



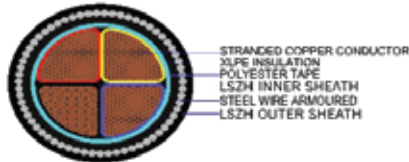
## COPPER CONDUCTOR, XLPE INSULATED, ARMoured, LSZH SHEATHED, 600/1000V, **LOW VOLTAGE POWER CABLE, BS 6724**

|                               |   |
|-------------------------------|---|
| <b>Application</b>            | : These cables are used for electricity supply in low voltage installation system. They are well adapted to underground, outdoors, use in industrial applications where mechanical protections are needed. For installation where fire, smoke emission and toxic fumes create a potential threat to life and equipment. |
| <b>Standards</b>              | : BS 6724   |
| <b>Construction Conductor</b> | : Copper conductor, round stranded or shaped class 2 to BS EN 60228   |
| <b>Insulation</b>             | : Cross linked polyethylene (XLPE) to BS 7655-1.3   |
| <b>Insulation Colour</b>      | : 2C: Red & Black<br>3C: Red, Yellow & Blue<br>4C: Red, Yellow, Blue & Black<br>5C: Red, Yellow, Blue, Black & Green / Yellow<br>(Other core colour also available on request)  |
| <b>Filler (Optional)</b>      | : Non Hygroscopic filler  |
| <b>Binder Tape (Optional)</b> | : Polyester (Mylar)Tape   |
| <b>Bedding</b>                | : Extruded Low Smoke Zero Halogen (LSZH) thermoplastic in Black colour.   |
| <b>Armour</b>                 | : Single Core: A single layer of Aluminium Wire Armoured (AWA)<br>Multi core: A single layer of Galvanized Steel Wire Armour (GSWA)   |
| <b>Outer Sheath</b>           | : Extruded Low Smoke Zero Halogen (LSZH) thermoplastic as per BS 7655-6.1 in Black colour.<br>(Other sheath colour also available on request)   |

### Technical Characteristic

|  |                                  |
|--|----------------------------------|
| <b>Voltage Grade</b>                   | : 600/1000V                      |
| <b>Conductor Operating Temperature</b> | : -15°C to +90°C                 |
| <b>Flame Retardent</b>                 | : IEC 60332-1-2 & IEC 60332-3-24 |
| <b>Halogen Acid Gas Emission</b>       | : Max. 0.5% (IEC 60754-1)        |

## 4 CORE CABLES - 600/1000 V



### 4 Core Cables - 600/1000 V, CU Conductor, XLPE Insulation, Steel Wire Armoured, LSZH Sheathed

| PHYSICAL PROPERTIES   |                            |                              |                      |                                |                                |                    |
|-----------------------|----------------------------|------------------------------|----------------------|--------------------------------|--------------------------------|--------------------|
| Catalogue Number      | Nominal Cross Section Area | Nominal Insulation Thickness | Thickness of Bedding | Nominal Steel Wire Armour Dia. | Nominal Outer Sheath Thickness | Approx Overall Dia |
|                       | SQ.MM                      | MM                           | MM                   | MM                             | MM                             | MM                 |
| NLVC2XWH040015ST10BS  | 1.5*                       | 0.6                          | 0.8                  | 0.9                            | 1.3                            | 13                 |
| NLVC2XWH040025ST10BS  | 2.5*                       | 0.7                          | 0.8                  | 0.9                            | 1.4                            | 15                 |
| NLVC2XWH040040ST10BS  | 4*                         | 0.7                          | 0.8                  | 0.9                            | 1.4                            | 16                 |
| NLVC2XWH040060ST10BS  | 6*                         | 0.7                          | 0.8                  | 1.25                           | 1.5                            | 18                 |
| NLVC2XWH040100DST10BS | 10*                        | 0.7                          | 0.8                  | 1.25                           | 1.5                            | 20                 |
| NLVC2XWH040160DST10BS | 16*                        | 0.7                          | 0.8                  | 1.25                           | 1.6                            | 22                 |
| NLVC2XWH040250JST10BS | 25                         | 0.9                          | 1.0                  | 1.6                            | 1.7                            | 26                 |
| NLVC2XWH040350JST10BS | 35                         | 0.9                          | 1.0                  | 1.6                            | 1.8                            | 28                 |
| NLVC2XWH040500JST10BS | 50                         | 1.0                          | 1.0                  | 1.6                            | 1.9                            | 32                 |
| NLVC2XWH040700JST10BS | 70                         | 1.1                          | 1.2                  | 2.0                            | 2.1                            | 37                 |
| NLVC2XWH040950JST10BS | 95                         | 1.1                          | 1.2                  | 2.0                            | 2.2                            | 41                 |
| NLVC2XWH041200JST10BS | 120                        | 1.2                          | 1.4                  | 2.5                            | 2.3                            | 46                 |
| NLVC2XWH041500JST10BS | 150                        | 1.4                          | 1.4                  | 2.5                            | 2.4                            | 51                 |
| NLVC2XWH041850JST10BS | 185                        | 1.6                          | 1.4                  | 2.5                            | 2.6                            | 56                 |
| NLVC2XWH042400JST10BS | 240                        | 1.7                          | 1.6                  | 2.5                            | 2.7                            | 61                 |
| NLVC2XWH043000JST10BS | 300                        | 1.8                          | 1.6                  | 2.5                            | 2.9                            | 67                 |
| NLVC2XWH044000JST10BS | 400                        | 2.0                          | 1.8                  | 3.15                           | 3.2                            | 77                 |

