

Overhead Lines
Composite Suspension Insulators
for Power Transmission 10kV to 220 kV

— Designed in 2010.12



13 Years' Manufacturing
Designed for tough conditions



**Power
System**

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Design

Our Composite Suspension Insulators are manufactured with these features:

ECR Core Rod

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

End Fittings

There are a range of end fittings made of steel or ductile iron. They are directly crimped to the ECR 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 suspension insulators feature high leakage distance for maximum resistance to contamination and leakage currents in various environmental applications.

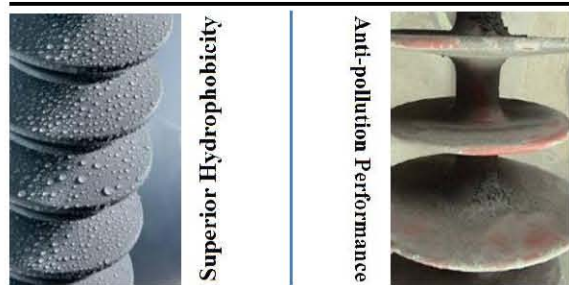
Mechanical Ratings

Tongyi Power composite suspension insulators are rated at a specified mechanical load of 40kN,70kN,100kN,120kN with proper ECR Rod size and enf fittings. Our routine tests are conducted at loads equal to or greater than the RTL rating according to IEC 61109 and ANSI C29.12.

Insulator Length

Tongyi Power composite suspension insulators have length ranging from 291mm to 2170mm appropriate for 10kV to 220kV. Thanks to our 13 years' manufacturing experience, different special length for OEM can be produced accordingly for special projects.

Better Materials, Better Quality
Better Design, Better Reliability



Standards

All Tongyi Power suspension insulators are manufactured and tested in strict accordance with IEC 61109 and IEC 62217, along with execution of ISO 9001 to guarantee quality.

Stamps and Markings

A stamp is made on the side of silicone rubber during the injection molding, including details of logo, manufacturing date, SML etc. Special order requirements can be met by us.

Packaging

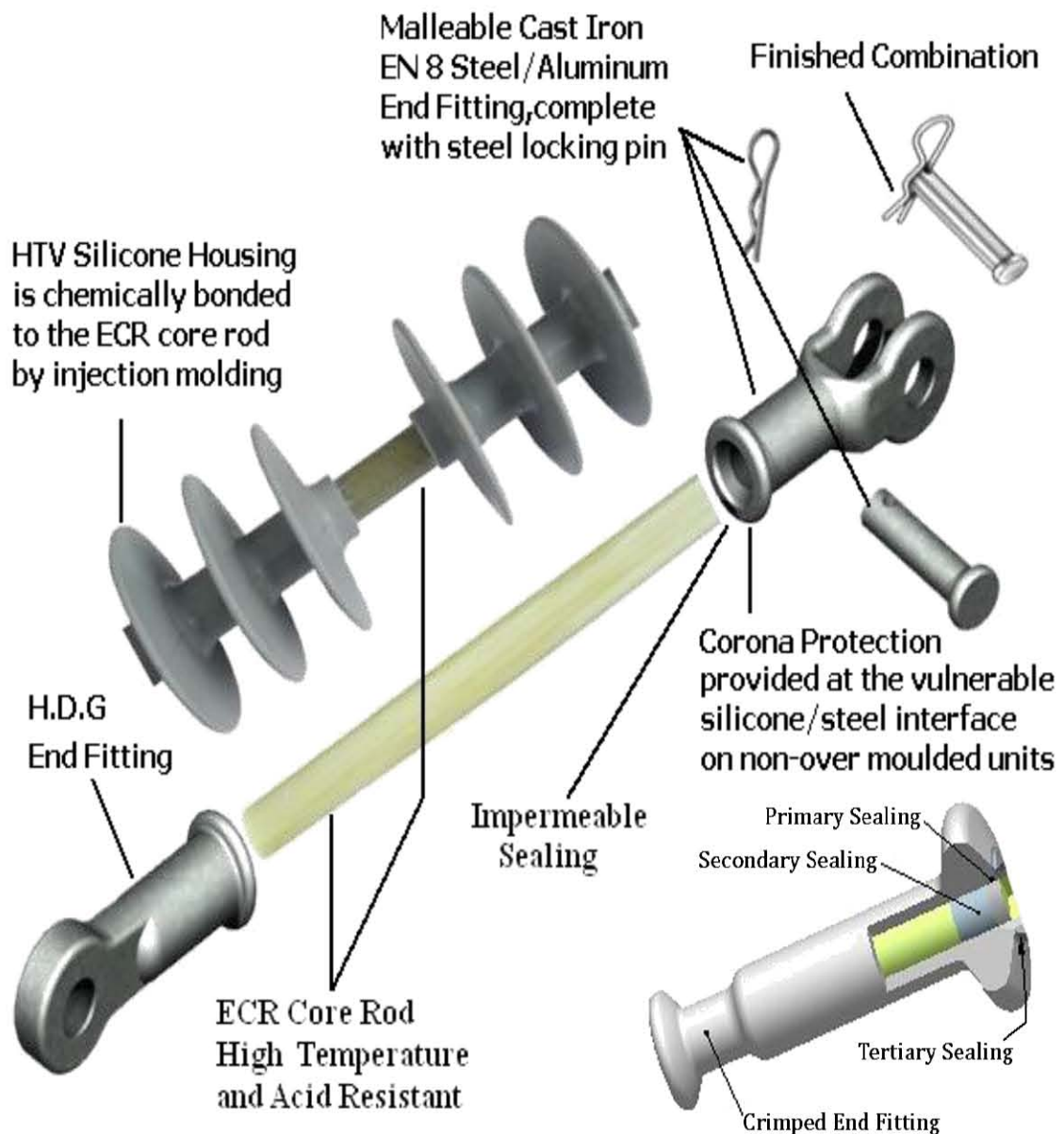
Suspension insulators are to be packed in the wooden crates or corrugated cartons stacked in a pallet and wrapped with four steel straps.

