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# 橡套电缆 Rubber-sheathed Cable

本产品适用于交流额定电压 $U_0/U$ 为450/750V  
及以下动力装置、家用电器、  
各类移动式电气设备及电动工具等。

The products could be applied to drive devices,  
household electrical appliances, varieties of portable  
electrical equipments and electromotive tools at A.C  
Rated voltage  $U_0/U$  up to and including 450/750V.



# 橡套电缆 Rubber-sheathed Cable

## 额定电压450/750V及以下橡皮绝缘软电缆 Rubber Insulated Flexible Cable at Rated Voltage Up to and Including 450/750V

### 执行标准 Executive Standard

本产品按照GB/T 5013-2008、JB 8735-2011 (IEC60245) 标准生产制造。

This product is manufactured as per GB/T 5013-2008、JB/T 8735-2011 (IEC60245) standards.

### 适用范围 Applicable Scope

本产品适用于交流额定电压为450/750V及以下的动力装置、家用电器、电动工具和各种移动式电器设备等的连接线。

The product is applied to household electrical appliances, electromotive tools and all varieties of portable electrical equipments at rated voltage up to and including 450/750V.

### 使用特性 Operating Features

1、电缆额定电压 $U_0/U$ 为450/750V and 300/500V。

Rated voltage  $U_0/U$ : 450/750V and 300/500V.

$U_0$ —电缆设计用的导体对地或金属屏蔽之间的额定工频电压;

Rated power frequency voltage from conductor to ground or between metal shielding layers

$U$ —电缆设计用的导体间的额定工频电压;

Rated power frequency voltage between conductors

2、电缆正常运行时导体最高工作温度为60℃。

Max. operating temp of conductor at normal operation is 60℃.

3、电缆短路时导体最高温度为160℃。(短路最长持续时间为5秒)

Max temp of conductor at short circuit is 160℃ (max duration at short circuit is 5s).

4、圆形电缆最小弯曲半径为电缆直径的6倍; 扁电缆最小弯曲半径为小边直径的10倍。

Min. bending radius of round cable is 6 times than cable O.D, and 10 times than cable O.D for flat cable.

5、电缆敷设 Cable Installation

电缆敷设时环境温度不低于0℃, 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、“W”型派生电缆具有一定的耐气候和一定的耐油能力, 适宜用于户外或接触油污的场合。

"W"-type cable has the capacity of climate-resistant and oil-resistant and can be suitable for outdoors and occasion with oil-contact.

## 电缆的型号、名称和主要用途 Type, Description and Service Environment

1、标准GB/T 5013-2008中橡皮绝缘电缆型号:

The types of rubber insulated cables in GB/T 5013-2008 standard include as follows:

型号 Type	名称 Description	主要用途 Main Application
60245 IEC 53(YZ)	普通强度橡套软线 Rubber Sheathed Flexible Electrical Wire with Common Strength	用于各种移动电器设备和工具 For all kinds of Portable Electrical Equipments and Tools
60245 IEC 57(YZW)	普通氯丁或其它相当的合成弹性体橡套软线 Common Chloroprene or Other Synthetic Elastomer Rubber Sheathed Flexible Electric Wire	用于各种移动电器设备和工具 For all kinds of Portable Electrical Equipments and Tools
60245 IEC 66(YCW)	重型氯丁或其它相当的合成弹性体橡套软电缆 Heavy-duty Chloroprene or Other Synthetic Elastomer Rubber Sheathed Flexible Electric Wire	用于各种移动电器设备、能承受较大的机械外力作用 For all kinds of Portable Electrical Equipments and Can Bear Larger External Outside Mechanical Forces

2、标准JB 8735-2011中通用橡套软电缆型号:

The types of rubber insulated cables in JB 8735 -2011standard include as follows:

