#### 0.6/1kV PVC Insulated Power Cable (Chinese standard)



**Application:** PVC insulated power cable is suitable for power supply and distribution circuits in manufacturing and processing plant, commercial building or residence at the rated voltage 0.6/1kV or less. The power cables can be flame retardant when used as type ZR.



**Installation Temperature:** The installation temperature should be over  $0^{\circ}$ C. If the ambient temperature is lower than  $0^{\circ}$ C, the cable should be preheated.

**Operating Temperature:** Max permissible continuous operating temperature of conductor shall not exceed 70°C. **Conductor Short-circuit Temperature:** Max temperature at short-circuit shall not exceed 160°C. The short-circuit duration shall not exceed 5 seconds.



**Bending Radius:**  $20(d+D)\pm5\%$  for single core cable,  $15(d+D)\pm5\%$  for multi-core cable

D = Actual outer diameter of cable (mm), d = Actual diameter of the conductor (mm)



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**Standard :** GB/T 12706, IEC 60502 or other standards required by customers.

The requirement for flame retardant property is according to IEC 60332-3 and GB/T 18380.

Packing: Steel/wooden reel, wooden reel or steel reel.

#### Type, Description and Application

Туре	Description	Application			
VV	Cu or Al conductor PVC insulated PVC	It is installed in indoor, in duct or in tunnel, but			
VLV	sheathed power cable	unable to bear pulling force and pressure.			
VV <sub>22</sub>	Cu or Al conductor PVC insulated steel tape	It is installed in indoor, in tunnel or directly in			
VLV <sub>22</sub>	armoured PVC sheathed power cable	ground, able to bear proper pressure.			
VV <sub>32</sub>	Cu or Al conductor PVC insulated steel wire	It is installed in indoor, in well, under water, able			
VLV <sub>32</sub>	armoured PVC sheathed power cable	to bear proper pulling force.			
ZR-VV	Cu or Al conductor PVC insulated PVC	It is installed in indoor, in duct or in tunnel, but			
ZR-VLV	sheathed flame retardant power cable	unable to bear pulling force and pressure.			
ZR-VV <sub>22</sub>	Cu or Al conductor PVC insulated steel tape	It is installed in indoor, in tunnel or directly in			
ZR-VLV <sub>22</sub>	armoured PVC sheathed flame retardant	ground, able to bear proper pressure.			
	power cable				
ZR-VV <sub>32</sub>	Cu or Al conductor PVC insulated steel wire	It is installed in indoor, in well or under water,			
ZR-VLV <sub>32</sub>	armoured PVC sheathed flame retardant	able to bear proper pulling force.			
	power cable				

\* L: Alunimiun conductor

#### Construction of 0.6/1kV PVC Insulated Power Cable

No	Construction and materials							
1	Copper or aluminium conductor							
2	PVC insulation							
3	PP yarn or glass fiber rope filler							
4	Non-woven cloth tape or glass fiber tape							
5	Non-flame retardant or flame retardant PVC							
	bedding							
6	Steel tape or steel wire armour							
7	Non-flame retardant or flame retardant PVC							
	outersheath							



**Supply Range** 



T. m. r.		Nominal Area of Conductor sq.mm			
Туре	NO OF CORES	Cu	Al		
	1	1.5 to 630	1.5 to 630		
	2	1.5 to 185	1.5 to 185		
V V, VLV, ZR-V V, ZR-VLV	3	1.5 to 300	1.5 to 300		
	4	2.5 to 300	2.5 to 300		
VV <sub>22</sub> , VLV <sub>22</sub> , ZR-VV <sub>22</sub> , ZR-VLV <sub>22</sub>	2	4 to 185	4 to 185		
VV <sub>32</sub> , VLV <sub>32</sub> , ZR-VV <sub>32</sub> , ZR-VLV <sub>32</sub>	3、4	4 to 300	4 to 300		

\*PVC cable with 3+1 cores, 5 cores, 4+1 cores, 3+2 cores are also in our supply range.

## PVC Insulated PVC Sheathed Power Cable

# Type VV, VLV, ZR-VV, ZR-VLV

1-core			2-core			
Nominal Area of Conductor	Nominal Insulation Thickness	Approx. Overall Diameter	Nominal Area of Conductor	Nominal Insulation Thickness	Approx. Overall Diameter	
sq. mm	mm	mm	sq. mm	mm	mm	
1×1.5	0.8	6.1	2×1.5 0.8		10.5	
1×2.5	0.8	6.5	2×2.5	0.8	11.3	
1×4	1.0	7.4	2×4	1.0	13.1	
1×6	1.0	7.9	2×6	1.0	14.1	
1×10	1.0	9.2	2×10	1.0	16.7	
1×16	1.0	10.3	2×16	1.0	18.8	
1×25	1.2	12.0	2×25	1.2	22.2	
1×35	1.2	13.2	2×35	1.2	24.5	
1×50	1.4	14.9	2×50	1.4	21.8	
1×70	1.4	16.7	2×70	1.4	24.7	
1×95	1.6	19.3	2×95	1.6	29.2	
1×120	1.6	20.9	2×120	1.6	31.3	
1×150	1.8	23.1	2×150	1.8	34.7	
1×185	2.0	25.6	2×185	2.0	37.9	
1×240	2.2	28.8				
1×300	2.4	31.9				
1×400	2.6	35.5				
1×500	2.8	39.7				
1×630	2.8	43.7				

