

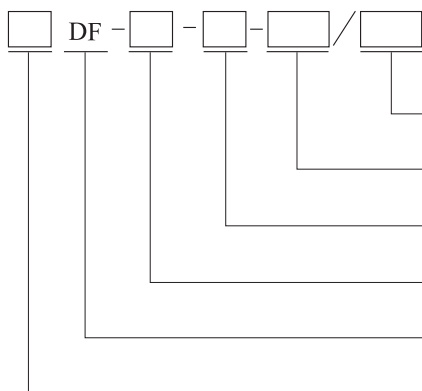
分支电缆 Power CABLES

※分支电缆的产品概述 Description of branch cable products

近年来，随着我国国民经济和基本建设的发展，中高层、高层和超高层建筑越来越多。由于现代建筑物中因配电的复杂性和容量的增加，对于配电主干线的可靠性及经济性的要求则越来越高，本公司为了满足这种市场需求，参考了国内外有关资料，在有关专家的指导下，研制开发了带分支电缆（预制分支电缆），产品经国家电线电缆权威部门——国家电线电缆质量监督检验中心和国家防火建筑材料质量监督检验中心检测，各项技术性能均达Q/ZRX003企业标准要求，主要性能超过JCS376《带分支电缆》日本标准要求，本产品通过了省级技术鉴定，并获得多项国家专利主要适用于中、高层建筑及工矿、企事业单位中输送额定电压在1000V及以下的供配电设备。它具有供电安全可靠，绝缘性能好，施工安装方便，配电成本低，适用范围广，品种规格多，安装环境要求低等优点。在国外先进国家已大量采用带分支电缆代替母线槽输送电方式，它与母线槽对比更具有抗震、防水和耐火作用，避免了母线槽安装、维护等烦琐现象。

In the recent years with the development of our national economy and basic establishment more middle buildings high buildings and super buildings have been built up Owing to the increase of the complexity and capacity of distribution among modern buildings stability and economic requirements to mainline of distribution are getting higher and higher In order to satisfy the market requirement. we consulted international and national relevant information and under the direction of relative expert we researched and developed branch cable (pre made branch cable) The product was tested by the authorization dept of national wire & cable - National quality supervising & testing center for cable and wire and anti flame construction material All the technical functions are up to the enterprise standard requirements of Q/ZRX003 The main function exceed JCS376 Japan Standard Requirement of With Branch Cable it also passed provincial technology approval and gained national patent It is mainly suitable for power supply units and controller switching equipment transmitting electricity with 1000V rated voltage and below in middle and high building industrial and mining unit enterprise unit and institution The product has the advantages of safe and reliable power supply, excellent insulating performance, convenient construction and installation, low cost of distribution, wide application scope, wide arrange of varieties and specifications and low requirements of installation environment. In foreign advanced countries cable with branch has been widely applied to replace the transmission method of bus slots Compared with bus slots the product has the additional functions of anti vibration, water proofing and flame resistance which avoid troubles of installation and maintenance of bus slots

※型号示范 Model demonstration



- 分支电缆规格
Spec. of branch cable
- 主干电缆规格
Spec. of main cable
- 电缆型号 (如: VV, YJV, YJE)
Model of cable (e.g. VV, YJV, YJE)
- 电缆特性 (如: ZR, NH, DDZ, WDZ, WDN)
Characteristic of cable (e.g. ZR, NH, DDZ, WDZ, WDN)
- 产品代号
Product code
- 种类代号 (如: 多芯型 “M” 表示、绞合型 “T” 表示、单芯型省略)
Type code (e.g. multicore type “M”, twist type “T”, singlecore type omitted)

举例
单芯型 DF-ZR-YJV-4 (1×630)+PE(1×300)/4(1×70)+PE(1×35)
绞合型 T DF-NH-VV-4 (1×70)+PE(1×35)/5(1×16)
多芯型 M DF-YJV-4×35+1×16/5×10

Example:
Singlecore type DF-ZR-YJV-4 (1×630)+PE(1×300)/4(1×70)+PE(1×35)
Twist type T DF-NH-VV-4 (1×70)+PE(1×35)/5(1×16)
multicore type M DF-YJV-4×35+1×16/5×10

※产品的优越性 Advantages Of Products

(1) 电气性能好，供电安全可靠

分支电缆的连接件采用“0”型银合金管，经机械模压成型后，使干线电缆和分支电缆的接触电阻很小，保证了分支连接件不受热胀冷缩影响，而随连接件的膨胀，分支线与干线电缆之间的紧抱力增加，接触电阻更小。由于电缆主干线无中间接头，直流电阻减少，且带分支电缆比普通电缆、母线槽来说，其电气性能、干线连续性、接头可靠性及稳定性都明显的要好，干线系统无一故障存在，大大提高了供电可靠性。

(2) 施工周期短、安装方便

由于原来在工地现场需要完成的电缆分支工作都已预先在工厂中完成。因而减轻了施工现场的劳动强度，节省了工作时间，保证了分支连接的质量。安装方法简单方便，对安装人员的安装技术水平要求不高，安装周期短，仅为母线槽安装时间的10%左右。

(3) 具有良好的抗震性、防水性

分支连接体处模塑部份采用机械注塑成型工艺，并采用特殊配方的PVC聚合物的粘接性与电缆护套紧密粘接，保证了连接体具有良好的气密性和防水性。由于带分支电缆为一整根中间无接头，所以它的抗拉性、可挠性远比母线槽要好，对高层建筑，由于地震引起的机械应力基本没有影响。

(4) 安装环境要求低、利用率高

占用建筑面积小，有利于建筑面积的合理使用，对土建预留孔尺寸无特殊要求，安装场地环境要求低。

(5) 可明显降低配电成本

与母线槽相比较，可降低电气工程造价的30%左右，并且技术指标更高，工厂化制作，杜绝了手工生产的弊端，从根本上解决了普通电缆、母线槽本身所无法解决的问题，保证了供电线路的安全性、可靠性和经济性。

(6) 免维护

带分支电缆按规范要求安装后，一次性开通率100%正常运行的分支电缆不需要任何的维护。

Fine electric performance—safety and reliable power supply

The connector of cable with branch adopts model O silver alloy pipe, which will make the contact resistance between main cable and branch cable little. Along with the expansion of connector, the pressure between branch line and main cable will be added while the contact resistance in between main cable and branch cable compared with common cable and bus slots, there are obvious advantages on cable with branch as to its electric performance, continuity of main cable, reliability and stability of tie-in, which enhance the reliability of power supply with no fault existed in main cable system.

