



## • Introduction

Mica and XLPE insulated LSZH fire resistant power cables are designed to maintain electrical circuit integrity under fire conditions. They combine the high-temperature resistance of mica with the durable properties of cross-linked polyethylene (XLPE) insulation and a Low Smoke Zero Halogen (LSZH) sheath to provide excellent fire performance and safety characteristics.

## • Application

**Emergency Power Systems:** Used in emergency lighting, fire alarms, and critical power supplies in buildings.  
**Public Buildings:** Ideal for use in hospitals, airports, shopping malls, and other public infrastructure where safety is paramount.  
**Industrial Facilities:** Suitable for power distribution in factories and plants where fire safety and reliability are crucial.

## • Performance

Rated voltage: 600/1000 V  
 Conductor operating temperature: 90°C  
 Ambient temperature: 30°C  
 Temperature range during operation (fixed state): -30°C to +90°C  
 Temperature range during installation (mobile state): -20°C to +50°C  
 Minimum bending radius:  
 8 x Overall Diameter (unarmoured cable)  
 10 x Overall Diameter (armoured cable)

## • Construction

**Conductor:** Plain annealed copper wire, stranded according to IEC 60228 class 2.  
**Insulation:** Mica glass tape covered by extruded cross-linked XLPE compound  
**Inner Sheath (optional):** Thermoplastic LSZH compound  
**Armouring (optional):** Aluminum wire armour  
**Outer Sheath:** Thermoplastic LSZH compound.

## • Specification

-IEC 60331: Specifies fire resistance performance, ensuring circuit integrity under fire conditions.  
 -BS 6387: Defines performance criteria for cables required to maintain circuit integrity under fire conditions.  
 -IEC 61034: Measures smoke density of cables burning under defined conditions.  
 -IEC 60754: Tests for halogen acid gas evolution

## • Eastful Cable Lab



We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.  
 CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

## • Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rheinland and CCS.



## • National Green Factory



Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China. We are committed to the development of high-end, intelligent and green manufacturing industry.

\*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

## ● Technical Parameters

| Single Core Cable          |                              |                   |                              |                      |                |                      |                |
|----------------------------|------------------------------|-------------------|------------------------------|----------------------|----------------|----------------------|----------------|
| Nominal Cross Section Area | No./ Nominal Dia. of Strands | Dia. of Conductor | Nominal Insulation Thickness | Unarmoured Cable     |                | Armoured Cable       |                |
|                            |                              |                   |                              | Approx. Overall Dia. | Approx. Weight | Approx. Overall Dia. | Approx. Weight |
| mm <sup>2</sup>            | No./mm                       | mm                | mm                           | mm                   | kg/km          | mm                   | kg/km          |
| 1.5                        | 7/0.53                       | 1.59              | 0.7                          | 6.5                  | 54             | -                    | -              |
| 2.5                        | 7/0.67                       | 2.01              | 0.7                          | 6.8                  | 67             | -                    | -              |
| 4                          | 7/0.85                       | 2.55              | 0.7                          | 7.5                  | 86             | -                    | -              |
| 6                          | 7/1.04                       | 3.12              | 0.7                          | 8.1                  | 110            | -                    | -              |
| 10                         | 7/1.35                       | 4.05              | 0.7                          | 9.2                  | 155            | -                    | -              |
| 16                         | 7/1.70                       | 5.1               | 0.7                          | 10.2                 | 220            | -                    | -              |
| 25                         | 7/2.14                       | 6.42              | 0.9                          | 11.9                 | 325            | -                    | -              |
| 35                         | 19/1.53                      | 7.65              | 0.9                          | 13.2                 | 425            | -                    | -              |
| 50                         | 19/1.78                      | 8.9               | 1                            | 14.6                 | 600            | 18.5                 | 780            |
| 70                         | 19/2.14                      | 10.7              | 1.1                          | 16.6                 | 820            | 20.5                 | 1010           |
| 95                         | 19/2.52                      | 12.6              | 1.1                          | 18.7                 | 1100           | 23                   | 1320           |
| 120                        | 37/2.03                      | 14.21             | 1.2                          | 20.5                 | 1350           | 24.5                 | 1610           |
| 150                        | 37/2.25                      | 15.75             | 1.4                          | 22.7                 | 1640           | 27                   | 2010           |
| 185                        | 37/2.52                      | 17.64             | 1.6                          | 25.5                 | 2040           | 29.5                 | 2440           |
| 240                        | 61/2.25                      | 20.25             | 1.7                          | 28.5                 | 2650           | 34.5                 | 3060           |
| 300                        | 61/2.52                      | 22.68             | 1.8                          | 31.5                 | 3260           | 36.9                 | 3690           |
| 400                        | 65/2.85                      | 25.65             | 2                            | 35.4                 | 4130           | 41.5                 | 4780           |
| 500                        | 61/3.20                      | 28.8              | 2.2                          | 39                   | 5200           | 45.5                 | 5970           |
| 630                        | 127/2.52                     | 32.76             | 2.4                          | 43.5                 | 6600           | 50.5                 | 7530           |
| 800                        | 127/2.85                     | 37.05             | 2.6                          | 48.5                 | 8300           | 56.8                 | 9680           |

