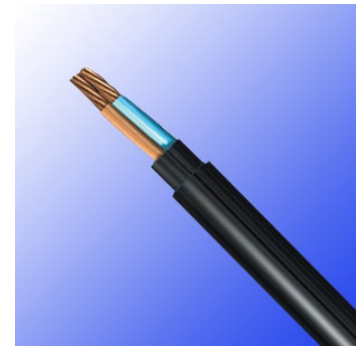




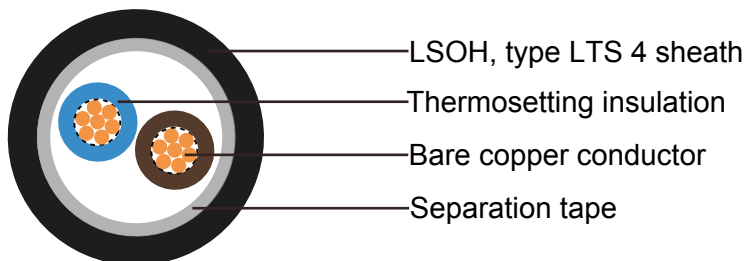
Thermosetting insulated, twin, 3-core, 4-core and 5-core circular sheathed cables

Application and Description

These cables are designed for fixed wiring purposes in domestic and industrial power/lighting applications. Can be used in trunking or conduit, or may be surface mounted when used for earthing. and generally in areas (such as public and government buildings) where smoke and toxic fumes may cause a threat to life and equipment. The cables produce no corrosive gasses when burnt which is particularly important where electronic equipment is installed.



Cable Construction



- Fine bare copper strands
- Strands to IEC 60228 CI-1 or 2
- Thermosetting core insulation type EI5 or GP 8
- The cores shall be twisted together. A centre filler may be used.
- The twisted core shall be covered by an extruded inner covering or separating tape
- LSOH sheath, type LTS 4

Insulation Colour

Twin: brown and blue

3-core: brown, black and grey

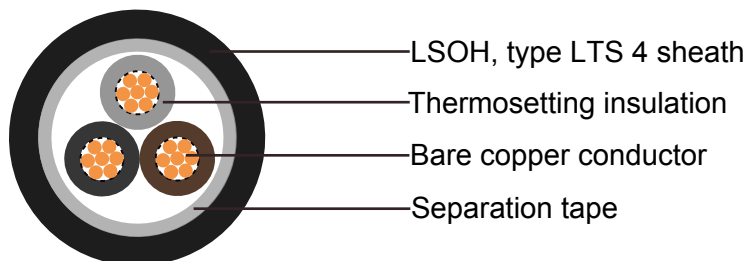
4-core: blue, brown, black and grey

5-core: green/yellow, blue, brown, black and grey



Technical Characteristics

- Working voltage: 450/750v
- Test voltage: 2500 volts
- Flexing bending radius: 15 x Ø
- Static bending radius: 10 x Ø
- Flexing temperature: -25° C to +90° C
- Short circuit temperature: +250° C
- Flame retardant: IEC 60332.1
- Insulation resistance: 10 MΩ x km
- Smoke density acc. to EN 50268 / IEC 61034
- Corrosiveness of combustion gases acc. to EN 50267-2-2, IEC 60754-2
- Flame test: flame-retardant acc. to EN 50265-2-1, IEC 60332.1



Cable Parameter

Two Cores

| AWG | No. of Cores x Nominal Cross Sectional Area | Nominal thickness of insulation | Nominal thickness of inner covering | Nominal thickness of sheath | Nominal overall diameter | Nominal Weight | Minimum insulation resistance at 90 °C |
|----------|---|---------------------------------|-------------------------------------|-----------------------------|--------------------------|----------------|--|
| | # x mm ² | mm | mm | mm | mm | kg/km | MΩ·km |
| 17 | 2 × 1.0 | 0.7 | 0.4 | 1.2 | 7.9-9.5 | 94 | 0.011 |
| 17(7/26) | 2 × 1.0 | 0.7 | 0.4 | 1.2 | 8.1-9.7 | 110 | 0.011 |
| 16 | 2 × 1.5 | 0.7 | 0.4 | 1.2 | 8.4-10.1 | 121 | 0.011 |
| 16(7/24) | 2 × 1.5 | 0.7 | 0.4 | 1.2 | 8.5-10.3 | 132 | 0.010 |
| 14 | 2 × 2.5 | 0.7 | 0.4 | 1.2 | 9.1-11.0 | 165 | 0.0092 |
| 14(7/22) | 2 × 2.5 | 0.7 | 0.4 | 1.2 | 9.3-11.3 | 178 | 0.0084 |
| 12 | 2 × 4.0 | 0.7 | 0.4 | 1.2 | 10.0-12.1 | 212 | 0.0077 |
| 12(7/20) | 2 × 4.0 | 0.7 | 0.4 | 1.2 | 10.3-12.4 | 232 | 0.0070 |
| 10 | 2 × 6.0 | 0.7 | 0.4 | 1.2 | 10.9-13.2 | 272 | 0.0065 |
| 10(7/18) | 2 × 6.0 | 0.7 | 0.4 | 1.2 | 11.3-13.7 | 302 | 0.0059 |
| 8 | 2 × 10 | 0.7 | 0.4 | 1.4 | 12.9-15.5 | 446 | 0.0053 |
| 8(7/16) | 2 × 10 | 0.7 | 0.6 | 1.4 | 13.8-16.7 | 490 | 0.0047 |
| 6(7/14) | 2 × 16 | 0.7 | 0.6 | 1.4 | 15.6-18.8 | 674 | 0.0039 |
| 4(7/12) | 2 × 25 | 0.9 | 0.8 | 1.4 | 19.2-23.2 | 1040 | 0.0039 |
| 2(7/10) | 2 × 35 | 0.9 | 0.8 | 1.6 | 21.5-26.0 | 1130 | 0.0034 |