Short construction period and convenient installation

For the work of cable branch which should have been finished in building scene, have been finished in factory in advance, which lightened work intensity in building site, saved job time and assured the quality of branch connecting. It's easy to install, so there is no special requirements to erectors. What's more, the installation period is short, only equal to installation man-hour of bus slots by 10%.

Fine vibration resistance and waterproof performance

The moulding part in branch connector adopts mechanical moulding form process and close bond between polymer PVC with special formulation and cable jacket by the viscosity of PVC, which ensure connector's fine performance of gas tightness and waterproof. As cable with branch is a whole without connector, its tensile and flexibility excels slots, and almost no influence to mechanical stress caused by earthquake to high buildings.

Low requirements to installation environment and high availability

Small land area occupied is good for the reasonable use of building area. There is no special size requirements to the obligated hole of construction. And there are low requirements to circumstance of installation site.

Power distribution cost can be lowered obviously

Compared with bus slots, the electric project cost can be reduced by about 30% with high technical index. Besides, union manufacture put an end to the abuse of hand manufacture, which settled the problem existed in common cable and bus slots radically and assured the safety, reliability and economy of power supply line.

Maintenance waiver

When the cable with branch is installed as prescriptive way, its one time success rate is 100%. Cable with branch under normal running usually need not any maintenance.

※ 分支电缆产品选型 Model selection of branch cable

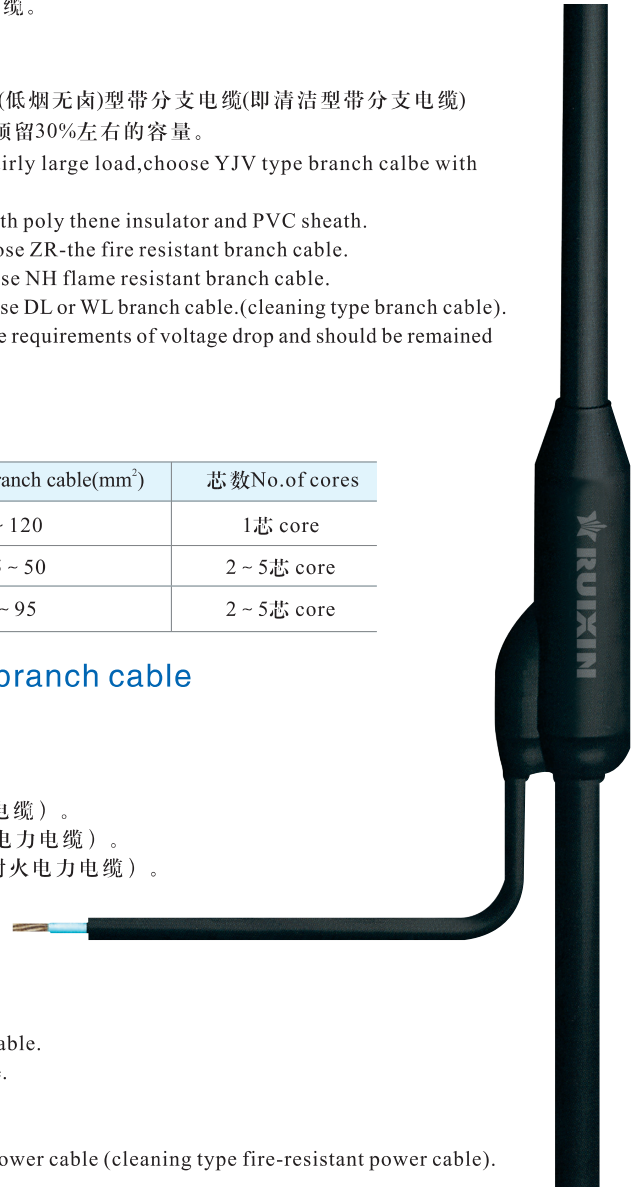
- (1)工作环境平均温度大于35℃或较大负荷可选用YJV-交联聚乙烯绝缘聚氯乙烯护套带分支电缆。
 - (2)一般的工作场所可选用VV-聚氯乙烯绝缘聚氯乙烯护套带分支电缆。
 - (3)配电线路设计中要求阻燃的可选用ZR-阻燃性能的带分支电缆。
 - (4)消防配电应急照明等线路呆选用NH耐火特性的带分支电缆。
 - (5)重要建筑及人员密集场所应选用DDZ(低烟低卤)或WDZ、WDZN(低烟无卤)型带分支电缆(即清洁型带分支电缆)
 - (6)选用的主干电缆和分支电缆应满足电压降的要求，载流量积应预留30%左右的容量。
- (1) Average temperature of operating environment more than 35℃ or fairly large load,choose YJV type branch calbe with XLPE insulator and PVC sheath.
- (2) Ordinary working situation,choose the “VV” type branch cable with poly thene insulator and PVC sheath.
- (3) Distribution circuit with fire-resistant design requirements can choose ZR-the fire resistant branch cable.
- (4) Circuits for fire equipment,emergency illumination etc.should choose NH flame resistant branch cable.
- (5) Important construction site and densely inhabited district should choose DL or WL branch cable.(cleaning type branch cable).
- (6) Gross section of the main cable and the branch chosen should meet the requirements of voltage drop and should be remained 30% capacity in advance.

