

煤矿用额定电压0.66/1.14kV及以下阻燃移动软电缆

Flame Retardant Mobile Flexible Cable with Rated Voltage of 0.66/1.14kV or Lower for Coal Mine Application

一、适用范围

本产品适用于煤矿用电缆额定电压0.66/1.14kV及以下移动软电缆。

Application

The product is copper core flexible cable with A.C. rated voltage of 0.66/1.14kV or lower for core mine moving equipment purpose.

二、执行标准

MT818.1-2009 煤矿用电缆第1部分：移动类软电缆 一般规定

MT818.5-2009 煤矿用电缆第5部分：额定电压0.66/1.14kV及以下移动软电缆

MT386 煤矿用阻燃电缆阻燃性的试验方法和判定规则

Executive Standard

MT818.1-2009 Flame retardant mobile flexible cable for coal mine application Part 1 general regulation

MT818.5-2009 Flame retardant mobile soft cable for coal mine application Part 5 mobile flexible cable with rated voltage of 0.66/1.14kV or lower

MT386 Test methods and judging rules of flame retardant performance of flame retardant cable for the coal mine application

三、工作条件

- 1、额定电压 U_0/U 为0.38/0.66kV和0.66/1.14kV。
- 2、电缆导体的长期允许工作温度为65℃。
- 3、电缆的最小弯曲半径为电缆直径的6倍。

Working condition

Rated voltage U_0/U is 0.38/0.66 and 0.66/1.14kV.
Long-term working temperature of cable conductor is 65℃.
Min. bending radius of cable is 6 times that of cable diameter.

四、型号名称

Type & Description

型号Type	名称Description	用途Application
MY-0.38/0.66 kV	煤矿用移动橡胶套软电缆 Mobile rubber jacketed flexible cable for coal mine application	额定电压为0.38/0.66kV各种井下移动采煤设备的电源连接。 The cable is used to connect power supply of all kinds of mobile mining equipment under well with rated voltage of 0.38/0.66kV.
MYP-0.38/0.66 kV	煤矿用移动屏蔽橡胶套软电缆 Mobile shielding rubber jacketed flexible cable for coal mine application	
MYP-0.66/1.14 kV	煤矿用移动屏蔽橡胶套软电缆 Mobile shielding rubber jacketed flexible cable for coal mine application	额定电压为0.66/1.14kV各种井下移动采煤设备的电源连接。 The cable is used to connect power supply of all kinds of mobile mining equipment under well with rated voltage of 0.66/1.14kV.

五、规格

1. 该电缆的规格用: 芯数×导体标称截面 (mm²) 表示。
2. 该电缆的规格有: 单芯和4芯 (3+1) 两种, 具体见下表:

Specification

Definition of cable specification: core no. × nominal cross section area of conductor (mm²)

Two kinds of cable specification: single core and 4 cores(3+1). For details, please see the following table.

芯数 × 导体标称截面 (mm ²) Core No. × nominal cross section area of conductor (mm ²)	标称厚度 (mm) Nominal thickness		电缆外径 (mm) Outer diameter of cable
	绝缘 Insulation	护套 Sheath	MY-0.38/0.66 kV
1 × 4	1.4	1.5	8.0~10.0
1 × 6	1.4	1.6	9.0~12.0
1 × 10	1.6	1.8	11.0~14.0
1 × 16	1.6	1.9	12.0~15.0
1 × 25	1.8	2.0	14.0~17.5
1 × 35	1.8	2.2	16.0~19.5
1 × 50	1.6	2.4	18.5~22.5
1 × 70	1.6	2.6	21.0~25.0
1 × 95	1.8	2.8	23.5~28.5
1 × 120	1.8	3.0	25.5~29.5
1 × 150	2.0	3.2	28.0~33.0
1 × 185	2.2	3.4	30.5~35.5
1 × 240	2.4	3.5	34.0~39.5
1 × 300	2.6	3.6	37.0~43.0
1 × 400	2.8	3.8	42.0~48.0

芯数 × 导体标 称截面 (mm ²) Core No. × nominal cross section area of conductor (mm ²)	标称厚度 (mm) Nominal thickness		电缆外径 (mm) Outer diameter of cable	
	动力线芯绝缘Power core insulation	护套 Sheath	MY-0.38/0.66 kV	MYP-0.38/0.66 kV
3 × 4+4	1.4	3.5	19.0~22.5	22.0~26.5
3 × 6+6	1.4	3.5	21.0~25.5	24.0~29.0
3 × 10+10	1.6	4.0	25.0~30.0	28.0~32.5
3 × 16+10	1.6	4.0	27.5~32.0	30.5~35.5
3 × 25+16	1.8	4.5	32.5~37.5	35.5~41.0
3 × 35+16	1.8	4.5	35.5~41.0	38.5~44.5
3 × 50+16	2.0	5.0	41.5~47.5	44.5~51.0
3 × 70+25	2.0	5.0	46.0~53.0	49.0~56.0
3 × 95+25	2.2	5.5	52.5~59.5	55.5~63.0
3 × 120+35	2.2	5.5	56.0~63.5	59.0~67.0
3 × 150+50	2.4	6.0	62.5~70.5	65.5~74.0

