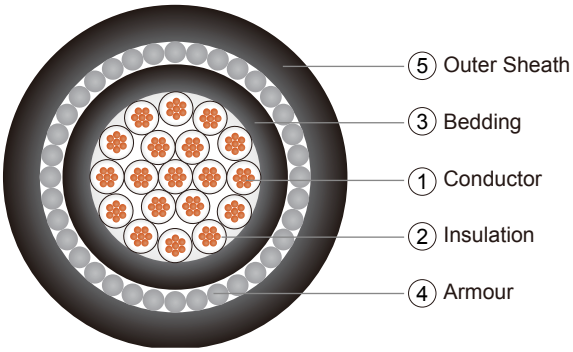
# CU/PVC/PVC/SWA/PVC (Multi - Cores)

PVC Insulated, PVC Bedded, Galvanised Steel Wire Armoured, PVC Sheathed Cable

## Application

These power cable for fixed installations such as distribution networks or industrial installations.
Such as Plant engineering; Industrial machinery; Heating and air-conditioning systems; Power stations; Stage applications etc.
Armoured cable suitable for direct burial.




## Construction

①Conductor: Plain annealed copper, class1 solid or class 2 stranded acc. to IEC 60228.
Flexible class 5 or tinned conductor could be offer upon request.
②Insulation: Polyviny chloride (PVC) compound as per IEC 60502-1.
Insulation Color Code:

| Number of Cores | Color Code to IEC 60502-1 | Color Code to BS 5467 |
|---|---|---|
| 6 and above | White with Black Numbering or Others | White with Black Numbering or Others |

Assembly: Cores cabled together with PP filler and covered with non-woven tape.
③Bedding: Polyvinyl choride (PVC) compound type ST1 (80°C), ST2 (90°C) of IEC 60502-1.
Bedding Colour: Black or other color as per customer request.
④Armour: Galvanized steel wire armoured (SWA).
⑤Outer Sheath: Polyvinyl choride (PVC) compound type ST1 (80°C), ST2 (90°C) of IEC 60502-1.
Outer Sheath Color: Black or other color as per customer request.

## Electrical Characteristics

Recommended rated voltages $U_0$

| Highest system voltage ($U_m$) (kV) | Rated voltage ($U_0$) (kV) | |
|---|---|---|
| | Categories A and B | Category C |
| 1,2 | 0,6 | 0,6 |

Routine test voltages

| Rated voltage $U_0$ (kV) | 0,6 |
|---|---|
| Test voltage (kV) | 3,5 |

Maximum conductor temperatures for different types of insulating compound

| Maximum conductor temperature (°C) | |
|---|---|
| Normal operation | Short-circuit (5 s maximum duration) |
| 70 | 160 |

Minimum Insulation Resistance at 20°C: 36.7 MΩ·km
Operating Temperature: -15°C to 70°C
Test Voltage: 3.5 kV for 5 minutes

## Installation Refference

Min.Bending Radius (mm): 8 x cable overall diameter
Max.Pulling Tension ($N/mm^2$): 70

## Reference Standards

Design: IEC60502-1
Conductor: IEC60228, BS EN60228
Flame Retardancy: IEC 60332-1, BS EN60332-1

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Dimension

| No.of Cores | Nominal Conductor Area ($mm^2$) | No. and Diameter of Wires (no./mm) | Thickness of Insulation (mm) | Thickness of Inner Sheath (mm) | Diameter of Armour Wire (mm) | Thickness of Outer Sheath (mm) | Overall Diameter (mm) | Approximate Weight (kg/km) |
|---|---|---|---|---|---|---|---|---|
| 5 | 1.5 | 7/0.53 | 0.8 | 1.0 | 1.25 | 1.8 | 16.7 | 616 |
| 7 | | 7/0.53 | 0.8 | 1.0 | 1.25 | 1.8 | 17.7 | 705 |
| 10 | | 7/0.53 | 0.8 | 1.0 | 1.25 | 1.8 | 20.9 | 908 |
| 12 | | 7/0.53 | 0.8 | 1.0 | 1.60 | 1.8 | 22.1 | 1,115 |
| 19 | | 7/0.53 | 0.8 | 1.0 | 1.60 | 1.8 | 24.8 | 1,421 |
| 20 | | 7/0.53 | 0.8 | 1.0 | 1.60 | 1.8 | 25.2 | 1,470 |
| 24 | | 7/0.53 | 0.8 | 1.0 | 1.60 | 1.8 | 27.9 | 1,699 |
| 37 | | 7/0.53 | 0.8 | 1.0 | 1.60 | 1.9 | 31.3 | 2,197 |
| 5 | 2.5 | 7/0.67 | 0.8 | 1.0 | 1.25 | 1.8 | 17.8 | 716 |
| 7 | | 7/0.67 | 0.8 | 1.0 | 1.25 | 1.8 | 18.9 | 833 |
| 10 | | 7/0.67 | 0.8 | 1.0 | 1.60 | 1.8 | 23.2 | 1,231 |
| 12 | | 7/0.67 | 0.8 | 1.0 | 1.60 | 1.8 | 23.8 | 1,331 |
| 19 | | 7/0.67 | 0.8 | 1.0 | 1.60 | 1.8 | 26.9 | 1,731 |
| 20 | | 7/0.67 | 0.8 | 1.0 | 1.60 | 1.8 | 27.4 | 1,794 |
| 24 | | 7/0.67 | 0.8 | 1.0 | 1.60 | 1.9 | 30.7 | 2,100 |
| 37 | | 7/0.67 | 0.8 | 1.2 | 2.00 | 2.1 | 35.9 | 3,094 |
| 5 | 4 | 7/0.85 | 1.0 | 1.0 | 1.25 | 1.8 | 20.4 | 928 |
| 7 | | 7/0.85 | 1.0 | 1.0 | 1.60 | 1.8 | 22.5 | 1,238 |
| 10 | | 7/0.85 | 1.0 | 1.0 | 1.60 | 1.8 | 27.0 | 1,628 |
| 12 | | 7/0.85 | 1.0 | 1.0 | 1.60 | 1.8 | 27.7 | 1,779 |
| 19 | | 7/0.85 | 1.0 | 1.0 | 1.60 | 1.9 | 31.8 | 2,387 |
| 20 | | 7/0.85 | 1.0 | 1.0 | 2.00 | 2.0 | 33.5 | 2,741 |
| 24 | | 7/0.85 | 1.0 | 1.2 | 2.00 | 2.1 | 37.9 | 3,262 |
| 37 | | 7/0.85 | 1.0 | 1.2 | 2.00 | 2.3 | 42.9 | 4,332 |