※ 电缆规格 Specification of branch cable

种类Variety	主电缆Main cable(mm ²)	分支电缆Branch cable(mm ²)	芯数No.of cores
单芯型Single-core type	10 ~ 1600	6 ~ 120	1芯 core
多芯型Multi-core type	4 ~ 240	2.5 ~ 50	2 ~ 5芯 core
绞合型Twist type	10 ~ 300	6 ~ 95	2 ~ 5芯 core

※ 可选用电缆品种 Model demonstration of branch cable

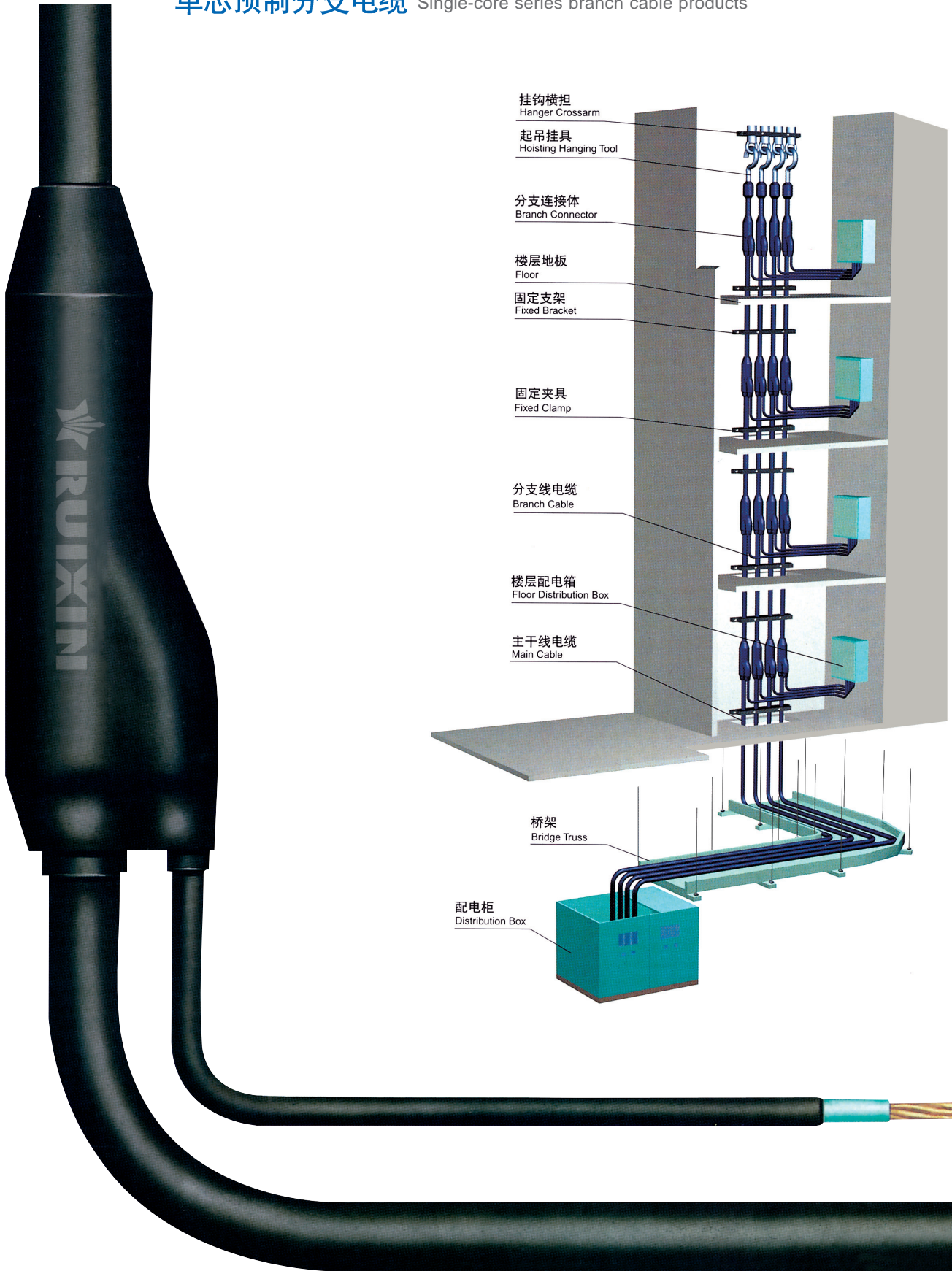
- YJV: 交联聚乙烯绝缘聚氯乙烯护套电力电缆。
 - ZR-YJV: 交联聚乙烯绝缘聚氯乙烯护套阻燃电力电缆。
 - NH-YJV: 交联聚乙烯绝缘聚氯乙烯护套耐火电力电缆。
 - DDZ-YJV: 交联聚乙烯绝缘低烟低卤阻燃电力电缆（清洁型电力电缆）。
 - WDZ-YJE: 交联聚乙烯绝缘低烟无卤阻燃电力电缆（清洁型耐火电力电缆）。
 - WDZN-YJE: 交联聚乙烯绝缘聚烯烃护套耐火电力电缆（清洁型耐火电力电缆）。
 - VV: 聚乙烯绝缘聚氯乙烯护套电力电缆。
 - ZR-VV: 聚氯乙烯绝缘聚氯乙烯护套阻燃电力电缆。
 - NH-VV: 聚氯乙烯绝缘聚氯乙烯护套耐火电力电缆。
- 注：电缆选用额定电压 (u./u)为0.6/1kV铜芯低压电力电缆。
- YJV: XLPE Insulated and PVC Sheathed Power Cable.
- ZR-YJV: XLPE Insulated and PVC Sheathed Flame Resistant Power Cable.
- NH-YJV: XLPE Insulated and PVC sheathed fire-resistant power cable.
- DDZ-YJV: XLPE Insulated DL fire-resistant power cable.
- WDZ-YJE: XLPE Insulated WL fire-resistant power cable.
- WDZN-YJE: XLPE Insulated and polyolefine sheathed fire-resistant power cable (cleaning type fire-resistant power cable).
- VV: PVC Insulated And Sheathed Power Cable.
- ZR-VV: PVC Insulated and Sheated Flame Retardant Power Cable.
- NH-VV: PVC Insulated and Sheated Slow-burning Power Cable
- Notes: The cable is copper core low-voltage power cable with 0.6/1kV rated voltage (u./u)without special indication.