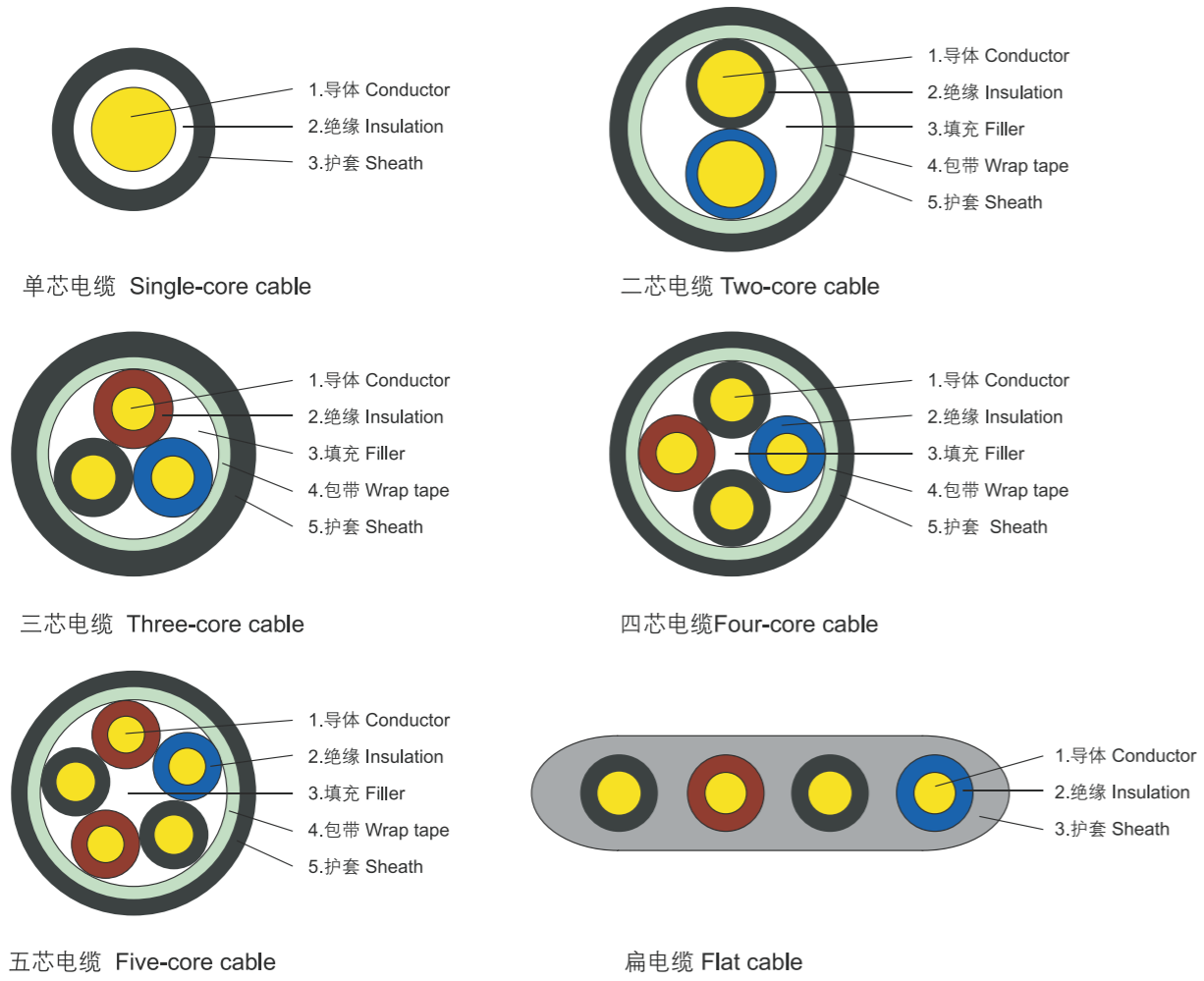
型号 Type	名称 Description	主要用途 Main Application
YZ、YZW	中型橡套软电缆 Middle-sized Rubber Sheathed Flexible Cable	用于各种移动电器设备和工具 For all kinds of Portable Electrical Equipments and Tools
YZB、YZWB	中型橡套扁形软电缆 Middle-sized Rubber Sheathed Flat Flexible Cable	用于各种移动电器设备和工具 For all kinds of Portable Electrical Equipments and Tools
YC、YCW	重型橡套软电缆 Heavy -type Rubber Sheathed Flexible Cable	用于各种移动电器设备、能承受较大的机械外力作用 For all kinds of Portable Electrical Equipments and Can Bear Larger External Outside Mechanical Forces

## 生产范围 Production Scope

型号 Type	额定电压 $U_0/U$ Rated voltage V	芯数 No. of cores	标称截面 Nom. cross section mm <sup>2</sup>	执行标准 Standard
60245 IEC 53(YZ)	300/500	2、3、4、5	0.75~2.5	GB/T 5013-2008
60245 IEC 57(YZW)	300/500	2、3、4、5	0.75~2.5	
60245 IEC 66(YCW)	450/750	1	1.5~400	JB/T 8735-2011
		2	1~25	
		3	1~95	
		4	1~150	
		5	1~25	
YZ、YZW	300/500	2、3、4、5 4(三大一小)	4~6 1.5~6	JB/T 8735-2011
		5(三大二小, 四大一小) 6	1.5~6 0.75~6	
YZB、YZWB	300/500	2、3、4、5、6	0.75~6	
YC	450/750	1	1.5~400	
		2	1.0~95	
		3、4、5 4(三大一小)	1.0~150 2.5~150	
		5(三大二小, 四大一小)	2.5~150	
		2	35~95	
YCW	450/750	3	120~150	
		4(三大一小)	2.5~150	
		5	35~150	
		5(三大二小, 四大一小)	2.5~150	
		5	2.5~150	

# 橡套电缆 Rubber-sheathed Cable

## 电缆结构图 Cable Drawings



## 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 mm <sup>2</sup>	铜导体20℃时最大直流电阻 Max. D.C resistace of copper conductor Ω/km	
	不镀金属 Plain Wires	镀金属 Metal Coated
0.75	26.0	26.7
1.0	19.5	20.0
1.5	13.3	13.7
2.5	7.98	8.21
4	4.95	5.09
6	3.30	3.39
10	1.91	1.95
16	1.21	1.24

