

硅橡胶绝缘扁电缆 Silicon rubber insulated flat cable

产品用途

本产品采用硅橡胶作绝缘或护套材料，由于硅橡胶本身具有耐高温、耐寒、柔软、耐磨、防腐等特性，因此该电缆在高温环境下电气性能稳定，抗老化性能好，使用寿命长，适用于移动8.7/15kV及以下具有抗拉、耐热、防腐等特殊要求的行车、台车、传输机械等移动设备和电器用动力传输线及控制、照明、通讯线路，本产品已广泛用于冶金、电力、化工、船舶、港口等行业。

使用特性

- 1、电缆额定电压 U_0/U 分别为：450/750V、0.6/1kV、3.6/6kV、6/6(10)kV、8.7/10(15)kV。
- 2、电缆导体最高允许工作温度不超过180℃。
- 3、电缆最高允许短路温度（持续时间不超过5s）：不超过350℃。
- 4、电缆最小弯曲半径应不小于电缆外径的6倍。

Application

The cable employs silicon rubber as the insulation and sheath material. The silicon rubber can endure high temperature and wear and is flexible and corrosion-resistant. It is stable in electrical properties and resistant to aging and thus has a long service life. It is applicable to the movable equipment (up to and including 8.7/15kV), eg. pallet car or delivery machine, as the power supply cable, control, lighting and communication cable. It has found its use in metal refining, electrical, ship or port industries etc.

Service property

1. The rated voltage U_0/U of the cable should be 450/750V, 0.6/1kV, 3.6/6kV, 6/6(10)kV, 8.7/10(15)kV.
2. Allowed maximum operating temperature of cable conductor should be 180℃.
3. Allowed maximum short circuit temperature (lasting 5 seconds) should be 350℃.
4. Minimum bending radius should be 6 times of cable outer diameter.

基本型号及名称 Type and description

型号 Type	名称 Description
YGGB、YGCB	铜芯硅橡胶绝缘及护套移动用扁平软电缆 Copper core silicon rubber insulated and sheathed movable flexible flat cable
YGVFB	铜芯硅橡胶绝缘丁腈复合物护套移动用扁平软电缆 Copper core silicon rubber insulated NBR sheathed movable flexible flat cable
YGSB	铜芯硅橡胶绝缘热塑性弹性体护套移动用扁平软电缆 Copper core silicon rubber insulated thermoplastic elastomer sheathed movable flexible flat cables
YGGPB、YGCPB	铜芯硅橡胶绝缘及护套铜丝编织屏蔽型移动用扁平软电缆 Copper core silicon rubber insulated and sheathed copper wire braided shielded movable flexible flat cable
YGVFPB	铜芯硅橡胶绝缘铜丝编织屏蔽丁腈复合物护套移动用扁平软电缆 Copper core silicon rubber insulated copper wire braided shielded NBR sheathed movable flexible flat cable
YGSPB	铜芯硅橡胶绝缘铜丝编织屏蔽热塑性弹性体护套移动用扁平软电缆 Copper core silicon rubber insulated copper wire braided shielded thermoplastic elastomer sheathed smovable flexible flat cable

注：表中未列型号按下面的型号说明组成。

Note: The type not listed in the table should be comprised according to following type explanation.

代号名称和含义 Code and meaning

代号 Code	说明 Description
Y	移动软电缆 Movable flexible cable
G、C	硅橡胶绝缘或护套 Silicon rubber insulated or sheathed
VF	丁腈复合物护套 NBR sheathed



续上表 Continued

代号 Code	说明 Description
S	热塑性弹性体护套 Thermoplastic elastomer sheath
P	铜丝编织屏蔽 Copperwire braided shield
B	扁平 Flat
T	加强型钢丝绳 Reinforcedsteel wire rope

产品结构示意图 Structure diagram



主要技术指标

- 20°C时导体直流电阻符合GB/T3956规定;
- 20°C时绝缘电阻不小于500MΩ.km;
- 电缆应经受下表工频电压试验5min不击穿。

额定电压kV	工频试验电压kV	额定电压kV	工频试验电压kV
0.45/0.75	3.0	66, 69/10	21.0
0.6/1	3.5	8.7/10, 8.7/15	30.5
3.6/6	12.5		