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



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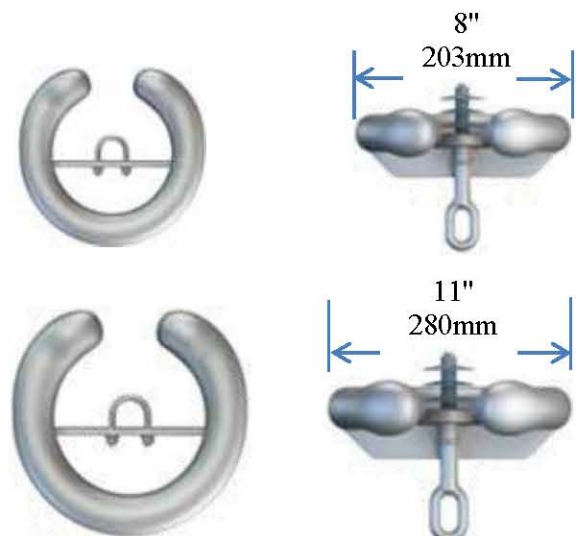
Illustration of Polymer Suspension Insulator



Corona Rings

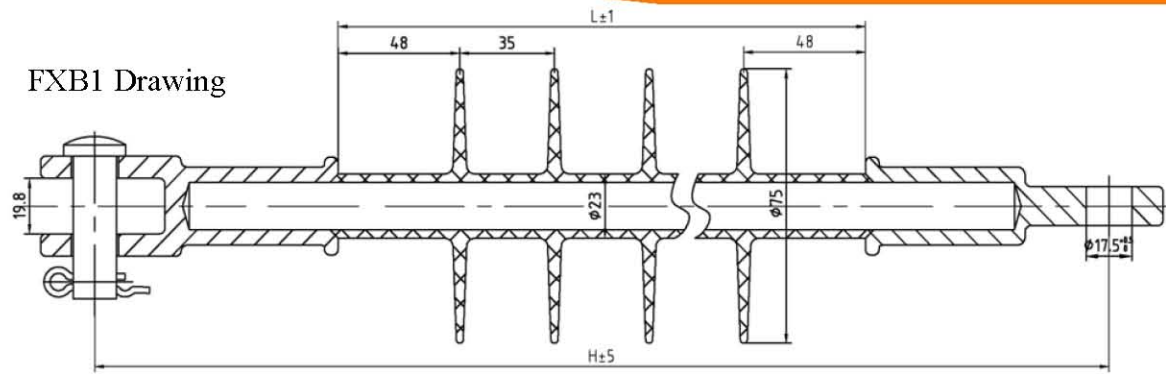
Corona Ring, also named Grading Ring or Shielding Ring, is applied to one or both ends of the insulator for higher operating voltages so as to reduce electrical stress concentration on and within the insulators. They can reduce corona discharges as well as audible noise levels, radio and television interference levels.

