductor cross sectional area | Reference Method A (enclosed in conduit in thermally insulating wall etc.) |                               | Reference Method B (enclosed in conduit on a wall or in trunking etc.) |                               | Reference Method C (clipped direct)              |  | Reference Method F (in free air or on a perforated cable tray etc horizontal or vertical etc) Touching |                               |                                  | Reference Method G (in free air) Spaced by one cable diameter   |          |
|--------------------------------|--|-------------------------------|--|-------------------------------|--|--|--|-------------------------------|----------------------------------|---|----------|
|                                | 2 cables single phase AC or DC   | 3 or 4 cables, three-phase AC | 2 cables single phase AC or DC   | 3 or 4 cables, three phase AC | 2 cables single phase AC or DC flat and touching | 3 or 4 cables, three phase AC flat and touching or trefoil | 2 cables single phase AC or DC flat  | 3 cables, three phase AC flat | 3 cables, three phase AC trefoil | 2 cables, single-phase AC or DC or 3 cables three-phase AC flat |          |
|                                |  |                               |  |                               |  |  |  |                               |                                  | Horizontal  | Vertical |
| mm <sup>2</sup>                | A  | A                             | A  | A                             | A  | A  | A  | A                             | A                                | A   | A        |
| 1                              | 14   | 13                            | 17   | 15                            | 19   | 17.5   | -  | -                             | -                                | -   | -        |
| 1.5                            | 19   | 17                            | 23   | 20                            | 25   | 23   | -  | -                             | -                                | -   | -        |
| 4                              | 35   | 31                            | 42   | 37                            | 46   | 41   | -  | -                             | -                                | -   | -        |
| 6                              | 45   | 40                            | 54   | 48                            | 59   | 54   | -  | -                             | -                                | -   | -        |
| 10                             | 61   | 54                            | 75   | 66                            | 81   | 74   | -  | -                             | -                                | -   | -        |
| 16                             | 81   | 73                            | 100  | 88                            | 109  | 99   | -  | -                             | -                                | -   | -        |
| 25                             | 106  | 95                            | 133  | 117                           | 143  | 130  | 161  | 141                           | 135                              | 182   | 161      |
| 35                             | 131  | 117                           | 164  | 144                           | 176  | 161  | 200  | 176                           | 169                              | 226   | 201      |
| 50                             | 158  | 141                           | 198  | 175                           | 228  | 209  | 242  | 216                           | 207                              | 275   | 246      |
| 70                             | 200  | 179                           | 253  | 222                           | 293  | 268  | 310  | 279                           | 268                              | 353   | 318      |
| 95                             | 241  | 216                           | 306  | 269                           | 355  | 326  | 377  | 342                           | 328                              | 430   | 389      |
| 120                            | 278  | 249                           | 354  | 312                           | 413  | 379  | 437  | 400                           | 383                              | 500   | 454      |
| 150                            | 318  | 285                           | 393  | 342                           | 476  | 436  | 504  | 464                           | 444                              | 577   | 527      |
| 185                            | 362  | 324                           | 449  | 384                           | 545  | 500  | 575  | 533                           | 510                              | 661   | 605      |
| 240                            | 424  | 380                           | 528  | 450                           | 644  | 590  | 679  | 634                           | 607                              | 781   | 719      |
| 300                            | 486  | 435                           | 603  | 514                           | 743  | 681  | 783  | 736                           | 703                              | 902   | 833      |
| 400                            | -  | -                             | 683  | 584                           | 868  | 793  | 940  | 868                           | 823                              | 1085  | 1008     |
| 500                            | -  | -                             | 783  | 666                           | 990  | 904  | 1083   | 998                           | 946                              | 1253  | 1169     |
| 630                            | -  | -                             | 900  | 764                           | 1130   | 1033   | 1254   | 1151                          | 1088                             | 1454  | 1362     |
| 800                            | -  | -                             | -  | -                             | 1288   | 1179   | 1358   | 1275                          | 1214                             | 1581  | 1485     |
| 1000                           | -  | -                             | -  | -                             | 1443   | 1323   | 1520   | 1436                          | 1349                             | 1775  | 1671     |

Where it is intended to connect the cables in this table to equipment or accessories designed to operate at a temperature lower than the maximum operating temperature of the cable, the cables should be rated at the maximum operating temperature of the equipment or accessory (see Regulation 512.1.5). Where it is intended to group a cable in this table with other cables, the cable should be rated at the lowest of the maximum operating temperatures of any of the cables in the group (see Regulation 12.1.5). For cables having flexible conductors see section 2.4 of this appendix for adjustment factors for current-carrying capacity and voltage drop.