※ 隧道照明用多芯分支电缆及照明用多芯分支电缆示意图
Sketch map of tunnel-lighting multicore branch cable



单芯预制分支电缆 Single-core series branch cable products



※ 单芯型分支电缆 Single-core series branch cable products

适用范围 Applicability

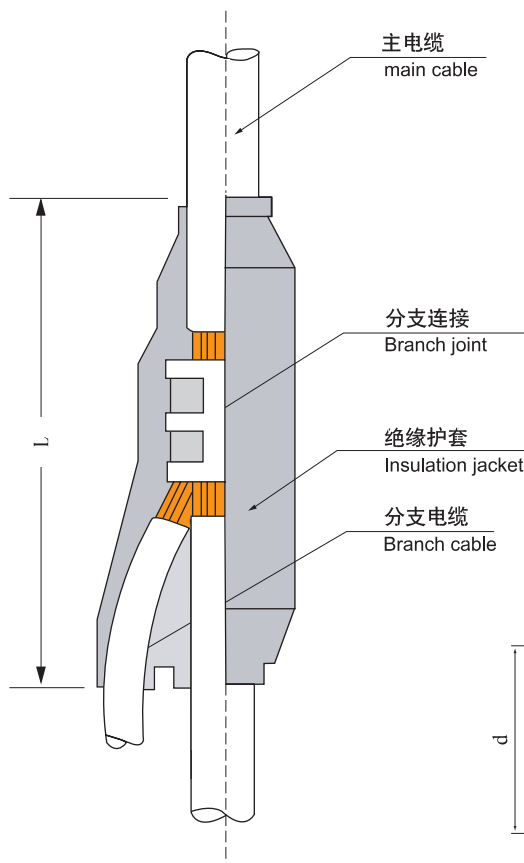
DF系列单芯型带分支电缆主要适用办公大楼、宾馆、写字楼、公寓、医院、商场等中、高层建筑配电系统。

DF series single-core branch cable is mainly applied to the power distributing system in middle and high level buildings such as office buildings, hotels, offices, mansions, hospitals and emporiums and so on.

分支接头的结构特点 Structure and characteristic of branch connector

DF系列带分支电缆的连接体采用特殊配方的PVC聚合物高压注塑而成，PVC聚合物的粘接性与电缆护套紧密粘接，确保气密和防水。

Connector of DF series branch cable adopts high-pressure moulding process with the material of polymer PVC with special formulation. The close bond between polymer PVC and cable sheath by the viscosity of PVC ensures connector's fine performance of gas tightness and waterproof.

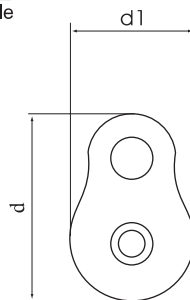


分支连接体示意图
Sketch map of branch connector

主电缆 Main cable (mm ²)	分支电缆 Branch cable (mm ²)	参考尺寸Reference dimensions		
		d	d1	L
16 ~ 70	50 ~ 6	34	65	140
95 ~ 185	95 ~ 10	42	74	144
240 ~ 400	150 ~ 16	54	83	145
500 ~ 800	185 ~ 16	68	100	170
1000 ~ 1200	240 ~ 25	78	111	180
1400 ~ 1600	240 ~ 25	86	122	186



注：这些尺寸可能略作修改

Note: These dimensions may be adjusted a little.





※ 单芯型分支电缆 Single-core series branch cable products

※ 0.6/1kV单芯XLPE/PVC电力电缆参数 (YJV) Parameters of 0.6/1kV single core xlpe/PVC cable(YJV)

标称截面 No.cross section (mm ²)	导体 直径 Dia. (mm)	绝缘厚度 Insulating thickness (mm)	护套厚度 Sheath thickness (mm)	外径(约) External diameter (approx.) (Mm)	重量(约) Weight (approx.) (Kg/km)	交流试 验电压 AC test voltage (kV/5min)	20℃最大导体直 流电阻Ω/km Max.DC resistance of conductor(20℃)	40℃时载流量(A) Ampacity(40℃)		电压降 × 10 ³ Voltage drop (V/A.m)
										
10	3.7	0.7	1.4	8.4	150	3.5	1.83	72	85	2.0
16	4.7	0.7	1.4	9.4	215	3.5	1.15	95	115	1.3
25	5.9	0.9	1.4	10.7	310	3.5	0.727	132	150	0.84
35	7.0	0.9	1.4	11.7	410	3.5	0.524	164	182	0.63
50	8.5	1.0	1.4	13.2	570	3.5	0.387	196	228	0.49
70	10.1	1.1	1.4	15.1	770	3.5	0.268	255	292	0.36
95	11.7	1.1	1.5	17.4	1030	3.5	0.193	310	356	0.29
120	13.2	1.2	1.5	19.1	1280	3.5	0.153	360	410	0.24
150	14.7	1.4	1.6	22	1590	3.5	0.124	419	479	0.21
185	16.4	1.6	1.6	24.3	1950	3.5	0.0991	479	546	0.19
240	18.6	1.7	1.7	27.5	2490	3.5	0.0754	565	643	0.16
300	20.8	1.8	1.8	30.8	3140	3.5	0.0601	643	738	0.15
400	24.1	2.0	1.9	34.2	4140	3.5	0.0470	771	908	0.131
500	26.9	2.2	2.0	38.8	5140	3.5	0.0366	885	1026	0.120
630	30.2	2.4	2.2	45.2	6440	3.5	0.0283	1008	1177	0.111
800	34.8	2.6	2.3	49.6	8450	3.5	0.0221	1180	1380	0.104
1000	39.0	2.8	2.4	51.5	10600	3.5	0.0176	1410	1605	0.098
1200	43.9	3.0	2.7	55.3	11834	3.5	0.0151	1591	2065	0.092
1400	47.7	3.2	2.9	59.9	13800	3.5	0.0129	1905	2210	0.087
1600	51.1	3.40	3.0	63.9	15740	3.5	0.0113	2130	2420	0.082

