

JINSHUI WIRE & CABLE GROUP ZHENGZHOU JINSHUI INDUSTRY & COMMERCE CO.,LTD.



PVC INSULATED POWER CABLE AND FIRE RESISTANT CABLE

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PVC INSULATED POWER CABLE AND FIRE RESISTANT CABLE

The PVC insulated power cable and fire resistant cable are suitable for fixed laying in power transmission and distribution lines with A.C. 50HZ and voltage rating of up to or including 6KV.

1.Product Performance:

- 1.The long-time permissible operation temperature of conductor shall not be higher than 70℃.
- 2.Conductor maximum short circuit (not more than 5 seconds) temperature shall not be higher than 160℃.
- 3.The cable is not limited by drop in level when being laid, and the ambient temperature shall not be lower than 0℃.
- 4.Perfect chemical stability, resistant against acids, alkalis, grease and organic solvents,and flame.
- 5.Light weight, perfect bending properties, installed and maintained easily and conveniently.

Voltage rating: 0.6 / 1kV、3.6 / 6kV.

Conductors: copper or aluminum.

Number of cable cores: one core (Single core), two cores (Double cores), three cores, four cores (Four Equal – section-area cores or three equal – section – area cores and one smaller section area neutral core), five cores (Five equal-section – area cores or three equal – section – area cores and two smaller section area neutral cores).We provide armoured type and non – armored type for the cables above.

Our company has been carrying out Chinese national standard GB 12706 and GB12666.6 (equivalent to IEC60502 and IEC60331) for PVC insulated power cable and fire resistant cable needed by domestic customer, and for foreign customers we can manufacture in accordance with BS, DIN and other countries, standards. In addition, we can design and manufacture PVC insulated power cable with special characteristics according to needs of customers.

2.Technical Requirements

1.Description

Cu Core	AL Core	Description
VV NH-VV	VLV NH-VLV	Cu (Al) Core PVC Insulated PVC Sheathed Power Cable Cu (Al) Core PVC Insulated PVC Sheathed Fire Resistant Cable
VY NH-VY	VLY NH-VLY	Cu (Al) Core PVC Insulated PE Sheathed Power Cable Cu (Al) Core PVC Insulated PE Sheathed Fire Resistant Cable
VV ₂₂ NH-VV ₂₂	VLV ₂₂ NH-VLV ₂₂	Cu (Al) Core PVC Insulated Steel Tape Armored PVC Sheathed Power Cable Cu (Al) Core PVC Insulated Steel Tape Armored PVC Sheathed Fire Resistant Cable
VV ₂₃ NH-VV ₂₃	VLV ₂₃ NH-VLV ₂₃	Cu (Al) Core PVC Insulated Steel Tape Armored PE Sheathed Power Cable Cu (Al) Core PVC Insulated Steel Tape Armored PE Sheathed Fire Resistant Cable
VV ₃₂ NH-VV ₃₂	VLV ₃₂ NH-VLV ₃₂	Cu (Al) core PVC Insulated Fine Steel Wire Armored PVC Sheathed Power Cable Cu (Al) core PVC Insulated Fine Steel Wire Armored PVC Sheathed Fire Resistant Cable
VV ₃₃ NH-VV ₃₃	VLV ₃₃ NH-VLV ₃₃	Cu (Al) Core PVC Insulated Fine Steel Wire Armored PE Sheathed Power Cable Cu (Al) Core PVC Insulated Fine Steel Wire Armored PE Sheathed Fire Resistant Cable

Cu Core	Al Core	Description
VV ₄₂ NH-VV ₄₂	VLV ₄₂ NH-VLV ₄₂	Cu (Al) Core PVC Insulated Thick Steel Wire Armored PVC Sheathed Power Cable Cu (Al) Core PVC Insulated Thick Steel Wire Armored PVC Sheathed Fire Resistant Cable
VV ₄₃ NH-VV ₄₃	VLV ₄₃ NH-VLV ₄₃	Cu (Al) Core PVC Insulated Thick Steel Wire Armored PE Sheathed Power Cable Cu (Al) Core PVC Insulated Thick Steel Wire Armored PE Sheathed Fire Resistant Cable

2.Nominal Cross-Section Area of Conductor Core

Main Core	1	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
3+1 Neutral Core	-	-	1.5	2.5	4	6	10	16	16	25	35	50	70	70	95	120	150
3+2 Neutral Core	-	-	1.5	2.5	4	6	10	16	16	25	35	50	70	70	95	120	150
4+1 Neutral Core	-	-	1.5	2.5	4	6	10	16	16	25	35	50	70	70	95	120	150

3.Nominal Thickness of Insulation (mm)

Nominal Section Area mm ²	1	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630	800	1000
0.6/1	0.8	0.8	0.8	1	1	1	1	1.2	1.2	1.4	1.4	1.6	1.6	1.8	2.0	2.2	2.4	2.6	2.8	2.8	2.8	3.0
3.6/6	-	-	-	-	-	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4

4. DC Resistance of Conductors

Nominal section Area (mm ²)	Resistance not More than (Ω/km)		Nominal Section Area (mm ²)	Resistance not More than (Ω/km)		Nominal Section Area (mm ²)	Resistance not More than (Ω/km)		Nominal Section Area (mm ²)	Resistance not More than (Ω/km)	
	Cu	Al		Cu	Al		Cu	Al		Cu	Al
1.5	12.1	18.1	25	0.727	1.20	150	0.124	0.206	630	0.0283	0.0469
2.5	7.41	12.1	35	0.524	0.868	185	0.0991	0.164	800	0.0221	0.0369
4	4.61	7.41	50	0.387	0.641	240	0.0754	0.125	1000	0.0176	0.0291
6	3.08	4.61	70	0.268	0.443	300	0.0601	0.100			
10	1.83	3.08	90	0.193	0.320	400	0.0470	0.0778			
16	1.15	1.91	120	0.153	0.253	500	0.0366	0.0605			