规格 Specification mm <sup>2</sup>	铜导体20℃时最大直流电阻 Max. D.C resistace of copper conductor Ω/km	
	不镀金属 Plain Wires	镀金属 Metal Coated
25	0.780	0.795
35	0.554	0.565
50	0.386	0.393
70	0.272	0.277
95	0.206	0.210
120	0.161	0.164
150	0.129	0.132
185	0.106	0.108
240	0.0801	0.0817
300	0.0641	0.0654
400	0.0486	0.0495

2、交流电压试验: YZ、YZW、YZB、YZBW施加工频试验电压2kV, 5min, 绝缘不击穿; YC、YCW施加工频试验电压2.5kV, 5min, 绝缘不击穿。

A.C voltage test: 2kV power frequency test voltage is applied to YZ、YZW、YZB、YZBW cable, 5min, without breakdown on insulation, 2.5kV power frequency test voltage is applied to YC、YCW cable, 5min, without breakdown on insulation.

# 橡套电缆 Rubber-sheathed Cable

## 电焊机电缆 Cables for Electric Welders

### 执行标准 Executive Standard

本产品按照GB/T 5013-2008 (IEC60245) 标准生产制造。

This product is manufactured as per GB/T 5013-2008 (IEC60245) standard.

### 适用范围 Applicable Scopes

本产品适用于电焊机与焊枪之间连接用电缆。

The product is applied to connective cable between electric welder and welding gun.

### 使用特性 Operating Features

1、电缆是在低电压(对地电压交流不超过200V和脉动直流峰值400V)大电流的条件下工作。

The cable is operated at low voltage and high current (eathing A.C voltage not be over 200V and peak value of impulse D.C shall be 400V)

2、在正常使用时，导体最高温度为60℃。 Max. temp of conductor at normal operation is 60℃

3、电缆最小弯曲半径为电缆直径的6倍。 Min. bending radius is 6 times than cable O.D

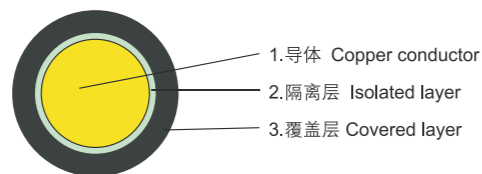
### 电缆的型号、名称和主要用途 Type, Description and Service Environment

型号 Type	名称 Description	主要用途 Main Application
60245 IEC 81(YH)	橡套电焊机电缆 Electric Welder Rubber Sheathed Cable	电焊机焊接用电缆 Cable for welding of electric welder
60245 IEC 82(YHF)	氯丁或其它相当的合成弹性体橡套电焊机电缆 Chloroprene or Other Synthetic Elastomer Electric Welding Rubber Sheathed Cable	电焊机焊接用电缆 Cable for welding of electric welder

### 生产范围 Product Range

型号 Type	芯数 No. of cores	标称截面 Nom. cross section mm <sup>2</sup>	执行标准 Standard
60245 IEC 81(YH) 60245 IEC 82(YHF)	1	16~95	GB/T 5013-2008

### 电缆结构 Cable Drawings



YH/YHF电缆

### 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 mm <sup>2</sup>	铜导体20℃时最大直流电阻 Max. D.C resistance of copper conductor Ω/km	
	不镀金属 Plain Wires	镀金属 Metal Coated
16	1.16	1.19
25	0.758	0.780
35	0.536	0.552
50	0.379	0.390
70	0.268	0.276
95	0.198	0.204

2、交流电压试验：施加工频试验电压1kV，5min，覆盖层不击穿。

A.C voltage test: 1kV power frequency voltage is applied, 5min, no breakdown on covering.

### 电缆结构尺寸及重量 Structural Dimension and Weight

标称截面 Nominal cross section mm <sup>2</sup>	电缆近似外径 Reference O.D of cable mm	电缆近似重量 Reference weight kg/km	
		YH	YHF
16	10.0	171	176
25	11.0	229	235
35	12.3	328	335
50	14.1	438	446
70	16.5	601	611
95	18.7	830	843

### 电缆允许载流量 Permissible Current Rating

导体标称截面积 Nom. cross section of conductor mm <sup>2</sup>	长期连续负荷允许载流量 Permissible current rating at long-term continuous load (A)
16	105
25	135
35	170
50	215
70	265
95	325

电缆载流量计算条件：Calculating Condition of Current Rating

1、周围环境温度Surrounding ambient temp.: 40℃。

2、不同环境温度下载流量的校正系数：Calibration coefficient of current rating at different ambient temp

工作温度 Operating temp	环境温度 (℃) 空气中 Ambient temp. in air						
	20	25	30	35	40	45	50
60℃	1.29	1.22	1.15	1.08	1.00	0.91	0.81