

煤矿用电缆

Cable for Coal Mine Application



煤矿用额定电压8.7/10kV及以下交联绝缘阻燃电力电缆

Flame Retardant Power Cable with Cross linked Insulation, Rated Voltage of 8.7/10kv or Lower for Coal Mine Application

煤矿用额定电压3.6/6kV及以下聚氯乙烯绝缘阻燃电力电缆

Flame Retardant Power Cable with PVC Insulation, Rated Voltage of 3.6/6kV or Lower for Coal Mine Application

煤矿用额定电压0.66/1.14kV及以下移动类阻燃软电缆

Mobile Flame Retardant Flexible Cable with rated voltage of 0.66/1.14kV or lower for Coal Mine Application

煤矿用额定电压8.7/10kV及以下交联绝缘阻燃电力电缆 Cross Linked Insulation Flame Retardant Power Cable of Rated Voltage 8.7/10kV or Lower for Coal Mine Application

一、生产执行标准

MT818.13-1999《煤矿用额定电压10kV及以下铜芯固定敷设阻燃电力电缆第3部分, 煤矿用交联聚乙烯绝缘电力电缆》

Executive standard:

MT818.13-1999 "Copper core fixed installation flame retardant power cable of rated voltage 10kv or lower for coal mine application---part 3 XLPE insulation power cable for coal mine application"

二、工作条件

- 1、电缆导体的允许最高工作温度为90℃。
- 2、短路时（最长持续时间不超过5秒）电缆导体的最高温度不超过250℃。
- 3、电缆敷设温度不低于0℃。

Working Condition

Max. working temperature of cable conductor is 90℃.
 Max. temperature of cable conductor is no more than 250℃ during short circuit. (The longest lasting time is no more than 5 seconds.)
 Cable installation temperature is no less than 0℃.

三、电缆型号名称

cable type & name

型号 type	名称name
MYJV	煤矿用铜芯交联聚乙烯绝缘聚氯乙烯护套电力电缆 Copper core XLPE insulation PVC sheath power cable for coal mine application
MYJV22	煤矿用铜芯交联聚乙烯绝缘钢带铠装聚氯乙烯护套电力电缆 Copper core XLPE insulation steel tape armoring PVC sheath power cable for coal mine application
MYJV32	煤矿用铜芯交联聚乙烯绝缘细钢丝铠装聚氯乙烯护套电力电缆 Copper core XLPE insulation thin steel wire armoring PVC sheath power cable for coal mine application
MYJV42	煤矿用铜芯交联聚乙烯绝缘粗钢丝铠装聚氯乙烯护套电力电缆 Copper core XLPE insulation thick steel wire armoring PVC sheath power cable for coal mine application

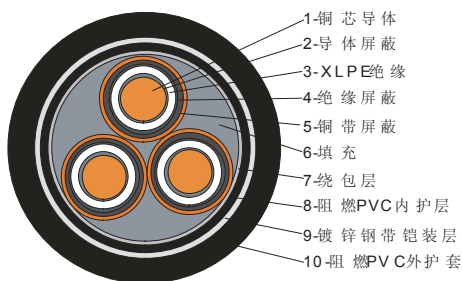
四、生产范围

manufacturing range

型号 type	芯数 Core number	额定电压(kV) rated voltage			
		0.6/1	1.8/3	3.6/6、6/6	6/10、8.7/10
		标称截面(mm ²) nominal cross section area			
MYJV	3	1.5~300	10~300	25~300	25~300
MYJV22	3	4~300	10~300	25~300	25~300
MYJV32	3	4~300	10~300	25~300	25~300
MYJV42	3	4~300	10~300	25~300	25~300