5.Insulation Resistance

A. Ω · cm 0.6/1kV 3.6/6kV

Volume Resistivity

20℃ Min. 10¹³ 10¹⁴

70℃ Min. 10¹⁰ 10¹¹

B. M Ω · km

Insulation Resistance Constant

20℃ Min. 36.7 0.37

70℃ Min. 0.037 0.37

6.AC · Voltage Test

Uo/U KV Us KV T min

0.6/1 3.5 5

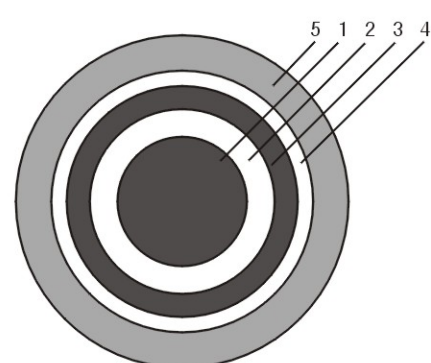
3.6/6 11 5



PVC INSULATED POWER CABLE AND FIRE RESISTANT CABLE

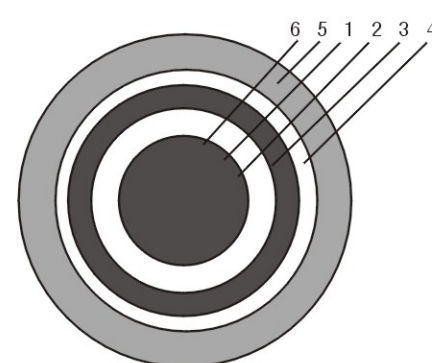
3. The Diagram of Structure

The Diagrams of Single-Core Cables



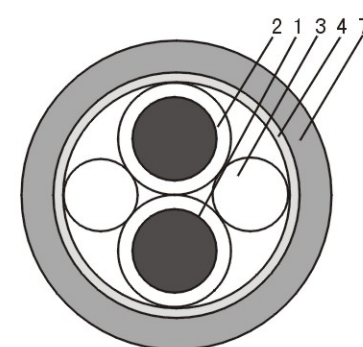
Solid-core or twisted conductor inner-steel-tape
(or wire)-armoured PVC cables
(Type) VV₂₂ VLV₂₂ VV₂₃ VLV₂₃ VV₃₂ VLV₃₂ VV₃₃ VLV₃₃

1. Copper (or aluminium) conducting core
2. PVC insulation
3. Non-woven cloth wrapped inner bedding material layer
4. Double steel tape (steel wire) armoured layer
5. PVC or PE outer sheath
6. Mica tape insulation

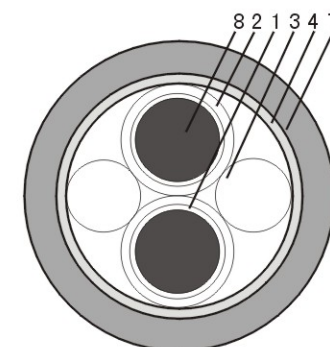


Solid-core or twisted conductor inner-steel-tape
(or wire)-armoured fire resistant PVC cables
(Type) NH-VV₂₂ NH-VLV₂₂ NH-VV₂₃ NH-VLV₂₃
NH-VV₃₂ NH-VLV₃₂ NH-VV₃₃ NH-VLV₃₃

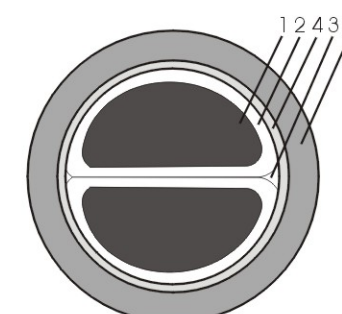
The Diagrams of Double-Core Cables



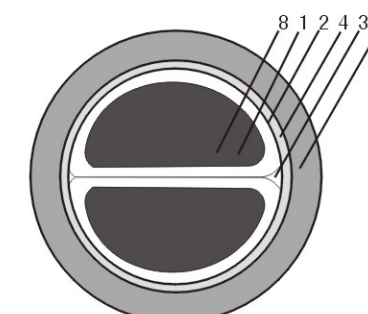
Solid-core round conductor non-armoured PVC
cables
(Type) VV VLV VY VLY



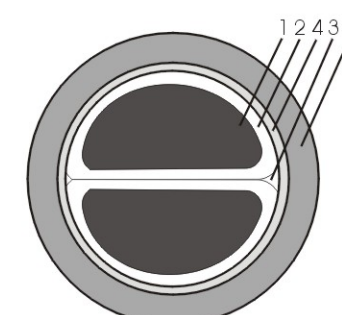
Solid-core round conductor non-armoured fire
resistant PVC cables
(Type) NH-VV NH-VLV NH-VY NH-VLY



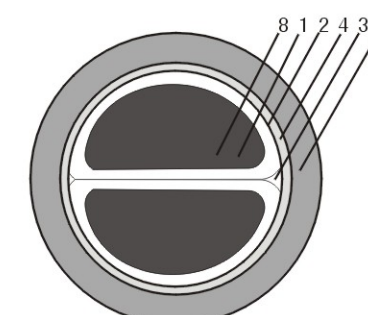
Solid-core or twisted tightly-pressed
semi-cylindrical conductor
non-armoured PVC cables
(Type) VV VLV VY VLY



