



BS 6724 Armoured Power Cables, 600/1000V

Application

These cables are used for power and control circuits, they can offer excellent protection through the use of a heavy galvanized steel wire armour. The GSWA makes them suitable for use inside and outside buildings or for direct burial in the ground. For installation where fire, smoke emission and toxic fumes create a potential threat to life and equipment.

Construction

| | |
|---------------------|--|
| Conductor | Solid Aluminum or Copper conductor, round stranded or shaped, Class 2 to BS 6460, IEC 60228. |
| Insulation | XLPE (Cross-Linked Polyethylene) Type GP 8 or ethylene propylene rubber (GP 6) |
| Colour Code | 1 Core : Brown 2 Cores: Brown or Blue 3 Cores: Brown, Black, Grey 4 Cores: Blue, Brown, Black, Grey 5 Cores: Green/Yellow, Blue, Brown, Black, Grey Above 5 Cores: White Cores with black numbers |
| Bedding | LSOH (Low Smoke Zero Halogen) |
| Armour | Single Core: AWA (Aluminum Wire Armour) Multi Core: SWA (Steel Wire Armour) |
| Outer Sheath | LSOH (Low Smoke Zero Halogen) |

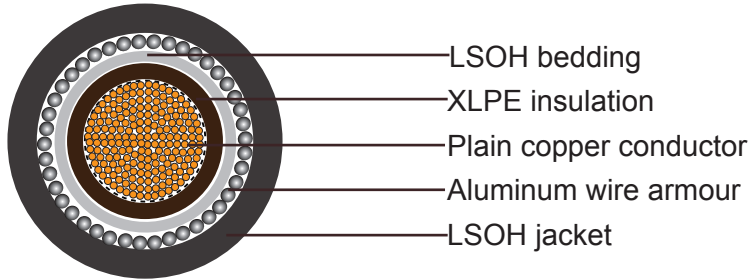
Technical Information

| | |
|---------------------------|---|
| Voltage rating | 600/1000V |
| Temperature rating | 0°C to +90°C |
| Bending radius | 1.5mm ² to 16mm ² : 6 x overall diameter 25mm ² and above: 8 x overall diameter |
| Flame retardant | IEC60332 part 1, BS4066 part 1 |
| Halogen free | IEC 60754, EN 50267 |
| Smoke density | IEC 61034, EN50268 |