TABLE 4E1B

| VOLTAGE DROP (per ampere per metre) |              |  |   |       |          |                |       |          |  |  |                               |       |                       |          |       |                     |          |       |       |       |       |       | Conductor operating temperature:90°C |  |  |  |  |  |
|-------------------------------------|--------------|--|---|-------|----------|----------------|-------|----------|--|--|-------------------------------|-------|-----------------------|----------|-------|---------------------|----------|-------|-------|-------|-------|-------|--------------------------------------|--|--|--|--|--|
| Conductor cross sectional area      | 2 cables, DC | 2 cables, single-phase AC                                    |   |       |          |                |       |          |  |  | 3 or 4 cables, three-phase AC |       |                       |          |       |                     |          |       |       |       |       |       |                                      |  |  |  |  |  |
|                                     |              | Reference Methods A & B<br>(enclosed in conduit or trunking) | References Methods C, F & G<br>(clipped direct, on tray or in free air) |       |          |                |       |          | Reference Methods A & B<br>(enclosed in conduit or trunking) | Reference Methods C, F & G<br>(clipped direct, on tray or in free air) |                               |       |                       |          |       |                     |          |       |       |       |       |       |                                      |  |  |  |  |  |
|                                     |              |  | Cables touching   |       |          | Cables spaced* |       |          |  | Cables touching, Trefoil   |                               |       | Cables touching, Flat |          |       | Cables spaced* Flat |          |       |       |       |       |       |                                      |  |  |  |  |  |
| (mm2)                               | (mV/ A/m)    | (mV/A/m)   |   |       | (mV/A/m) |                |       | (mV/A/m) |  |  | (mV/A/m)                      |       |                       | (mV/A/m) |       |                     | (mV/A/m) |       |       |       |       |       |                                      |  |  |  |  |  |
| 1                                   | 46           | 46   |   |       | 46       |                |       | 46       |  |  | 40                            |       |                       | 40       |       |                     | 40       |       |       |       |       |       |                                      |  |  |  |  |  |
| 1.5                                 | 31           | 31   |   |       | 31       |                |       | 31       |  |  | 27                            |       |                       | 27       |       |                     | 27       |       |       |       |       |       |                                      |  |  |  |  |  |
| 2.5                                 | 19           | 19   |   |       | 19       |                |       | 19       |  |  | 16                            |       |                       | 16       |       |                     | 16       |       |       |       |       |       |                                      |  |  |  |  |  |
| 4                                   | 12           | 12   |   |       | 12       |                |       | 12       |  |  | 10                            |       |                       | 10       |       |                     | 10       |       |       |       |       |       |                                      |  |  |  |  |  |
| 6                                   | 7.9          | 7.9  |   |       | 7.9      |                |       | 7.9      |  |  | 6.8                           |       |                       | 6.8      |       |                     | 6.8      |       |       |       |       |       |                                      |  |  |  |  |  |
| 10                                  | 4.7          | 4.7  |   |       | 4.7      |                |       | 4.7      |  |  | 4.0                           |       |                       | 4.0      |       |                     | 4.0      |       |       |       |       |       |                                      |  |  |  |  |  |
| 16                                  | 2.9          | 2.9  |   |       | 2.9      |                |       | 2.9      |  |  | 2.5                           |       |                       | 2.5      |       |                     | 2.5      |       |       |       |       |       |                                      |  |  |  |  |  |
|                                     |              | R  | X   | Z     | R        | X              | Z     | R        | X  | Z  | R                             | X     | Z                     | R        | X     | Z                   | R        | X     | Z     | R     | X     | Z     |                                      |  |  |  |  |  |
| 25                                  | 1.850        | 1.850  | 0.310   | 1.900 | 1.850    | 0.190          | 1.850 | 1.850    | 0.280  | 1.850  | 1.600                         | 0.270 | 1.650                 | 1.600    | 0.165 | 1.600               | 1.600    | 0.190 | 1.600 | 1.600 | 0.270 | 1.650 |                                      |  |  |  |  |  |