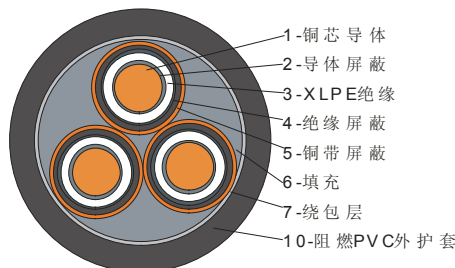
五、产品结构示意图

The figure of cable structure



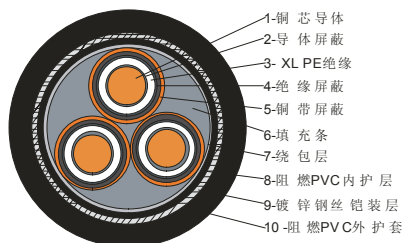
MYJV22-
3.6/6~8.7/10kV

1. copper conductor
2. conductor shielding
3. XLPE insulation
4. insulated shielding
5. copper tape shielding
6. filling
7. wrapping layer
8. flame retardant PVC inner sheath
9. galvanized steel tape armor layer
10. flame retardant PVC outer sheath



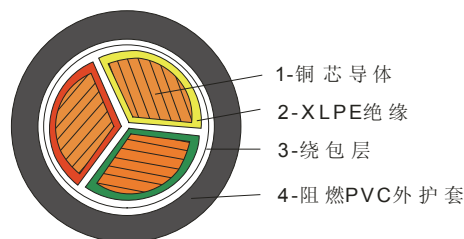
MYJV-
3.6/6~8.7/10kV

2. conductor shielding
4. insulated shielding
6. filling strip
8. flame retardant PVC inner sheath
10. flame retardant PVC outer sheath



MYJV42-
3.6/6~8.7/10kV

1. copper conductor
2. conductor shielding
3. XLPE insulation
4. insulated shielding
5. copper tape shielding
6. filling strip
7. wrapping layer
8. flame retardant PVC inner sheath
9. galvanized steel wire armor layer
10. flame retardant PVC outer sheath



MYJV-
0.6/1~1.8/3 kV

1. copper conductor
2. XLPE insulation
3. wrapping layer
4. flame retardant PVC outer sheath

六、产品特色

- 1、具有优异的阻燃性能, 满足煤矿用电缆特殊要求。
- 2、成品电缆的阻燃性能符合MT386各项试验要求。

product characteristic

The cable has good feature of flame resistance. It can meet special requirement of cable for coal mine application.

Flame retardant performance of finished cable shall meet all kinds of test requirement stipulated in MT386 standard.

七、电缆外径尺寸

outer diameter size of cable

MYJV-0.6/1kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度 (mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径 (mm) Approx. outer diameter of cable
3*1.5	0.7	1.8	10.0
3*2.5	0.7	1.8	10.8
3*4	0.7	1.8	11.8
3*6	0.7	1.8	12.8
3*10	0.7	1.8	15.6
3*16	0.7	1.8	18.0
3*25	0.9	1.8	20.6
3*35	0.9	1.8	20.2
3*50	1.0	1.8	23.4
3*70	1.1	1.8	26.4
3*95	1.1	1.9	30.0
3*120	1.2	2.0	33.2
3*150	1.4	2.1	37.5
3*185	1.6	2.3	42.0
3*240	1.7	2.4	46.4
3*300	1.8	2.6	51.0

MYJV22-0.6/1kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*4	0.7	1.8	14.5
3*6	0.7	1.8	15.6
3*10	0.7	1.8	18.5
3*16	0.7	1.8	20.8
3*25	0.9	1.8	23.5
3*35	0.9	1.8	23.0
3*50	1.0	1.8	26.2
3*70	1.1	1.9	30.5
3*95	1.1	2.0	34.5
3*120	1.2	2.2	38.0
3*150	1.4	2.3	42.2
3*185	1.6	2.5	47.0
3*240	1.7	2.6	51.6
3*300	1.8	2.8	56.4

MYJV32-0.6/1kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*4	0.7	1.8	15.5
3*6	0.7	1.8	17.5
3*10	0.7	1.8	20.4
3*16	0.7	1.8	23.2
3*25	0.9	1.8	26.0
3*35	0.9	1.8	25.5
3*50	1.0	1.8	28.5
3*70	1.1	2.0	32.0
3*95	1.1	2.1	36.8
3*120	1.2	2.2	40.0
3*150	1.4	2.4	45.5
3*185	1.6	2.6	50.5
3*240	1.7	2.7	55.0
3*300	1.8	2.9	60.0