※ 0.6/1kV单芯PVC/PVC电力电缆参数 (VV) Parameters of 0.6/1kV single core PVC/PVC cable(VV)

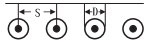
标称截面 No.cross section (mm ²)	导体 直径 Dia. (mm)	绝缘厚度 Insulating thickness (mm)	护套厚度 Sheath thickness (mm)	外径(约) External diameter (approx.) (Mm)	重量(约) Weight (approx.) (Kg/km)	交流试 验电压 AC test voltage (kV/5min)	20℃最大导体直 流电阻Ω/km Max.DC resistance of conductor(20℃)	40℃时载流量(A) Ampacity(40℃)		电压降 × 10 ³ Voltage drop (V/A.m)
										
10	3.7	1.0	1.4	9.6	151	3.5	1.83	60	70	2.0
16	4.7	1.0	1.4	10.0	216	3.5	1.15	82	95	1.3
25	5.9	1.2	1.4	11.3	311	3.5	0.727	105	122	0.84
35	7.0	1.2	1.4	12.3	412	3.5	0.524	127	148	0.63
50	8.5	1.4	1.4	14.0	572	3.5	0.387	163	190	0.49
70	10.1	1.4	1.4	15.7	772	3.5	0.268	199	231	0.36
95	11.7	1.6	1.7	18.4	1035	3.5	0.193	245	285	0.29
120	13.2	1.6	1.7	19.8	1287	3.5	0.153	285	332	0.24
150	14.7	1.8	1.8	22.8	1600	3.5	0.124	326	379	0.21
185	16.4	2.0	1.8	25.1	1962	3.5	0.0991	377	438	0.19
240	18.6	2.2	1.8	28.5	2500	3.5	0.0754	455	520	0.16
300	20.8	2.4	2.1	32.0	3155	3.5	0.0601	524	610	0.15
400	24.1	2.6	2.2	35.4	4160	3.5	0.0470	631	734	0.131
500	26.9	2.8	2.3	40.0	5160	3.5	0.0366	736	856	0.120
630	30.2	3.0	2.4	46.0	6460	3.5	0.0283	883	1026	0.111
800	34.8	3.2	2.6	50.0	8475	3.5	0.0221	1040	1209	0.104
1000	39.0	3.4	2.7	53.0	10635	3.5	0.0176	1220	1419	0.098
1200	43.9	3.6	3.0	57.10	11880	3.5	0.0151	1420	1705	0.092
1400	47.7	3.8	3.2	61.70	13860	3.5	0.0129	1620	1915	0.087
1600	51.1	4.0	3.3	65.70	15810	3.5	0.0113	1805	2090	0.082

※ 电压降根据下列条件计算 Calculate and voltage drop according to the following conditions

1、导线温度：70℃ ~ 90℃

2、环境温度：40℃

3、电缆排列（单芯）：S=2D



4、功率因数：cos φ=0.8

5、Vd代表降压

$$V_d = K \times I \times L \times V_0 \text{ (V)}$$

I: 电流 (A)

L: 线路长度 (m)

V₀: 表内电压降 (V/A · m)

K: 系数是根据配电系统而定3相4线时

K=1: 在每相线芯和中线线芯间

K=√3: 每相线芯之间

6、末端允许电压降：≤5%

三相时末端允许电压降：V_d=380V × 5%=19V

7、主干电缆允许长度的计算公式

$$L = \frac{19}{\sqrt{3} \times I \times V_0}$$

例：主电缆300mm²、工作电流（计算电流520A）

表内电压降V₀=0.15 × 10⁻³V/A · m

三相允许长度

$$L = \frac{19}{\sqrt{3} \times 520 \times 0.15 \times 10^{-3}} \approx 141\text{m}$$

1、Wire Temperature: 70℃ ~ 90℃

2、Ambient Temperature: 40℃

3、Cable Arrange (Single-Core) : S=2D

4、Power Factor: cos φ=0.8

5、Vd stands for voltage drop

$$V_d = K \times I \times L \times V_0 \text{ (V)}$$

I: Current (A)

L: Length of Circuit (m)

V₀: Voltage Drop inside Meter (V/A · m)

K: Coefficient is determined according to distribution system At three-phase four-wire

K=1: between wire core of each phase and wire core of centerline

K=√3: among wire core of each phase

6、Terminal permission voltage drop: ≤5%

At three-phase, terminal permission voltage drop: V_d=380V × 5%=19V

7、Account formuler for permission length of main cable

$$L = \frac{19}{\sqrt{3} \times I \times V_0}$$

Example: main cable 300mm²、(working voltage 520A)

voltage drop inside meter V₀=0.15 × 10⁻³V/A · m

three-phase permission length

$$L = \frac{19}{\sqrt{3} \times 520 \times 0.15 \times 10^{-3}} \approx 141\text{m}$$

