# RSJY Heat Shrink Joints For MV Cables Up To 42kV

## **Design of Joint**

The joints are designed for MV screened, 1-core polymeric insulated cables with or without armour. The same design principles are used for 3-core cables.



#### 1. Electrical stress control

Stress control tube, together with stress relief mastic, is used to smooth out the electrical field at the cable screen ends.

2. Insulation and screen

Heat shrink insulation tube delivers consistent insulation thickness to meet or exceed that of the cable.

Heat shrink semi-conductive /insulation dual layer tube is also adopted to help ensure a void-free interface between the insulation and screen.

#### 3. Metallic shielding

Copper mesh wrapped around the joint area rebuilds the metallic screen. Either soldering or solderless earth connection is available to provide screen continuity across the joint.

4. Outer sealing and protection

The outer sealing and protection is performed by an adhesive coated heat shrink tube. It provides mechanical protection and chemical resistance as expected from cable oversheath.



# RSJY-1 Straight joint for screened, 1-core polymeric insulated cables 6kV, 10kV, 20kV, 30kV and 35kV

The joint is designed for screened single core polymeric insulated MV cables up to 35kV.

Stress control tube, together with stress relief mastic, is used to smooth out the electrical field at the cable screen ends. Heat shrink insulation tube delivers consistent insulation thickness over the core insulation. Heat shrink dual layer tube is adopted to help ensure a void-free interface between the insulation and screen. Copper mesh wrapped around the joint area rebuilds the metallic screen. Either soldering or solderless earth connection is available to provide screen continuity across the joint. The outer sealing and protection is performed by an adhesive coated heat shrink tube.



### **Selection Table**

Nominal voltage U₀/U(U <sub>m</sub> )	Cross section (mm²)	Kit No.	L Dimensions(mm)
3.6 / 6(7.2)kV	50-120 150-240 300-400 500	6kVRSJY-1/1 6kVRSJY-1/2 6kVRSJY-1/3 6kVRSJY-1/4	1000 1000 1000 1000
6/10(12)kV 6.35/11(12)kV	50-95 120-185 240-300 400-500 630	10kVRSJY-1/1 10kVRSJY-1/2 10kVRSJY-1/3 10kVRSJY-1/4 10kVRSJY-1/5	1000 1000 1000 1000 1000
8.7/15(17.5)kV	25-50 70-120 150-240 300-400 500-630	10kVRSJY-1/1 10kVRSJY-1/2 10kVRSJY-1/3 10kVRSJY-1/4 10kVRSJY-1/5	1000 1000 1000 1000 1000
12/20(24)kV 12.7/22(24)kV	35-50 70-120 150-240 300-400 500-630 800-1000 1200	20kVRSJY-1/1 20kVRSJY-1/2 20kVRSJY-1/3 20kVRSJY-1/4 20kVRSJY-1/5 20kVRSJY-1/6 20kVRSJY-1/7	1000 1000 1200 1200 1200 1200 1200
18 / 30(36)kV 19 / 33(36)kV	35-50 70-120 150-240 300-400 500-630 800-1000 1200	30kVRSJY-1/1 30kVRSJY-1/2 30kVRSJY-1/3 30kVRSJY-1/4 30kVRSJY-1/5 30kVRSJY-1/6 30kVRSJY-1/7	1400 1400 1400 1400 1400 1400 1400
20.8 / 36(42)kV 26 / 35(42)kV	50 70-120 150-240 300-400 500-630 800-1000 1200	35kVRSJY-1/1 35kVRSJY-1/2 35kVRSJY-1/3 35kVRSJY-1/4 35kVRSJY-1/5 35kVRSJY-1/6 35kVRSJY-1/7	1400 1400 1500 1500 1500 1500 1500

Note:

1.Connectors need to be ordered separately.

2.RSJY-1 is for cables with copper wire screen without armour.

3. For cables with other construction, please order kits separately.

Remark: Above cross-section range selection is for reference, the final determination factor is the diameter over insulation

# RSJY-3 Straight joint for screened, 3-core polymeric insulated cables 6kV, 10kV, 20kV, 30kV and 35kV

The joint is designed for screened three core polymeric insulated MV cables up to 35kV.

Stress control tube, together with stress relief mastic, is used to smooth out the electrical field at the cable screen ends. Heat shrink insulation tube delivers consistent insulation thickness over the core insulation. Heat shrink dual layer tube is adopted to help ensure a void-free interface between the insulation and screen. Copper mesh wrapped around the joint area rebuilds the metallic screen. Either soldering or solderless earth connection is available to provide screen continuity across the joint. The outer sealing and protection is performed by an adhesive coated heat shrink tube.



### **Selection Table**

Nominal voltage U₀/U(U₅)	Cross section (mm <sup>2</sup> )	Kit No.	L Dimensions(mm)
3.6 / 6(7.2)kV	50-120 150-240 300-400 500	6kVRSJY-3/1 6kVRSJY-3/2 6kVRSJY-3/3 6kVRSJY-3/4	1800 1800 1800 1800
6/10(12)kV 6.35/11(12)kV	50-95 120-185 240-300 400-500 630	10kVRSJY-3/1 10kVRSJY-3/2 10kVRSJY-3/3 10kVRSJY-3/4 10kVRSJY-3/5	1800 1800 1800 1800 1800
8.7 / 15(17.5)kV	25-50 70-120 150-240 300-400 500-630	10kVRSJY-3/1 10kVRSJY-3/2 10kVRSJY-3/3 10kVRSJY-3/4 10kVRSJY-3/5	1800 1800 1800 1800 1800
12 / 20(24)kV 12.7 / 22(24)kV	35-50 70-120 150-240 300-400 500-630	20kVRSJY-3/1 20kVRSJY-3/2 20kVRSJY-3/3 20kVRSJY-3/4 20kVRSJY-3/5	1800 1800 1800 2600 2600
18 / 30(36)kV 19 / 33(36)kV	35-50 70-120 150-240 300-400 500-630	30kVRSJY-3/1 30kVRSJY-3/2 30kVRSJY-3/3 30kVRSJY-3/4 30kVRSJY-3/5	2700 2700 2700 2700 2700 2700
20.8 / 36(42)kV 26 / 35(42)kV	50 70-120 150-240 300-400 500-630	35kVRSJY-3/1 35kVRSJY-3/2 35kVRSJY-3/3 35kVRSJY-3/4 35kVRSJY-3/5	2700 2700 2700 2800 2800

Note:

1.Connectors need to be ordered separately.

2.RSJY-3 is for cables with copper wire screen without armour.

3. For cables with other construction, please order kits separately.

Remark: Above cross-section range selection is for reference, the final determination factor is the diameter over insulation