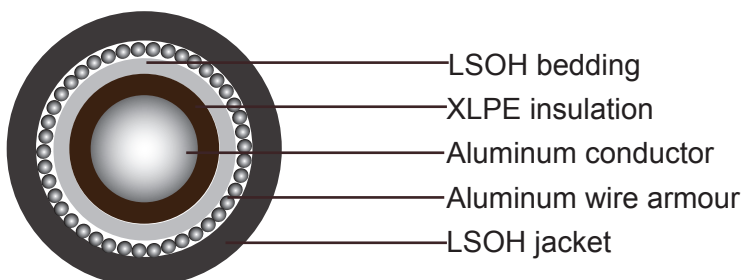
Cable Parameter

Single-core 600/1000 V cables with circular stranded copper conductor



| Nominal Cross-sectional Area | Strand Type | Nominal Insulation Thickness | Nominal Bedding Thickness | Nominal Alum Wire Armor dia. | Nominal Sheath Thickness | Approx. Overall Diameter | Approx Weight |
|------------------------------|-------------|------------------------------|---------------------------|------------------------------|--------------------------|--------------------------|---------------|
| mm ² | No./mm | mm | mm | mm | mm | mm | kg/km |
| 1x50 | 19/1.78 | 1.0 | 0.8 | 0.9 | 1.5 | 17.5 | 800 |
| 1x70 | 19/2.14 | 1.1 | 0.8 | 1.25 | 1.5 | 20.2 | 990 |
| 1x95 | 19/2.52 | 1.1 | 0.8 | 1.25 | 1.6 | 22.3 | 1280 |
| 1x120 | 37/2.03 | 1.2 | 0.8 | 1.25 | 1.6 | 24.2 | 1550 |
| 1x150 | 37/2.25 | 1.4 | 1 | 1.6 | 1.7 | 27.4 | 1900 |
| 1x185 | 37/2.52 | 1.6 | 1 | 1.6 | 1.8 | 30.0 | 2320 |
| 1x240 | 61/2.25 | 1.7 | 1 | 1.6 | 1.8 | 32.8 | 2930 |
| 1x300 | 61/2.52 | 1.8 | 1 | 1.6 | 1.9 | 35.6 | 3580 |
| 1x400 | 61/2.85 | 2.0 | 1.2 | 2.0 | 2.0 | 40.5 | 4600 |
| 1x500 | 61/3.20 | 2.2 | 1.2 | 2.0 | 2.1 | 44.2 | 5680 |
| 1x630 | 127/2.52 | 2.4 | 1.2 | 2.0 | 2.2 | 48.8 | 7160 |
| 1x800 | 127/2.85 | 2.6 | 1.4 | 2.5 | 2.4 | 55.4 | 9315 |
| 1x1000 | 127/3.20 | 2.8 | 1.4 | 2.5 | 2.5 | 60.6 | 11490 |

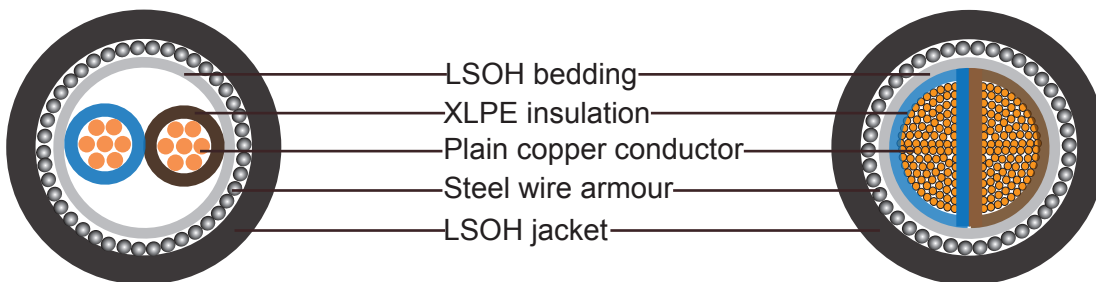
Single-core 600/1000 V cables with solid aluminum conductor





| Nominal Cross-sectional Area | Nominal Insulation Thickness | Nominal Bedding Thickness | Nominal Alum Wire Armor dia. | Nominal Sheath Thickness | Approx. Overall Diameter | Approx Weight |
|------------------------------|------------------------------|---------------------------|------------------------------|--------------------------|--------------------------|---------------|
| mm ² | mm | mm | mm | mm | mm | kg/km |
| 1x50 | 1.0 | 0.8 | 0.9 | 1.5 | 16.3 | 460 |
| 1x70 | 1.1 | 0.8 | 1.25 | 1.5 | 18.7 | 560 |
| 1x95 | 1.1 | 0.8 | 1.25 | 1.6 | 20.6 | 690 |
| 1x120 | 1.2 | 0.8 | 1.25 | 1.6 | 22.1 | 800 |
| 1x150 | 1.4 | 1 | 1.6 | 1.7 | 25.2 | 970 |
| 1x185 | 1.6 | 1 | 1.6 | 1.8 | 27.4 | 1150 |
| 1x240 | 1.7 | 1 | 1.6 | 1.8 | 29.9 | 1380 |
| 1x300 | 1.8 | 1 | 1.6 | 1.9 | 32.4 | 1640 |