| Single Core Cable          |                              |                   |                              |                      |                |                      |                |
|----------------------------|------------------------------|-------------------|------------------------------|----------------------|----------------|----------------------|----------------|
| Nominal Cross Section Area | No./ Nominal Dia. of Strands | Dia. Of Conductor | Nominal Insulation Thickness | Unarmoured Cable     |                | Armoured Cable       |                |
|                            |                              |                   |                              | Nominal Overall Dia. | Approx. Weight | Nominal Overall Dia. | Approx. Weight |
| mm <sup>2</sup>            | No./mm                       | mm                | mm                           | mm                   | kg/km          | mm                   | kg/km          |
| 2 Cores                    |                              |                   |                              |                      |                |                      |                |
| 1.5                        | 7/0.53                       | 1.59              | 0.7                          | 12.2                 | 150            | 15.3                 | 390            |
| 2.5                        | 7/0.67                       | 2.01              | 0.7                          | 12.6                 | 180            | 16.5                 | 450            |
| 4                          | 7/0.85                       | 2.55              | 0.7                          | 14.7                 | 250            | 17.6                 | 525            |
| 6                          | 7/1.04                       | 3.12              | 0.7                          | 16.2                 | 290            | 18.8                 | 620            |
| 10                         | 7/1.35                       | 4.05              | 0.7                          | 17.1                 | 450            | 21                   | 800            |
| 16                         | 7/1.70                       | 5.1               | 0.7                          | 19.2                 | 550            | 23                   | 1100           |
| 25                         | 7/2.14                       | 6.42              | 0.9                          | 20                   | 680            | 27                   | 1480           |
| 35                         | 19/1.53                      | 7.65              | 0.9                          | 22                   | 940            | 30                   | 2000           |
| 50                         | 19/1.78                      | 8.9               | 1                            | 24                   | 1250           | 33                   | 2450           |
| 70                         | 19/2.14                      | 10.7              | 1.1                          | 27                   | 1700           | 37                   | 3200           |
| 95                         | 19/2.52                      | 12.6              | 1.1                          | 31                   | 2300           | 42                   | 4350           |
| 120                        | 37/2.03                      | 14.21             | 1.2                          | 36                   | 3150           | 48                   | 6500           |