Three Cores

| AWG | No. of Cores x Nominal Cross Sectional Area | Nominal thickness of insulation | Nominal thickness of inner covering | Nominal thickness of sheath | Nominal overall diameter | Nominal Weight | Minimum insulation resistance at 90 °C |
|----------|---|--|--|-----------------------------------|--------------------------------|-------------------|---|
| | # x mm ² | mm | mm | mm | mm | kg/km | MΩ·km |
| 17 | 3 × 1.0 | 0.7 | 0.4 | 1.2 | 8.3-10.0 | 110 | 0.011 |
| 17(7/26) | 3 × 1.0 | 0.7 | 0.4 | 1.2 | 8.8-10.2 | 128 | 0.011 |
| 16 | 3 × 1.5 | 0.7 | 0.4 | 1.2 | 8.8-10.6 | 143 | 0.011 |
| 16(7/24) | 3 × 1.5 | 0.7 | 0.4 | 1.2 | 9.0-10.9 | 156 | 0.010 |
| 14 | 3 × 2.5 | 0.7 | 0.4 | 1.2 | 9.6-11.6 | 198 | 0.0092 |
| 14(7/22) | 3 × 2.5 | 0.7 | 0.4 | 1.2 | 9.8-11.9 | 213 | 0.0084 |
| 12 | 3 × 4.0 | 0.7 | 0.4 | 1.2 | 10.5-12.7 | 260 | 0.0077 |
| 12(7/20) | 3 × 4.0 | 0.7 | 0.4 | 1.2 | 10.8-13.1 | 282 | 0.0070 |
| 10 | 3 × 6.0 | 0.7 | 0.4 | 1.2 | 11.8-14.0 | 351 | 0.0065 |
| 10(7/18) | 3 × 6.0 | 0.7 | 0.4 | 1.4 | 12.4-15.0 | 387 | 0.0059 |
| 8 | 3 × 10 | 0.7 | 0.6 | 1.4 | 14.0-16.9 | 557 | 0.0053 |
| 8(7/16) | 3 × 10 | 0.7 | 0.6 | 1.4 | 14.6-17.5 | 607 | 0.0047 |
| 6(7/14) | 3 × 16 | 0.7 | 0.6 | 1.4 | 16.5-19.9 | 850 | 0.0039 |
| 4(7/12) | 3 × 25 | 0.9 | 0.8 | 1.4 | 20.4-24.7 | 1315 | 0.0039 |
| 2(7/10) | 3 × 35 | 0.9 | 0.8 | 1.6 | 22.9-27.6 | 1562 | 0.0034 |