Two-core 600/1000 V cables with stranded copper conductors



| Nominal Cross-sectional Area | Strand Type | Nominal Insulation Thickness | Nominal Bedding Thickness | Nominal Steel Wire Armor dia. | Nominal Sheath Thickness | Approx. Overall Diameter | Approx Weight |
|------------------------------|-------------|------------------------------|---------------------------|-------------------------------|--------------------------|--------------------------|---------------|
| mm ² | No./mm | mm | mm | mm | mm | mm | kg/km |
| 2x1.5 | 7/0.53 | 0.6 | 0.8 | 0.9 | 1.4 | 12.1 | 320 |
| 2x2.5 | 7/0.67 | 0.7 | 0.8 | 0.9 | 1.4 | 13.6 | 365 |
| 2x4 | 7/0.85 | 0.7 | 0.8 | 0.9 | 1.4 | 14.7 | 440 |
| 2x6 | 7/1.04 | 0.7 | 0.8 | 0.9 | 1.4 | 15.9 | 470 |
| 2x10 | 7/1.35 | 0.7 | 0.8 | 0.9 | 1.5 | 18.0 | 800 |
| 2x16 | 7/1.70 | 0.7 | 0.8 | 1.25 | 1.5 | 20.4 | 900 |
| 2x25 | 7/2.14 | 0.9 | 0.8 | 1.25 | 1.6 | 24.1 | 1240 |
| 2x25* | 7/2.14 | 0.9 | 0.8 | 1.25 | 1.6 | 20.4 | 1240 |
| 2x35 | 7/2.52 | 0.9 | 1 | 1.6 | 1.7 | 27.7 | 1710 |
| 2x35* | 7/2.52 | 0.9 | 1 | 1.6 | 1.7 | 23.3 | 1710 |

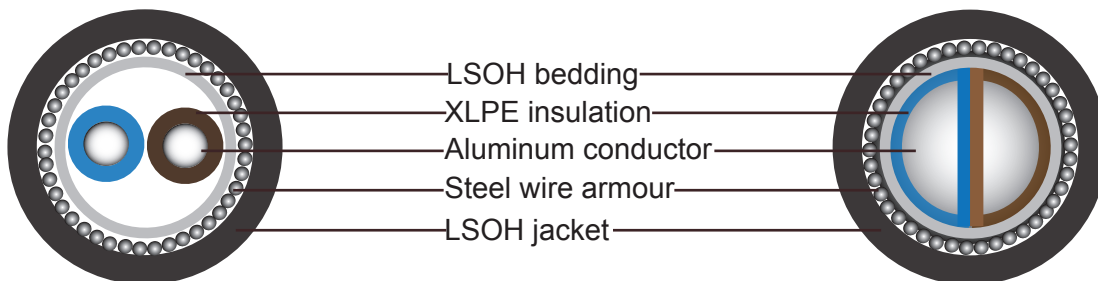




| Nominal Cross-sectional Area | Strand Type | Nominal Insulation Thickness | Nominal Bedding Thickness | Nominal Steel Wire Armor dia. | Nominal Sheath Thickness | Approx. Overall Diameter | Approx Weight |
|------------------------------|-------------|------------------------------|---------------------------|-------------------------------|--------------------------|--------------------------|---------------|
| mm ² | No./mm | mm | mm | mm | mm | mm | kg/km |
| 2x50* | 19/1.78 | 1.0 | 1 | 1.6 | 1.8 | 25.8 | 1800 |
| 2x70* | 19/2.14 | 1.1 | 1 | 1.6 | 1.9 | 29.0 | 2320 |
| 2x95* | 19/2.52 | 1.1 | 1.2 | 2.0 | 2.0 | 33.0 | 3150 |
| 2x120* | 37/2.03 | 1.2 | 1.2 | 2.0 | 2.1 | 36.1 | 3880 |
| 2x150* | 37/2.25 | 1.4 | 1.2 | 2.0 | 2.2 | 39.3 | 4820 |
| 2x185* | 37/2.52 | 1.6 | 1.4 | 2.5 | 2.4 | 44.7 | 5920 |
| 2x240* | 61/2.25 | 1.7 | 1.4 | 2.5 | 2.5 | 49.0 | 7300 |
| 2x300* | 61/2.52 | 1.8 | 1.6 | 2.5 | 2.6 | 53.5 | 8770 |
| 2x400* | 61/2.85 | 2 | 1.6 | 2.5 | 2.8 | 59.0 | 10905 |

* D-Shaped stranded conductor (class 2)