Solid-core or twisted tightly-pressed
semi-cylindrical conductor non-armoured fire
resistant PVC cables
(Type) NH-VV NH-VLV NH-VY NH-VLY



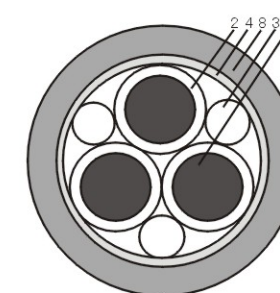
Solid-core or twisted tightly-pressed Semi-cylindrical
conductor inner-steel-tape (fine wire)-
armoured PVC cables
(Type) VV₂₂ VLV₂₂ VV₂₃ VLV₂₃ VV₃₃ VLV₃₃



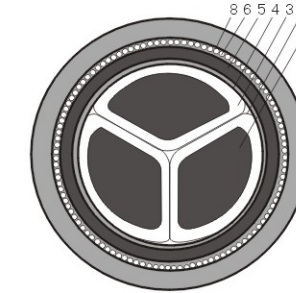
Solid-core or twisted tightly-pressed Semi-cylindrical
conductor inner-steel-tape (or wire) -fire resistant
PVC cables
(Type) NH-VV₂₂ NH-VLV₂₂ NH-VV₂₃ NH-VLV₂₃
NH-VV₃₃ NH-VLV₃₃

- | | |
|--|---|
| 1. Copper (or aluminium) conductive core | 5. Non-woven cloth wrapped inner bedding material layer |
| 2. PVC insulation | 6. Double steel tape (steel wire) armoured layer |
| 3. PP filler | 7. PVC or PE outer sheath |
| 4. Cable core wrapping tape | 8. Wrapped mica tape insulation |

The Diagrams of Three-Core Cables

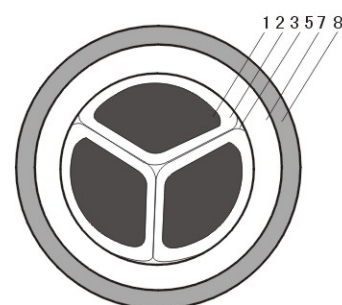


Solid-core round conductor non-armoured PVC cables
(TYPE) VV VLV VY VLY



Solid-core or tightly-pressed twisted sector conductor
fine (thick) -steel-wire inner-armoured PVC cables
(Type) VV₃₂ VLV₃₂ VV₃₃ VLV₃₃ VV₄₂ VLV₄₂ VV₄₃ VLV₄₃

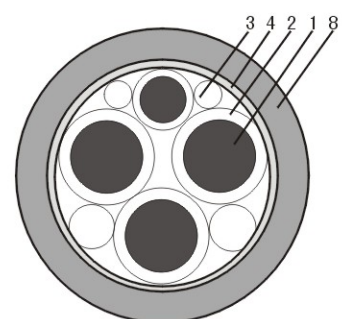
PVC INSULATED POWER CABLE AND FIRE RESISTANT CABLE



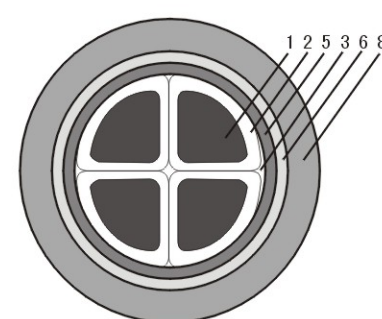
Solid-core or tightly-pressed twisted sector conductor
inner-steel-tape-armoured PVC cables
(Type) VV₂₂VLV₂₂VV₂₃VLV₂₃

- 1.Copper (or aluminium) conductive core
- 2.PVC insulation
- 3.PP filler
- 4.Cable core wrapping tape
- 5.Non-woven cloth wrapped inner bedding material layer
- 6.Single layer of inner-armoured fine (thick) steel wire
- 7.Double steel tape armoured layer
- 8.PVC or PE outer sheath

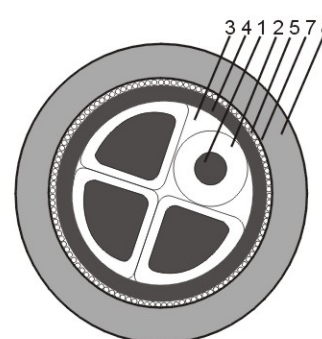
The Diagrams of Four-Core Cables



Solid-core round conductor non-armoured PVC cables
(Type) VV VLV VY VLY



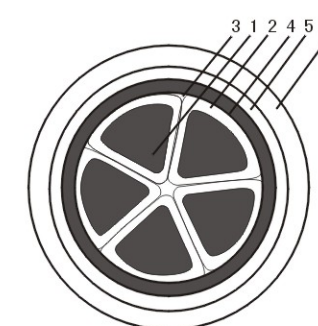
Solid-core or tightly-pressed sector (equal section)
inner-steel-tape (wire) -armoured PVC cables
(Type) VV₂₂VLV₂₂VV₂₃VLV₂₃VV₃₃VLV₃₃



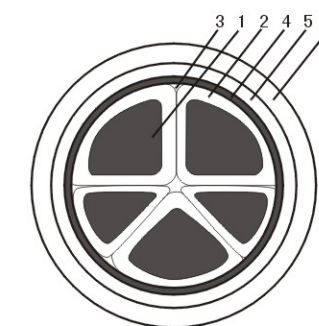
Solid-core or tightly-pressed sector (3+1) inner-
fine (thick) -steel-wire-armoured PVC cables
(Type) VV₃₂VLV₃₂VV₃₃VLV₃₃VV₄₂VLV₄₂VV₄₃VLV₄₃