※ DF系列单芯分支电缆竖井预留孔尺寸

Shaft hole dimensions of DF series branch cables

线制 Wiring system	回路 Loop	主干线截面 Main cable section	A (mm)	B (mm)	示意图 Sketch map	
三相四线制(4芯) Three-phase four-wire system (four-core)	单回路 Single loop	16mm ² ~ 300mm ²	200	300	<p>双排安装 double-row installation</p>	
		400mm ² ~ 630mm ²	250	400		
		800mm ² ~ 1600mm ²	300	550		
	双回路 Double loop	平行安装 Parallel installing	16mm ² ~ 300mm ²	200		550
			400mm ² ~ 630mm ²	250		800
			800mm ² ~ 1600mm ²	300		1100
三相五线制(5芯) Three-phase five-wire system (five-core)	单回路 Single loop	16mm ² ~ 150mm ²	200	250	<p>重叠安装 Overlap installation</p>	
		185mm ² ~ 300mm ²	250	350		
		400mm ² ~ 630mm ²	300	450		
		800mm ² ~ 1600mm ²	300	650		
	双回路 Double loop	平行安装 Parallel installing	16mm ² ~ 150mm ²	200		500
			185mm ² ~ 300mm ²	250		700
			400mm ² ~ 630mm ²	300		900
			800mm ² ~ 1600mm ²	300		1300
			重叠安装 Overlap installing	16mm ² ~ 300mm ²		300

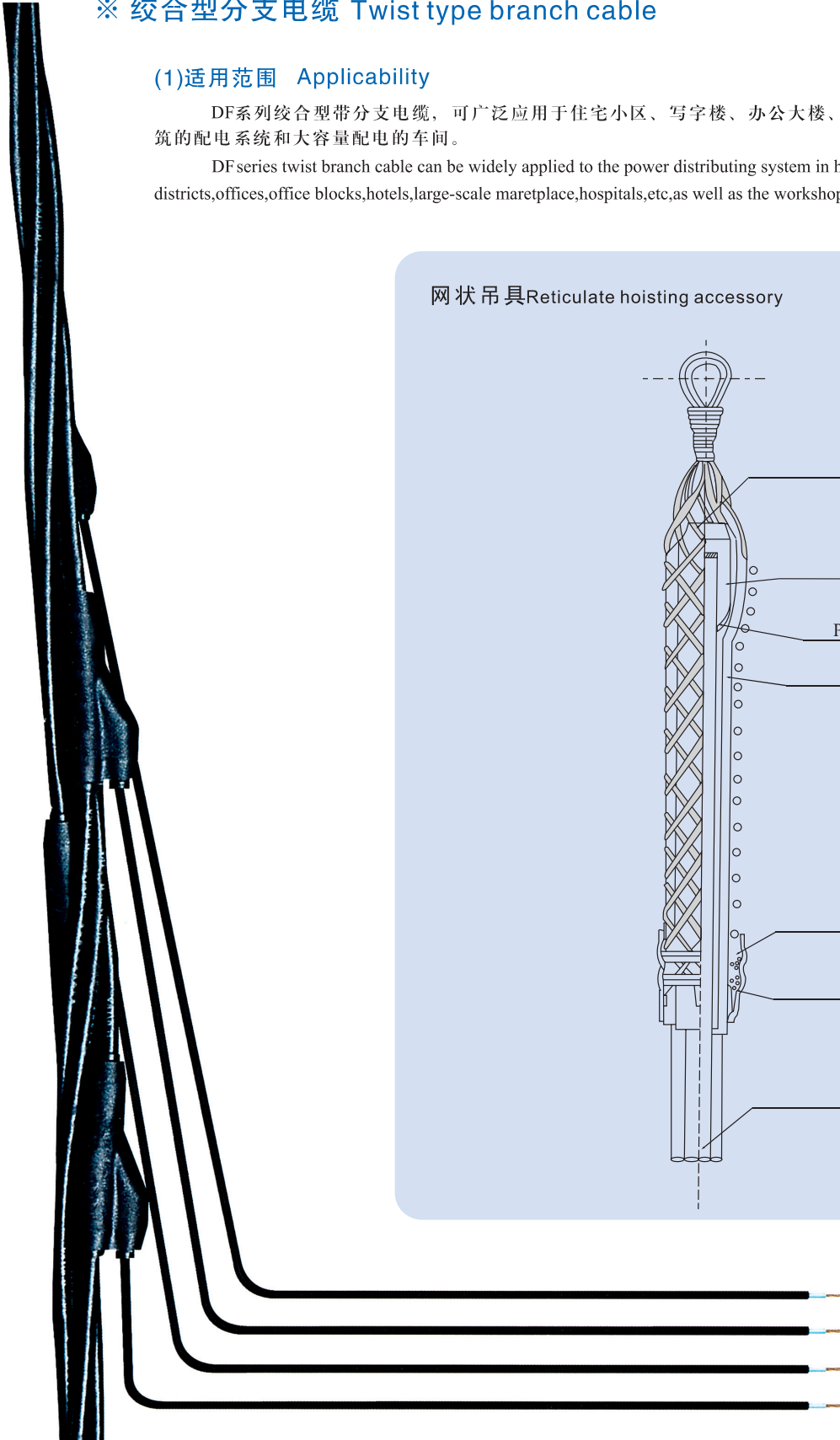
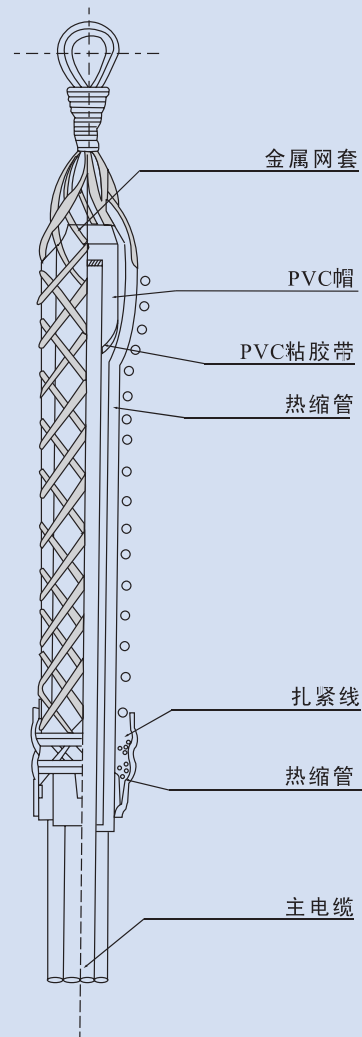
※ 绞合型分支电缆 Twist type branch cable

(1) 适用范围 Applicability

DF系列绞合型带分支电缆，可广泛应用于住宅小区、写字楼、办公大楼、宾馆、大型商场、医院等中、高层建筑的配电系统和大容量配电的车间。

DF series twist branch cable can be widely applied to the power distributing system in high and middle buildings such as residential districts, offices, office blocks, hotels, large-scale maretplace, hospitals, etc, as well as the workshop with great-capacity power distribution.