MYJV42-0.6/1kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*4	0.7	1.8	24.0
3*6	0.7	1.8	25.0
3*10	0.7	1.8	28.0
3*16	0.7	1.9	30.2
3*25	0.9	2.0	33.2
3*35	0.9	2.0	32.5
3*50	1.0	2.1	36.0
3*70	1.1	2.2	39.5
3*95	1.1	2.3	42.5
3*120	1.2	2.4	46.0
3*150	1.4	2.6	50.5
3*185	1.6	2.7	54.5
3*240	1.7	2.9	59.5
3*300	1.8	3.0	63.5

MYJV-1.8/3kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*10	2.0	1.8	23.2
3*16	2.0	1.8	25.5
3*25	2.0	1.8	27.5
3*35	2.0	1.9	29.5
3*50	2.0	2.0	34.0
3*70	2.0	2.1	38.0
3*95	2.0	2.3	42.2
3*120	2.0	2.5	47.5
3*150	2.0	2.6	50.0
3*185	2.0	2.7	53.2
3*240	2.0	2.9	60.0
3*300	2.0	3.0	64.0

MYJV22-1.8/3kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*10	2.0	1.8	24.0
3*16	2.0	1.8	26.2
3*25	2.0	1.8	28.5
3*35	2.0	1.9	31.5
3*50	2.0	2.1	36.5
3*70	2.0	2.3	40.5
3*95	2.0	2.4	44.5
3*120	2.0	2.5	49.5
3*150	2.0	2.6	52.0
3*185	2.0	2.7	55.2
3*240	2.0	3.0	62.0
3*300	2.0	3.1	66.5

MYJV32 -1.8/3kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*10	2.0	1.8	26.5
3*16	2.0	1.8	28.8
3*25	2.0	1.9	31.0
3*35	2.0	2.0	34.0
3*50	2.0	2.1	38.5
3*70	2.0	2.3	42.8
3*95	2.0	2.4	46.8
3*120	2.0	2.6	52.8
3*150	2.0	2.7	54.8
3*185	2.0	2.8	58.8
3*240	2.0	3.1	66.8
3*300	2.0	3.2	71.0

MYJV42-1.8/3kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*10	2.0	1.9	31.5
3*16	2.0	2.0	34.0
3*25	2.0	2.1	36.2
3*35	2.0	2.1	38.0
3*50	2.0	2.3	42.8
3*70	2.0	2.4	46.8
3*95	2.0	2.5	50.8
3*120	2.0	2.7	56.2
3*150	2.0	2.8	58.5
3*185	2.0	2.9	62.0
3*240	2.0	3.1	68.0
3*300	2.0	3.3	73.0

MYJV-3.6/6kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	2.5	2.1	36.0
3*35	2.5	2.1	38.0
3*50	2.5	2.2	41.0
3*70	2.5	2.4	45.0
3*95	2.5	2.5	49.0
3*120	2.5	2.6	52.0
3*150	2.5	2.7	56.0
3*185	2.5	2.8	60.0
3*240	2.6	3.0	65.0
3*300	2.8	3.2	71.0

MYJV22-3.6/6kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	2.5	2.2	41.0
3*35	2.5	2.2	43.0
3*50	2.5	2.3	47.0
3*70	2.5	2.5	51.0
3*95	2.5	2.6	54.0
3*120	2.5	2.7	58.0
3*150	2.5	2.8	62.0
3*185	2.5	2.9	65.0
3*240	2.6	3.1	71.0
3*300	2.8	3.3	77.0

MYJV32 -3.6/6kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	2.5	2.2	43.0
3*35	2.5	2.3	46.0
3*50	2.5	2.4	50.0
3*70	2.5	2.6	54.0
3*95	2.5	2.7	58.0
3*120	2.5	2.8	62.0
3*150	2.5	2.9	66.5
3*185	2.5	3.1	71.0
3*240	2.6	3.2	76.0
3*300	2.8	3.4	82.0

MYJV42 -3.6/6kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	2.5	2.4	49.5
3*35	2.5	2.5	52.0
3*50	2.5	2.6	55.0
3*70	2.5	2.7	58.0
3*95	2.5	2.8	62.0
3*120	2.5	2.9	65.5
3*150	2.5	3.0	69.5
3*185	2.5	3.2	73.0
3*240	2.6	3.3	78.5
3*300	2.8	3.5	84.0

