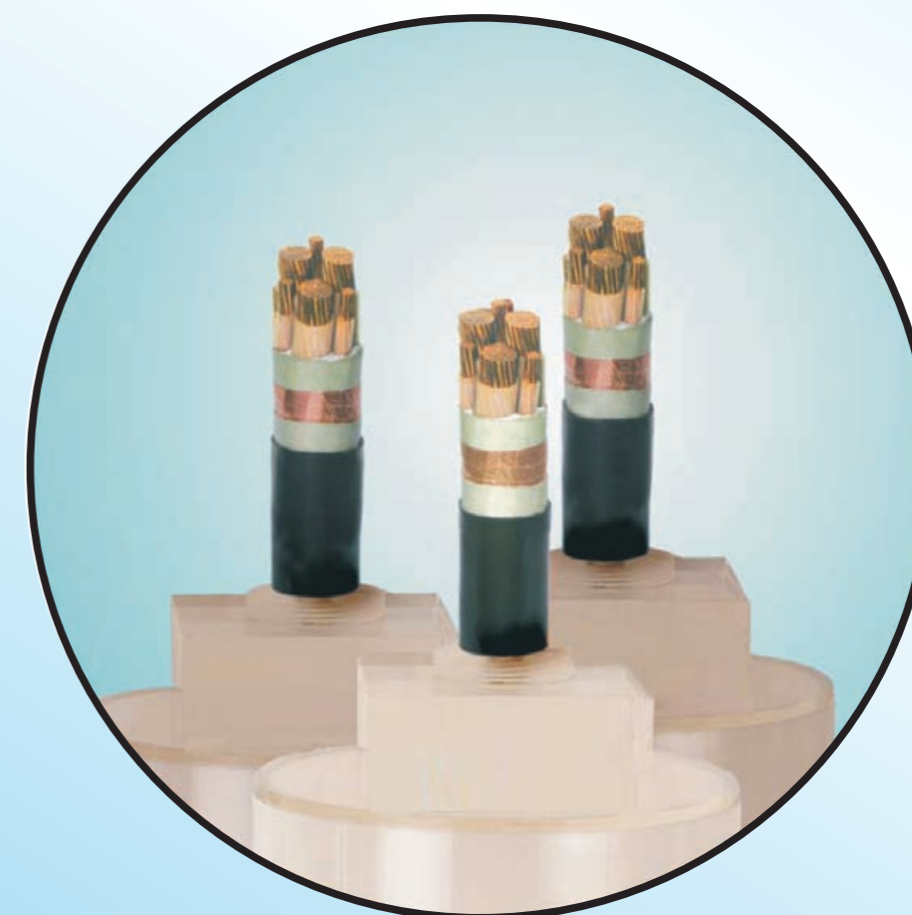


# 变频器专用电缆 Transducer Cable

变频器专用电缆主要用于钢铁、石油化工、电站建设、轻工、纺工等领域的变频器系统与配套电动元件的传动系统；  
本产品性能优越，各项技术指标与ABB公司的技术条件吻合。

The products could be applied to drive systems of frequency-conversion and electromotive components in some industries as steel, petrochemical, construction of power station, light industry and textile. It has superior performances and all the technical index complies with the requirements of ABB company.



## 索引 Index

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## 变频器专用电缆 Transducer Cable

### 执行标准 Executive Standard

本产品按照Q/75230256-2.6标准生产制造

This product is manufactured as per Q/75230256-2.6 standard.

### 适用范围 Application Scope

不同电压等级的产品适用范围: Applicable scope for product at different voltage grade:

1、0.6/1kV级, 产品适用于额定电压0.6/1kV及以下的变频动力系统

Grade 0.6/1kV, product is applied to frequency-conversion power system at rated voltage up to and including 0.6/1kV.

2、1.8/3kV级, 产品适用于额定电压0.6/1kV以上, 1.8/3kV以下的变频动力系统

Grade 1.8/3kV, product is applied to frequency-conversion power system at rated voltage from 0.6/1kV to 1.8/3kV.

3、3.6/6kV级, 产品适用于额定电压1.8/3kV以上, 3.6/6kV以下的变频动力系统

Grade 3.6/6kV, product is applied to frequency-conversion power system at rated voltage from 1.8/3kV to 3.6/6kV.

4、6/10kV级, 产品适用于额定电压3.6/6kV以上, 6/10kV以下的变频动力系统

Grade 6/10kV, product is applied to frequency-conversion power system at rated voltage from 3.6/6kV to 6/10kV.

### 使用特性 Operating Features

变频器专用电缆使用特征: Operating features of transducer cable:

1、额定电压Rated voltage ( $U_0/U$ ): (A)0.6/1kV (B)1.8/3kV (C)3.6/6kV (D)6/10kV

2、电缆导体最高工作温度: 90℃

Max. operating temp of conductor is 90℃.

3、短路时(最长不超过5s), 电缆导体允许的最高工作温度: 250℃

Max. permissible operating temp of conductor at short circuit is 250℃ (max. duration is 5s)

4、电缆敷设时最小弯曲半径: 12D (D为电缆外径)

Min. bending radius of cable installation is 12D (D=cable O.D)

5、电缆的最低允许敷设温度: Min. permissible installation temp of cable:

敷设时电缆温度不低于0℃, 环境温度低于0℃时, 应对电缆进行预热。

The ambient temp. of cable installation shall not be less than 0℃, the cable shall be preheated if the temp. is less than 0℃.

