# Overhead Lines Polymer Pin Insulators for Power Transmission & Distribution

— Designed in 2011.2



13 Years' Manufacturing Designed for 10kV to 220kV



#### Design

Our Composite Crossarm Insulators (Polymer Crossarm Insulators) are manufactured with these features:

#### **Insulator Core Rod**

Tongyi Power applies fiberglass rod (made from imported Glass Fiber and Epoxy Resin by pultrusion) to composite insulators for higher electrical and mechnical performance. FRP Rod is used in composite insulators below 66kV, ECR Rod is used in composite insulators above 66kV.

#### **End Fittings**

There is a variety of pin insulator end fittings made of steel or ductile iron. They are directly crimped to the core rod by a circumferential crimping process, which utilizes the rod's inherent tensile strength to achieve better performance.

#### Sheds

The sheds are made from high quality HTV silicone rubber, using high pressure injection molding techniques to create a smooth surface. The weathersheds have excellent weather ability, high mechanical strength, anti-tracking, excellent corona resistance, pollution resistance and surface erosion resistance as well as superior Hydrophobicity performance.

#### Interface

The silicone rubber housing is injection molded onto the rod to create a reliable interface which ensures a permant bond between the silicone rubber and rods, as well as prevents intrusion of moisture and contaminations.

#### Leakage Distance

Our composite post insulators feature high leakage distance for maximum resistance to contamination and leakage currents in various environmental applications.

#### **Mechanical Ratings**

Specified Cantilever Load (SCL) is the ultimate cantilever strength rating. SCL is identical to the minimum mechanical bending load. Maximum Design Cantilever Load (MDCL) or Working Cantilever Load (WCL) is the maximum continuous cantilever load at which the composite crossarm insulator applies.

#### Washability

All our composite post insulators are suitable for washing by conventional dry-particle, air-pressure cleaning methods in current use owing to the excellent hydrophobicity performance of the polymer insulators.

Better Materials, Better Design Better Quality, Better Reliability









#### **Standards**

All our composite(polymer) pin insulators are manufactured and tested in strict accordance with IEC 61952 & IEC 62217, along with the implement of ISO 9001:2008 to control the process and guarantee insulators' quality.

#### **Stamps and Markings**

A stamp is made on one end side of the silicone rubber during the injection molding, including details of a logo, manufacturer, date code, SCL in kN and rated voltage ect.

Special order requirements can be met by us.

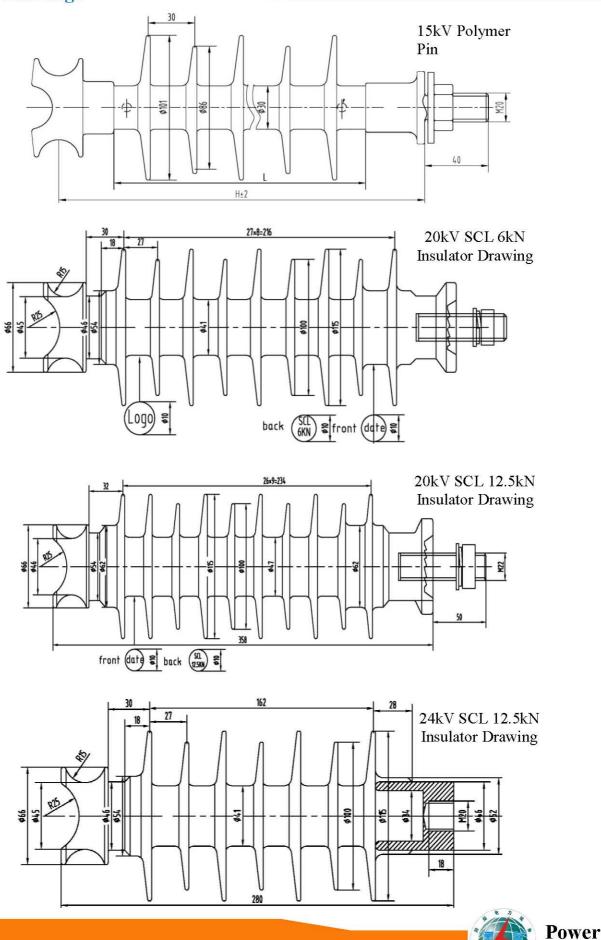
#### **Packaging**

Composite Post insulators are to be packed in the corrugated cartons stacked on a pallet and wrapped with four steel straps.

★ OEM and ODM of composite line post insulators from 10kV to 220kV are available.

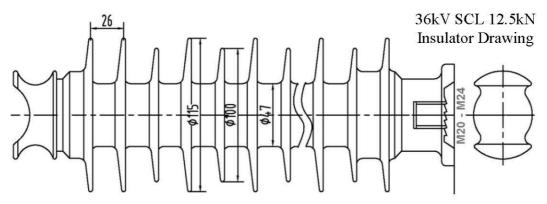


# **Product** Drawings



System

## **Product Drawings**



NOTE: Above drawings are representative ones of our polymer pin insulators, we also accept OEM and ODM drawing orders.

### **Product Specifications**

Model	Rated Voltage kV	Rated Mechanical bending load kN	Section Length H mm	Polymer Length L	Minimum Creepage Distance mm	Lightning Impulse Withstand kV	Power Frequency Withstand Voltage (kV)	
							Dry	Wet
FP-10/5T16	10	5	223	165	358	90	65	40
FP-10/5T18	10	5	223	165	358	90	65	40
FP-15/5T18	15	5	253	200	451	110	70	50
FP-15/5T20	15	5	253	200	451	110	70	50
FP-20/6T20	20	6	320	240	800	145	95	75
FP-20/12.5T20	20	12.5	358	305	790	145	95	75
FP-20/12.5T22	20	12.5	358	305	790	145	95	75
FP-24/6T20	24	6	272	160	650	125	95	75
FP-24/6T22	24	6	272	160	650	125	95	75
FP-36/12.5T20	36	12.5	410	383	960	210	143	98
FP-36/12.5T22	36	12.5	410	383	960	210	143	98
FP-36/12.5T24	36	12.5	410	383	960	210	143	98

Note: OEM service in accordance with technical specifications are available upon request.

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### FRP | Polymer Insulator | Fuse Cutout | Switchgear | Power Fitting

Suspension Insulator | Pin Insulator | Post Insulator | Crossarm Insulator | Bushing

#### Disclaimer

We reserve the right to change the dimensions without notice, the OEM pin insulators shall be confirmed in accordance with clients' specifications, drawings and requirements of power line systems.