MYJV-6/6kV、6/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	3.4	2.2	40.5
3*35	3.4	2.3	43.0
3*50	3.4	2.4	46.0
3*70	3.4	2.5	50.0
3*95	3.4	2.6	53.0
3*120	3.4	2.7	56.5
3*150	3.4	2.8	60.5
3*185	3.4	2.9	64.0
3*240	3.4	3.1	69.5
3*300	3.4	3.3	74.5

MYJV22-6/6kV、6/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	3.4	2.3	45.0
3*35	3.4	2.4	48.0
3*50	3.4	2.5	51.0
3*70	3.4	2.6	55.0
3*95	3.4	2.7	59.0
3*120	3.4	2.8	62.0
3*150	3.4	2.9	66.0
3*185	3.4	3.0	70.0
3*240	3.4	3.2	75.0
3*300	3.4	3.4	80.0

MYJV32-6/6kV、6/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	3.4	2.4	48.5
3*35	3.4	2.5	51.5
3*50	3.4	2.6	54.5
3*70	3.4	2.7	58.0
3*95	3.4	2.9	63.5
3*120	3.4	3.0	67.0
3*150	3.4	3.1	71.0
3*185	3.4	3.2	74.0
3*240	3.4	3.4	80.0
3*300	3.4	3.5	85.0

MYJV42-6/6kV、6/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	3.4	2.5	53.0
3*35	3.4	2.6	56.0
3*50	3.4	2.7	58.0
3*70	3.4	2.8	62.5
3*95	3.4	3.0	66.5
3*120	3.4	3.1	70.0
3*150	3.4	3.2	73.5
3*185	3.4	3.3	77.0
3*240	3.4	3.5	82.0
3*300	3.4	3.6	87.0

MYJV-8.7/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	4.5	2.4	45.5
3*35	4.5	2.5	48.5
3*50	4.5	2.6	51.2
3*70	4.5	2.7	55.0
3*95	4.5	2.8	58.5
3*120	4.5	2.9	62.0
3*150	4.5	3.0	65.5
3*185	4.5	3.1	69.5
3*240	4.5	3.3	74.5
3*300	4.5	3.4	79.5

MYJV22-8.7/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	4.5	2.5	51.0
3*35	4.5	2.6	53.5
3*50	4.5	2.7	56.5
3*70	4.5	2.8	60.2
3*95	4.5	2.9	64.0
3*120	4.5	3.0	68.0
3*150	4.5	3.1	72.0
3*185	4.5	3.2	75.0
3*240	4.5	3.4	80.5
3*300	4.5	3.5	85.5

MYJV32-8.7/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	4.5	2.6	54.0
3*35	4.5	2.7	56.57.0
3*50	4.5	2.8	60.0
3*70	4.5	2.9	65.5
3*95	4.5	3.0	69.0
3*120	4.5	3.1	72.0
3*150	4.5	3.3	76.0
3*185	4.5	3.4	80.0
3*240	4.5	3.5	85.0
3*300	4.5	3.7	90.0

MYJV42-8.7/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	4.5	2.7	58.0
3*35	4.5	2.8	61.0
3*50	4.5	2.9	64.0
3*70	4.5	3.0	68.0
3*95	4.5	3.1	71.5
3*120	4.5	3.2	75.0
3*150	4.5	3.4	79.0
3*185	4.5	3.5	82.5
3*240	4.5	3.6	88.0
3*300	4.5	3.8	92.0

八、电缆主要技术参数

main technical parameter of cable

1、20℃时导体最大直流电阻值应满足GB/T3956标准中的2类导体的规定:

Max. conductor DC resistance at 20℃ shall meet the requirement of class 2 conductor stipulated in GB/T3956 standard.

