

通用橡套电缆(GB5013-97) Colliery rubber sheath cable



※ 用途 Application

本产品适用于交流额定电压为450/750V及以下的家用电器、电动工具和各类移动电器设备。
This product is suitable for rated ac voltage 450/750V or below domestic appliances, power-operated tools and various portable electric equipments.

※ 使用特性 Using Features

- (1)YZ型额定电压 U_0/u 为300/500V,YC型为450/750V。
- (2)线芯的长期允许工作温度不超过65℃。
- (3)W型电缆具有耐气候和一定的耐油性能, 适宜于在户外或接触油污的场合使用。
- (4)ZR型电缆具有阻燃性能。
- (1)YZ model rated voltage U_0/u is 300/500V,YC model is 450/750V.
- (2)Long time allow working temperature of wire core is not more than 65℃.
- (3)W model cable has the property of durability and suitable for outdoor touching of greasy dirt.
- (4)ZR model cable has the property of fire-resistance.

※ 型号、名称及用途(见表1)Model name and usage:(see table 1)

表1 table 1

型号Type	名称Name	主要用途Main usage
YQ,YQW	轻型橡套软电缆 Light model rubber sheath flexible cable	用于轻型移动电器设备和工具 Used for light portable electric equipment and tools
YZ,YZW	中型橡套软电缆 Middle model rubber sheath flexible cable	用于各种移动电器设备和工具 Used for various portable electric equipment and tools
YC,YCW	重型橡套软电缆 Heavy model rubber sheath flexible cable	用于各种移动电器设备, 能承受较大的机械外力作用 Used for various portable electric equipment which can bear larger mechanical force effect

※ 尺寸重量及技术参数(见表2-4) Size, weight and technological date(see table 2-4)

300/300V YQ,YQW 轻型 300/300V YQ,YQW light model

表2 table 2

芯数 × 标称截面 Cores × Nominal section (mm ²)	导电线芯 Conductive core(mm)	平均外径 Average outer diameter (mm ²)		20℃ 导体电阻 ≤ (Ω/km) 20℃ conductor resistance ≤ (Ω/km)		参考重量 Reference weight(kg/km)		
		根数/线径 number diameter of core	下限 minimun	上限 maximun limit	铜芯 Copper core	镀锡铜芯 tin-wellded Copper core	YQ	YQW
2×0.3	16/0.15		4.6	6.6	69.2	71.2	30	31.5
2×0.5	28/0.15		5.0	7.2	39.0	40.1	43	45.5
3×0.3	16/0.15		4.8	7.0	69.2	71.2	36	38.1
3×0.5	28/0.15		5.2	7.6	39.0	40.1	74	77.0

