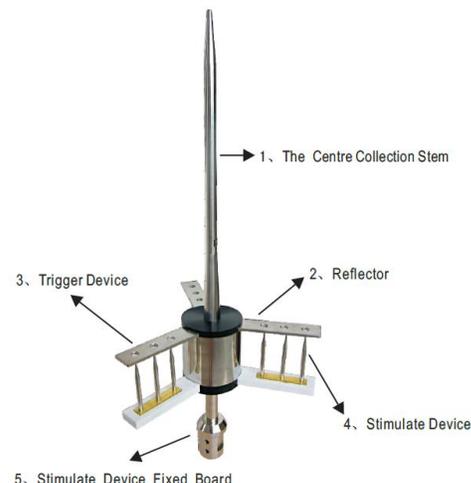
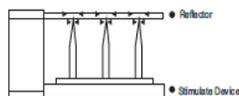


### (1) Working Principle

Structure Declaration (2) KLF series lightning rod mainly absorb and store energy by stimulate device from the electric field of nature. Reflector and small tip have a good electrical connection with the earth, stay in the potential state. So generally speaking, there is electric field strength between the reflector and stimulate device, once flash occurs the electric field strength will increase rapidly, the potential difference between the stimulate device and the reflector is roughly equivalent to the potential between thundercloud and the earth, the voltage drop between them will result in rapid increase in cutting edge ignition, and to ionization of air around the tip to form a point discharge phenomenon. The central collection stem and stimulate device of lightning rod make air ionization at top end caused by the rapid electric field increase in a very short and accurate time.

### (2) Structure Declaration

Stimulate device, reflector and central collection stem is insulated. Reflector and central collection stem must have a good electric connection with the earth; the bottom case of stimulate device is made of plastics which is applicable to any corrosive conditions.



### (3) Performance

1. Non-electronic style, long working life;
2. Quality will not be changed after the lightning strike;
3. Without electronic system so will not be damaged because of surge impact;
4. Difference protection radius model options;
5. When there is lightning strike, it will self-activate;
6. Features beauty and needn't maintenance.

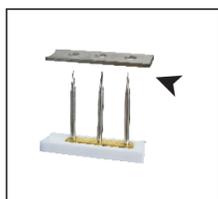
### (4) Start Beat Time

Name	Type	Start beat time $\Delta t$
Discharging in advance lightning rod	KLF-B05-1	25 $\mu$ s
	KLF-B05-2	34 $\mu$ s
	KLF-B05-3	43 $\mu$ s
	KLF-B05-4	52 $\mu$ s

### (5) Installation Diagram



1. Each packing box contains a needle tip hole of reflector



2. stimulate device point to the round of reflector.



3. Needle tip install to base



4. Connectors link with

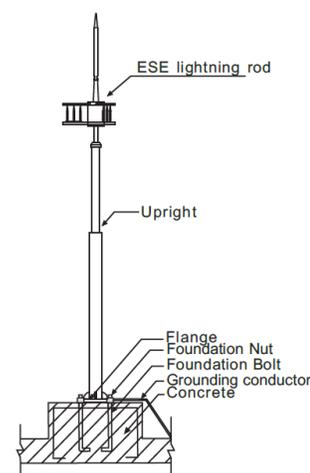


5. Connectors fixed with



6. Connecting rods fixed with

### (6) Installation Photo



### (7) Product Installation, Use and Maintenance

1. The lightning rod should be installed in the tower or other buildings, the flange plate of lightning rod must be higher over 1.5m than the highest protected building, according to this requirement to heighten height of the tower or set the tower.
2. Installation and test of lightning rod on the thunderstorm day is prohibited.
3. The grounding devices of lightning rod can use two round or flat steels direct by 180° at one end to weld the tower leg or foot tower, the other side can reliably weld with lightning belt on the parapet, or be separately down and reliably welded with independent ground network.
4. Make regular checking (one time a year) to make sure if the connection of the screw of the lightning rod is solid, ground down lead is if connected with the grounding system reliably. If we find the screw and weld is corroded serious, we should re-connect, re-soldering the screw.