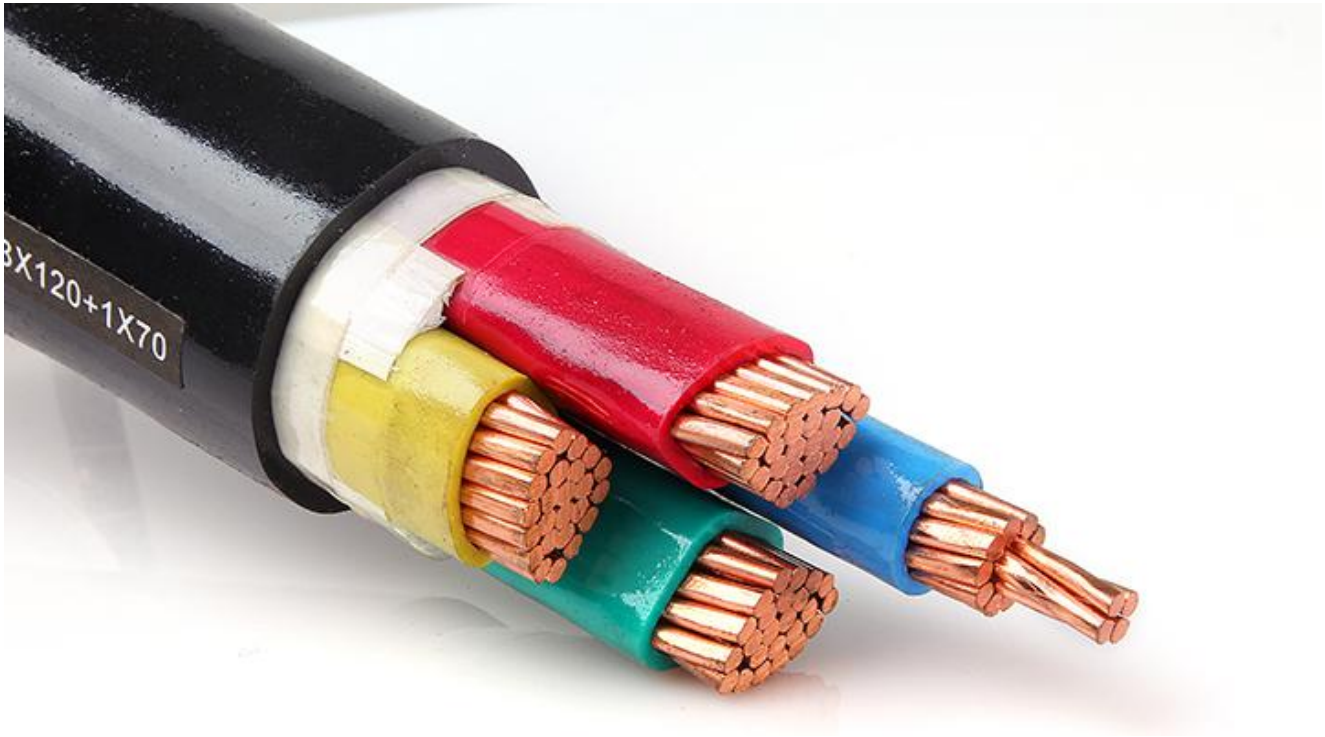


## 600/1000V PVC insulated Cable



### Application:

0.6/1kV PVC Cable, It to be used for indoors, in tunnel, in down wells, cable furrow or pipe, underground.

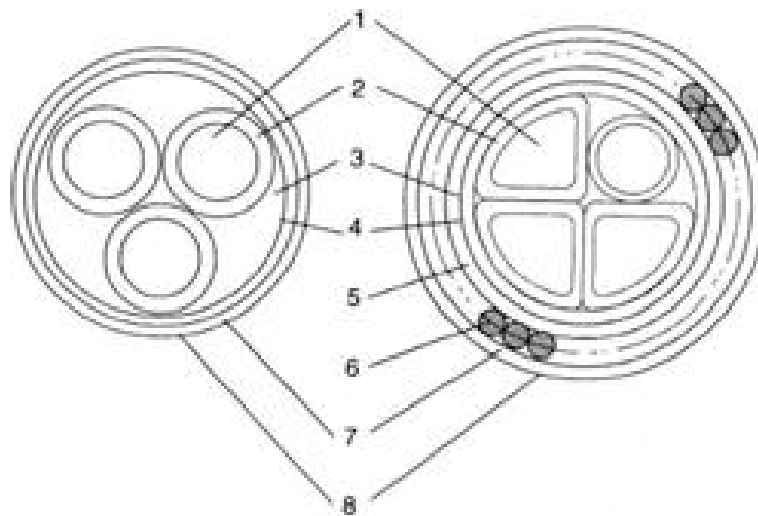
Note: the single core armored cables are used for D.C. system only. As for A.C. system, armor layer should be used of non-magnetic material or magnetic isolation measures.