| 35                                  | 1.350        | 1.350  | 0.290   | 1.350 | 1.350    | 0.180          | 1.350 | 1.350    | 0.270  | 1.350  | 1.150                         | 0.250 | 1.150                 | 1.150    | 0.155 | 1.150               | 1.150    | 0.180 | 1.150 | 1.150 | 0.260 | 1.200 |                                      |  |  |  |  |  |
| 50                                  | 0.990        | 1.000  | 0.290   | 1.050 | 0.990    | 0.180          | 1.000 | 0.990    | 0.270  | 1.000  | 0.870                         | 0.250 | 0.900                 | 0.860    | 0.155 | 0.870               | 0.860    | 0.180 | 0.870 | 0.860 | 0.260 | 0.890 |                                      |  |  |  |  |  |
| 70                                  | 0.680        | 0.700  | 0.280   | 0.750 | 0.680    | 0.175          | 0.710 | 0.680    | 0.260  | 0.730  | 0.600                         | 0.240 | 0.650                 | 0.590    | 0.150 | 0.610               | 0.590    | 0.175 | 0.620 | 0.590 | 0.250 | 0.650 |                                      |  |  |  |  |  |
| 95                                  | 0.490        | 0.510  | 0.270   | 0.580 | 0.490    | 0.170          | 0.520 | 0.490    | 0.260  | 0.560  | 0.440                         | 0.230 | 0.500                 | 0.430    | 0.145 | 0.450               | 0.430    | 0.170 | 0.460 | 0.430 | 0.250 | 0.490 |                                      |  |  |  |  |  |
| 120                                 | 0.390        | 0.410  | 0.260   | 0.480 | 0.390    | 0.165          | 0.430 | 0.390    | 0.250  | 0.470  | 0.350                         | 0.230 | 0.420                 | 0.340    | 0.140 | 0.370               | 0.340    | 0.165 | 0.380 | 0.340 | 0.240 | 0.420 |                                      |  |  |  |  |  |
| 150                                 | 0.320        | 0.330  | 0.260   | 0.430 | 0.320    | 0.165          | 0.360 | 0.320    | 0.250  | 0.410  | 0.290                         | 0.230 | 0.370                 | 0.280    | 0.140 | 0.310               | 0.280    | 0.165 | 0.320 | 0.280 | 0.240 | 0.370 |                                      |  |  |  |  |  |
| 185                                 | 0.250        | 0.270  | 0.260   | 0.370 | 0.260    | 0.165          | 0.300 | 0.250    | 0.250  | 0.360  | 0.230                         | 0.230 | 0.320                 | 0.220    | 0.140 | 0.260               | 0.220    | 0.165 | 0.280 | 0.220 | 0.240 | 0.330 |                                      |  |  |  |  |  |
| 240                                 | 0.190        | 0.210  | 0.260   | 0.330 | 0.200    | 0.160          | 0.250 | 0.195    | 0.250  | 0.310  | 0.185                         | 0.220 | 0.290                 | 0.170    | 0.140 | 0.220               | 0.170    | 0.165 | 0.240 | 0.170 | 0.240 | 0.290 |                                      |  |  |  |  |  |
| 300                                 | 0.155        | 0.175  | 0.250   | 0.310 | 0.160    | 0.160          | 0.220 | 0.155    | 0.250  | 0.290  | 0.150                         | 0.220 | 0.270                 | 0.140    | 0.140 | 0.195               | 0.135    | 0.160 | 0.210 | 0.135 | 0.240 | 0.270 |                                      |  |  |  |  |  |
| 400                                 | 0.120        | 0.140  | 0.250   | 0.290 | 0.130    | 0.155          | 0.200 | 0.125    | 0.240  | 0.270  | 0.125                         | 0.220 | 0.250                 | 0.110    | 0.135 | 0.175               | 0.110    | 0.160 | 0.195 | 0.110 | 0.240 | 0.260 |                                      |  |  |  |  |  |
| 500                                 | 0.093        | 0.120  | 0.250   | 0.280 | 0.105    | 0.155          | 0.185 | 0.098    | 0.240  | 0.260  | 0.100                         | 0.220 | 0.240                 | 0.090    | 0.135 | 0.160               | 0.088    | 0.160 | 0.180 | 0.085 | 0.240 | 0.250 |                                      |  |  |  |  |  |
| 630                                 | 0.072        | 0.100  | 0.250   | 0.270 | 0.086    | 0.155          | 0.175 | 0.078    | 0.240  | 0.250  | 0.088                         | 0.210 | 0.230                 | 0.074    | 0.135 | 0.150               | 0.071    | 0.160 | 0.170 | 0.068 | 0.230 | 0.240 |                                      |  |  |  |  |  |
| 800                                 | 0.056        | -  | -   | -     | 0.072    | 0.150          | 0.170 | 0.064    | 0.240  | 0.250  | -                             | -     | -                     | 0.062    | 0.130 | 0.145               | 0.059    | 0.155 | 0.165 | 0.055 | 0.230 | 0.240 |                                      |  |  |  |  |  |
| 1000                                | 0.045        | -  | -   | -     | 0.063    | 0.150          | 0.165 | 0.054    | 0.240  | 0.240  | -                             | -     | -                     | 0.055    | 0.130 | 0.140               | 0.050    | 0.155 | 0.165 | 0.047 | 0.230 | 0.240 |                                      |  |  |  |  |  |

NOTE: \* Spacings larger than one cable diameter will result in a larger voltage drop.

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