300/500V YZ,YZW中型
300/500V YZ,YZW medium model

表3 table 3

芯数 × 标称截面 Cores × nominal section (mm ²)	导电线芯 Conductive core(mm) 根数/线径 number diameter of core	平均外径 Average outer diameter (mm ³)		20℃ 导体电阻 ≤ (Ω/km) 20℃ conductor resistance ≤ (Ω/km)		参考重量 Reference weight(kg/km)	
		下限 minimun	上限 maximun limit	铜芯 Copper core	镀锡铜芯 tin-wellded Copper core	YZ	YZW
2×0.75	24/0.20	6.0	8.2	26.0	26.7		
2×1	32/0.20	6.4	8.8	19.5	20.0	81.7	89.6
2×1.5	30/0.25	8.0	10.5	13.3	13.7		
2×2.5	49/0.25	9.4	12.5	7.98	8.21	227.1	242.6
2×4	56/0.30	11.0	14.0	4.95	5.09		
2×6	84/0.30	12.5	17.0	3.30	3.39	366.0	394.5
3×0.75	24/0.20	6.6	8.8	26.0	26.7		
3×1	32/0.20	6.8	9.2	19.5	20.0	97.4	105.0
3×1.5	30/0.25	8.4	11.0	13.3	13.7		
3×2.5	49/0.25	10.0	13.0	7.98	8.21	205.1	219.2
3×4	56/0.30	11.5	14.5	4.95	5.09		
3×6	84/0.30	13.0	18.0	3.30	3.39	452.5	497.7
4×0.75	24/0.20	7.2	9.6	26.0	26.7		
4×1	32/0.20	7.6	10.0	19.5	20.0	117.1	125.2
4×1.5	30/0.25	9.4	12.5	13.3	13.7		
4×2.5	49/0.25	11.0	14.0	7.98	8.21	255.2	270.9
4×4	56/0.30	13.0	16.5	4.95	5.09		
4×6	84/0.30	14.5	20.0	3.30	3.39	564.0	594.0
3×1.5+1×1.0	30/0.25+32/0.20	9.4	12.0	13.3	13.7	170.1	181.9
3×2.5+1×1.5	49/0.25+30/0.25	11.0	14.0	7.98	8.21	246.8	262.9
3×4+1×2.5	56/0.30+49/0.25	13.0	16.0	4.95	5.09	359.1	380.2
3×6+1×4	84/0.30+56/0.30	14.5	19.5	3.30	3.39	542.1	572.5
5×0.75	24/0.20	8.0	11.0	26.0	26.7	127.1	136.8
5×1	32/0.20	8.4	11.5	19.5	20.0	144.3	154.5
5×1.5	30/0.25	10.0	13.5	13.3	13.7	210.5	223.6
5×2.5	49/0.25	12.5	15.5	7.98	8.21	304.3	322.4
5×4	56/0.30	14.5	18.0	4.95	5.09	441.8	464.5
5×6	84/0.30	16.5	22.5	3.30	3.39	687.5	724.0

450/750V YC,YCW重型
450/750V YC,YCW heavy model

表4 table 4

芯数 × 标称截面 Cores × nominal section (mm ²)	导电线芯 Conductive core(mm) 根数/线径 number diameter of core	平均外径 Average outer diameter (mm ²)		20℃ 导体电阻 ≤ (Ω/km) 20℃ conductor resistance ≤ (Ω/km)		参考重量 Reference weight(kg/km)	
		下限 minimun	上限 maximun limit	铜芯 Copper core	镀锡铜芯 tin-wellded Copper core	YC	YCW
1×1.5	30/0.25	5.6	7.2	13.3	13.7	51.9	57.0
1×2.5	49/0.25	6.4	8.0	7.98	8.21	73.7	79.5
1×4	56/0.30	7.2	9.0	4.95	5.09	110.5	118.7
1×6	84/0.30	8.0	11.0	3.30	3.39	132	167.3
1×10	84/0.40	9.8	13.0	1.91	1.95	220.6	234.8
1×16	126/0.40	11.0	14.5	1.21	1.24	295.1	311.6
1×25	196/0.40	12.5	16.5	0.780	0.795	425.6	446.2
1×35	276/0.40	16.5	21.0	0.386	0.393	758.4	788.4
1×50	396/0.40	16.5	21.0	0.386	0.393	758.4	788.4