网状吊具 Reticulate hoisting accessory



※ 绞合型分支电缆 Twist type branch cable

(1)0.6/1kV绞合型XLPE/PVC电力电缆参数 (YJV)
Parameters of 0.6/1kV twist type XLPE/PVC power cable(YJV)

标称截面 No.cross section (mm ²)	直径 Dia. (mm)	绝缘厚度 Insulating thickness (mm)	护套厚度 Sheath thickness (mm)	外径(约) External diameter (approx.)		重量(约) Weight (approx.) (Kg/km)		交流试 验电压 AC test voltage (kV/5min)	20℃最大导体 直流电阻Ω/km Max.DC resistance of conductor (20℃)	40℃时载 流量(A) Ampacity (40℃)	电压降 × 10 ⁻³ Voltage drop (V/A.m)
				4芯 Four-core	5芯 Five-core	4芯 Four-core	5芯 Five-core				
10	3.7	0.7	1.4	20.5	24.6	600	750	3.5	1.87	72	2.0
16	4.7	0.7	1.4	23.0	27.6	860	1075	3.5	1.17	95	1.3
25	5.9	0.9	1.4	26.5	31.8	1240	1550	3.5	0.742	132	0.84
35	7.0	0.9	1.4	29.0	34.8	1640	2050	3.5	0.534	164	0.63
50	8.5	1.0	1.4	33.0	39.6	2280	2850	3.5	0.395	196	0.49
70	10.1	1.1	1.4	36.5	43.8	3080	3850	3.5	0.273	255	0.36
95	11.7	1.1	1.4	41.0	49.2	4120	5150	3.5	0.197	310	0.29
120	13.2	1.2	1.6	46.0	55.2	5120	6400	3.5	0.156	360	0.24
150	14.7	1.4	1.6	51.0	61.2	6360	7950	3.5	0.126	419	0.21
185	16.4	1.6	1.6	55.5	66.6	7800	9750	3.5	0.101	479	0.19
240	18.6	1.7	1.7	63.0	75.6	9960	12450	3.5	0.0769	565	0.16
300	20.8	1.8	1.8	70.0	84.0	12560	15700	3.5	0.0601	643	0.15

(2)0.6/1kV绞合型PVC/PVC电力电缆参数 (VV)
Parameters of 0.6/1kV twist type PVC/PVC power cable(VV)

标称截面 No.cross section (mm ²)	直径 Dia. (mm)	绝缘厚度 Insulating thickness (mm)	护套厚度 Sheath thickness (mm)	外径(约) External diameter (approx.)		重量(约) Weight (approx.) (Kg/km)		交流试 验电压 AC test voltage (kV/5min)	20℃最大导体 直流电阻Ω/km Max.DC resistance of conductor (20℃)	40℃时载 流量(A) Ampacity (40℃)	电压降 × 10 ⁻³ Voltage drop (V/A.m)
				4芯 Four-core	5芯 Five-core	4芯 Four-core	5芯 Five-core				
10	3.7	1.0	1.4	21.7	25.8	604	755	3.5	1.87	60	2.0
16	4.7	1.0	1.4	24.2	28.8	864	1080	3.5	1.17	82	1.3
25	5.9	1.2	1.4	28.5	32.8	1244	1555	3.5	0.742	105	0.84
35	7.0	1.2	1.4	30.2	36.0	1648	2060	3.5	0.534	127	0.63
50	8.5	1.4	1.4	34.6	41.2	2288	2860	3.5	0.395	163	0.49
70	10.1	1.4	1.4	37.7	45.0	3088	3860	3.5	0.273	199	0.36
95	11.7	1.6	1.7	43.8	52.0	4140	5175	3.5	0.197	245	0.29
120	13.2	1.6	1.7	48.4	57.6	5148	6435	3.5	0.156	285	0.24
150	14.7	1.8	1.8	53.4	63.6	6400	8000	3.5	0.126	326	0.21
185	16.4	2.0	1.8	57.9	69	7848	9810	3.5	0.101	377	0.19
240	18.6	2.2	1.8	65.4	78	10000	12500	3.5	0.0769	455	0.16
300	20.8	2.4	2.1	73.6	87.6	12620	15775	3.5	0.0601	524	0.15

※ 多芯型分支电缆 Multi-core type branch cable

(1)适用范围 Applicability

DF系列多芯型带分支电缆,广泛应用于机场、地铁、公路、路灯、桥架、隧道的照明系统和小容量的住宅楼等。

DF series multi-core branch cable can be widely applied to the lighting systems of airports, underground, roads, street lamps, bridge and tunnels, as well as in residence building with small capacity.

(2)主要优点 Main advantages

①经济

由于节省了现场施工劳力,总的建筑工程造价包括人员和材料的费用都大大的压缩了。

②施工周期短

现场的工作部分在工厂中完成,因而节省了现场施工的劳动时间。

③高质量

所有影响电气性能,机械性能的分支连接体都具有严格质量控制和良好工作环境的工厂中完成。

④气密和防水

分支连接体采用PVC合成材料注塑而成,使电缆护套和接头合在一起确保气密和防水,所以适用于潮湿的地区。

⑤免维护

DF系列多芯型带分支电缆安装后,开通率达100%,正常运行不需要作任何的维护。

①Economy

As the manpower was lightened in building site, the total project cost including the expense about personnel and material was cut down greatly.

②Short construction period

Part of the work should have finished in building scene have been finished in factory, therefore it saved construction time.