Four Cores

| AWG | No. of Cores x Nominal Cross Sectional Area | Nominal thickness of insulation | Nominal thickness of inner covering | Nominal thickness of sheath | Nominal overall diameter | Nominal Weight | Minimum insulation resistance at 90 °C |
|----------|---|--|--|-----------------------------------|--------------------------------|-------------------|---|
| | # x mm ² | mm | mm | mm | mm | kg/km | MΩ·km |
| 17 | 4 × 1.0 | 0.7 | 0.4 | 1.2 | 8.9-11.2 | 130 | 0.011 |
| 17(7/26) | 4 × 1.0 | 0.7 | 0.4 | 1.2 | 9.5-11.5 | 150 | 0.011 |
| 16 | 4 × 1.5 | 0.7 | 0.4 | 1.2 | 9.5-11.4 | 170 | 0.011 |
| 16(7/24) | 4 × 1.5 | 0.7 | 0.4 | 1.2 | 9.7-11.7 | 185 | 0.010 |
| 14 | 4 × 2.5 | 0.7 | 0.4 | 1.2 | 10.4-12.6 | 240 | 0.0092 |
| 14(7/22) | 4 × 2.5 | 0.7 | 0.4 | 1.2 | 10.6-12.8 | 256 | 0.0084 |
| 12 | 4 × 4.0 | 0.7 | 0.4 | 1.2 | 11.4-13.8 | 330 | 0.0077 |
| 12(7/20) | 4 × 4.0 | 0.7 | 0.4 | 1.2 | 11.6-14.0 | 344 | 0.0070 |
| 10 | 4 × 6.0 | 0.7 | 0.4 | 1.4 | 13.0-15.7 | 445 | 0.0065 |
| 10(7/18) | 4 × 6.0 | 0.7 | 0.6 | 1.4 | 13.8-16.7 | 490 | 0.0059 |



| AWG | No. of Cores x Nominal Cross Sectional Area | Nominal thickness of insulation | Nominal thickness of inner covering | Nominal thickness of sheath | Nominal overall diameter | Nominal Weight | Minimum insulation resistance at 90 °C |
|---------|---|--|--|-----------------------------------|--------------------------------|-------------------|---|
| | # x mm ² | mm | mm | mm | mm | kg/km | MΩ·km |
| 8 | 4 × 10 | 0.7 | 0.6 | 1.4 | 15.2-18.4 | 687 | 0.0053 |
| 8(7/16) | 4 × 10 | 0.7 | 0.6 | 1.4 | 15.9-19.2 | 747 | 0.0047 |
| 6(7/14) | 4 × 16 | 0.7 | 0.6 | 1.4 | 18.0-21.8 | 1055 | 0.0039 |
| 4(7/12) | 4 × 25 | 0.9 | 0.8 | 1.6 | 22.7-27.5 | 1670 | 0.0039 |
| 2(7/10) | 4 × 35 | 0.9 | 1.0 | 1.6 | 25.4-30.7 | 2044 | 0.0034 |

Five Cores

| AWG | No. of Cores x Nominal Cross Sectional Area | Nominal thickness of insulation | Nominal thickness of inner covering | Nominal thickness of sheath | Nominal overall diameter | Nominal Weight | Minimum insulation resistance at 90 °C |
|----------|---|--|--|-----------------------------------|--------------------------------|-------------------|---|
| | # x mm ² | mm | mm | mm | mm | kg/km | MΩ·km |
| 17 | 5 × 1.0 | 0.7 | 0.4 | 1.2 | 9.6-11.5 | 157 | 0.011 |
| 17(7/26) | 5 × 1.0 | 0.7 | 0.4 | 1.2 | 10.2-11.9 | 183 | 0.011 |
| 16 | 5 × 1.5 | 0.7 | 0.4 | 1.2 | 10.2-12.3 | 208 | 0.011 |
| 16(7/24) | 5 × 1.5 | 0.7 | 0.4 | 1.2 | 10.5-12.6 | 227 | 0.010 |
| 14 | 5 × 2.5 | 0.7 | 0.4 | 1.2 | 11.2-13.6 | 295 | 0.0092 |
| 14(7/22) | 5 × 2.5 | 0.7 | 0.4 | 1.2 | 11.5-13.9 | 317 | 0.0084 |
| 12 | 5 × 4.0 | 0.7 | 0.4 | 1.4 | 12.8-15.5 | 422 | 0.0077 |
| 12(7/20) | 5 × 4.0 | 0.7 | 0.6 | 1.4 | 13.6-16.4 | 460 | 0.0070 |
| 10 | 5 × 6.0 | 0.7 | 0.6 | 1.4 | 14.5-17.5 | 551 | 0.0065 |
| 10(7/18) | 5 × 6.0 | 0.7 | 0.6 | 1.4 | 15.0-18.1 | 610 | 0.0059 |
| 8 | 5 × 10 | 0.7 | 0.6 | 1.4 | 16.5-20.0 | 858 | 0.0053 |
| 8(7/16) | 5 × 10 | 0.7 | 0.6 | 1.4 | 17.3-20.9 | 937 | 0.0047 |
| 6(7/14) | 5 × 16 | 0.7 | 0.8 | 1.4 | 20.0-24.2 | 1328 | 0.0039 |
| 4(7/12) | 5 × 25 | 0.9 | 1.0 | 1.6 | 25.2-30.5 | 1860 | 0.0039 |
| 2(7/10) | 5 × 35 | 0.9 | 1.0 | 1.6 | 27.8-33.6 | 2500 | 0.0034 |