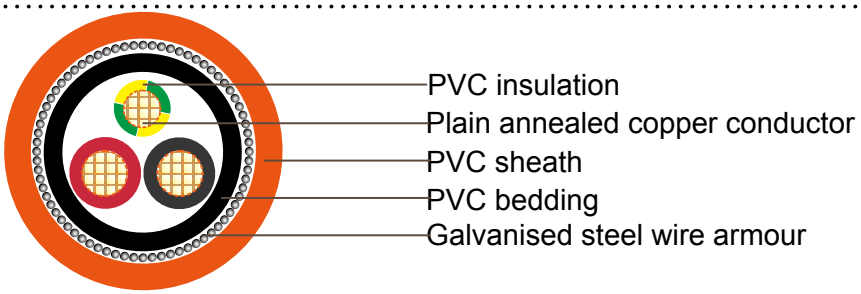
# PVC Insulated, PVC Sheathed 2 core+E Armored Cables, 0.6/1kV

## Application

These cables are used for mains, submains and subcircuits unenclosed, enclosed in conduit, buried direct or in underground ducts for buildings and industrial plants where not subject to mechanical damage.

## Standard

AS/NZS 5000.1
AS/NZS 3008
AS/NZS 1125




## Cable Construction

**Conductor:** Plain annealed copper
**Insulation:** Polyvinylchloride compound PVC V-90.
**Insulation colour:** 2C + E - Red, Black, Green/yellow
**Bedding:** Polyvinylchloride compound PVC 5V-90
**Bedding colour**: Black
**Armour:** Galvanised Steel Wire
**Sheath:** Polyvinylchloride compound PVC 5V-90
**Sheath colour:** Orange, other colors are available upon request

## Technical Characteristics

| Conductor | Current Ratings | | | Electrical Characteristics | | | |
|---|---|---|---|---|---|---|---|
| Nominal Area $mm^2$ | Unenclosed In Air A | Buried Direct A | Buried In Ducts A | Maximum DC Resistance @20°C Ohm/km | Maximum AC Resistance @75°C Ohm/km | Reactance Ohm/km | Single Phase Voltage Drop @75°C mV/Am |
| 1.5 | 18 | 28 | 22 | 13.6 | 16.5 | 0.111 | 33.0 |
| 2.5 | 26 | 40 | 31 | 7.41 | 9.01 | 0.102 | 18.0 |

# Australian Standard

| Conductor | Current Ratings | | | Electrical Characteristics | | | |
|---|---|---|---|---|---|---|---|
| Nominal Area $mm^2$ | Unenclosed In Air A | Buried Direct A | Buried In Ducts A | Maximum DC Resistance @20°C Ohm/km | Maximum AC Resistance @75°C Ohm/km | Reactance Ohm/km | Single Phase Voltage Drop @75°C mV/Am |
| 4 | 34 | 52 | 40 | 4.61 | 5.61 | 0.102 | 11.2 |
| 6 | 44 | 65 | 51 | 3.08 | 3.75 | 0.0967 | 7.50 |
| 10 | 60 | 87 | 68 | 1.83 | 2.23 | 0.0906 | 4.46 |
| 16 | 80 | 115 | 88 | 1.15 | 1.40 | 0.0861 | 2.81 |
| 25 | 105 | 145 | 115 | 0.727 | 0.884 | 0.0853 | 1.78 |
| 35 | 130 | 180 | 140 | 0.524 | 0.638 | 0.0826 | 1.28 |
| 50 | 160 | 210 | 165 | 0.387 | 0.471 | 0.0797 | 0.957 |
| 70 | 200 | 260 | 205 | 0.268 | 0.327 | 0.0770 | 0.673 |
| 95 | 250 | 310 | 250 | 0.193 | 0.236 | 0.0766 | 0.498 |

## Cable Parameter

| Nom. conductor area $mm^2$ | Conductor No./ OD | Nom. insulation thickness mm | Nom. earth conductor area $mm^2$ | Nom. earth conductor insulation thickness mm | Nom. diameter over bedding mm | Armour diameter mm | Nom. overall diameter mm | Approx. mass kg/km |
|---|---|---|---|---|---|---|---|---|
| 1.5 | 7/0.50 | 0.8 | 1.5 | 0.6 | 9.0 | 0.9 | 14.5 | 470 |
| 2.5 | 7/0.67 | 0.8 | 2.5 | 0.7 | 10.0 | 0.9 | 15.6 | 490 |
| 4 | 7/0.85 | 1.0 | 2.5 | 0.7 | 11.4 | 0.9 | 16.9 | 690 |
| 6 | 7/1.04 | 1.0 | 2.5 | 0.7 | 12.5 | 0.9 | 18.0 | 765 |
| 10 | 7/1.35 | 1.0 | 4.0 | 1.0 | 14.2 | 1.25 | 20.5 | 937 |
| 16 | 7/1.70 | 1.0 | 6.0 | 1.0 | 16.3 | 1.25 | 22.5 | 1295 |
| 25 | 7/2.14 | 1.2 | 6.0 | 1.0 | 20.0 | 1.6 | 27.0 | 1600 |
| 35 | 7/2.65 | 1.2 | 10 | 1.0 | 21.7 | 1.6 | 28.1 | 1775 |
| 50 | 19/1.89 | 1.4 | 16 | 1.0 | 24.7 | 1.6 | 31.3 | 2215 |
| 70 | 19/2.24 | 1.4 | 25 | 1.2 | 28.7 | 2.0 | 35.1 | 2880 |
| 95 | 19/2.65 | 1.6 | 25 | 1.2 | 32.6 | 2.0 | 40.4 | 3910 |