- 1.Copper (or aluminium) conductive core
- 2.PVC insulation
- 3.PP filler
- 4.Cable core wrapping tape
- 5.Non-woven cloth wrapped inner bedding material layer
- 6.Double steel tape armoured layer
- 7.Single layer of inner-armoured fine (thick) steel wire
8. PVC or PE outer sheath

The Diagrams of Five-Core Cables



Solid-core or tightly-pressed sector (equal
section) inner-steel-tape (or wire) -armoured
PVC cables

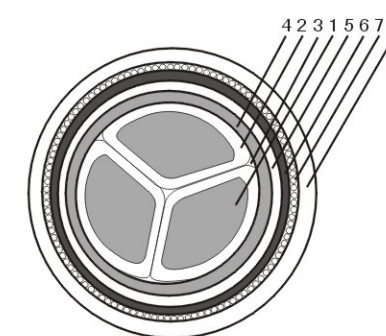


Solid-core or tightly-pressed sector (3+2) inner-
steel-tape(or wire)-armoured PVC cables

(Type) VV₂₂VLV₂₂VV₂₃VLV₂₃VV₃₃VLV₃₃

- 1.Copper (or aluminium) conductive core
- 2.PVC insulation
- 3.PP filler
- 4.Non-woven cloth wrapped inner bedding material layer
- 5.Steel tape (or wire) armoured layer
- 6.PVC or PE outer sheath

The Diagrams of 3.6/6KV Cables



- 1.Copper (or aluminium) conductive core
- 2.PVC insulation
- 3.PP filler
- 4.Inner bedding material layer
- 5.Copper tape screening layer
- 6.Isolation layer (extrusion)
- 7.Steel tape (or wire) armoured layer
- 8.PVC or PE outer sheath

PVC INSULATED POWER CABLE AND FIRE RESISTANT CABLE

4.Continuous Current Capacity

Recommended Continuous Current Capacity (A) of Two-core PVC Insulated Cable & Fire Resistant Cable

Type		VV VLV VY VLY VV ₂₂₍₂₃₎ VLV ₂₂₍₂₃₎ VV ₃₂₍₃₃₎ VLV ₃₂₍₃₃₎ VV ₄₂₍₄₃₎ VLV ₄₂₍₄₃₎ NH-VV NH-VLV NH-VY NH-VLY NH-VV ₂₂₍₂₃₎ NH-VLV ₂₂₍₂₃₎ NH-VV ₃₂₍₃₃₎ NH-VLV ₃₂₍₃₃₎									
Laying		In air		In soil (k · m/w)							
				P _w		P ₀ Water Move					
				1.0		2.5		30		35	
(KV) Voltage	Section Area(mm ²)	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al
0.6/1	1.5	17		26							
	2.5	23	18	34	26						
	4	31	24	44	35	*	*	*	*	*	*
	6	38	32	56	45						
	10	53	42	76	59						
	16	71	55	100	77	100	75	95	76	95	76
	25	90	70	125	100	120	95	120	95	120	95
	35	110	86	155	120	150	115	150	115	150	115
	50	135	105	185	145	180	135	175	135	175	135
	70	165	130	230	175	215	165	215	165	210	165
	95	210	165	275	210	260	205	255	200	255	200
	120	245	190	310	245	295	230	295	225	290	225
	150	280	215	350	275	330	255	330	250	325	250
	185	320	250	395	310	375	295	370	290	365	285
3.6/6	10	53	41	68	52						
	16	69	55	89	68						
	25	95	73	120	95						
	35	115	88	145	115	*	*	*	*	*	*
	50	135	105	170	130						
	70	165	130	210	160						
	95	205	160	250	195	250	195	250	195	250	195
	120	235	180	290	225	285	220	285	220	285	220
	150	265	210	325	250	320	250	320	250	320	250
Operating Temperature	70										
Environment Temperature	40			25							

Note:Pw—Coefficient of thermal resistance of soil when no water move.

The continuous current capacity of (3+1)-cord, (3+2)-core and five -core cables can be selected according to that of three-core cable.

P₀—Coefficient of thermal resistance of soil when water move makes soil dry.

*—The surface temperature of cable is not above 50℃,no water move.

Recommended Continuous Current Capacity (A) of Three-core PVC Insulated Cable & Fire Resistant Cable.

Type		VV VLV VY VLY VV ₂₂₍₂₃₎ VLV ₂₂₍₂₃₎ VV ₃₂₍₃₃₎ VLV ₃₂₍₃₃₎ VV ₄₂₍₄₃₎ VLV ₄₂₍₄₃₎ NH-VV NH-VLV NH-VY NH-VLY NH-VV ₂₂₍₂₃₎ NH-VLV ₂₂₍₂₃₎ NH-VV ₃₂₍₃₃₎ NH-VLV ₃₂₍₃₃₎									
Laying		In air		In soil (k · m/w)							
				P _w		P ₀ Water Move					
				1.0		2.5		30		35	
(KV) Voltage	Section Area(mm ²)	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al
0.6/1	1.5	15		22							
	2.5	19	15	29	23						
	4	26	20	38	30						
	6	32	26	47	39	*	*	*	*	*	*
	10	46	35	65	50	64	49	63	49	63	49
	16	60	47	84	65	82	64	82	63	81	63
	25	77	60	110	84	105	81	105	80	105	80
	35	95	74	130	100	120	95	120	95	120	95
	50	115	90	155	120	160	115	145	115	145	115
	70	145	115	195	150	180	140	185	140	175	140
	95	185	140	230	185	215	165	215	165	210	165
	120	210	165	260	205	250	190	245	190	245	190
	150	245	190	300	230	275	215	275	210	270	210
	185	280	215	335	260	310	245	310	245	305	240
	240	335	260	390	300	360	285	360	280	355	280
	300	375	295	435	340	405	315	400	315	395	315
3.6/6	10	47	36	60	46						
	16	61	48	78	60						
	25	78	61	100	77						
	35	95	74	120	90						
	50	115	88	140	110	*	*	*	*	*	*
	70	140	110	175	135	170	135	170	135	170	135
	95	170	130	210	165	210	160	210	160	210	160
	120	200	155	240	185	235	180	235	180	235	180
	150	235	180	275	210	270	210	265	210	265	210
	185	255	205	300	235	300	230	295	230	295	230
	240	305	240	350	275	345	265	340	265	340	250
	300	340	265	390	310	380	300	375	300	375	300
Operating Temperature	70										
Environment Temperature	40			25							

