

# Electrical Signal Communication Cable

This cable is designed for connecting electrical signals, alarm signals, and telegraph signals. It is suitable for use in railways, power plants, and chemical industries with AC rated voltage of 500V and below for audio signal transmission and automatic control devices.

**信号电缆**

本产品适用于额定电压500V及以下电气信号、报警信号、电报信号、音频信号传输及自动控制装置连接，广泛用于铁路、电厂、电站、工厂、矿山、港口、化工等领域。

● 产品执行标准：  
企业标准

● 电缆使用条件：  
1) 电缆导体的最高工作温度 70℃；  
2) 电缆应符合国家对于工业及民用信号传输和通信、综合布线系统关于音频范围内信号传输的要求；  
3) 电缆的长期运行环境温度不应超过 70℃；  
4) 电缆的最小弯曲半径为电缆外径的 12 倍。

电缆的型号，名称，见表 13-1

表 13-1 信号电缆的型号、名称

型号/名称	描述/说明
PVV	聚氯乙烯绝缘聚氯乙烯护套信号电缆 Signaling cable with PVC insulation & sheath
PYV	聚乙烯绝缘聚氯乙烯护套信号电缆 Signaling cable with PE insulation PVC sheath
PVV22	聚氯乙烯绝缘聚氯乙烯护套铠装信号电缆 Signaling cable with PVC insulation & sheath steel tape armor
PYV22	聚乙烯绝缘聚氯乙烯护套铠装信号电缆 Signaling cable with PE insulation PVC sheath steel tape armor

注：PVV、PYV 为信号传输型；PVV22、PYV22 为信号传输铠装型。

## Overview

### High-Performance Electrical Signal Communication Cable

This electrical signal communication cable is designed for reliable transmission of alarm, telegraph, and audio signals in systems with an AC rated voltage of 500V and below. It is engineered for versatile use across heavy industries, including railways, power plants, mines, and chemical facilities. The cable supports both power frequency and DC signal transmission, with specific integrated twisting structures available for high-quality audio range performance.

## Technical Specifications

### Rated Voltage

**500 V**

AC Rated Voltage

Max Working Temperature	70 °C
Min Installation Temperature	0 °C
Minimum Bending Radius	12 times the cable outer diameter
Performance Recommendation	PYV and PYV22 models offer superior signal transmission performance compared to PVV and PVV22 types.

## Product Models

### Cable Model Specifications

Model Type	Description
PVV	PVC insulation & PVC sheath signaling cable
PYV	PE insulation & PVC sheath signaling cable
PVV22	PVC insulation & PVC sheath with steel tape armor
PYV22	PE insulation & PVC sheath with steel tape armor

## Application Areas

### Signal Compatibility

- Electrical Signals
- Alarm Signals
- Telegraph Signals
- Audio Signal Transmission
- Automatic Control Devices

### Target Industries

Railways, Power Plants, Substations, Mines, Ports, Chemical Industry