导体标称截面 (mm ²) Nominal cross section area of conductor	20℃时导体最大直流电阻 Ω/km Max. conductor DC resistance at 20℃	导体标称截面 (mm ²) Nominal cross section area of conductor	20℃时导体最大直流电阻 Ω/km Max. conductor DC resistance at 20℃
1.5	12.1	50	0.387
2.5	7.41	70	0.268
4	4.61	95	0.193
6	3.08	120	0.153
10	1.83	150	0.124
16	1.15	185	0.0991
25	0.727	240	0.0754
35	0.524	300	0.0601

2、工频交流耐压试验

A.C. proof-voltage test

额定电压kV Rated voltage	0.6/1	1.8/3	3.6/6	6/6、6/10	8.7/10
试验电压kV Test voltage	3.5	6.5	11	15	22
试验条件: 环境温度下5分钟。 Test condition: 5 minutes under environment temperature 试验要求: 绝缘应无击穿。 Test requirement: insulation without puncture					

3、局部放电量

Partial discharge

应在1.5 U₀电压下测量局部放电量, 其数值应不高于以下规定:

Partial discharge shall be measured under voltage of 1.5 U₀. And the value shall be no more than that listed in the following table

额定电压kV Rated voltage	3.6/6	6/6、6/10	8.7/10
放电量pc Discharge value	10		

4、电缆载流量(A)

cable current loading capacity

参照普通YJV系列交联电力电缆的载流量值。

Please refer to current-loading capacity of common JYV series cross linked power cable.

煤矿用额定电压3.6/6kV及以下聚氯乙烯绝缘阻燃电力电缆 Flame Retardant Power Cable with PVC insulation, rated voltage of 3.6/6kV or lower for Coal Mine Application

一、生产执行标准

MT818.12-1999《煤矿用额定电压10kV及以下铜芯固定敷设阻燃电力电缆第2部分，煤矿用聚氯乙烯绝缘电力电缆》

Executive standard:

MT818.12-1999 “Copper core fixed installation flame retardant power cable of rated voltage 10kv or lower for coal mine application---part 2 PVC insulation power cable for coal mine application”

二、工作条件

- 1、电缆导体的允许最高工作温度为70℃。
- 2、短路时（最长持续时间不超过5秒）电缆导体的最高温度不超过160℃。
- 3、电缆敷设温度不低于0℃。

Working Condition

Max. working temperature of cable conductor is 70℃.
Max. temperature of cable conductor is no more than 160℃ during short circuit. (The longest lasting time is no more than 5 seconds.)
Cable installation temperature is no less than 0℃.

三、电缆型号名称

cable type & name

型号type	名称name
MVV	煤矿用聚氯乙烯绝缘聚氯乙烯护套电力电缆 PVC insulation PVC sheath power cable for coal mine application
MVV22	煤矿用聚氯乙烯绝缘钢带铠装聚氯乙烯护套电力电缆 PVC insulation steel tape armoring PVC sheath power cable for coal mine application
MVV32	煤矿用聚氯乙烯绝缘细钢丝铠装聚氯乙烯护套电力电缆 PVC insulation thin steel wire armoring PVC sheath power cable for coal mine application
MVV42	煤矿用聚氯乙烯绝缘粗钢丝铠装聚氯乙烯护套电力电缆 PVC insulation thick steel wire armoring PVC sheath power cable for coal mine application

四、生产范围

manufacturing range

型号 type	芯数 Core number	额定电压（kV）rated voltage		
		0.6/1	1.8/3	3.6/6
		标称截面(mm ²) nominal cross section area		
MVV	3	1.5~300	10~300	10~300
MVV22	3	2.5~300	10~300	10~300
MVV32	3	--	--	16~300
MVV42	3	--	--	16~300
MVV	3+1	4~300	10~300	--
MVV22	3+1	4~300	10~300	--
MVV	4	4~185	4~185	--
MVV22	4	4~185	4~185	--

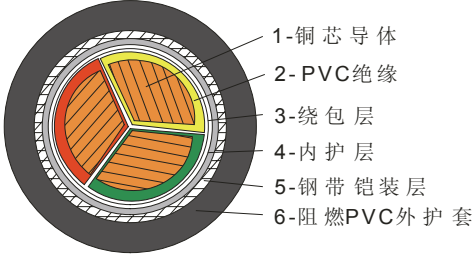
五、电缆绝缘标称厚度

Nominal thickness of cable insulation

导体标称 截面(mm2) nominal cross section area of conductor	额定电压（kV） rated voltage			导体标称截面 (mm2) nominal cross section area of conductor	额定电压（kV） rated voltage		
	0.6/1	1.8/3	3.6/6		0.6/1	1.8/3	3.6/6
	绝缘标称厚度（mm） insulation nominal thickness				绝缘标称厚度（mm） insulation nominal thickness		
1.5	0.8	--	--	50	1.4	2.2	3.4
2.5	0.8	--	--	70	1.4	2.2	3.4
4	1.0	--	--	95	1.6	2.2	3.4
6	1.0	--	--	120	1.6	2.2	3.4
10	1.0	2.2	3.4	150	1.8	2.2	3.4
16	1.0	2.2	3.4	185	2.0	2.2	3.4
25	1.2	2.2	3.4	240	2.2	2.2	3.4
35	1.2	2.2	3.4	300	2.4	2.4	3.4