Two-core 600/1000 V cables with solid aluminum conductors



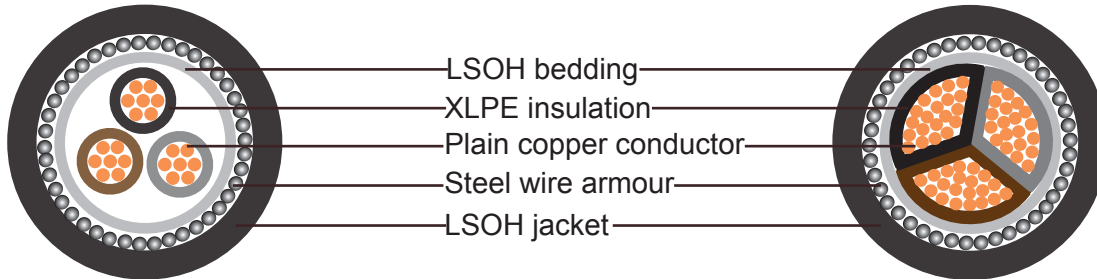
| Nominal Cross-sectional Area | Nominal Insulation Thickness | Nominal Bedding Thickness | Nominal Steel Wire Armor dia. | Nominal Sheath Thickness | Approx. Overall Diameter | Approx Weight |
|------------------------------|------------------------------|---------------------------|-------------------------------|--------------------------|--------------------------|---------------|
| mm ² | mm | mm | mm | mm | mm | kg/km |
| 2x16 | 0.7 | 0.8 | 1.25 | 1.5 | 19.1 | 650 |
| 2x25 | 0.9 | 0.8 | 1.25 | 1.5 | 22.4 | 915 |
| 2x25* | 0.9 | 0.8 | 1.25 | 1.6 | 18.7 | 1255 |
| 2x35 | 0.9 | 1 | 1.6 | 1.6 | 25.7 | 1255 |
| 2x35* | 0.9 | 1 | 1.6 | 1.7 | 21.4 | 1430 |
| 2x50* | 1.0 | 1 | 1.6 | 1.8 | 23.5 | 1430 |
| 2x70* | 1.1 | 1 | 1.6 | 1.9 | 26.3 | 1780 |
| 2x95* | 1.1 | 1.2 | 2.0 | 2 | 30 | 1950 |

*Solid shaped conductor (class 1)