③High quality

All of the branch connectors which influence electric and machinery performances will be checked strictly about quality and be made in fine working environment.

④Gas tightness and water proof performance

Branch connector is moulded by PVC material which agglutinates cable sheath and tie-in. Therefore it ensures connector's good performance of gastightness and waterproof, and ensures normal power supply in humid environment.

⑤Maintenance Waiver

When DF series multi-core branch cable is installed, its success rate reaches 100%. Under normal running, it needs not any maintenance.

(3)主要技术参数 Main technical parameter

①额定电压: 0.6/1kV

②绝缘电阻: $>200M\Omega$

③工频耐压: 每线之间施加4000V历时1分钟工频电压无击穿和闪络现象。

④连接体的接触电阻: 接触电阻与等长的分支线的基准电阻之比值 ≤ 1.2

①Rated voltage: 0.6/1kV

②Insulation resistance: $>200M\Omega$

③Industrial frequency withstand: frequency withstand voltage 4000V for 1 min on every wire, without breaking=down and flashover about industrial frequency voltage.

④Contact resistance of connector: Ratio of contact resistance and reference resistance of branch wire of equal length ≤ 1.2



※单芯型附件 Accessory for single-core type

名称 Name	型号称 Type	适用范围 Applicable scope(mm ²)		示意图 Sketchmap
起吊挂具 Hoisiinghangingtool	GJ-01	10-70		
	GJ-02	95-300		
	GJ-03	400-800		
	GJ-04	1000-1600		
挂钩横担 Hanger cross am	GD-01	10-70		
	GD-02	95-300		
	GD-03	400-800		
	GD-04	1000-1600		
固定夹具 Fixedclamp	JJ-01	四线 10-50	五线 10-35	
	JJ-02	四线 70-150	五线 50-90	
	JJ-03	四线 185-300	五线 120-180	
	JJ-04	四线 400-800	五线 240-500	
	JJ-05	四线 1000-1600	五线 630-1600	
固定支架 Fixed bracket	ZJ-01	四线 10-50	五线 10-35	
	ZJ-02	四线 70-150	五线 50-95	
	ZJ-03	四线 185-300	五线 120-185	
	ZJ-04	四线 400-800	五线 240-500	
	ZJ-05	四线 1000-1600	五线 630-1600	

※绞合型附件 Accessory for twist type

名称 Name	型号称 Type	适用范围 Applicable scope(mm ²)
网状吊具 Reticulate Hanger tool	WD-21	10-50
	WD-22	70-95
	WD-23	120-185
	WD-24	240-300
挂钩横担 Hanger cross am	GD-21	10-50
	GD-22	70-95
	GD-23	120-185
	GD-24	240-300
固定夹具 Fixedclamp	JJ-21	10-50
	JJ-22	70-95
	JJ-23	120-185
	JJ-24	240-300
固定支架 Fixed bracket	ZJ-21	10-50
	ZJ-22	70-95
	ZJ-23	120-185
	ZJ-24	240-300

注: 1、起吊挂具每根主电缆配一个, 挂钩横担和网状吊具每回路配一套;
2、固定支架和固定夹具安装间距 15-20 米。

※多芯型附件 Accessory formulti-core type

名称 Name	型号称 Type	适用范围 Applicable scope(mm ²)
网状吊具 Reticulate Hanger tool	WD-11	10-35
	WD-12	50-70
	WD-13	95-120
	WD-14	150-240
挂钩横担 Hanger cross am	GD-11	10-35
	GD-12	50-70
	GD-13	95-120
	GD-14	150-240
固定夹具 Fixedclamp	JJ-11	10-35
	JJ-12	50-70
	JJ-13	95-120
	JJ-14	150-240
固定支架 Fixed bracket	ZJ-11	10-35
	ZJ-12	50-70
	ZJ-13	95-120
	ZJ-14	150-240

Note: 1. Ahoisfirlghagngntoolisin eachmaincable,ahgercrosarmandareticulatehan
mgtoolin eachloop

2:fixedblacketandclampwillbe~PPedbetweoathedistanceof 1 5~2 0m

※进出线箱 Inlet/outlet box

	名称 Name	型号称 Type	适用范围 Applicable scope(mm ²)	箱体规格 Package dimensions (mm)	
	进(出)线箱 (内装铜排) Inlet/outletbox (installed copper row inside)	JX-01		10-70	700 × 400 × 250
		JX-02		95-300	800 × 600 × 250
		JX-03		400-800	1000 × 800 × 250
		JX-04		1000-1600	1200 × 1000 × 250

※ 单订货须知 Notes to Order

为了提供您需求的DF 系列带分支电缆，请提供下列资料：

- (1) 配电系统图 (配电系统的功率及配电方式) 和楼层层高剖面图；
- (2) 主干线电缆和分支线电缆的型号规格与长度；
- (3) 分支连接体距楼层地面的高度，以及分支线电缆进楼层配电 (照明) 箱上进线或下进线；
- (4) 配件型号规格及数量；
- (5) 安装方法：电缆从地面提升或楼顶放下。(通常采用地面提升)
- (6) 是否需要对电缆进行末端处理 (压接接线端子)；
- (7) 带分支电缆的选型 (如单芯型、绞合型、多芯型)

In order to supply DF series branch cable that meeting the requirements of your project, please provide the following documents:

- (1) Distributing system figure and section on a figure showing floor level of the building;
- (2) Specs and length of main cable and each branch cable;
- (3) The height of branch contact from the building surface the upper or lower input wire of branch cable entering building distribution box;
- (4) Model, specs and quantity of component;
- (5) The lift-on when the cable is pulled up from the ground or
- (6) Whether it is necessary to early out terminal process (if using connecting terminal);
- (7) a Xoeo branch cable (example, single core type, twist type, multi-core type)

举例：三相五线制系统

Example: three-phase-five-wire system

吊装示意图

Sketch map of hanging tool