Tongyi Power® recommends an 8"(203mm) corona ring for composite suspension insulators from 110kV to 220kV as a default. For special and intended applications with a smaller or larger corona ring, please feel free to contact us.

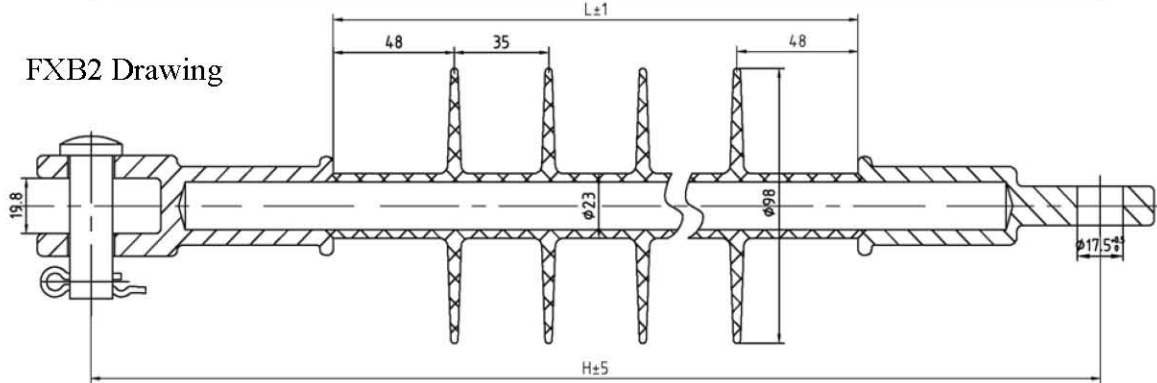


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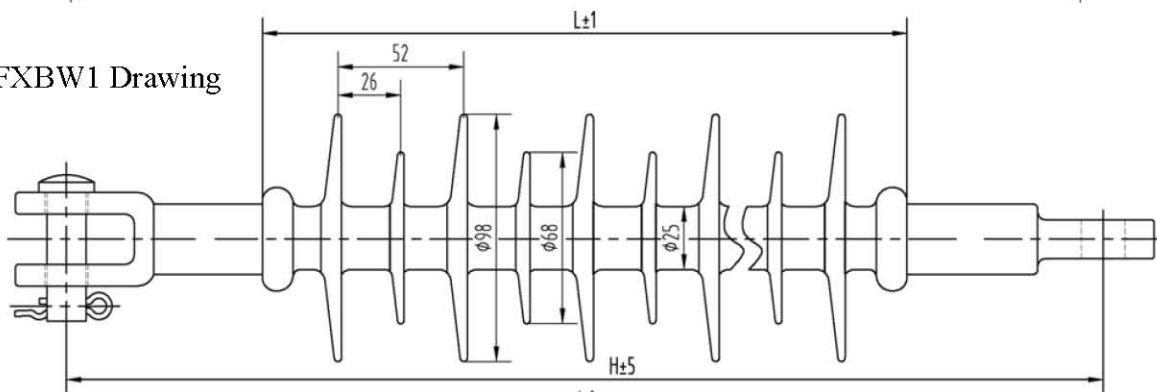
FXB1 Drawing