Three-core 600/1000 V cables with stranded copper conductors



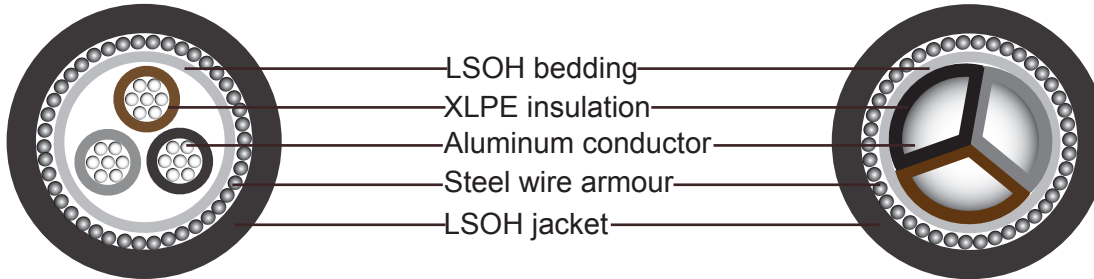
| Nominal Cross-sectional Area | Strand Type | Nominal Insulation Thickness | Nominal Bedding Thickness | Nominal Steel Wire Armor dia. | Nominal Sheath Thickness | Approx. Overall Diameter | Approx Weight |
|------------------------------|-------------|------------------------------|---------------------------|-------------------------------|--------------------------|--------------------------|---------------|
| mm ² | No./mm | mm | mm | mm | mm | mm | kg/km |
| 3x1.5 | 7/0.53 | 0.6 | 0.8 | 0.9 | 1.3 | 12.6 | 340 |
| 3x2.5 | 7/0.67 | 0.7 | 0.8 | 0.9 | 1.4 | 14.1 | 408 |
| 3x4 | 7/0.85 | 0.7 | 0.8 | 0.9 | 1.4 | 15.3 | 498 |
| 3x6 | 7/1.04 | 0.7 | 0.8 | 0.9 | 1.4 | 16.6 | 600 |
| 3x10 | 7/1.35 | 0.7 | 0.8 | 1.25 | 1.5 | 19.5 | 915 |
| 3x16 | 7/1.70 | 0.7 | 0.8 | 1.25 | 1.6 | 21.6 | 1130 |
| 3x25 | 7/2.14 | 0.9 | 1 | 1.6 | 1.7 | 26.7 | 1710 |
| 3x25* | 7/2.14 | 0.9 | 1 | 1.6 | 1.7 | 23.6 | 1710 |
| 3x35 | 7/2.52 | 0.9 | 1 | 1.6 | 1.8 | 29.4 | 2100 |
| 3x35* | 7/2.52 | 0.9 | 1 | 1.6 | 1.8 | 25.7 | 2100 |
| 3x50* | 19/1.78 | 1.0 | 1 | 1.6 | 1.8 | 28.5 | 2450 |
| 3x70* | 19/2.14 | 1.1 | 1 | 1.6 | 1.9 | 32.2 | 3120 |
| 3x95* | 19/2.52 | 1.1 | 1.2 | 2.0 | 2.1 | 37.0 | 4310 |
| 3x120* | 37/2.03 | 1.2 | 1.2 | 2.0 | 2.2 | 40.4 | 5160 |
| 3x150* | 37/2.25 | 1.4 | 1.4 | 2.5 | 2.3 | 45.5 | 7160 |
| 3x185* | 37/2.52 | 1.6 | 1.4 | 2.5 | 2.4 | 49.8 | 8600 |
| 3x240* | 61/2.25 | 1.7 | 1.4 | 2.5 | 2.6 | 55.1 | 10755 |
| 3x300* | 61/2.52 | 1.8 | 1.6 | 2.5 | 2.7 | 60.2 | 13080 |
| 3x400* | 61/2.85 | 2 | 1.6 | 2.5 | 2.9 | 66.6 | 15810 |

*Shaped stranded conductor (class 2)





Three-core 600/1000 V cables with solid aluminum conductors



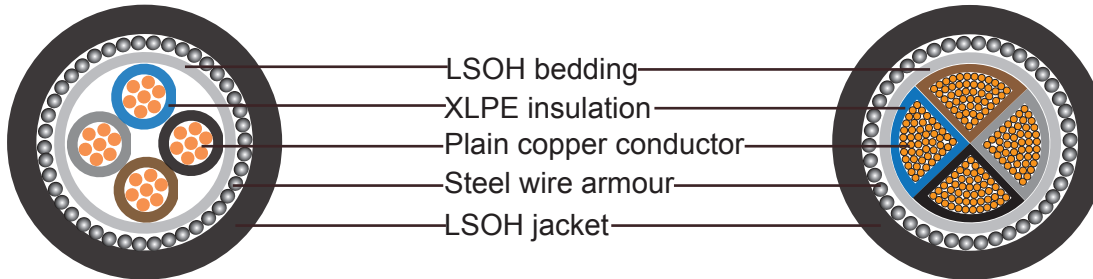
| Nominal Cross-sectional Area | Nominal Insulation Thickness | Nominal Bedding Thickness | Nominal Steel Wire Armor dia. | Nominal Sheath Thickness | Approx. Overall Diameter | Approx Weight |
|------------------------------|------------------------------|---------------------------|-------------------------------|--------------------------|--------------------------|---------------|
| mm ² | mm | mm | mm | mm | mm | kg/km |
| 3x16 | 0.7 | 0.8 | 1.25 | 1.6 | 20.3 | 760 |
| 3x25 | 0.9 | 1 | 1.6 | 1.7 | 22.5 | 1020 |
| 3x25* | 0.9 | 1 | 1.6 | 1.7 | 24.9 | 1020 |
| 3x35 | 0.9 | 1 | 1.6 | 1.8 | 24.4 | 1200 |
| 3x35* | 0.9 | 1 | 1.6 | 1.8 | 27.3 | 1200 |
| 3x50* | 1.0 | 1 | 1.6 | 1.8 | 26.8 | 1380 |
| 3x70* | 1.1 | 1 | 1.6 | 1.9 | 30.2 | 1750 |
| 3x95* | 1.1 | 1.2 | 2.0 | 2.1 | 34.8 | 2420 |
| 3x120* | 1.2 | 1.2 | 2.0 | 2.2 | 37.8 | 2820 |
| 3x150* | 1.4 | 1.4 | 2.5 | 2.3 | 42.7 | 3660 |
| 3x185* | 1.6 | 1.4 | 2.5 | 2.4 | 46.7 | 4350 |
| 3x240* | 1.7 | 1.4 | 2.5 | 2.6 | 51.5 | 5220 |
| 3x300* | 1.8 | 1.6 | 2.5 | 2.7 | 56.2 | 6200 |

