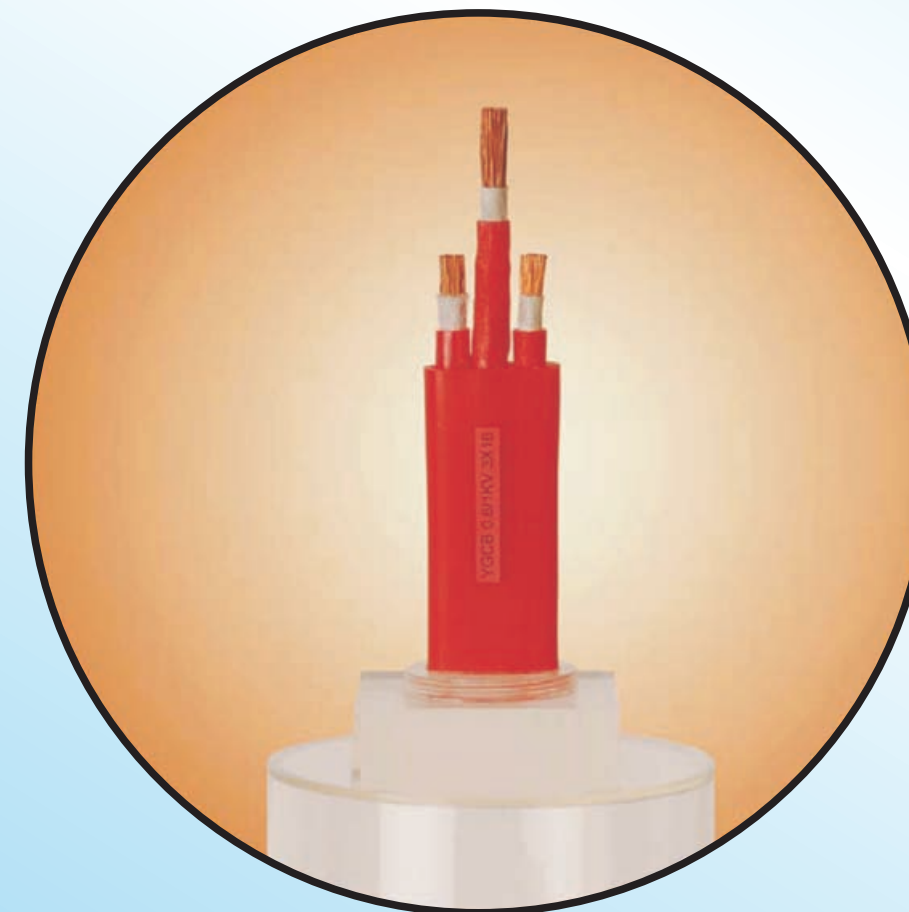


# 扁电缆 Flat Cable

适用于野外线路、电器仪表、电子设备  
及自动化装置的电力、化工、冶金、港口、货场、  
矿山等行业挂缆、拖缆、安装使用。  
Applicable to hanging cable, hauling cable and installing  
cable in electric power, chemical industry, metallurgy,  
port, stockyard, mine of field route, electrical apparatus,  
electrical equipment and automatic device.



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# 扁电缆 Flat Cable

## 阻燃、耐热扁电缆 Flame-retardant, Heat Resistant Flat Cable

### 执行标准 Executive Standard

本产品按照Q/75230256-2.15-2011标准生产制造。

This product is manufactured as per Q/75230256-2.15-2011 standard.

### 适用范围 Applicable Scope

扁平软电缆适用于额定电压6/10kV及以下的野外线路、电器仪表、电子设备及自动化装置的电力、化工、冶金、港口、货场、矿山等行业安装使用。产品特别柔软、易于折叠移动、平稳不扭，且具有阻燃、耐高温、酸碱腐蚀、耐老化、抗拉拽之特性。

Flat flexible cable is applied to field lines, electric appliance instrument, electronic equipment and automatic devices at rated voltage up to and including 6/10kV for power, chemistry, metallurgy, port, goods yard and mine. It is flexible and easy to be folded and moved, stable, without torsion, and with features of flame-retardant, hi-temp resistant, acid/alkali/corrosion resistant, ageing resistant and tensile-resistant.

### 使用特性 Operating Features

1、电缆交流额定电压： $U_0/U$ ：450/750V、0.6/1kV和6/10kV

A.C rated voltage:  $U_0/U$ ：450/750V、0.6/1kV and 6/10kV

2、电缆正常运行时导体最高工作温度：

Max. operating temp of conductor at normal operation:

(丁腈) 聚氯乙烯绝缘：70℃或90℃；70℃ or 90℃ for (butyronitrile) PVC insulation

硅橡胶绝缘：180℃；180℃ for silicon rubber insulation

乙丙绝缘：90℃。90℃ for EPR insulation

3、电缆经50000次弯曲：线芯不断裂。

Cable is subjected to 50000 times bending without breaking of wire.

4、电缆安装时的最小弯曲半径：Min. bending radius of cable installation:

不小于电缆厚度（小边长度）的10倍。It not be 10 times less than cable thickness.