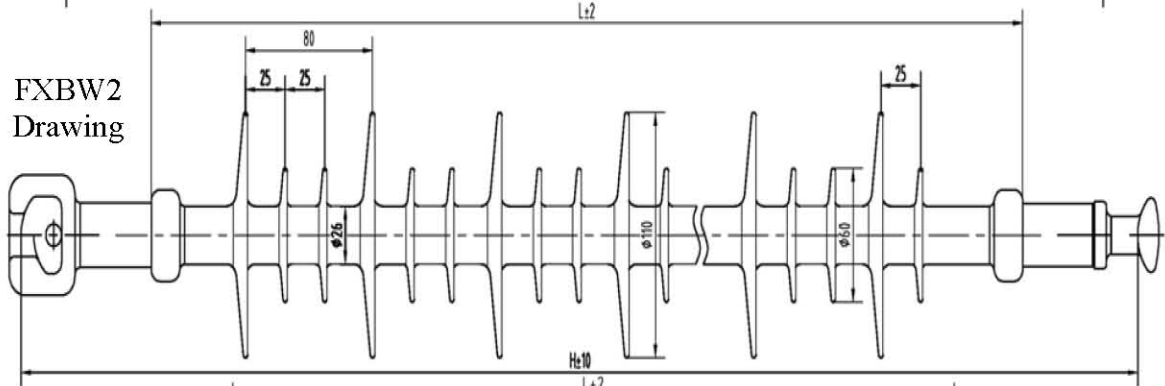
FXB2 Drawing



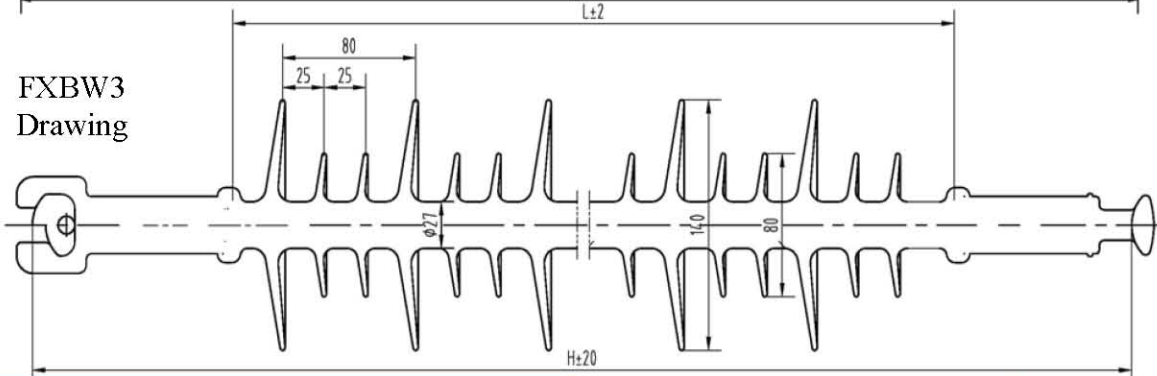
FXBW1 Drawing



FXBW2 Drawing



FXBW3 Drawing



Product Specifications

Model	Rated Voltage	Specified Mechanical Tensile Load	Section Length H	Polymer Length L	Minimum Creepage Distance	Lightning Impulse Withstand Voltage	Power Frequency Withstand Voltage (kV)	
	kV	SML-kN	mm	mm	mm	kV	Dry	Wet
FXB1-10/40	10	40	291	155	340	135	66	60
FXB1-10/70	10	70	325	155	340	135	66	60
FXB2-10/40	10	40	301	165	440	141	70	60
FXB2-10/70	10	70	346	190	535	147	78	60
FXB2-10/100	10	100	346	190	535	147	78	60
FXBW1-10/40	10	40	342	196	600	125	100	60
FXBW1-10/70	10	70	370	196	600	125	100	60
FXBW1-10/100	10	100	402	196	600	125	100	60
FXBW1-10/120	10	120	412	196	600	125	100	60
FXBW1-20/70	20	70	422	300	750	187	121	108
FXBW1-20/100	20	100	442	300	750	187	121	108
FXBW1-22/120	20	120	454	300	750	187	98	70
FXB1-24/70	24	70	450	292	604	180	120	96
FXB2-24/70	24	70	465	292	847	170	120	90
FXB2-24/100	24	100	500	292	847	170	120	90
FXB1-33/70	33	70	570	416	912	294	99	76
FXB1-33/100	33	70	600	416	912	294	99	76
FXB2-33/70	33	70	570	434	1154	200	90	70
FXB2-33/100	33	100	600	434	1154	200	90	70
FXBW2-35/70	35	70	620	464	1115	230	150	130
FXBW2-35/100	35	100	660	464	1115	230	150	130
FXBW2-35/120	35	120	680	464	1115	230	150	130
FXBW2-66/100	66	100	880	709	1970	400	240	140
FXBW2-66/120	66	120	990	770	1970	410	210	185
FXBW3-110/70	110	70	1220	1099	3518	550	290	230
FXBW3-110/100	110	100	1240	1099	3518	550	290	230
FXBW3-110/120	110	120	1260	1099	3518	550	290	230
FXBW3-132/100	132	100	1440	1294	4109	550	320	290
FXBW3-132/120	132	120	1460	1294	4109	550	320	290
FXBW3-220/100	220	100	2150	2000	6572	1000	540	495
FXBW3-220/120	220	120	2170	2000	6572	1000	540	495

Note: OEM service in accordance with technical requirements 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 suspension insulators shall be confirmed in accordance with clients' needs, drawings and requirements of power line systems.



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