六、产品结构示意图

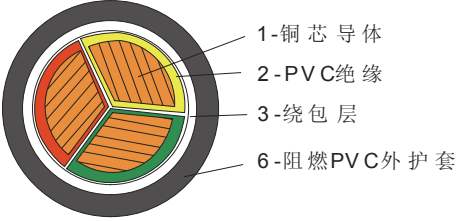
The figure of cable structure



1-铜芯导体
2-PVC绝缘
3-绕包层
4-内护层
5-钢带铠装层
6-阻燃PVC外护套

MVV22 3芯

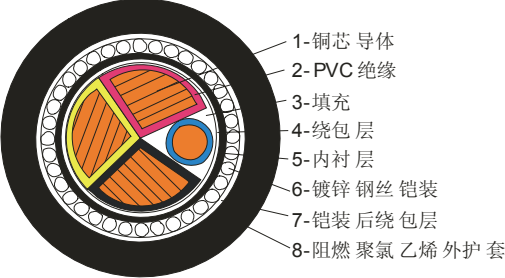
1. copper conductor
2. PVC insulation
3. wrapping layer
5. steel tape armoring layer



1-铜芯导体
2-PVC绝缘
3-绕包层
6-阻燃PVC外护套

MVV 3芯

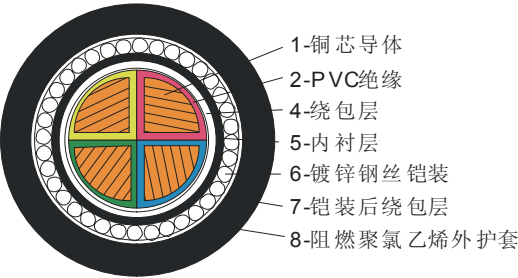
2. PVC insulation
4. inner sheath
6. flame retardant PVC outer sheath



1-铜芯导体
2-PVC绝缘
3-填充
4-绕包层
5-内衬层
6-镀锌钢丝铠装
7-铠装后绕包层
8-阻燃聚氯乙烯外护套

MVV32 3+1芯

1. copper conductor
3. filling
5. inner layer
7. wrapping layer after armoring



1-铜芯导体
2-PVC绝缘
4-绕包层
5-内衬层
6-镀锌钢丝铠装
7-铠装后绕包层
8-阻燃聚氯乙烯外护套

MVV32 4芯

2. PVC insulation
4. wrapping layer
6. galvanized steel wire armoring
8. flame retardant PVC outer sheath

七、产品特色

- 1、具有优异的阻燃性能，满足煤矿用电缆特殊要求。
- 2、成品电缆的阻燃性能符合MT386各项试验要求。

product characteristic

The cable has good feature of flame resistance. It can meet special requirement of cable for coal mine application.

Flame retardant performance of finished cable shall meet all kinds of test requirement stipulated in MT386 standard.

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

本产品适用于交流额定电压0.66/1.14kV及以下煤矿移动设备用铜芯软电缆。

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

MT818.1-1999 煤矿用移动类阻燃软电缆 第1部分：一般规定
 MT818.5-1999 煤矿用移动类阻燃软电缆 第5部分：额定电压0.66/1.14kV及以下移动软电缆
 MT386-1995 煤矿用阻燃电缆阻燃性的试验方法和判定规则

Executive Standard

Flame retardant mobile flexible cable for coal mine application Part 1 general regulation
 Flame retardant mobile soft cable for coal mine application Part 5 mobile flexible cable with rated voltage of 0.66/1.14kV or lower
 Test methods and judging rules of flam retardant performance of flam retardant cable for the coal mine application