表4 table 4

芯数 × 标称截面 Cores × Nominal section (mm ²)	导电线芯 Conductive core(mm)	平均外径 Average outer diameter (mm ²)		20℃ 导体电阻 ≤ (Ω/km) 20℃ conductor resistance ≤ (Ω/km)		参考重量 Reference weight(kg/km)	
		根数/线径 number diameter of core	下限 minimun	上限 maximun limit	铜芯 Copper core	镀锡铜芯 tin-wellded Copper core	YC
1×70	360/0.50	18.5	24.0	0.272	0.277	1034.1	1073.7
1×95	475/0.50	21.0	26.0	0.206	0.210	1324.7	1369.3
1×120	608/0.50	23.0	28.5	0.161	0.164	1593.9	1646.3
1×150	756/0.50	25.0	32.0	0.129	0.132	1971.6	2063.7
1×185	925/0.50	27.5	34.5	0.160	0.108	2425.6	2498
1×240	1221/0.50	30.5	38.0	0.0801	0.0817	3081.3	3166.2
1×300	1525/0.50	33.5	41.5	0.0641	0.0654	3730.7	3825.2
1×400	2013/0.50	37.5	46.5	0.0486	0.0495	4934	5048.2
2×1.5	30/0.25	9.0	11.5	13.3	13.7	132	146.6
2×2.5	49/0.25	10.5	13.5	7.98	8.21	203.6	223.9
2×4	56/0.30	12.0	15.0	4.95	5.09	280.2	305.6
2×6	84/0.30	13.5	18.5	3.30	3.39	412.2	448.2
2×10	84/0.40	18.5	24.0	1.91	1.95	669.1	732.8
2×16	126/0.40	21.0	27.5	1.21	1.24	906.6	988.5
2×25	196/0.40	24.5	31.5	0.780	0.795	1144.3	1229.4
2×4	56/0.30	12.0	15.0	4.95	5.09	280.2	305.6
2×6	84/0.30	13.5	18.5	3.30	1.95	412.2	448.2
2×10	84/0.40	18.5	24.0	1.91	3.39	669.1	732.8
2×16	126/0.40	21.0	27.5	1.21	1.95	906.6	988.5
2×25	196/0.40	24.5	31.5	0.780	1.24	1144.3	1229.4
2×35	276/0.40	27.5	35.5	0.554	0.795	1505.5	1610.4
2×50	396/0.40	32.0	41.0	0.386	0.565	2464.2	2655.7
2×70	360/0.50	36.0	46.0	0.272	0.393	3254.8	3484.3
2×95	475/0.50	40.5	50.5	0.206	0.277	4144.3	4423.0
3×1.5	30/0.25	9.6	12.5	13.3	0.210	156.0	171.0
3×2.5	49/0.25	11.5	14.5	7.98	13.7	246.1	266.9
3×4	56/0.30	13.0	16.0	4.95	8.21	305.6	325.2
3×6	84/0.30	20.0	25.5	1.91	5.09	822.3	895.6
3×10	84/0.40	20.0	25.5	1.91	1.95	822.3	895.6
3×16	126/0.40	22.5	29.5	1.21	1.24	1075.8	1152.8
3×25	196/0.40	26.5	34.0	0.780	0.795	1514.3	1725.4
3×35	276/0.40	29.5	38.0	0.554	0.565	789.3	1956.0
3×50	396/0.40	34.5	43.5	0.386	0.393	2880.3	3057.8
3×70	360/0.50	38.5	49.5	0.272	0.277	3879.3	4109.2
3×95	475/0.50	44.0	54.0	0.206	0.210	4974.5	5250.8
3×120	608/0.50	48.0	59.0	0.161	0.164	5933.3	6253.3
3×150	756/0.50	53.0	66.5	0.129	0.132	7343.4	7740.9
4×1.5	30/0.25	10.5	15.5	13.3	13.7	188.6	205.6
4×2.5	49/0.25	12.5	15.5	7.98	8.21	300.5	323.7
4×4	56/0.30	14.5	18.0	4.95	5.09	438.4	469.5
4×6	84/0.30	16.5	22.0	3.30	3.39	643.2	686.0
4×10	84/0.40	21.5	28.0	1.91	1.95	1106.0	1097.7
4×16	126/0.40	24.5	32.0	1.21	1.24	1380.0	1473.9
4×25	196/0.40	29.5	37.5	0.780	0.795	2011.8	2137.3
4×35	276/0.40	33.3	42.0	0.554	0.565	2637.2	2792.7
4×50	396/0.40	38.0	48.5	0.386	0.393	3634.4	3838.4
4×70	360/0.50	43.0	55.0	0.272	0.277	4861.7	5118
4×95	475/0.50	49.0	60.5	0.206	0.210	6245.5	6551
4×120	608/0.50	53.0	65.5	0.161	0.164	7479.6	7836
4×150	756/0.50	59.0	74.0	0.129	0.132	9302.4	9753
3×2.5+1×1.5	49/0.25+30/0.25	12.5	15.5	7.98	8.21	282.7	305.6