| Single Core Cable             |                                 |                   |                                 |                      |                |                      |                |
|-------------------------------|---------------------------------|-------------------|---------------------------------|----------------------|----------------|----------------------|----------------|
| Nominal Cross<br>Section Area | No./ Nominal Dia.<br>of Strands | Dia. Of Conductor | Nominal Insulation<br>Thickness | Unarmoured Cable     |                | Armoured Cable       |                |
|                               |                                 |                   |                                 | Nominal Overall Dia. | Approx. Weight | Nominal Overall Dia. | Approx. Weight |
| mm <sup>2</sup>               | No./mm                          | mm                | mm                              | mm                   | kg/km          | mm                   | kg/km          |
| 3 Cores                       |                                 |                   |                                 |                      |                |                      |                |
| 1.5                           | 7/0.53                          | 1.59              | 0.7                             | 12.3                 | 170            | 16.5                 | 420            |
| 2.5                           | 7/0.67                          | 2.01              | 0.7                             | 13.8                 | 200            | 17                   | 500            |
| 4                             | 7/0.85                          | 2.55              | 0.7                             | 15.2                 | 300            | 18.5                 | 600            |
| 6                             | 7/1.04                          | 3.12              | 0.7                             | 16.8                 | 380            | 19.8                 | 785            |
| 10                            | 7/1.35                          | 4.05              | 0.7                             | 18                   | 550            | 22.6                 | 1030           |
| 16                            | 1/1.70                          | 5.1               | 0.7                             | 21                   | 760            | 25                   | 1370           |
| 25                            | 7/2.14                          | 6.42              | 0.9                             | 22                   | 960            | 29                   | 1900           |
| 35                            | 19/1.53                         | 7.65              | 0.9                             | 24                   | 1300           | 32                   | 2300           |
| 50                            | 19/1.78                         | 8.9               | 1                               | 28                   | 1700           | 35                   | 2900           |
| 70                            | 19/2.14                         | 10.7              | 1.1                             | 31                   | 2400           | 40                   | 4000           |
| 95                            | 19/2.52                         | 12.6              | 1.1                             | 36                   | 3250           | 45                   | 5400           |
| 120                           | 37/2.03                         | 14.21             | 1.2                             | 38                   | 4000           | 49                   | 6450           |
| 150                           | 37/2.25                         | 15.75             | 1.4                             | 42                   | 5000           | 55                   | 8200           |
| 185                           | 37/2.52                         | 17.64             | 1.6                             | 47                   | 6100           | 60                   | 9800           |
| 240                           | 61/2.25                         | 20.25             | 1.7                             | 52                   | 8000           | 68                   | 12300          |
| 300                           | 61/2.52                         | 22.68             | 1.8                             | 59                   | 9850           | 74                   | 14800          |
| 400                           | 61/2.85                         | 25.65             | 2                               | 63                   | 13000          | 83                   | 17600          |
| 4 Cores                       |                                 |                   |                                 |                      |                |                      |                |
| 1.5                           | 7/0.53                          | 1.59              | 0.7                             | 14.3                 | 210            | 16                   | 475            |
| 2.5                           | 7/0.67                          | 2.01              | 0.7                             | 15.2                 | 270            | 17.8                 | 570            |
| 4                             | 7/0.85                          | 2.55              | 0.7                             | 17.2                 | 380            | 19.8                 | 690            |
| 6                             | 7/1.04                          | 3.12              | 0.7                             | 19                   | 440            | 21                   | 940            |
| 10                            | 7/1.35                          | 4.05              | 0.7                             | 20.6                 | 670            | 23.3                 | 1200           |
| 16                            | 1/1.70                          | 5.1               | 0.7                             | 23.6                 | 820            | 26.5                 | 1400           |
| 25                            | 7/2.14                          | 6.42              | 0.9                             | 26                   | 1320           | 30.5                 | 2400           |
| 35                            | 19/1.53                         | 7.65              | 0.9                             | 29                   | 1730           | 34                   | 2800           |
| 50                            | 19/1.78                         | 8.9               | 1                               | 32                   | 2300           | 38                   | 3500           |
| 70                            | 19/2.14                         | 10.7              | 1.1                             | 38                   | 3180           | 44                   | 5300           |
| 95                            | 19/2.52                         | 12.6              | 1.1                             | 41.9                 | 4370           | 48.5                 | 6700           |
| 120                           | 37/2.03                         | 14.21             | 1.2                             | 44                   | 5400           | 54                   | 8500           |
| 150                           | 37/2.25                         | 15.75             | 1.4                             | 50.8                 | 6500           | 59                   | 10000          |
| 185                           | 37/2.52                         | 17.64             | 1.6                             | 55                   | 8200           | 64.5                 | 12200          |
| 240                           | 61/2.25                         | 20.25             | 1.7                             | 60.5                 | 10600          | 74                   | 15400          |
| 300                           | 61/2.52                         | 22.68             | 1.8                             | 68.5                 | 13200          | 82                   | 19500          |
| 400                           | 61/2.85                         | 25.65             | 2                               | 76                   | 17000          | 92                   | 25500          |