Note:Pw—Coefficient of thermal resistance of soil when no water move.

The continuous current capacity of (3+1)-core, (3+2)-core and five -core can be selected according to that of three-core cable.

P₀—Coefficient of thermal resistance of soil when water move makes soil dry.

*—The surface temperature of cable is not above 50℃,no water move.

PVC INSULATED POWER CABLE AND FIRE RESISTANT CABLE

Recommended Continuous Current Capacity (A) of Single-core Non-armored PVC Insulated Power Cable&Fire Resistant Cable

Type	VV VLV VY VLY NH-VV NH-VLV NH-VY NH-VLY									
Voltage	0.6 / 1 (kV)									
Arrangement	△ Triangle (Touch each other)									
Laying	In air		In soil (k · m / w)							
			Pw		Po Water Move					
			1.0		2.5		3.0		3.5	
Section Area (mm ²)	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al
1.5	19	-	27	-	25	-	23	-	19	-
2.5	25	19	36	27	33	25	30	21	25	17
4	33	26	47	35	43	32	39	28	33	23
6	41	34	58	46	53	41	48	36	41	29
10	57	44	78	58	71	52	65	46	55	38
16	76	59	100	76	92	68	84	60	72	49
25	98	76	130	98	115	87	105	77	93	64
35	115	90	155	115	140	105	125	93	110	77
50	145	110	185	140	165	125	150	110	130	93
70	180	140	225	170	200	150	185	135	165	115
95	225	175	270	205	240	180	225	165	200	140
120	260	200	310	235	275	205	225	190	230	160
150	300	230	350	265	310	235	290	215	260	185
185	345	270	392	300	350	265	325	245	295	210
240	410	320	455	350	405	310	380	280	340	245
300	475	370	515	395	455	350	430	320	385	280
400	555	440	585	455	515	400	485	370	440	320
500	640	510	660	520	580	455	550	420	495	365
630	730	595	740	590	650	520	615	475	555	415
800	830	690	820	665	720	580	675	535	615	470
1000	-	780	-	735	-	645	-	595	-	520
Operating Temperature	70									
Environment Temperature	40		25							

Note: P_w—Coefficient of thermal resistance of soil When no water move.
P_o—Coefficient of thermal resistance of soil when water move makes soil dry.

Recommended Continuous Current Capacity (A) of Single – core Non – armored PVC Insulated Power Cable&Fire Resistant Cable

Type	VV VLV VY VLY NH-VV NH-VLV NH-VY NH-VLY									
Voltage	0.6 / 1 (kV)									
Arrangement	⊙ ⊙ ⊙ Flat (Distance between cables equals to the diameter of cable)									
Laying	In air		In soil (k · m / w)							
			Pw		Po Water Move					
			1.0		2.5		3.0		3.5	
Section Area(mm ²)	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al
1.5	24	-	29	-	28	-	28	-	28	-
2.5	31	24	38	30	37	29	36	28	36	28
4	41	32	49	39	47	37	47	37	47	37
6	52	42	61	50	58	48	58	47	58	47
10	72	55	83	64	78	60	77	59	76	59
16	95	73	105	83	100	77	99	76	98	76
25	120	96	135	105	125	99	125	98	125	97
35	150	115	160	125	150	115	150	115	145	115
50	180	140	195	150	175	135	175	135	175	135
70	230	175	240	185	215	170	215	165	210	165
95	280	215	285	220	260	200	255	200	255	195
120	325	250	325	250	295	230	290	225	290	225
150	375	290	365	285	330	255	325	255	325	250
185	430	335	415	320	375	290	370	285	365	285
240	510	395	480	375	435	340	430	335	425	330
300	585	455	545	425	495	385	485	380	480	375
400	690	540	625	490	565	440	555	435	550	430
500	800	630	710	560	640	505	630	500	625	495
630	920	740	810	645	730	580	715	570	710	565
800	1060	860	910	735	820	660	805	650	795	640
1000	-	980	-	825	-	740	-	730	-	720
Operating Temperature	70									
Environment Temperature	40		25							

Note: P_w—Coefficient of thermal resistance of soil when no water move.
P_o—Coefficient of thermal resistance of soil when water move makes soil dry.