### Type VV, VLV, ZR-VV, ZR-VLV

3-core			4-core			
Nominal Area of Conductor Thickness		Approx. Overall Diameter	Nominal Area of Conductor	Nominal Insulation Thickness	Approx. Overall Diameter	
sq.mm	mm	mm	sq.mm	mm	mm	
3×1.5	0.8	10.9				
3×2.5	0.8	11.8	4×2.5	0.8	12.7	
3×4	1.0	13.7	4×4	1.0	14.9	
3×6	1.0	14.8	4×6	1.0	16.1	
3×10	1.0	17.6	4×10	1.0	19.2	
3×16	1.0	19.9	4×16	1.0	21.7	
3×25	1.2	23.6	4×25	1.2	25.9	
3×35	1.2	26.1	4×35	1.2	28.7	
3×50	1.4	26.5	4×50	1.4	30.4	
3×70	1.4	28.8	4×70	1.4	33.9	
3×95	1.6	33.6	4×95	1.6	39.7	
3×120	1.6	37.1	4×120	1.6	44.2	
3×150	1.8	41.9	4×150	1.8	48.7	
3×185	2.0	45.9	4×185	2.0	53.5	
3×240	2.2	51.8	4×240	2.2	55.4	
3×300	2.4	55.3	4×300	2.4	60.2	

### PVC Insulated Steel Tape Armoured PVC Sheathed Power Cable

# Type VV22, VLV22, ZR-VV22, ZR-VLV22

2-core		3-core			4-core			
Nominal	Nominal	Approx.	Nominal	Nominal	Approx.	Nominal	Nominal	Approx.
Area of	Insulation	Overall	Area of	Insulation	Overall	Area of	Insulation	Overall
Conductor	Thickness	Diameter	Conductor	Thickness	Diameter	Conductor	Thickness	Diameter
sq. mm	mm	mm	sq. mm	mm	mm	sq. mm	mm	mm
2×4	1.0	13.1	3×4	1.0	17.3	4×4	1.0	18.5
2×6	1.0	14.1	3×6	1.0	18.4	4×6	1.0	19.7
2×10	1.0	16.7	3×10	1.0	21.2	4×10	1.0	22.8
2×16	1.0	18.8	3×16	1.0	23.5	4×16	1.0	25.3
2×25	1.2	22.2	3×25	1.2	27.2	4×25	1.2	30.5
2×35	1.2	24.5	3×35	1.2	30.7	4×35	1.2	33.5
2×50	1.4	21.8	3×50	1.4	31.3	4×50	1.4	35.2
2×70	1.4	24.7	3×70	1.4	33.6	4×70	1.4	38.7
2×95	1.6	29.2	3×95	1.6	38.3	4×95	1.6	44.7
2×120	1.6	31.3	3×120	1.6	41.9	4×120	1.6	49.4
2×150	1.8	34.7	3×150	1.8	47.1	4×150	1.8	53.7
2×185	2.0	39.2	3×185	2.0	50.9	4×185	2.0	58.9
			3×240	2.2	57.0	4×240	2.2	61.0
			3×300	2.4	61.1	4×300	2.4	66.2

## PVC Insulated Steel Wire Armoured PVC Sheathed Power Cable

2-core		3-core			4-core			
Nominal	Nominal	Approx.	Nominal	Nominal	Approx.	Nominal	Nominal	Approx.
Area of	Insulation	Overall	Area of	Insulation	Overall	Area of	Insulation	Overall
Conductor	Thickness	Diameter	Conductor	Thickness	Diameter	Conductor	Thickness	Diameter
sq. mm	mm	mm	sq. mm	mm	mm	sq. mm	mm	mm
2×4	1.0	18.7	3×4	1.0	19.3	4×4	1.0	20.1
2×6	1.0	19.9	3×6	1.0	20.6	4×6	1.0	21.7
2×10	1.0	22.3	3×10	1.0	22.1	4×10	1.0	25.6
2×16	1.0	25.2	3×16	1.0	26.3	4×16	1.0	28.1
2×25	1.2	28.8	3×25	1.2	30.2	4×25	1.2	32.7
2×35	1.2	31.1	3×35	1.2	32.7	4×35	1.2	35.7
2×50	1.4	28.6	3×50	1.4	33.3	4×50	1.4	37.2
2×70	1.4	31.5	3×70	1.4	35.6	4×70	1.4	41.9
2×95	1.6	36.2	3×95	1.6	41.5	4×95	1.6	47.9
2×120	1.6	38.3	3×120	1.6	45.1	4×120	1.6	53.9
2×150	1.8	42.9	3×150	1.8	51.6	4×150	1.8	58.4
2×185	2.0	48.0	3×185	2.0	55.6	4×185	2.0	63.6
			3×240	2.2	61.7	4×240	2.2	65.7
			3×300	2.4	65.8	4×300	2.4	70.7

## Type VV<sub>32</sub>, VLV<sub>32</sub>, ZR-VV<sub>32</sub>, ZR-VLV<sub>32</sub>