芯数×导体标称截面 (mm²) Core No. × nominal cross section area of conductor (mm²)	标称厚度 (mm) Nominal thickness		电缆外径 (mm) Outer diameter of cable
	动力线芯绝缘 Power core insulation	护套 Sheath	MYP0.66/1.14 kV MYPE0.66/1.14 kV
3×10+10	1.8	4.5	30.0~35.0
3×16+10	1.8	4.5	32.5~37.5
3×25+16	2.0	5.0	37.5~43.0
3×35+16	2.0	5.0	40.5~46.5
3×50+16	2.2	5.5	46.5~53.0
3×70+25	2.2	5.5	51.0~58.0
3×95+25	2.4	6.0	57.5~65.0
3×120+35	2.4	6.0	61.0~69.0
3×150+50	2.6	6.0	66.5~75.0

六、主要技术参数

1、20℃导体直流电阻

在20℃时每芯导体电阻应符合GB/T3956中第5种导体(即多股软芯结构)的要求。

2、20℃绝缘电阻

橡皮绝缘动力线芯的绝缘电阻应符合下表规定：

Main technical parameter

1、Conductor DC resistance at 20℃

Resistance of each core conductor shall meet the requirements of class 5 conductor (multi-strand flexible structure) stipulated in GB/T3956 standard at 20℃.

2、Insulated resistance at 20℃

Insulated resistance of rubber insulation power core shall meet the requirements stipulated in the following table.

动力线芯标称截面 (mm²) Nominal cross section area of power core	20℃时绝缘电阻 (MΩ.km) Insulated resistance at 20℃	动力线芯标称截面 (mm²) Nominal cross section area of power core	20℃时绝缘电阻 (MΩ.km) Insulated resistance at 20℃
4	600	95	200
6	450	120	200
10	400	150	180
16	350	185	180
25	300	240	160
35	250	300	140
50	250	400	140
70	200	/	

3、工频电压试验

电缆的绝缘动力线芯应经受下表规定的工频电压试验而不被击穿：

A.C. voltage test

Insulated power core of cable shall endure following A.C. voltage test without puncture.

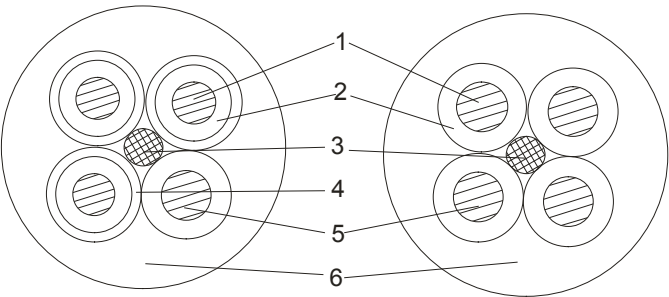
额定电压U0/U (kV) rated voltage	试验电压 (有效值) (kV) Test voltage (effective value)	施加电压时间 (min) Time for giving pressure
0.38/0.66	3.0	5
0.66/1.14	3.7	

4、成品电缆阻燃性能均应满足MT386标准中各项试验要求。

Flame retardant performance of finished cable can meet all kinds of test requirements stipulated in MT386 standard.

七、电缆结构图

The figure of cable structure



MYP-0.38/0.66 MY-0.38/0.66
MYP-0.66/1.14 MY-0.66/1.14

1-动力线芯导体; 2-绝缘; 3-填充; 4-绝缘屏蔽; 5-地线芯导体; 6-外护套

1. Power core conductor 2. Insulation 3. Filler 4. Insulated shielding 5. earthing conductor 6. Outer sheath

八、电缆标志

Cable mark

1、绝缘线芯识别标志: 采用颜色或表面印阿拉伯数字, 当采用颜色时, 单芯电缆绝缘为红色或白色; 4芯电缆动力线芯为红色、白色、浅蓝色, 地线芯为黑色。当采用阿拉伯数字编码时, 4芯电缆动力线芯为1、2、3, 地线芯为0。
2、电缆识别标志: 井下用不同电压等级电缆的护套宜采用不同的识别颜色, 见下表:

Identified mark of insulated core: using color OR printing numbers on the surface of insulated core.
If you use color to identify, the insulated color of single core cable is red or white.
Power core color of c able with 4 cores is red, white, light blue and black for earthing conductor.
If you print numbers on the surface of insulated core, power core of cable with 4 cores is 1, 2, 3 and 0 for earthing conductor.
Identified mark of cable:
Different cable sheath color will be used to identify cable under well with different voltage degree. Please see the following table.

U0/U (kV)	3.6/6	1.9/3.3	0.66/1.14	0.38/0.66及以下 0.38/0.66 or lower
护套颜色 Sheath color	红 red	黑 black	黄 Yellow	黑 black

成品电缆护套表面至少应明显印有: 制造厂名、型号规格、电压、煤安标志的内容。

Manufacturer, type, voltage and coal mine safety mark etc. will be clearly printed on the surface of finished cable sheath

九、交货长度

delivery length

1、电缆根据双方的协议长度交货。
2、无协议时, 按产品标准规定: 最短段长度为40米, 短段长度应不超过总长度的10%。
3、长度计量误差不超过±0.5%。

Delivery length of cable depends on final both agreements.
If there is no final agreement, the cable no shorter than 40 meters is allowed for delivery, which accounts for no more than 10% of the total length.
Length error of cable is no more than ±0.5%.