*Solid shaped conductor (class 1)





Four-core 600/1000 V cables with stranded copper conductors



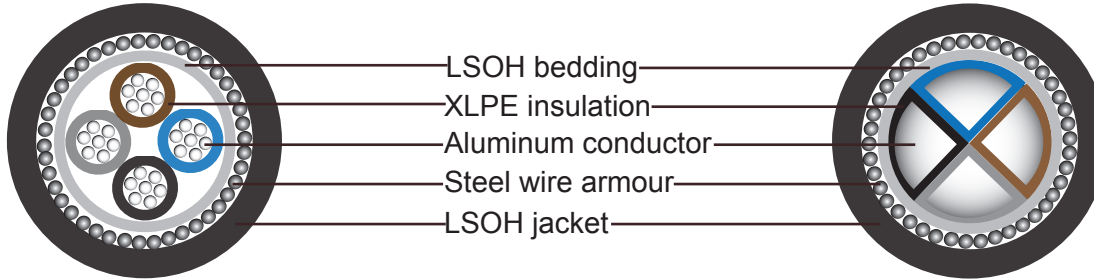
| Nominal Cross-sectional Area | Strand Type | Nominal Insulation Thickness | Nominal Bedding Thickness | Nominal Steel Wire Armour dia. | Nominal Sheath Thickness | Approx. Overall Diameter | Approx Weight |
|------------------------------|-------------|------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------|
| mm ² | No./mm | mm | mm | mm | mm | mm | kg/km |
| 4x1.5 | 7/0.53 | 0.7 | 0.8 | 0.9 | 1.4 | 13.3 | 390 |
| 4x2.5 | 7/0.67 | 0.7 | 0.8 | 0.9 | 1.4 | 15.0 | 470 |
| 4x4 | 7/0.85 | 0.7 | 0.8 | 0.9 | 1.4 | 16.4 | 580 |
| 4x6 | 7/1.04 | 0.7 | 0.8 | 1.25 | 1.5 | 18.7 | 805 |
| 4x10 | 7/1.35 | 0.7 | 0.8 | 1.25 | 1.5 | 21.1 | 1090 |
| 4x16 | 7/1.70 | 0.7 | 0.8 | 1.25 | 1.6 | 23.4 | 1320 |
| 4x25 | 7/2.14 | 0.9 | 1 | 1.6 | 1.7 | 28.9 | 1840 |
| 4x25* | 7/2.14 | 0.9 | 1 | 1.6 | 1.7 | 26.1 | 1840 |
| 4x35 | 7/2.52 | 0.9 | 1 | 1.6 | 1.8 | 31.9 | 2310 |
| 4x35* | 7/2.52 | 0.9 | 1 | 1.6 | 1.8 | 28.6 | 2310 |
| 4x50* | 19/1.78 | 1.0 | 1 | 1.6 | 1.9 | 32.0 | 2970 |
| 4x70* | 19/2.14 | 1.1 | 1.2 | 2.0 | 2.1 | 37.7 | 4240 |
| 4x95* | 19/2.52 | 1.1 | 1.2 | 2.0 | 2.2 | 41.7 | 5400 |
| 4x120* | 37/2.03 | 1.2 | 1.4 | 2.5 | 2.3 | 47.1 | 7000 |
| 4x150* | 37/2.25 | 1.4 | 1.4 | 2.5 | 2.4 | 51.4 | 8350 |
| 4x185* | 37/2.52 | 1.6 | 1.4 | 2.5 | 2.6 | 56.6 | 10130 |
| 4x240* | 61/2.25 | 1.7 | 1.6 | 2.5 | 2.7 | 63.0 | 12840 |
| 4x300* | 61/2.52 | 1.8 | 1.6 | 2.5 | 2.9 | 68.8 | 15530 |
| 4x400* | 61/2.85 | 2 | 1.8 | 3.15 | 3.2 | 78.1 | 19950 |

