**CABLE STRUCTURE**

**Conductor** : Solid and stranded annealed copper wire  
: Sizes 1.5 mm<sup>2</sup> up to 400 mm<sup>2</sup>

**Insulation** : Polyvinyl chloride (PVC/C)

**Core identification** : Single-cores : Any color

**TECHNICAL DATA**

**Classification** : Maximum conductor temperature 70 °C  
: Circuit voltage not exceeding 450/750 Volts

**Rated voltage** : 450 Volts between Line to Earth  
: 750 Volts between Line to Line

**Testing voltage** : 2,500 Volts

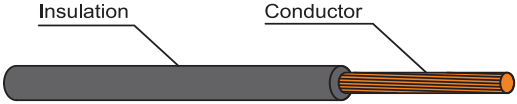
**Reference standard** : TIS 11 Part 3-2553, Table 1

**APPLICATION**

Building wiring for installation on insulator or in raceway dry location.

| Nominal cross sectional area<br>(mm <sup>2</sup> ) | Conductor type | Insulation thickness nominal<br>(mm) | Overall diameter |                 | Conductor resistance at 20°C maximum<br>(Ω/km) | Insulation resistance at 70°C minimum<br>(MΩ·km) | Continuous current rating in free air maximum (40 °C)<br><br>(A) | Cable weight approx.<br>(kg/km) | Standard Length<br>(m) |
|----------------------------------------------------|----------------|--------------------------------------|------------------|-----------------|------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|------------------------|
|                                                    |                |                                      | Minimum<br>(mm)  | Maximum<br>(mm) |                                                |                                                  |                                                                                                                                                   |                                 |                        |
| 1.5                                                | Solid          | 0.7                                  | 2.6              | 3.2             | 12.1                                           | 0.011                                            | 21                                                                                                                                                | 21                              | 100/C                  |
| 1.5                                                | Stranded       | 0.7                                  | 2.7              | 3.3             | 12.1                                           | 0.010                                            | 21                                                                                                                                                | 22                              | 100/C                  |
| 2.5                                                | Solid          | 0.8                                  | 3.2              | 3.9             | 7.41                                           | 0.010                                            | 28                                                                                                                                                | 32                              | 100/C                  |
| 2.5                                                | Stranded       | 0.8                                  | 3.3              | 4.0             | 7.41                                           | 0.009                                            | 28                                                                                                                                                | 35                              | 100/C                  |
| 4                                                  | Solid          | 0.8                                  | 3.6              | 4.4             | 4.61                                           | 0.0085                                           | 37                                                                                                                                                | 47                              | 100/C                  |
| 4                                                  | Stranded       | 0.8                                  | 3.8              | 4.6             | 4.61                                           | 0.0077                                           | 37                                                                                                                                                | 50                              | 100/C                  |
| 6                                                  | Solid          | 0.8                                  | 4.1              | 5.0             | 3.08                                           | 0.0070                                           | 49                                                                                                                                                | 65                              | 100/C                  |
| 6                                                  | Stranded       | 0.8                                  | 4.3              | 5.2             | 3.08                                           | 0.0065                                           | 49                                                                                                                                                | 70                              | 100/C                  |
| 10                                                 | Solid          | 1.0                                  | 5.3              | 6.4             | 1.83                                           | 0.0070                                           | 68                                                                                                                                                | 110                             | 100/C                  |
| 10                                                 | Stranded       | 1.0                                  | 5.6              | 6.7             | 1.83                                           | 0.0065                                           | 68                                                                                                                                                | 120                             | 100/C                  |
| 16                                                 | Stranded       | 1.0                                  | 6.4              | 7.8             | 1.15                                           | 0.0050                                           | 91                                                                                                                                                | 180                             | 100/C                  |
| 25                                                 | Stranded       | 1.2                                  | 8.1              | 9.7             | 0.727                                          | 0.0050                                           | 122                                                                                                                                               | 280                             | 100/C                  |
| 35                                                 | Stranded       | 1.2                                  | 9.0              | 10.9            | 0.524                                          | 0.0043                                           | 151                                                                                                                                               | 370                             | 100/C                  |
| 50                                                 | Stranded       | 1.4                                  | 10.6             | 12.8            | 0.387                                          | 0.0043                                           | 184                                                                                                                                               | 500                             | 500/D                  |
| 70                                                 | Stranded       | 1.4                                  | 12.1             | 14.6            | 0.268                                          | 0.0035                                           | 234                                                                                                                                               | 700                             | 500/D                  |
| 95                                                 | Stranded       | 1.6                                  | 14.1             | 17.1            | 0.193                                          | 0.0035                                           | 292                                                                                                                                               | 1,000                           | 500/D                  |
| 120                                                | Stranded       | 1.6                                  | 15.6             | 18.8            | 0.153                                          | 0.0032                                           | 341                                                                                                                                               | 1,200                           | 500/D                  |
| 150                                                | Stranded       | 1.8                                  | 17.3             | 20.9            | 0.124                                          | 0.0032                                           | 391                                                                                                                                               | 1,500                           | 500/D                  |
| 185                                                | Stranded       | 2.0                                  | 19.3             | 23.3            | 0.0991                                         | 0.0032                                           | 454                                                                                                                                               | 1,900                           | 500/D                  |
| 240                                                | Stranded       | 2.2                                  | 22.0             | 26.6            | 0.0754                                         | 0.0032                                           | 543                                                                                                                                               | 2,500                           | 500/D                  |
| 300                                                | Stranded       | 2.4                                  | 24.5             | 29.6            | 0.0601                                         | 0.0030                                           | 628                                                                                                                                               | 3,100                           | 500/D                  |
| 400                                                | Stranded       | 2.6                                  | 27.5             | 33.2            | 0.0470                                         | 0.0028                                           | 736                                                                                                                                               | 3,900                           | 500/D                  |

