

Outdoor High-voltage Composite Insulator

Composite Insulator

Key of Power
Electric Professional
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Composite Insulator

• Application:

The composite insulator line of XIYA includes line insulators comprised of line rod, line post, traction line type and line spacer, station insulators comprised of outdoor solid core, indoor solid core type, post and tension hollow post and tension rod, insulating bushing comprised of oil impregnated paper condenser wall bushing and dry type condenser wall bushing. Moreover, shed booster for station insulation, feeding rod for locomotive and dry type polymer current transformer are also available.

The shed housing polymer for XIYA composite insulator is prepared using specific composition mixing developed by XIYA experts for years, contributing the highest grade of tracking and corrosion resistance in conformance with IEC standard, which shows no apparent degradation after artificial accelerate ageing for 1000h and natural exposure test for 15 years.

The XIYA insulator are manufactured with unique one-piece injection molding technique, excluding possibility of interface breakdown. A main trouble which may destroy the normal operation of insulators. The unique gluing connection of line rod insulator with metal getting keeps FRP rod intact, providing the highest reliability of insulator in respect of its mechanical performance with practically no degradation even in environment of high temperature or severe cold.

The composite insulator, characteristic of small size, light weight, high mechanical strength, shatter-free, easy handling, well shock-resistance, pollution-resistance and minor maintenance, grows fast as a new generation of insulator.

Insulator with specific parameters other than those listed hereafter is required by customer, it can be supplied by technical agreement. If any insulator of other application is needed, XIYA is willing to proceed cooperative development to meet utmost the customer demand.

• Normal service conditions

- A) Ambient air temperature within the range of -40°C to $+50^{\circ}\text{C}$.
- b) Altitude not exceeding 1500m.
- c) Frequency of the A.C. Power supply not less than 48Hz and not exceeding 62Hz.
- d) Maximum wind speed not exceeding 35m/s.
- e) Earthquake intensity not exceeding 8 degrees.

• Characteristics:

- Small volume and light weight, easy to transport and install.
- The superior in performance and high intensity mechanical enhance reliability of power line.
- Extraordinary hydrophobic and resistance to contamination.
- Long-duration resistance aging and leakage tracking.

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Configuration and Anatomy Design of Composite Insulator

End fittings are steel or ductile iron. They are crimped directly to the rod by a special process originated by XIYA, and later adopted by many other producers. The crimp develops a high percentage of the rod's inherent tensile strength. It requires no intermovement of the parts to achieve high strength, nor does it introduce potting compounds or adhesives.

Weathersheds are high pressure injection molded by XIYA, from the proprietary compound. Housings manufactured with silicon alloy rubber exhibit long-term hydrophobicity, high mechanical strength, excellent corona resistance and low permeability to moisture.

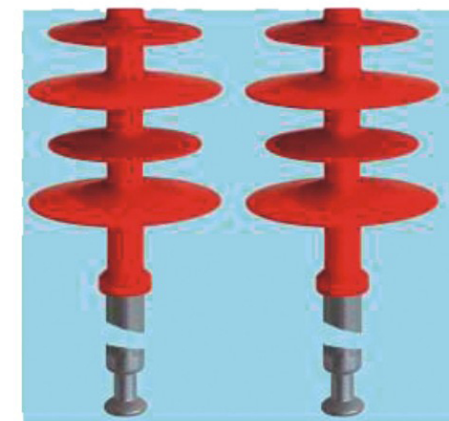
Coating thickness: $> 5\text{mm}$, same thickness according to the IEC STANDARD.

ROD: adopting the ECR high temperature acid-resistance rod (more than 50 percent glass fibers in cross section)

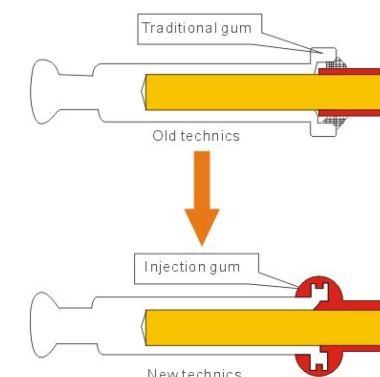
Labyrinthine configuration designed end fitting, and adopting silicon coating technical, has improved the hydrophobicity and anti-leakage characteristics.