5、加强型扁电缆能承受较大拉力（根据客户要求，抗拉力可设计为300N~8000N）

Reinforced flat cable could bear larger pulling force (As per requirements of clients: pulling force could be designed to 300N~8000N).

## 电缆的型号、名称和代号含义 Type, Description and Code

表1 型号及名称 Table 1, Type and Description

型号 Type	名称 Description
YVV <sub>F</sub> B	多股细铜丝绞合导体，聚氯乙烯绝缘，丁腈聚氯乙烯复合物护套扁平软电缆 Multi-strands fine copper wire stranded conductor, PVC insulated, butyronitrile PVC sheathed, flat flexible cable
YVVB	多股细铜丝绞合导体，聚氯乙烯绝缘，聚氯乙烯护套扁平软电缆 Multi-strands fine copper wire stranded conductor, PVC insulated, PVC sheathed, flat flexible cable
YVGB	多股细铜丝绞合导体，聚氯乙烯绝缘，硅橡胶护套扁平软电缆 Multi-strands fine copper wire stranded conductor, PVC insulated, silicon rubber sheathed, flat flexible cable
YGGB	多股细铜丝绞合导体，硅橡胶绝缘，硅橡胶护套扁平软电缆 Multi-strands fine copper wire stranded conductor, silicon rubber insulated, silicon rubber sheathed, flat flexible cable
YGV <sub>F</sub> B	多股细铜丝绞合导体，硅橡胶绝缘，丁腈聚氯乙烯复合物护套扁平软电缆 Multi-strands fine copper wire stranded conductor, silicon rubber insulated, butyronitrile PVC sheathed, flat flexible cable
YGVB	多股细铜丝绞合导体，硅橡胶绝缘，聚氯乙烯护套扁平软电缆 Multi-strands fine copper wire stranded conductor, silicon rubber insulated, PVC sheathed, flat flexible cable
YGCB	多股细铜丝绞合导体，硅橡胶绝缘，硅橡胶护套重型扁平软电缆 Multi-strands fine copper wire stranded conductor, silicon rubber insulated, heavy-type silicon rubber sheathed, flat flexible cable
YCWB	多股细铜丝绞合导体，乙丙橡胶绝缘，氯（磺）化聚乙烯护套重型扁平软电缆 Multi-strands fine copper wire stranded conductor, EPR insulated, chlorosulphonated PE sheathed, heavy-type flat flexible cable
YEFB	多股细铜丝绞合导体，乙丙橡胶绝缘，氯（磺）化聚乙烯护套扁平软电缆 Multi-strands fine copper wire stranded conductor, EPR insulated, chlorosulphonated PE sheathed, flat flexible cable
YEV <sub>F</sub> B	多股细铜丝绞合导体，乙丙橡胶绝缘，丁腈聚氯乙烯复合物护套扁平软电缆 Multi-strands fine copper wire stranded conductor, EPR insulated, butyronitrile PVC sheathed, flat flexible cable
ZR-YVV <sub>F</sub> B	多股细铜丝绞合导体，聚氯乙烯绝缘，丁腈聚氯乙烯复合物护套阻燃扁平软电缆 Multi-strands fine copper wire stranded conductor, PVC insulated, butyronitrile PVC sheathed, flame-retardant flat flexible cable
YVV <sub>F</sub> B-J	多股细铜丝绞合导体，聚氯乙烯绝缘，丁腈聚氯乙烯复合物护套加强型扁平软电缆 Multi-strands fine copper wire stranded conductor, PVC insulated, butyronitrile PVC sheathed, reinforced flat flexible cable
YGGP <sub>F</sub> B	多股细铜丝绞合导体，硅橡胶绝缘，镀锡铜丝编织屏蔽，硅橡胶护套扁平软电缆 Multi-strands fine copper wire stranded conductor, silicon rubber insulated, tinned copper wire braided and shielded, silicon rubber sheathed, flat flexible cable

备注：本表只列举主要型号，电缆可以根据阻燃（ZR）、耐火（NH）、加强型（-J）、屏蔽型（P、P1、P2、P3）等演变出更多派生型号。

Note: Only types are listed in the table. Cable could become many types as per flame-retardant (FR), fire-resistant (NH), reinforced(-J) and shield (P、P1、P2、P3).

表2 代号和含义 Table 2 Code and Meaning

代号 Code	ZR	NH	Y	V	G	E	V <sub>F</sub>
含义 Meaning	阻燃 Flame-retardant	耐火 Fire-resistant	移动 Portable	聚氯乙烯 PVC	硅橡胶 Silicon rubber	乙丙橡胶 EPR	丁腈PVC Butyronitrile PVC
代号 Code	C	B	J	P	P1	P2	P3
含义 Meaning	重型 Heavy-type	扁平 Flat	加强型 Reinforced	铜丝编织 Copper wire braiding	镀锡铜丝编织 Tinned copper wire braiding	铜带 Copper tape	铝塑复合带 Al-laminated tape

# 扁电缆 Flat Cable

备注：加强型(-J)，根据客户要求，设计有三中形式。包括a. 采用钢丝绳加强，设置在缆芯间隙或导体之中；b. 采用不锈钢丝网包覆，设置在护套外表面；c. a与b组合。

Note: There are three types for reinforced type as per requirements of clients. It includes: a, steel wire rope reinforcement, it is placed in gaps of cores of in conductor; b, stainless steel wire net covering, it is placed on the surface of sheath; C, combination of a and b.