三、工作条件

- 1、额定电压U₀/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 U₀/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.
MYE-0.38/0.66 kV	煤矿用移动弹性体软电缆 Mobile elastomer flexible cable for coal mine application	
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	
MYPE-0.38/0.66 kV	煤矿用移动屏蔽弹性体软电缆 Mobile shielding elastomer 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.
MYPE-0.66/1.14 kV	煤矿用移动屏蔽弹性体软电缆 Mobile shielding elastomer flexible cable for coal mine application	

五、规格

Specification

- 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:

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 MYE-0.38/0.66 kV
1×50	1.6	2.4	18.7~20.5
1×70	1.6	2.6	20.9~23.0
1×95	1.8	2.8	24.2~26.6
1×120	1.8	3.0	26.4~29.0
1×150	2.0	3.2	30.1~33.1
1×185	2.2	3.4	32.7~35.9
1×240	2.4	3.5	35.3~38.8
1×300	2.6	3.6	40.0~43.3
1×400	2.8	3.8	43.4~47.7

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 MYE-0.38/0.66 kV	MYP-0.38/0.66 kV MYPE-0.38/0.66 kV
3×4+4	1.4	3.5	20.9~23.0	22.9~25.2
3×6+6	1.4	3.5	22.9~25.1	24.7~27.2
3×10+10	1.6	4.0	27.8~30.6	29.7~32.7
3×16+10	1.6	4.0	30.3~33.3	32.2~35.4
3×25+16	1.8	4.5	36.4~40.1	38.3~41.0
3×35+16	1.8	4.5	40.5~44.6	42.4~46.6
3×50+16	2.0	5.0	45.5~50.1	47.4~51.0
3×70+25	2.0	5.0	51.5~55.1	52.4~57.1

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	MYP0.66/1.14 kV MYPE0.66/1.14 kV
3×10+10	1.8	4.5	31.7~34.9
3×16+10	1.8	4.5	34.2~37.6
3×25+16	2.0	5.0	40.3~44.3
3×35+16	2.0	5.0	44.4~48.8
3×50+16	2.2	5.5	51.5~54.6
3×70+25	2.2	5.5	53.9~59.3
3×95+25	2.4	6.0	62.1~68.1

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
- 弹性体绝缘动力线芯的绝缘体积电阻率 $\geq 1.0 \times 10^{13} \Omega \cdot \text{cm}$ ；橡皮绝缘动力线芯的绝缘电阻应符合下表规定：

Main technical parameter

- 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℃.
- Insulated resistance at 20℃
- Insulated volume resistance ratio of elastomer insulated power core is at least more than $1.0 \times 10^{13} \Omega \cdot \text{cm}$; 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 （M Ω .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 （M Ω .km） Insulated resistance at 20 ℃
4	≥200	95	≥80
6	≥180	120	≥50
10	≥160	150	
16	≥120	185	
25	≥120	240	
35	≥100	300	
50	≥100	400	
70	≥80	/	

- 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.

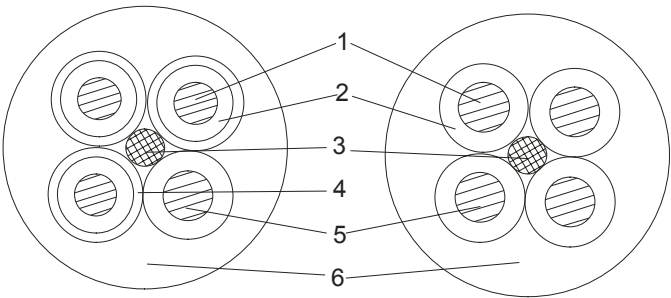
额定电压U0/U (kV) rated voltage	试验电压（有效值）(kV) Test voltage (effective value)	施加电压时间 (min) Time for giving pressure
0.38/0.66	3.0	5
0.66/1.14	3.7	

- 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 MYPE-0.38/0.66
MYP-0.66/1.14 MYPE-0.66/1.14

MY-0.38/0.66
MYE-0.38/0.66

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

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:

Cable mark

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 cable 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

- 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: 最小短段长度为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 $\pm 0.5\%$ 。

delivery length

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 $\pm 0.5\%$.