C : Packing in Coil  
D : Packing in Drum



**CABLE STRUCTURE**

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: Sizes 1.5 mm<sup>2</sup> up to 400 mm<sup>2</sup>

**Insulation** : Polyvinyl chloride (PVC/C)

**Core identification** : Single-cores : Any color

**TECHNICAL DATA**

**Classification** : Maximum conductor temperature 70 °C  
: Circuit voltage not exceeding 450/750 Volts

**Rated voltage** : 450 Volts between Line to Earth  
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**Testing voltage** : 2,500 Volts

**Reference standard** : TIS 11 Part 3-2553, Table 1

**APPLICATION**

Building wiring for installation on insulator or in raceway dry location.

| Number of core | Nominal cross sectional area (mm <sup>2</sup> ) | A.C.Resistance | Inductance | Reactance | Impedance |
|----------------|-------------------------------------------------|----------------|------------|-----------|-----------|
|                |                                                 | R (Ω/km)       | L (mH/km)  | XL (Ω/km) | Z (Ω/km)  |
| 1.5            | Solid                                           | 14.4777        | 0.5259     | 0.1652    | 14.4786   |
| 1.5            | Stranded                                        | 14.4777        | 0.5276     | 0.1657    | 14.4786   |
| 2.5            | Solid                                           | 8.8661         | 0.5121     | 0.1609    | 8.8675    |
| 2.5            | Stranded                                        | 8.8661         | 0.5202     | 0.1634    | 8.8676    |
| 4              | Solid                                           | 5.5159         | 0.4917     | 0.1545    | 5.5180    |
| 4              | Stranded                                        | 5.5159         | 0.4929     | 0.1548    | 5.5181    |
| 6              | Solid                                           | 3.6852         | 0.4742     | 0.1490    | 3.6883    |
| 6              | Stranded                                        | 3.6852         | 0.4788     | 0.1504    | 3.6883    |
| 10             | Solid                                           | 2.1896         | 0.4694     | 0.1475    | 2.1946    |
| 10             | Stranded                                        | 2.1896         | 0.4736     | 0.1488    | 2.1947    |
| 16             | Stranded                                        | 1.3760         | 0.4575     | 0.1437    | 1.3835    |
| 25             | Stranded                                        | 0.8700         | 0.4596     | 0.1444    | 0.8819    |
| 35             | Stranded                                        | 0.6271         | 0.4403     | 0.1383    | 0.6422    |
| 50             | Stranded                                        | 0.4633         | 0.4387     | 0.1378    | 0.4833    |
| 70             | Stranded                                        | 0.3210         | 0.4298     | 0.1350    | 0.3482    |
| 95             | Stranded                                        | 0.2314         | 0.4304     | 0.1352    | 0.2680    |
| 120            | Stranded                                        | 0.1836         | 0.4236     | 0.1331    | 0.2268    |
| 150            | Stranded                                        | 0.1491         | 0.4231     | 0.1329    | 0.1997    |
| 185            | Stranded                                        | 0.1195         | 0.4232     | 0.1329    | 0.1787    |
| 240            | Stranded                                        | 0.0914         | 0.4194     | 0.1318    | 0.1603    |
| 300            | Stranded                                        | 0.0734         | 0.4177     | 0.1312    | 0.1503    |
| 400            | Stranded                                        | 0.0581         | 0.4160     | 0.1307    | 0.1430    |