## 生产范围 Production Scope

芯数 No. of cores	导体标称截面积 Nom. cross section of conductor	
	YVV <sub>F</sub> B、YVVB、YVGB、YGGB、YGV <sub>F</sub> B、YGV <sub>B</sub> 、YGCB、YVV <sub>F</sub> B-J、YGGP1B etc.	YEFB、YEV <sub>F</sub> B
	0.45/0.75 kV 0.6/1 kV	6/10 kV
2	1.5~150	—
3	1.5~150	16~150
4	1.5~50	—
5~12	1.5~6	—
12以上	1.5、2.5	—

备注：本生产范围表只列举单根绝缘线芯结构扁电缆，根据客户要求，扁电缆中可设置电缆线组如：变频电缆、控制电缆、计算机电缆等。

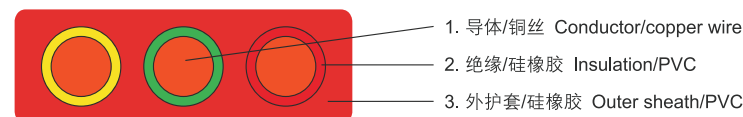
Note: Only single insulated wire flat cable is listed in the table. Cable wire groups as transducer cable, control cable, computer cable could be set in flat cable as per requirements of clients.

## 电缆结构图 Cable Drawings

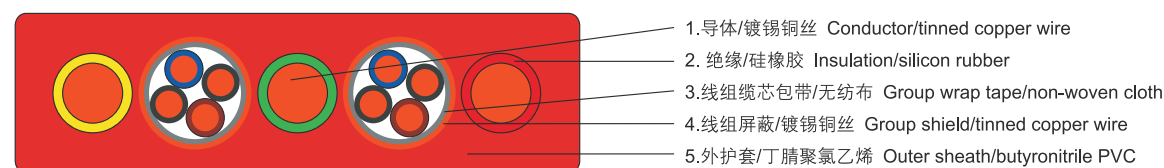
(1) 聚氯乙烯绝缘扁平软电缆YVVB YVVB type PVC insulated, flat flexible cable



(2) 硅橡胶绝缘扁平软电缆YGCB YGCB type silicon rubber insulated, flat flexible cable



(3) 硅橡胶绝缘扁平软电缆YGV<sub>F</sub>B YGV<sub>F</sub>B type silicon rubber insulated, flat flexible cable



## 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（第5种铜导体）

Max. D.C Resistance of Conductor at 20℃ (category 5 copper conductor)

导体标称截面积 Nom. cross section of conductor mm <sup>2</sup>	20℃时最大直流电阻 Ω/km Max. D.C resistance at 20℃	导体标称截面积 Nom. cross section of conductor mm <sup>2</sup>	20℃时最大直流电阻 Ω/km Max. D.C resistance at 20℃	导体标称截面积 Nom. cross section of conductor mm <sup>2</sup>	20℃时最大直流电阻 Ω/km Max. D.C resistance at 20℃
1.0	19.5	16	1.21	120	0.161
1.5	13.3	25	0.780	150	0.129
2.5	7.98	35	0.554	185	0.106
4	4.95	50	0.386	240	0.0801
6	3.30	70	0.272	300	0.0641
10	1.91	95	0.206		

2、成品电缆耐压试验：Withstand voltage test for completed cable

按Q/75230256-2.15-2011标准执行：

Test is conducted as per Q/75230256-2.15-2011 standard.

额定电压450/750V及以下，交流50Hz、3kV试验5min，绝缘不击穿；

For rated voltage up to and including 450/750V, A.C 50Hz, 3kV, 5min, without breakdown on insulation.

额定电压0.6/1kV，交流50Hz、3.5kV试验5min，绝缘不击穿；

For rated voltage up to and including 0.6/1kV, A.C 50Hz, 3.5kV, 5min, without breakdown on insulation.

额定电压6/10kV，交流50Hz、21kV试验5min，绝缘不击穿。

For rated voltage up to and including 6/10kV, A.C 50Hz, 21kV, 5min, without breakdown on insulation.

3、阻燃型电缆的阻燃性能符合GB/T 18380规定的燃烧试验。

Flame-retardant performance is in accordance with specified combustion test in GB/T 18380 standard.

4、绝缘及护套最小抗拉强度：Min. tensile strength of insulation and sheath

硅橡胶、乙丙绝缘6N/mm<sup>2</sup>、聚氯乙烯绝缘10N/mm<sup>2</sup>；

6N/mm<sup>2</sup> for silicon rubber, EPR insulation, 10N/mm<sup>2</sup> for PVC insulation

绝缘及护套最小断裂伸长率：150%；

Min. elongation at break of insulation and sheath: 150%

-40℃低温最小伸长率：20%。

Min. elongation ratio at -40℃ temp: 20%