* Shaped stranded conductor (class 2)





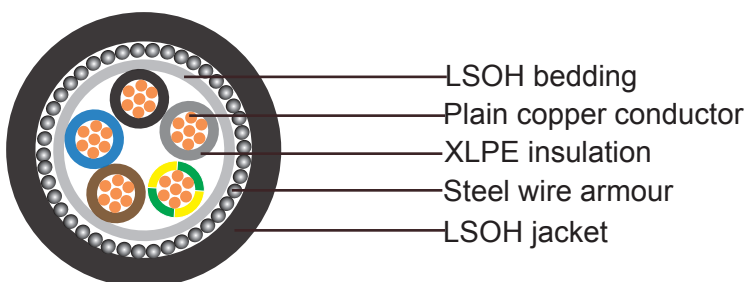
Four-core 600/1000 V cables with solid aluminum conductors



| Nominal Cross-sectional Area | Nominal Insulation Thickness | Nominal Bedding Thickness | Nominal Steel Wire Armor dia. | Nominal Sheath Thickness | Approx. Overall Diameter | Approx Weight |
|------------------------------|------------------------------|---------------------------|-------------------------------|--------------------------|--------------------------|---------------|
| mm ² | mm | mm | mm | mm | mm | kg/km |
| 4x16 | 0.7 | 0.8 | 1.25 | 1.6 | 21.8 | 980 |
| 4x25 | 0.9 | 1 | 1.6 | 1.7 | 26.9 | 1220 |
| 4x25* | 0.9 | 1 | 1.6 | 1.7 | 24.6 | 1220 |
| 4x35 | 0.9 | 1 | 1.6 | 1.8 | 29.5 | 1420 |
| 4x35* | 0.9 | 1 | 1.6 | 1.8 | 27 | 1420 |
| 4x50* | 1.0 | 1 | 1.6 | 1.9 | 30 | 1770 |
| 4x70* | 1.1 | 1.2 | 2.0 | 2.1 | 35.3 | 2500 |
| 4x95* | 1.1 | 1.2 | 2.0 | 2.2 | 39 | 2980 |
| 4x120* | 1.2 | 1.4 | 2.5 | 2.3 | 44 | 3950 |
| 4x150* | 1.4 | 1.4 | 2.5 | 2.4 | 47.9 | 4600 |
| 4x185* | 1.6 | 1.4 | 2.5 | 2.6 | 52.7 | 5430 |
| 4x240* | 1.7 | 1.6 | 2.5 | 2.7 | 58.5 | 6660 |
| 4x300* | 1.8 | 1.6 | 2.5 | 2.9 | 63.8 | 7770 |

*Solid shaped conductor (class 1)

