Chapter 1
Insulator Definition

1.5 Insulator Voltage

By Orient Power
Insulator Voltage

Insulator voltage ranges from 400v to 1000kv, and can be divided into LV, MV, HV, UHV and EHV as per the voltage grade, or distribution, transmission and substation in accordance with their applications in details.

Common insulator voltage values:

- Low voltage (LV): 400v, 1kv
- Medium voltage (MV): 6kv, 10kv, 11kv, 12kv, 15kv, 20kv, 22kv, 24kv, 25kv, 28kv, 30kv, 33kv, 35kv, 36kv
- High voltage (HV): 45kv, 55kv, 66kv, 69kv, 88kv, 110kv, 115kv, 132kv, 220kv
- Ultra high voltage (UHV): 300kv, 330kv, 400kv, 500kv, 800kv
- Extra high voltage (EHV): 1000kv, above 1000kv

Insulator Voltage for Power Lines or Substations:

- Distribution line insulator voltage: 400v ~ 36kv
- Transmission line insulator voltage: 66kv ~ 1000kv
- Substation insulator voltage: 15kv ~1000kv

Insulator nominal voltage depends on the system voltage of power lines or substations and should be higher than the system voltage. To meet the different voltage levels, an insulator can be designed into different shapes or length as per the related standards.

For more information about insulator voltage, you can visit Orient Power website.