

#### Introduction

Prefabricated branched power cables are produced according to specific requirements. In sections where the main cable needs to branch, specialized equipment is employed in the cable processing workshop to prefabricate cables with single-core or multi-core configurations, featuring identical or varying cross-sectional areas. Comprising the main cable, branch connectors, and branch cables, the assembly includes specially designed cap sleeves at terminals for unified installation positioning. Branch connectors utilize dedicated molds and synthetic insulating materials, employing specialized techniques to seamlessly integrate the jacket material, ensuring airtightness and waterproofing performance.

### **Application**

Suitable for distribution lines with AC rated voltage of 0.6/1 kV and below, with a main current not exceeding 1000A.

Suitable for use in industrial and civil buildings, both indoors and outdoors, under normal environmental conditions. Can replace bus ducts in scenarios requiring small to medium capacity.

Various combinations of installation methods for single-core and multi-core trunk cables, as well as single-core and multi-core branch power cables are available.

### Characteristics

Economy: Significant savings in cable quantity, construction labor, and cable tray production and installation contribute to substantial project cost reduction. Additionally, post-installation cable maintenance is minimized, enhancing overall cost-effectiveness.

Quality: Trunk cables, branch cables, and cable joints undergo stringent manufacturing processes in the factory and are subject to rigorous testing to ensure superior electrical, mechanical, and physical performance. This meticulous approach guarantees the reliability and longevity of the system.

Efficiency: Streamlines power distribution into a simplified process, primarily focusing on secondary power distribution. With trunk cables and branch cables prefabricated in the factory, on-site construction intensity is reduced, expediting project progress significantly.

Adaptability to Environment: The flexibility and ease of manufacturing of these cables enable them to accommodate irregular cable laying locations and special length requirements. Sealed and insulated joints, along with specialized end caps, render them suitable for diverse environments characterized by humidity, acidity, alkalinity, or

Limitations: Prefabricated branch cables are tailored for specific environments during factory manufacturing, which may limit their adaptability to other settings. Their flexibility might be constrained as a result. Furthermore, once in normal operation, the cable's designed capacity is fixed, prohibiting arbitrary increases in load. Therefore, design considerations should include provisions for a certain margin of capacity.

### **Specification**

JCS 376: branch cable IEC 60502: Rated voltage 1kV\u00ed30kV extrusion-type extruding insulation power cable

#### Eastful Cable Lab



We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.

CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

#### Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rhineland and CCS.



# **National Green Factory**



Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China. We are committed to the development of high-end, intelligent and green manufacturing industry.

\*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.











# **Types**

Model	Name	Voltage
This is customized product and can be designed according to customers' request.	PVC Insulated PVC Sheathed Prefabricated Branch Cable	0.6/lkV
	PVC Insulated PVC Sheathed Flame Retardant prefabricated Branch Cable	0.6/lkV
	PVC Insulated PVC Sheathed Fire-resistant Prefabricated Branch Cable	0.6/lkV
	XLPE Insulated PVC Sheathed Prefabricated Branch Cable	0.6/lkV
	XLPE Insulated PVC Sheathed Flame Retardant Prefabricated Branch Cable	0.6/lkV
	XLPE Insulated PVC Sheathed Fire-resistant Prefabricated Branch Cable	0.6/lkV

## Technical Parameters

Conductor		Insulation	Sheath	Approx. Overall	Approx.	A.C. Current	Max. Conductor D.C.
Nominal Cross Section Area	Diameter	Thickness	Thickness	Dia.	Weight	Voltage	Resistance at 20℃
mm²	mm	mm	mm	mm	kg/km	3.5kv/5min	Ω/km
10	3.7	0.7	0.7	8.5	150		1.83
16	4.7	0.7	0.7	9.5	210		1.15
25	5.9	0.9	0.9	11	310		0.727
35	7	0.9	0.9	12	410		0.524
50	8.5	1	1	13.5	555		0.387
70	10.1	1.1	1.1	15	760		0.268
95	11.7	1.1	1.1	17	1020		0.193
120	13.2	1.2	1.2	19	1260		0.153
150	14.7	1.4	1.4	21	1570		0.124
185	16.4	1.6	1.6	23	1920		0.0991
240	18.6	1.7	1.7	26	2470		0.0754
300	20.8	1.8	1.8	29	3090		0.0601
400	24.1	2	2	32	4050		0.047
500	26.9	2.2	2.2	36	5080		0.0366
630	30.2	2.4	2.4	40	6390		0.0283