**Notes:** \*1.5 Sq.mm to 16 Sq.mm Circular Conductor & Other shaped conductors.

The above data is indicative & may be changed without prior information.

Cables can be supplied in multiples of 1000/500/250 mtrs.or required by customer.

**4 Core Cables – 600/1000 V, CU Conductor, XLPE Insulation, Steel Wire Armoured, LSZH Sheathed**

**ELECTRICAL PROPERTIES**

| Nominal Cross Section Area | Current Rating                         |           |         | Approx Voltage Drop of 4 core cables (3 Phase) | Reactance at 50 Hz | Capacitance for Cable (Approx) | Maximum DC Resistance at 20°C | Short Circuit Rating for 1 Sec. |
|----------------------------|--|-----------|---------|--|--------------------|--------------------------------|-------------------------------|---------------------------------|
|                            | In Air                                 | In Ground | In Duct |  |                    |                                |                               |                                 |
|                            | Three cables, Trefoil three Phase a.c. |           |         |  |                    |                                | CU.                           | CU.                             |
| SQ.MM                      | Amps(A)                                |           |         | V/A/km   | Ohm/Km             | µF/Km                          | Ohm/Km                        | kA(rms)                         |
| 1.5                        | 24                                     | 23        | 21      | 26.73  | 0.102              | 0.09                           | 12.1                          | 0.21                            |
| 2.5                        | 32                                     | 30        | 28      | 16.37  | 0.100              | 0.10                           | 7.41                          | 0.36                            |
| 4.0                        | 42                                     | 39        | 36      | 9.73   | 0.098              | 0.11                           | 4.61                          | 0.57                            |
| 6.0                        | 54                                     | 49        | 44      | 6.52   | 0.090              | 0.13                           | 3.08                          | 0.86                            |
| 10                         | 75                                     | 65        | 58      | 3.89   | 0.084              | 0.16                           | 1.83                          | 1.43                            |
| 16                         | 100                                    | 84        | 75      | 2.46   | 0.080              | 0.14                           | 1.15                          | 2.29                            |
| 25                         | 135                                    | 107       | 96      | 1.58   | 0.08               | 0.20                           | 0.727                         | 3.58                            |
| 35                         | 169                                    | 129       | 115     | 1.15   | 0.08               | 0.23                           | 0.524                         | 5.00                            |
| 50                         | 207                                    | 153       | 135     | 0.86   | 0.078              | 0.24                           | 0.387                         | 7.15                            |
| 70                         | 268                                    | 188       | 167     | 0.61   | 0.077              | 0.26                           | 0.268                         | 10.01                           |
| 95                         | 328                                    | 226       | 197     | 0.45   | 0.074              | 0.29                           | 0.193                         | 13.59                           |
| 120                        | 393                                    | 257       | 223     | 0.37   | 0.072              | 0.29                           | 0.153                         | 17.16                           |
| 150                        | 444                                    | 287       | 251     | 0.31   | 0.072              | 0.29                           | 0.124                         | 21.45                           |
| 185                        | 510                                    | 324       | 281     | 0.25   | 0.072              | 0.29                           | 0.0991                        | 26.46                           |
| 240                        | 607                                    | 375       | 324     | 0.20   | 0.072              | 0.31                           | 0.0754                        | 34.32                           |
| 300                        | 703                                    | 419       | 365     | 0.17   | 0.071              | 0.33                           | 0.0601                        | 42.9                            |
| 400                        | 823                                    | 480       | 415     | 0.16   | 0.07               | 0.33                           | 0.0470                        | 57.2                            |