基本电缆规格和结构参数 Cable specification and structural parameter

芯数×标称截面 Number of cores × nominal cross section area	导体结构 Conductor structure	外形尺寸(mm) Dimension YGCB	芯数×标称截面 Number of cores × nominal cross section area	导体结构 Conductor structure	外形尺寸(mm) Dimension YGCB
2×0.75	5	17.2×7.7	2×25	5	37.4×18.5
2×1	5	17.2×7.8	2×35	5	41.4×20.5
2×1.5	5	18.2×8.3	2×50	5	46.4×22.7
2×2.5	5	19.9×8.7	2×70	5	50.4×24.7
2×4	5	22.9×10.7	2×95	5	56.8×27.9
2×6	5	24.7×11.6	2×120	5	63.1×30.3
2×10	5	30.5×15.5	2×150	5	68.9×33.2
2×16	5	32.7×16.6	2×185	5	72.5×35

续上表 Continued

芯数×标称截面 Number of cores × nominal cross section area	导体结构 Conductor structure	外形尺寸(mm) Dimension YGCB	芯数×标称截面 Number of cores × nominal cross section area	导体结构 Conductor structure	外形尺寸(mm) Dimension YGCB
2×240	5	83.2×39.6	3×185+1×95	5	121.1×35
3×0.75	5	20.9×7.7	3×240+1×120	5	140.1×39.6
3×1	5	21.2×7.8	5×0.75	5	28.7×7.7
3×1.5	5	22.7×8.3	5×1	5	29.2×7.8
3×2.5	5	25.1×8.7	5×1.5	5	31.7×8.3
3×4	5	29.1×10.7	5×2.5	5	35.5×8.7
3×6	5	31.8×11.6	5×4	5	41.5×10.7
3×10	5	39.5×15.5	5×6	5	48×11.6
3×16	5	42.8×16.6	5×10	5	58.5×15.5
3×25	5	50.7×18.5	5×16	5	64×16.6
3×35	5	54.7×20.5	5×25	5	76.3×18.5
3×50	5	63.1×22.7	5×35	5	82.3×20.5
3×70	5	69.1×24.7	5×50	5	95.9×22.7
3×95	5	77.7×27.9	5×70	5	105.5×24.7
3×120	5	86.9×30.3	5×95	5	118.5×27.9
3×150	5	94.6×33.2	6×0.75	5	32.6×7.7
3×185	5	101×35	6×1	5	33.2×7.8
3×240	5	116.8×39.6	6×1.5	5	36.2×8.3
4×0.75	5	24.8×7.7	6×2.5	5	40.7×8.7
4×1	5	25.2×7.8	6×4	5	47.7×10.7
4×1.5	5	27.2×8.3	6×6	5	53.1×11.6
4×2.5	5	30.3×8.7	6×10	5	67.5×15.5
4×4	5	35.3×10.7	7×0.75	5	36.5×7.7
4×6	5	38.9×11.6	7×1	5	37.2×7.8
4×10	5	46.5×15.5	7×1.5	5	40.7×8.3
4×16	5	53.9×16.6	7×2.5	5	45.9×8.7
4×25	5	63×18.5	7×4	5	53.9×10.7
4×35	5	69×20.5	7×6	5	60.2×11.6
4×50	5	78.8×22.7	7×10	5	76.5×15.5
4×70	5	87.8×24.7	8×0.75	5	40.4×7.7
4×95	5	96.6×27.9	8×1	5	41.2×7.8
4×120	5	110.7×30.3	8×1.5	5	45.2×8.3
3×10+1×6	5	46.6×15.5	8×2.5	5	51.1×8.7
3×16+1×10	5	51.4×16.6	8×4	5	60.1×10.7
3×25+1×16	5	61.1×18.5	8×6	5	67.3×11.6
3×35+1×16	5	65.1×20.5	10×0.75	5	48.2×7.7
3×50+1×25	5	75.6×22.7	10×1	5	49.2×7.8
3×70+1×35	5	83.6×24.7	10×1.5	5	54.2×8.3
3×95+1×50	5	93.4×27.9	10×2.5	5	61.5×8.7
3×120+1×70	5	106.1×30.3	10×4	5	72.5×10.7
3×150+1×70	5	113.8×33.2	10×6	5	82.5×11.6