PVC INSULATED POWER CABLE AND FIRE RESISTANT CABLE

Recommended Continuous Current Capacity(A)of Single – core Non – armored PVC Insulated Power Cable&Fire Resistant Cable

Type	VV VLV VY VLY									
Voltage	3.6 / 6 (kV)									
Arrangement	△ Triangle (Touch each other)									
Laying	In air		In soil (k · m / w)							
			Pw		P _D Water Move					
			1.0		2.5		3.0		3.5	
Section Area (mm ²)	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al
10	59	45	74	55	71	53	67	49	60	42
16	77	60	96	72	91	68	86	63	77	54
25	99	77	120	92	115	87	105	80	98	69
35	120	93	145	110	135	100	130	95	115	82
50	145	110	170	130	160	120	150	110	135	97
70	180	140	210	160	195	150	185	135	165	115
95	215	170	255	190	235	175	220	160	200	140
120	250	195	290	220	265	200	250	185	225	160
150	285	220	325	245	295	225	280	205	250	175
185	330	255	365	280	330	250	315	230	280	200
240	385	300	425	325	385	290	360	265	325	230
300	445	345	480	365	430	330	405	300	360	260
400	520	410	545	420	485	375	455	345	410	295
500	595	475	615	480	545	425	510	390	460	335
630	680	550	690	545	610	480	570	440	510	375
800	770	635	760	615	670	540	625	490	560	420
1000	860	720	825	680	725	595	680	540	605	460
Operating Temperature	70									
Environment Temperature	40		25							

Note:P_w—Coefficient of thermal resistance of soil when no water move.
P_D—Coefficient of thermal resistance of soil when water move makes soil dry.

Recommended Continuous Current Capacity(A)of Single – core Non – armored PVC Insulated Power Cable&Fire Resistant Cable

Type	VV VLV VY VLY									
Voltage	3.6 / 6 (kV)									
Arrangement	⊙ ⊙ ⊙ Flat (Distance between cables equals to the diameter of cable)									
Laying	In air		In soil (k · m / w)							
			Pw		P _D Water Move					
			1.0		2.5		3.0		3.5	
Section Area(mm ²)	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al
10	69	53	76	59	76	58	75	58	75	58
16	90	70	99	76	97	75	97	75	96	75
25	115	90	125	98	120	96	120	95	120	95
35	140	110	150	115	145	110	145	110	145	110
50	170	130	180	140	170	130	170	130	170	130
70	210	165	220	170	210	160	205	160	205	160
95	260	200	265	205	250	195	245	190	245	190
120	300	230	300	235	285	220	280	215	280	215
150	340	265	340	265	315	145	315	245	310	240
185	395	305	385	300	360	280	355	275	350	275
240	465	360	445	345	415	320	410	320	405	315
300	535	415	505	395	465	365	460	360	455	355
400	630	490	580	455	530	415	525	410	520	405
500	730	575	660	520	600	475	595	470	590	465
630	845	670	750	595	680	540	670	535	665	530
800	970	780	840	680	760	615	750	605	740	600
1000	1090	895	930	760	835	685	825	675	815	670
Operating Temperature	70									
Environment Temperature	40		25							

Note:P_w—Coefficient of thermal resistance of soil when no water move.
P_D—Coefficient of thermal resistance of soil when water move makes soil dry.

PVC INSULATED POWER CABLE AND FIRE RESISTANT CABLE

5.Cable's Construction and Weight

Grade 0.6/1kV Non-armored PVC Cables (including flame retardant types)

Nominal Section Area (mm ²)	Single-core Cable				Double-core Cable				Three-core Cable				Four-core Cable			
	φ (mm)	Weight (kg/km)			φ (mm)	Weight (kg/km)			φ (mm)	Weight (kg/km)			φ (mm)	Weight (kg/km)		
		VV	VY	VLV	VLV	VV	VY	VLV	VLV	VV	VY	VLV	VLV	VV	VY	VLV
1.5	6.08	51	45	-	-	9.86	112	99	-	10.33	136	123	-	11.13	165	150
2.5	6.48	63	56	48	41	10.66	141	127	110	96	11.19	175	160	128	113	137
4	7.73	88	80	63	55	12.44	197	180	147	130	13.11	250	232	176	158	192
6	7.88	111	103	76	68	13.60	249	230	178	159	14.36	322	302	215	195	242
10	8.69	156	147	94	85	15.08	347	326	222	201	15.95	460	438	272	250	311
16	9.62	218	207	120	109	16.94	483	459	284	260	17.96	653	628	355	330	414
25	11.96	335	321	177	163	18.20	679	653	366	340	22.51	969	936	499	466	569
35	13.10	437	422	217	202	19.62	876	848	444	416	24.33	1260	1225	611	560	712
50	14.86	577	559	280	262	22.08	1157	1125	571	539	26.79	1662	1623	784	745	942
70	16.66	790	770	360	340	24.76	1590	1552	742	704	30.11	2310	2261	1039	990	1260
95	19.20	1078	1053	482	457	28.27	2160	2114	987	941	33.86	3138	3080	1378	1320	1692
120	20.81	1326	1299	573	546	30.52	2664	2612	1180	1128	36.62	3881	3815	1655	1589	2045
150	22.99	1625	1593	700	668	33.58	3257	3197	1435	1372	39.77	4793	4718	2060	1985	2555
185	25.51	2025	1987	866	828	37.31	4075	4002	1786	1713	43.72	5975	5885	2541	2451	3172
240	28.76	2631	2585	1107	1061						48.73	7738	7629	3233	3124	4067
300	31.82	3274	3221	1362	1309						53.49	9594	9466	3963	3835	5010
400	35.43	4145	4082	1700	1637						59.27	12197	12045	4959	4807	6325
500	39.22	5178	5105	2096	2023											
630	43.63	6668	6582	2627	2541											
800	48.14	8394	8295	3234	3135											
1000	53.50	10495	10375	4017	3891											

Grade 0.6/1kV Non-armored PVC Cables (including flame retardant types)

