

# 金属屏蔽电力电缆

## Metallic Shielding Power Cable

本产品适用于额定电压0.6/1kV及以下的电力线路中作输送电能用。产品具有较强的电磁干扰、抗雷击及均衡电位，改善供电品质的特性，特别适宜计算机中心、航空航天监控中心，智能大楼等精密电子装置场所。

### 一、生产执行标准

GB/T12706.1-2008

It is used for power transmission on power lines of rated voltage 0.6/1kV or lower. It has strong electromagnetic interference, lightning and equilibrium potential, and improves the quality of power supply. It is especially suitable for computer center, aeronautics and astronautics monitoring center, intelligent building, etc.

### Executive standard

GB/T12706.1-2008

### 二、型号名称

### Type and Description

| 型号 Type       |                  | 名称<br>Description  |
|---------------|------------------|--|
| 铜 Cu          | 铝 Al             |  |
| VVP<br>VVP22  | VLVP<br>VLVP22   | 铜、铝芯聚氯乙烯绝缘金属屏蔽（钢带铠装）聚氯乙烯护套电力电缆<br>Power cable with Cu/Al core, PVC insulation, metallic shielding(steel tape armor), PVC sheath.   |
| YJVP<br>YJV22 | YJLVP<br>YJLVP22 | 铜、铝芯交联聚乙烯绝缘金属屏蔽（钢带铠装）聚氯乙烯护套电力电缆<br>Power cable with Cu/Al core, XLPE insulation, metallic shielding(steel tape armor), PVC sheath. |

注：1、该产品可按用户的使用要求，设计成具有阻燃性能或耐火性能的产品。

订货时只需在型号前加“ZR-、ZA-、ZB-、ZC-、ZD-”表示阻燃型，加“N-”表示耐火型，加“ZAN-、ZBN-、ZCN-、ZDN-”表示阻燃耐火型；

2、电缆的金属屏蔽可按用户要求有两种形式：金属丝编织或金属带绕包。

Note 1. We also produce cable with flame retardant or fire resistant performance according to the requirement of customer's. Prefix "ZR-、ZA-、ZB-、ZC-、ZD-" shall be added to the original type for flame retardant cable, "N-" added for fire resistant cable and "ZAN- ZBN- ZCN- ZDN-" added for flame retardant and fire resistant cable.  
2. There are two kinds of metallic shielding according to the requirement of customer's. metallic wire braiding or metallic tape wrapping.

### 三、规格

### Specification

| 型号 Type               |                           | 芯数<br>Core number | 标称截面 mm <sup>2</sup><br>Nominal cross section area |
|-----------------------|---------------------------|-------------------|--|
| 铜 Cu                  | 铝 Al                      |                   |  |
| VVP YJVP              | VLVP YJLVP                | 1                 | 4~300  |
| VVP VVP22 YJVP YJVP22 | VLVP VLVP22 YJLVP YJLVP22 | 2                 | 4~185  |
|                       |                           | 3                 | 4~300  |
|                       |                           | 3+1               |  |
|                       |                           | 4                 | 4~185  |

### 四、使用条件

### Working Condition

- 导体最高长期允许工作温度：  
聚氯乙烯绝缘为70°C，  
交联聚乙烯绝缘为90°C；
- 电缆短路时（最长持续时间不超过5s），导体的最高温度不超过：  
聚氯乙烯绝缘为160°C；  
交联聚乙烯绝缘为250°C；  
敷设时环境温度应不低于0°C；
- 电缆允许弯曲半径为：  
铠装电缆不小于电缆外径的20倍；  
非铠装电缆不小于电缆外径的15倍；  
软芯导体电缆不小于电缆外径的10倍。

- Max long-term working temperature allowed by conductor is 70°C for cable with PVC insulation, 90°C for cable with XLPE insulation.
- Max temperature of conductor is no more than 160°C for cable with PVC insulation, 250°C for cable with XLPE insulation during short circuit (The longest lasting time is no more than 5s).
- Environment temperature for installation is not lower than 0°C.
- Bending radius allowed by cable is no less than 20 times of outer diameter of cable for armored cable, it is less than 15 times of outer diameter of cable for inarmored cable, no less than 10 times of outer diameter of cable for soft conductor.

## 五、电缆近似外径

VVP型、VLVP型电缆外径分别在VV型、VLV型电缆外径的基础上增加1~1.5mm。

YJVP型、YJLVP型电缆外径分别在YJV型、YJLV型电缆外径的基础上增加1~1.5mm。

VV22P型、VLV22P型电缆外径分别在VV22型、VLV22型电缆外径的基础上增加1~1.5mm。

YJV22P型、YJLV22P型电缆外径分别在YJV22型、YJLV22型电缆外径的基础上增加1~1.5mm。

## Approximate Outer Diameter of Cable

Outer diameter value of VVP type and VLVP type cable should be added by 1~1.5mm on the basis of that of VV type and VLV type cable.

Outer diameter value of YJVP type and YJLVP type cable should be added by 1~1.5mm on the basis of that of YJV type and YJLV type cable.

Outer diameter value of VV22P type and VLV22P type cable should be added by 1~1.5mm on the basis of that of VV22 type and VLV22 type cable.

Outer diameter value of YJV22P type and YJLV22P type cable should be added by 1~1.5mm on the basis of that of YJV22 type and YJLV22 type cable.

## 六、主要技术参数

1、20°C时导体直流电阻，参见0.6/1kV聚氯乙烯绝缘及护套电力电缆；

2、绝缘电阻；

## Main Technical Parameter

1.DC resistance of conductor at 20°C, see 0.6/1kV PVC insulated and sheath power cable.

2.Insulated resistance.

| 序号<br>No. | 性能<br>Performance  | 聚氯乙烯绝缘<br>PVC insulation | 交联聚乙烯绝缘<br>XLPE insulation |
|-----------|--|--------------------------|----------------------------|
| 1         | 体积电阻率(20°C) 电缆工作温度时<br>Volume resistance ratio(20°C) under cable<br>working temperature          | $10^{13}$<br>$10^{10}$   | —<br>$10^{12}$             |
| 2         | 绝缘电阻常数(20°C) 电缆工作温度时<br>Insulation resistance constant (20°C) under<br>cable working temperature | 36.7<br>0.037            | —<br>3.67                  |

3、交流电压试验成品电缆经受交流50Hz、5min、3.5KV的电压试验绝缘应无击穿；

4、耐火型电缆的耐火特性应符合IEC60331或GB/T19666中的A类或B类耐火试验要求；

5、阻燃型电缆的阻燃性能应符合IEC60332 或GB/T18380.3 标准中规定的A、B或C三类中任一类别阻燃性能要求。

3.Finished cable should endure A.C voltage test of 3.5kV, AC 50Hz for 5min without puncture.

4.Fire resistant performance of fire resistance cable should meet testing requirement of category stipulated in IEC60331 or GB/T19666-2005 standard.

5.Flame retardant performance of Flame retardant cable should meet testing requirement of category A or B or C stipulated in IEC60332 or GB/T18380.1.2.3standard.

## 七、交货长度

1、根据双方协议，允许任何长度的电缆交货；

2、长度计量误差不超过±0.5%。

## Delivery Length

1.Delivery length of cable depends on both agreements.

2.The measurement error of length is no more than ±0.5%.