6、屏蔽性能: 屏蔽抑制系数 $S < 0.001$

Shielding performance: shielding restriction coefficient

### 电缆的型号、名称和使用环境 Type, Description and Service Environment

型号 Type	名称 Description	使用环境 Applicable Scopes
BPYJVP	铜芯交联聚乙烯绝缘聚氯乙烯护套铜带屏蔽变频器用电缆 Copper conductor, XLPE insulated, copper tape shielded, PVC sheathed, transducer cable	适用于干燥或潮湿的室内, 无强应力缓释或强制引导的自由连续往复运动下的安装, 工业使用环境下的弯曲场合, 如木工机械、机床加工设备、物流运输系统、起重机械等, 对电磁屏蔽干扰好。 For dry or damp room, without strong stress release, or installation at reciprocal movement under guidance, bending radius at industrial environment, as wooden machinery, machine tool processing equipment, logistics transmission system, crane etc, better performance of resisting electromagnetic shielding

### 生产范围 Production Scope

系列 Series	导体标称截面积 Nom. cross section of conductor			
	0.6/1kV BPYJVP	1.8/3kV BPYJVP	3.6/6kV BPYJVP	6/10kV BPYJVP
3P	1.5~300	10~300	25~300	25~300
3P+1N	1.5+1.5~300+150	/	/	/
3P+3N	1.5+0.3~300+35	/	/	/
3P+3N/E	(1.5+0.3)+1.5~(300+35)+150	/	/	/

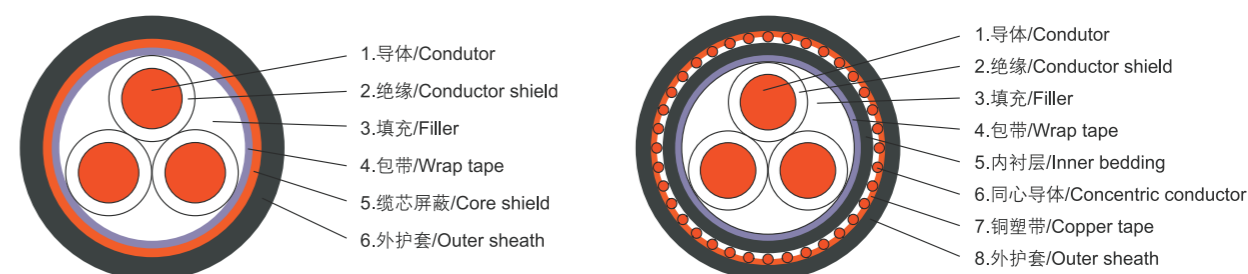
### 电缆结构图 Cable Drawings

A、3.6/6~6/10kV变频电缆: 3.6/6~6/10kV transducer cable



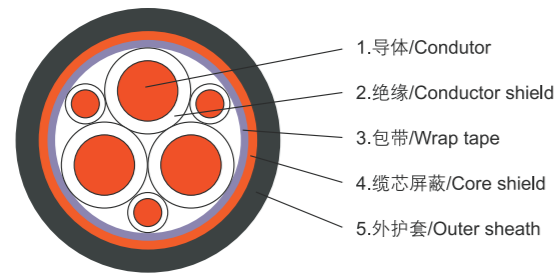
3P系列 Series

B、0.6/1kV变频电缆: 0.6/1kV Transducer Cable



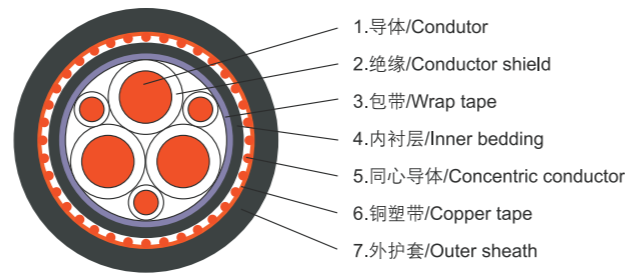
3P+1N系列 Series

# 变频器专用电缆 Transducer Cable



3P+3N系列 Series:

- 1.导体/Conductor
- 2.绝缘/Conductor shield
- 3.包带/Wrap tape
- 4.缆芯屏蔽/Core shield
- 5.外护套/Outer sheath



3P+3N/E系列 Series

- 1.导体/Conductor
- 2.绝缘/Conductor shield
- 3.包带/Wrap tape
- 4.内衬层/Inner bedding
- 5.同心导体/Concentric conductor
- 6.铜塑带/Copper tape
- 7.外护套/Outer sheath

## 主要试验项目及指标 Main Test Items and Index

### 1、20℃时导电线芯最大直流电阻 Max. D.C Resistance of Conductor at 20℃

规格 Specification	20℃主线芯铜导体电阻≤Ω/km Resistance of copper conductor of main core at 20℃
mm <sup>2</sup>	Ω/km
1.5	12.1
2.5	7.41
4	4.61
6	3.08
10	1.83
16	1.15
25	0.727
35	0.524
50	0.387
70	0.268
95	0.193
120	0.153
150	0.124
185	0.0991
240	0.0754
300	0.0601

### 2、交流电压试验: 施加工频试验电压(如下表), 5min, 绝缘不击穿。

A.C voltage test: power frequency test voltage (as following) is applied, 5min, without breakdown on insulation.

额定电压 Rated voltage	0.6/1kV	1.8/3kV	3.6/6kV	6/6kV、6/10kV	8.7/10kV、8.7/15kV
试验电压及时间 Test voltage and time	3.5 kV/5min	6.5kV/5min	12.5kV/5min	21kV/5min	30.5kV/5min

### 3、绝缘电阻常数Insulation resistance constant :

环境温度为20℃时: 交联聚乙烯绝缘为3670 MΩ·km。

When ambient temp is 20℃, 3670 MΩ·km for XLPE insulation.

正常运行时导体最高温度时: 交联聚乙烯绝缘为3.67 MΩ·km。

Max. temp of conductor at normal operation: 3.67 MΩ·km for XLPE