Nominal Section Area (mm ²)	(3+1) core Cable				Five-core Cable				(3+2)core Cable			
	φ (mm)	Weigh (kg/km)			φ (mm)	Weight (kg/km)			φ (mm)	Weight (kg/km)		
		VV	VY	VLV		VV	VY	VLV		VV	VY	VLV
1.5	—	—	—	—	—	12.01	191	166	—	—	—	—
2.5	11.87	202	186	—	—	13.09	253	226	175	148	13.44	251
4	13.75	287	268	196	177	15.49	369	336	245	212	15.37	353
6	15.16	380	359	248	227	16.87	486	450	289	253	17.12	476
10	17.06	539	515	315	291	19.06	735	694	418	377	19.00	663
16	19.12	772	745	411	384	23.19	1094	1043	591	540	22.89	995
25	21.08	1131	1101	563	533	28.85	1763	1695	916	848	26.39	1536
35	22.99	1426	1393	678	645	32.15	2316	2236	1152	1072	27.06	1768
50	26.54	1953	1912	916	875	31.68	2692	2614	1229	1151	32.17	2285
70	29.95	2686	2637	1194	1145	35.73	3740	3647	1421	1328	35.82	3125
95	33.29	3645	3585	1592	1532	41.27	5123	5005	2191	2073	40.53	4249
120	36.58	4601	4532	1952	1883	44.82	6349	6215	2610	2476	44.45	5428
150	39.84	5494	5415	2337	2258	49.60	7846	7685	3290	3129	47.04	6289
185	44.28	6943	6484	2923	2828	54.96	9782	9596	4065	3879	52.09	8025
240	49.78	8974	8859	3723	3608	62.12	12732	11980	5224	4472	57.65	10301
300	54.91	11096	10964	4554	4422	68.71	15814	14930	6429	5545	63.27	12750
400												
500	39.22	5178	5105	2096	2023							
630	43.63	6668	6582	2627	2541							
800	48.14	8394	8395	3234	3135							
1000	53.50	10495	10375	4017	3891							

PVC INSULATED POWER CABLE AND FIRE RESISTANT CABLE

Grade 0.6/1kV Steel-tape-armored PVC Cables (including flame retardant types)

[illegible]

Grade 0.6/1kV Steel-tape-armored PVC Cables (including flame retardant types)

[illegible]

PVC INSULATED POWER CABLE AND FIRE RESISTANT CABLE

Grade 0.6/1kV Fine-steel-wire-armored PVC Cables (including flame retardant types)

[illegible]

Grade 0.6/1kV Thick-steel-wire-armored PVC Cables (including flame retardant types)

[illegible]

PVC INSULATED POWER CABLE AND FIRE RESISTANT CABLE

Grade 0.6/1kV Thick-steel-wire-armored PVC Cable (including flame retardant types)

Nominal Section Area (mm ²)	Three-core Cable					Four-core Cable					(3+1)core Cable				
	φ (mm)	Weight (kg/km)			φ (mm)	Weight (kg/km)			φ (mm)	Weight (kg/km)					
		VV ₄₂	VV ₄₃	VLV ₄₂		VLV ₄₃	VV ₄₂	VV ₄₃		VLV ₄₂	VLV ₄₃	VV ₄₂	VV ₄₃	VLV ₄₂	VLV ₄₃
16	28.56	2472	2405	2173	2106	31.92	2622	2543	2218	2139	29.72	2597	2527	2235	2165
25	32.75	3046	2965	2577	2496	31.89	2889	2810	2264	2185	31.32	2973	2896	2423	2346
35	34.77	3458	3367	2809	2718	34.29	3501	3412	2636	2547	33.23	3503	3421	2755	2673
50	37.43	4088	3986	3210	3108	37.27	4259	4157	3089	2987	36.78	4248	4152	3210	3114
70	40.55	4942	4826	3671	3555	40.92	5317	5200	3622	3505	40.39	5316	5201	3824	3709
95	44.30	6090	5957	4331	4198	45.16	6731	6596	4384	4249	43.53	6478	6348	4427	4297
120	47.06	7049	6902	4824	4677	48.36	8033	7882	5065	4914	46.82	7651	7505	5003	4857
150	50.21	8178	8015	5444	5281	52.64	9457	9279	5813	5635	50.08	8861	8698	5704	5541
185	53.96	9560	9377	6127	5944	56.88	11325	11125	6747	6547	54.32	10612	10428	6593	6409
240	58.97	11751	11537	7246	7032	62.86	14201	13964	8195	7958	59.82	13072	12854	7826	7608
300	63.53	13906	13666	8275	8035	68.23	16947	16673	9440	9166	65.15	15539	15285	8997	8743

Grade 3.6/6kV Non-armored PVC Cable (including flame retardant types)