Standards: BS 7870-3.10-2001 or IEC 60502 -1

Conductor: Cu or Aluminum

Insulation: PVC

Sheath: PVC



Sheath Color: Black or Colors

### Cable Structure:

1. Conductor: Copper(Cu) or Aluminum
2. PVC insulation
3. Fill layer
4. Around the package tape
5. Inner Sheath
6. Steel tape armor
7. Outer Sheath



### Product Description:

- PVC insulated PVC sheathed power cable (PVC/PVC Cable)
  - PVC insulated steel tape armored PVC sheathed power cable (PVC/STA/PVC Cable)
  - PVC insulated steel wire armored PVC sheathed power cable (PVC/SWA/PVC Cable)
  
  - Flame retardant PVC insulated PVC sheathed power cable (FR/PVC/PVC Cable)
  - Flame retardant PVC insulated steel tape armored PVC sheathed power cable (FR/PVC/STA/PVC Cable)
  - Flame retardant PVC insulated steel wire armored PVC sheathed power cable (FR/PVC/SWA/PVC Cable)
- FR – Flame Retardant

### Number of Cores & Nominal Cross-section Area:

Number of Cores	1	2	3	3+1	4	3+2	4+1	5
Section Area (mm <sup>2</sup> )	4 - 500	2.5 - 500	2.5 - 300	4 - 300	2.5 - 300	2.5 -300	4 - 300	2.5 - 95

## Main Properties:

Test Item		Property	
Construction		Listed to the tables	
Conductor resistance		Listed to the tables	
Test Voltage	A.C 3.5kV 5min	No broken	
Machanical Properties before aging	Tensile Strength	Insulation	Min. 12.5N/mm <sup>2</sup>
		Sheath	Min. 12.5N/mm <sup>2</sup>
	Elongation at break	Insulation	Min. 150%
		Sheath	Min. 150%
Machanical properties after aging	Tensile Strength	Insulation	100°C±2°C 7days Min. 12.5N/mm <sup>2</sup>
		Sheath	100°C±2°C 7days Min. 12.5N/mm <sup>2</sup>
	Varying valve of tensile strength	Insulation	100°C±2°C 7days Max. 25%
		Sheath	100°C±2°C 7days Max. 25%
	Elongation at break	Insulation	100°C±2°C 7days Min.150%
		Sheath	100°C±2°C 7days Min.150%
Varying valve of tensile strength	Insulation	100°C±2°C 7days Max. 25%	
	Sheath	100°C±2°C 7days Max. 25%	
Flame retardant property		IEC60332 - 3	
Constant of insulation resistivity	Min at 20°C	36.7	
Ki MΩ.km	Min at 70°C	0.037	

## Installation:

1. The installation temperature should not over 20°C, If the ambient temperature is lower than 0°C, the cable should be preheated.
2. The bending radius of cable should not less than 8 times.
3. After installation, the cable should with stand voltage test for 15min. 3.5kv D.C.

## In air:

1. As the single core cable laying in parallel, the distance between the cable's center is 2 times (for cables which cross section area of conductor  $\leq 185\text{mm}^2$ ) and 90mm (for cables which cross sectional area of conductor  $\geq 240\text{mm}^2$ )
2. Ambient temperature: 30°C
3. Max. temperature of conductor: 70°C
4. Rating factors of current rating for ambient temperature:

Air temperature	20°C	25°C	35°C	40°C	45°C
Rating factors	1.12	1.06	0.94	0.87	0.79

### Direct in ground:

1. When the single core cables are installed separately, the distance between the cable's center is 2 times of the cable diameter.
2. Ambient temperature: 25°C.
3. Max. temperature of conductor: 70°C.
4. Soil thermour resistivity: 1.0°C. m/w.
5. Depth: 0.7m
6. Rating factors under different ambient temp.:

Air temperature	15°C	20°C	30°C	35°C
Rating factors	1.11	1.05	0.94	0.88

### Short circuit ratings:

Max temperature at short circuit	Max temperature short circuit rating
130°C	$I=94 S\sqrt{A}$





**liberative line**



**Stranded wire frames**



**Primary Premolding**



**Second Premolding**



**Pulling**



**Cabling**