Five-core 600/1000 V cables with stranded copper conductors





| Nominal Cross-sectional Area | Strand Type | Nominal Insulation Thickness | Nominal Bedding Thickness | Nominal Steel Wire Armor dia. | Nominal Sheath Thickness | Approx. Overall Diameter | Approx Weight |
|------------------------------|-------------|------------------------------|---------------------------|-------------------------------|--------------------------|--------------------------|---------------|
| mm ² | No./mm | mm | mm | mm | mm | mm | kg/km |
| 5x1.5 | 7/0.53 | 0.6 | 0.8 | 0.9 | 1.4 | 14.3 | 430 |
| 5x2.5 | 7/0.67 | 0.7 | 0.8 | 0.9 | 1.4 | 16.1 | 545 |
| 5x4 | 7/0.85 | 0.7 | 0.8 | 0.9 | 1.5 | 17.8 | 680 |
| 5x6 | 7/1.04 | 0.7 | 0.8 | 1.25 | 1.5 | 20 | 840 |
| 5x10 | 7/1.35 | 0.7 | 0.8 | 1.25 | 1.6 | 22.9 | 1105 |
| 5x16 | 7/1.70 | 0.7 | 1 | 1.6 | 1.7 | 26.6 | 1450 |
| 5x25 | 7/2.14 | 0.9 | 1 | 1.6 | 1.8 | 31.5 | 2245 |
| 5x35 | 7/2.52 | 0.9 | 1 | 1.6 | 1.9 | 34.8 | 2840 |
| 5x50 | 19/1.78 | 1.0 | 1.2 | 2 | 2 | 40.4 | 3895 |
| 5x70 | 19/2.14 | 1.1 | 1.2 | 2 | 2.2 | 46.3 | 5145 |

Multi-core 600/1000 V cables with stranded copper conductors

| Nominal Cross-sectional Area | Strand Type | Nominal Insulation Thickness | Nominal Bedding Thickness | Nominal Steel Wire Armor dia. | Nominal Sheath Thickness | Approx. Overall Diameter | Approx Weight |
|------------------------------|-------------|------------------------------|---------------------------|-------------------------------|--------------------------|--------------------------|---------------|
| mm ² | No./mm | mm | mm | mm | mm | mm | kg/km |
| 7x1.5 | 7/0.53 | 0.6 | 0.8 | 0.9 | 1.4 | 15.2 | 500 |
| 12x1.5 | 7/0.53 | 0.6 | 0.8 | 1.25 | 1.5 | 19.4 | 820 |
| 19x1.5 | 7/0.53 | 0.6 | 0.8 | 1.25 | 1.6 | 22.2 | 1080 |
| 27x1.5 | 7/0.53 | 0.6 | 1 | 1.6 | 1.7 | 26.7 | 1550 |
| 37x1.5 | 7/0.53 | 0.6 | 1 | 1.6 | 1.7 | 29 | 1850 |
| 48x1.5 | 7/0.53 | 0.6 | 1 | 1.6 | 1.8 | 32.7 | 2250 |
| 7x2.5 | 7/0.67 | 0.7 | 0.8 | 0.9 | 1.4 | 17.1 | 730 |
| 12x2.5 | 7/0.67 | 0.7 | 0.8 | 1.25 | 1.6 | 22.4 | 1020 |
| 19x2.5 | 7/0.67 | 0.7 | 1 | 1.6 | 1.7 | 26.6 | 1530 |
| 27x2.5 | 7/0.67 | 0.7 | 1 | 1.6 | 1.8 | 30.7 | 1960 |
| 37x2.5 | 7/0.67 | 0.7 | 1 | 1.6 | 1.8 | 33.8 | 2450 |
| 48x2.5 | 7/0.67 | 0.7 | 1.2 | 2 | 2 | 39.3 | 3260 |
| 7x4 | 7/0.85 | 0.7 | 0.8 | 1.25 | 1.5 | 19.7 | 840 |
| 12x4 | 7/0.85 | 0.7 | 1 | 1.6 | 1.6 | 25.7 | 1390 |
| 19x4 | 7/0.85 | 0.7 | 1 | 1.6 | 1.7 | 29.3 | 1850 |
| 27x4 | 7/0.85 | 0.7 | 1 | 1.6 | 1.9 | 34.4 | 2350 |
| 37x4 | 7/0.85 | 0.7 | 1.2 | 2 | 2 | 39.2 | 2800 |
| 48x4 | 7/0.85 | 0.7 | 1.2 | 2 | 2.1 | 44.1 | 3250 |

The number of cores can be ordered upon request.