Nominal Section Area (mm ²)	Single-core Cable				Double-core Cable						Three-core Cable				
	φ (mm)	Weight (kg/km)			φ (mm)	Weight (kg/km)			φ (mm)	Weight (kg/km)					
		VV	VY	VLV		VV	VY	VLV		VV	VY	VLV			
10	14.54	332	312	270	250	26.14	673	635	548	510	27.79	895	854	707	666
16	15.44	409	388	310	289	28.00	830	789	631	590	29.99	1130	1084	831	785
25	17.36	545	520	387	362	27.98	1068	1025	756	713	27.80	1466	1421	997	952
35	18.50	663	637	443	417	29.60	1310	1262	878	830	29.82	1814	1763	1165	1114
50	19.84	810	782	512	484	31.41	1605	1552	1020	967	32.05	2242	2185	1364	1307
70	21.64	1047	1016	617	586	34.08	2081	2020	1234	1173	35.18	2946	2880	1675	1609
95	23.54	1335	1301	740	706	36.74	2663	2594	1489	1420	38.50	3797	3722	2037	1962
120	25.15	1603	1566	851	814	38.99	3207	3131	1723	1647	41.72	4605	4520	2379	2294
150	26.69	1890	1851	966	927	41.66	3797	3712	1974	1889	44.44	5464	5369	2730	2635
185	28.58	2278	2236	1118	1076	44.234	4587	4492	2298	2203	47.76	6526	6520	3192	3086
240	31.39	2883	2834	1359	1310						52.34	8393	8268	3889	3764
300	34.02	3519	3463	1607	1551						56.48	10212	10072	4581	4441
400	37.19	4381	4316	1936	1871										
500	40.54	5400	5326	2318	2244										
630	44.94	6914	6828	2873	2787										
800	49.43	8664	8565	3504	3405										
1000	54.14	10718	10605	4234	4121										

PVC INSULATED POWER CABLE AND FIRE RESISTANT CABLE

Grade 3.6/6kV steel-tape-armored PVC Cable (including flame retardant types)

Nominal Section Area (mm ²)	Single-core Cable				Double-core Cable				Three-core Cable			
	φ (mm)	Weight (kg/km)		φ (mm)	Weight (kg/km)		φ (mm)	Weight (kg/km)		φ (mm)	Weight (kg/km)	
		VV ₂₃	VLV ₂₃		VV ₂₃	VLV ₂₃		VV ₂₃	VLV ₂₃		VV ₂₃	VLV ₂₃
10	17.71	525	463	29.54	1031	985	32.59	1627	1574	34.59	1901	1844
16	18.64	614	516	32.80	1568	1514	34.59	2575	1844	34.59	2575	1926
25	20.56	775	617	32.78	1803	1747	32.40	2179	2123	32.40	2179	1710
35	21.70	908	689	34.20	2069	2010	34.42	2575	2513	34.42	2575	1926
50	23.04	1072	775	36.01	2406	2341	36.85	3075	3005	36.85	3075	2197
70	24.84	1333	903	38.88	2966	2892	39.98	3855	3776	39.98	3855	2584
95	26.74	1654	1050	41.54	3612	3530	43.50	4810	4720	43.50	4810	3050
120	28.35	1934	1182	43.99	4233	4142	46.46	5694	5591	46.46	5694	3469
150	29.89	2241	1317	46.20	4873	4773	49.38	6645	6531	49.38	6645	3912
185	31.18	2603	1555	49.28	5774	5660	52.90	7918	7791	52.90	7918	4485
240	35.99	3687	2163				57.68	9831	9683	57.68	9831	5179
300	38.42	4370	2459				62.02	11790	11625	62.02	11790	6159
400	41.19	5325	2880									
500	45.34	6448	3366									
630	49.74	8071	4030									
800	44.63	9982	4822									
1000	59.54	12186	5701									

Grade 3.6/6kV Fine-steel-tape-armored PVC Cable (including flame retardant types)

Nominal Section Area (mm ²)	Single-core Cable				Double-core Cable				Three-core Cable			
	φ (mm)	Weight (kg/km)		φ (mm)	Weight (kg/km)		φ (mm)	Weight (kg/km)		φ (mm)	Weight (kg/km)	
		VV ₃₂	VLV ₃₂		VV ₃₃	VLV ₃₃		VV ₃₂	VLV ₃₂		VV ₃₂	VLV ₃₂
10	20.11	907	878	32.14	1683	1630	34.44	2196	2139	34.44	2196	1551
16	21.04	1022	923	34.80	2149	2092	36.65	2523	2459	36.65	2523	1660
25	22.96	1217	1184	34.78	2380	2320	34.60	2764	2702	34.60	2764	2233
35	24.10	1374	1339	36.40	2688	2622	36.62	3196	3127	36.62	3196	2478
50	25.44	1560	1523	38.21	3057	2985	40.05	4084	4005	40.05	4084	3127
70	27.24	1873	1833	42.08	4033	3950	43.18	4950	4861	43.18	4950	3590
95	29.34	2233	2187	44.74	4752	4660	46.90	6022	5918	46.90	6022	4159
120	30.95	2559	2511	47.19	5439	5337	49.66	6964	6849	49.66	6964	4623
150	32.69	2918	2864	49.60	6152	6037	52.58	7995	7869	52.58	7995	5135
185	35.38	3612	3554	52.48	7112	6986	56.10	9366	9227	56.10	9366	5793
240	38.19	4338	4272				60.88	11408	11246	60.88	11408	6741
300	40.82	5095	5021				66.72	14275	14087	66.72	14275	8456
400	43.99	6081	5997									
500	48.54	7714	7617									
630	52.94	9459	9349									
800	57.83	11488	11358									
1000	62.74	13844	13697									

Grade 3.6/6kV Thick-steel-wire-armored PVC Cable (including flame retardant types)

Nominal Section Area(mm ²)	Three-core Cable			
	φ (mm)	Weight (kg/km)		
		VV ₄₂	VY ₄₃	VLV ₄₂
16	41.05	3893	3775	3594
25	38.60	4085	3980	3616
35	40.62	4551	4435	3902
50	42.85	5276	5153	4398
70	45.98	6130	5992	4859
95	49.70	7249	7088	5490
120	52.26	8258	8088	6027
150	55.18	9357	9170	6623
185	58.90	10869	10655	7427
240	63.48	13013	12774	8508
300	68.02	15229	14956	9598