

# 硅橡胶(阻燃)扁电力电缆

## Silicon Rubber (flame retardant) Flat Power Cable

该电缆广泛应用于起重、运输、机械、电气、钢铁、医药、冶金、港口、矿山、物流、仓储等行业的0.6/1kV及以下各种移动动力装置的电源连接及控制、信号、照明等。

It is used as power connection & controlling & signal & lighting of various moving power equipment, in the field of lifting, transportation, machine, electronic, steel, medicine, metallurgy, port, mine and storage etc.

**一、生产执行标准：** 采用企业标准

**Executive standard:** enterprise standard

### 二、使用特性

### Performance for Usage

- 1、额定电压:U<sub>0</sub>/U为0.6/1kV。
- 2、电缆允许工作温度范围：硅橡胶绝缘-60℃~+180℃；氟塑料绝缘-60℃~+200℃。
- 3、短路时(最长持续间不超过5S)电缆导体的最高温度不超过250℃。
- 4、电缆敷设温度应不低于-20℃。
- 5、缆最小弯曲半径为电缆小边长度的10倍。

- 1: Rated voltage U<sub>0</sub>/U:0.6/1kV
- 2: Working temperature allowed by cable: -60℃~+180℃ for cable with silicon rubber insulation; -60℃~+200℃ for cable with fluoroplastics insulation
- 3: Max temperature of cable conductor is no more than 250℃ during short circuit(the longest lasting time is no more than 5s).
- 4: Temperature for installing is no lower than -20℃.
- 5: Min. bending radius of cable is 10 times that of small border length of cable.

### 三、电缆的型号名称

### Type and Description

1、电缆型号名称如表1

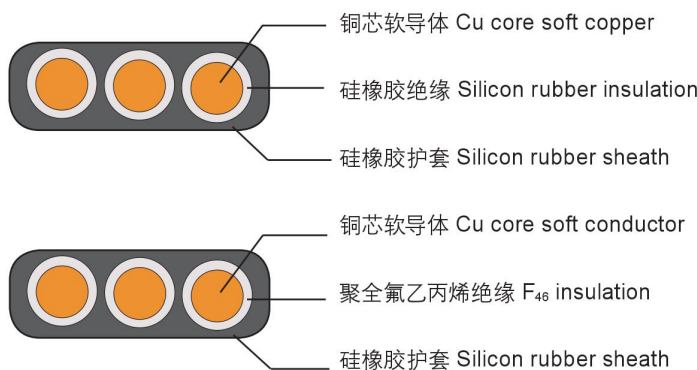
Type and description of cable listed in table 1

**Table 1**

型号 Type	名称 Description
(ZR)-YGCB	硅橡胶绝缘硅橡胶护套(阻燃)扁电力电缆 (flame retardant)Flat power cable with silicon rubber insulation and sheath
(ZR)-YF46GRB	聚全氟乙丙烯绝缘硅橡胶护套(阻燃)扁电力电缆 (flame retardant)Flat power cable with F <sub>46</sub> insulation and silicon rubber sheath

2、电缆结构图如下：

The figure of cable structure



### 四、主要性能参数

### Main Performance Parameter

1、在20℃时导体直流电阻应符合下表规定：

DC resistance of conductor at 20℃ shall meet the requirements of the following table:

截面mm <sup>2</sup> Cross section area R <sub>omax</sub>	0.75	1	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185
(Ω/km)	26.0	19.5	13.3	7.98	4.95	3.30	1.91	1.21	0.780	0.551	0.386	0.272	0.206	0.161	0.129	0.106

2、规格及参考数据如下表规定：

Specification and data for reference stipulated in the following table:

标称截面mm <sup>2</sup> Nominal cross section area	导体直径mm Conductor diameter	绝缘厚度mm Insulation thickness	护套厚度mm Sheath thickness	间距mm Space	电缆外径mm Cable OD	重量(kg) Weight
4×1	1.29	0.8	1.6	1	17.76×6.09	225
6×1	1.29	0.8	1.6	1	25.54×6.09	3.8
8×1	1.29	0.8	1.6	1	33.32×3.09	360
4×1.5	1.56	1	1.6	1	20.44×6.76	291
6×1.5	1.56	1	1.6	1	29.56×6.76	360
8×1.5	1.56	1	1.6	1	38.68×6.76	469
4×2.5	2.05	1.4	1.6	1.5	27.1×8.05	333
6×2.5	2.05	1.4	1.6	1.5	39.8×8.05	536
8×2.5	2.05	1.4	1.6	1.5	52.5×8.05	608
4×4	2.60	1.8	1.7	1.7	33.3×9.6	457
6×4	2.60	1.8	1.7	1.7	49.1×9.6	790
4×6	3.15	2	1.9	2.0	38.4×11.5	615
6×6	3.15	2	1.9	2.0	56.7×11.5	1098
3×10	4.4	2.5	2.4	2.4	37.8×14.2	702
6×10	4.4	2.5	2.4	2.4	73.2×14.2	1428
3×25	6.81	2.8	2.7	2.8	48.23×17.81	1645
6×25	6.81	2.8	2.7	2.8	93.86×17.81	3325
4×35	7.9	3	3	3	70.6×19.9	2181
3×50	9.2	3.2	3.1	3.4	59.8×21.8	2681
4×50	9.2	3.2	3.1	3.4	78.8×21.8	3158
3×70	12.6	3.4	3.3	3.8	72.4×26	2878
3×120	15.4	3.8	3.07	4.2	84.8×30.4	5157
3×150	16.4	4	4.1	4.4	90.2×32.6	6171

### 3、成品电缆线芯的绝缘电阻

成品电缆绝缘线芯的绝缘电阻，换算到电缆长度为1km和温度为20℃时，导电线芯截面在50mm<sup>2</sup>及以下的应不小于50MΩ，70~185mm<sup>2</sup>的应不小于35 MΩ；多芯电缆的成品电压试验应经受交流50HZ，试验电压3500V、5min，绝缘无击穿。

Insulated Resistance of Finished Cable Conductor  
Insulated resistance of finished cable insulated conductor will be no less than 50MΩ for cable with conductive core cross section 50mm<sup>2</sup> or lower and 35 MΩ for cable with conductive core cross section 70~185mm<sup>2</sup> under the condition that cable length is 1km and temperature is 20℃. Finished cable with multi-core shall bear voltage test of 3500v, AC 50Hz for 5 minutes without puncture of insulation.

### 五、交货长度

允许根据双方协议长度交货；长度计量误差不超过±0.5%。

### Delivery Length

Delivery length of cable depends on both agreements with length error allowance of ±0.5%