表4 Table4

芯数×标称截面 Cores ×Nominal section (mm ²)	导电线芯 Conductive core(mm) 根数/线径 Number diameter of core	平均外径 Average outer diameter (mm ²)		20℃导体电阻≤(Ω/km) 20℃conductor resistance		参考重量 Reference weight(kg/km)	
		下限 minimun	上限 maximun limit	铜芯 Copper core	镀锡铜芯 tin-wellded Copper core	YC	YCW
3×4+1×1.5	56/0.30+49/0.25	14.5	17.5	4.95	5.09	406.8	435.7
3×6+1×4	84/0.30+56/0.30	16.0	21.0	3.30	3.39	600.1	640.3
3×10+1×6	84/0.40+84/0.30	20.5	26.5	1.91	1.95	925.1	990.9
3×16+1×6	126/0.40+84/0.40	23.0	30.5	1.21	1.24	1253.9	1341.5
3×25+1×10	196/0.40+84/0.40	28.0	35.5	0.780	0.795	1823.2	1941.3
3×25+1×10	196/0.40+84/0.40	28.0	35.5	0.780	0.795	1823.2	1941.3
3×35+1×10	276/0.40+84/0.40	30.0	38.5	0.554	0.565	1980.4	2115.9
3×50+1×16	396/0.40+126/0.40	36.0	46.0	0.386	0.393	3243.4	3439.7
3×70+1×25	360/0.50+196/0.40	40.0	51.0	0.272	0.277	4504.4	4772.6
3×95+1×35	475/0.50+276/0.40	44.0	55.0	0.206	0.210	5553.5	5838.3
3×120+1×35	608/0.50+276/0.40	46.5	59.0	0.161	0.164	6362.1	6662.4
3×150+1×50	756/0.50+396/0.40	52.0	66.0	0.129	0.132	7889.3	8252.6
5×1.5	30/0.25	11.5	15.0	13.3	13.7	221.4	240.6
5×2.5	49/0.25	13.5	17.0	7.98	8.21	347.6	372.7
5×4	56/0.30	16.0	19.5	4.95	5.09	497.1	528.9
5×6	84/0.30	18.0	24.5	3.30	3.39	765.7	815.0
5×10	84/0.40	24.0	31.0	1.91	1.95	1205.2	1289.0
5×16	126/0.40	27.0	35.5	1.21	1.24	1668.8	1777.0
5×25	196/0.40	32.5	41.5	0.780	0.795	2434.3	2587.1

※ 通用橡套软电缆载流量见表5-6

Carrier current quantity of general rubber sheath flexible cable:see table 5-6

表5 table 5

主线芯截面 Main core section (mm)	长期连续负荷允许载流量(A) long time continuting currier quantity current						
	YZ、YZW型			YC、YCW型			
	二芯2-core	三芯3-core	四芯4-core	单芯1-core	二芯2-core	三芯3-core	四芯4-core
0.75	14	12	11				
1.0	17	14	13				
1.5	21	18	18				
2.0	26	22	22				
2.5	30	25	25	37	30	26	27
4.0	41	35	35	47	39	34	34
6.0	53	45	45	52	51	44	44
10				75	74	63	63
16				112	96	84	84
25				148	135	115	116
35				188	167	142	143
50				226	208	176	177

表6 不同环境温度时载流量换算系数

Exchange ccefficient of rate of different surrounding temperature

表6 table 6

环境温度 Surrounding temperature	15	20	25	30	35	40
换算系数 Exange ccefficient	1.12	1.06	1.00	0.94	0.87	0.97