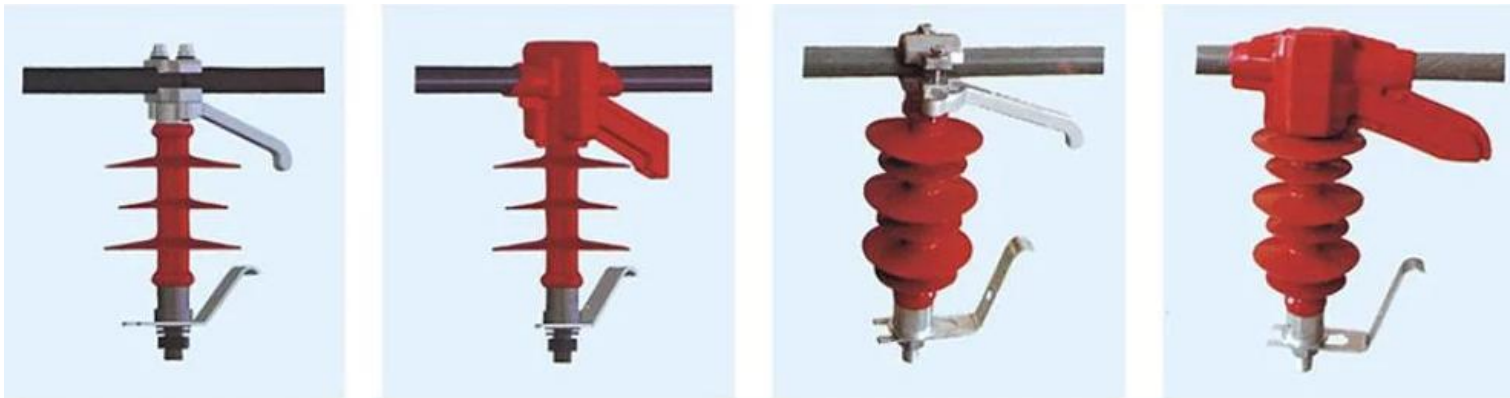


Overview

With the development of distribution lines and line communication, the traditional insulated lines are difficult to withstand the effect of direct lightning or induced lightning. Lightning disconnection and explosion of porcelain insulators have become another new problem faced by the power system. FEG High Voltage Line Lightning-Protection Pin Type Insulator is a two in one product with a new combined structure. It adopts the design principle of "blocking first and then Dredging". It is not only used for the insulation support of overhead lines, but also has the protection function of preventing lightning disconnection, porcelain yard explosion and reducing lightning trip. Its principle is: when the lightning overvoltage exceeds a certain value of insulation blockage, a short-circuit channel is formed between the arc striking rod and the lower steel pin of FEG High Voltage Line Lightning-Protection Pin Type Insulator, flashover and discharge together, and the continuous power frequency arc will burn at the discharge gap to protect the conductor from burns. When applied to insulation, the product also has the function of puncture and power on. Without stripping the insulation layer, it can avoid water ingress and corrosion of the wire core, make the line more concise and beautiful, and greatly reduce the cost.

Structural features

1. This product is divided into puncture type and non puncture type (stripping insulation layer), which is mainly composed of insulation protection, wire clamping aluminum alloy fittings, composite insulators, arc striking rods and lower steel feet
2. The arc striking rod and wire clamping hardware are assembled into one. When lightning occurs, a short-circuit channel is formed between the arc striking rod and the lower steel pin, causing flashover discharge, and the continuous power frequency arc moves to burn between the arc striking rod and the lower steel pin, so as to protect the conductor from burns. Because the arc striking rod bypasses the umbrella skirt and adjusts to the best discharge gap, the discharge effect is better and the insulator umbrella skirt can be prevented from burning out.
3. The wire clamping hardware is constructed of puncture barbed teeth, which can be disassembled, and the purpose of peeling or not peeling can be selected. The barbed teeth are made of copper alloy materials with higher strength and better conductivity than aluminum alloy. The surface is electroplated to prevent oxidation during copper aluminum bonding, so that both copper and aluminum conductors can be used
4. The lightning protection insulator made of conforming materials has better insulation performance than the electromagnetic insulator, and its creepage distance is large, which improves the anti pollution level of the insulator
5. A unique structure has been considered to prevent short circuit hazards to overhead conductors
6. It can withstand the burning of about 5 times of power frequency high current arc.



10kV Series

20kV Series

Parameter

pec.&Type	System Voltage (kV)	Insulated Conductor Section (mm)	Lightning full wave impulse withstand voltage (peak) kV	1min Power frequency withstand voltage (effective value) kV		Power Frequency Arc Current (effective value) Ka	Rated Bending Withstand Load (kN)	Minimum Creepage Distance (mm)	Remarks
				Dry	Wet				
FEG1-12/5	12	50/240	75	42	30	12.5	5	400	Puncture type parallel wire

FEG2-12/5	12	50/240	75	42	30	12.5	5	400	Puncture type parallel wire
FEG3-12/5	12	50/240	75	42	30	12.5	5	400	Non-Puncture type parallel wire
FEG4-12/5	12	50/240	75	42	30	12.5	5	400	Non-Puncture type parallel wire