Enhancing methods of silicone rubber holds good hydrophobicity and anti-leakage current tracking capacity.



The stable inherent tensile strength and accuracy are because of special rod with advanced compaction and interlinkage technique.



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Composite Insulator Manufacture Flow Chart

A Metal instrument cleanout & drying, wipe off mandril roughcast.

B Compaction and interlinkage

C Degrease and warm-up

D Holistic injection pressurize molding

E Check the appearance and amend

F Secondary vulcanization

G Test before package

H Set nameplate on the eligible products

I Pack and stored



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Insulator Quality Guarantee

Any products made by XIYA are according to the ISO9001 management system to ensure the quality and service.

Material Incoming Inspection Items

Core

- a. Strong light test(every piece)
- b. Porosity and water diffusion test
- c. Power frequency withstand voltage inspection
- d. Tension force loading inspection

End Fitting

- a. Zinc coating mass testing
- b. Go gauge and not go testing

Silicon

- a. Technical performance testing
- b. Hardness
- c. The comparative and the proof tracking characteristics
- d. Inspection data

Exfactory Inspection

- a. Visual inspection
- b. 50% rated mechanical load tensile test
- c. 50% rated mechanical load bending test
- d. 50% rated mechanical load torsion test
- e. Power frequency withstand voltage inspection

Sampling Inspection

- a. Leakage current testing
- b. The comparative and the proof tracking inspection
- c. Impulse endurance test and lightning full-wave impulse test.
- d. Mechanical tensile test(bending and torsion) breaking test



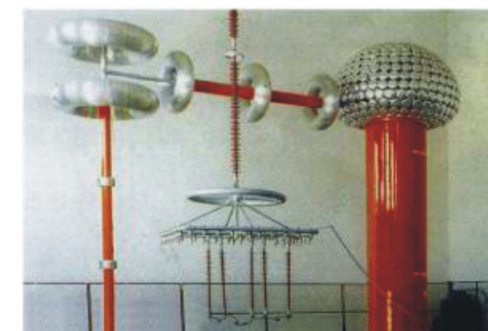
Product design



Load tensile test



Load bending test
Load torsion test



Power frequency withstand voltage inspection

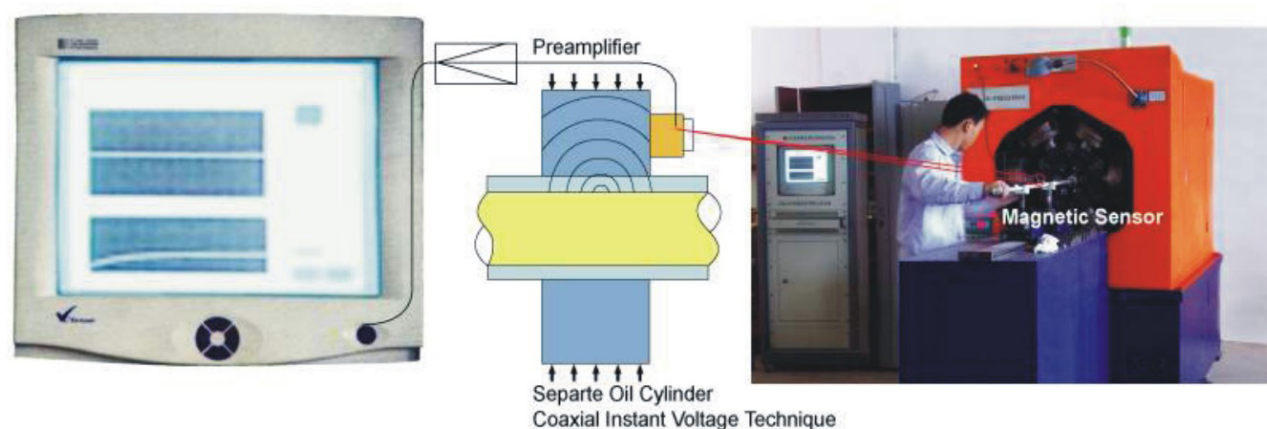
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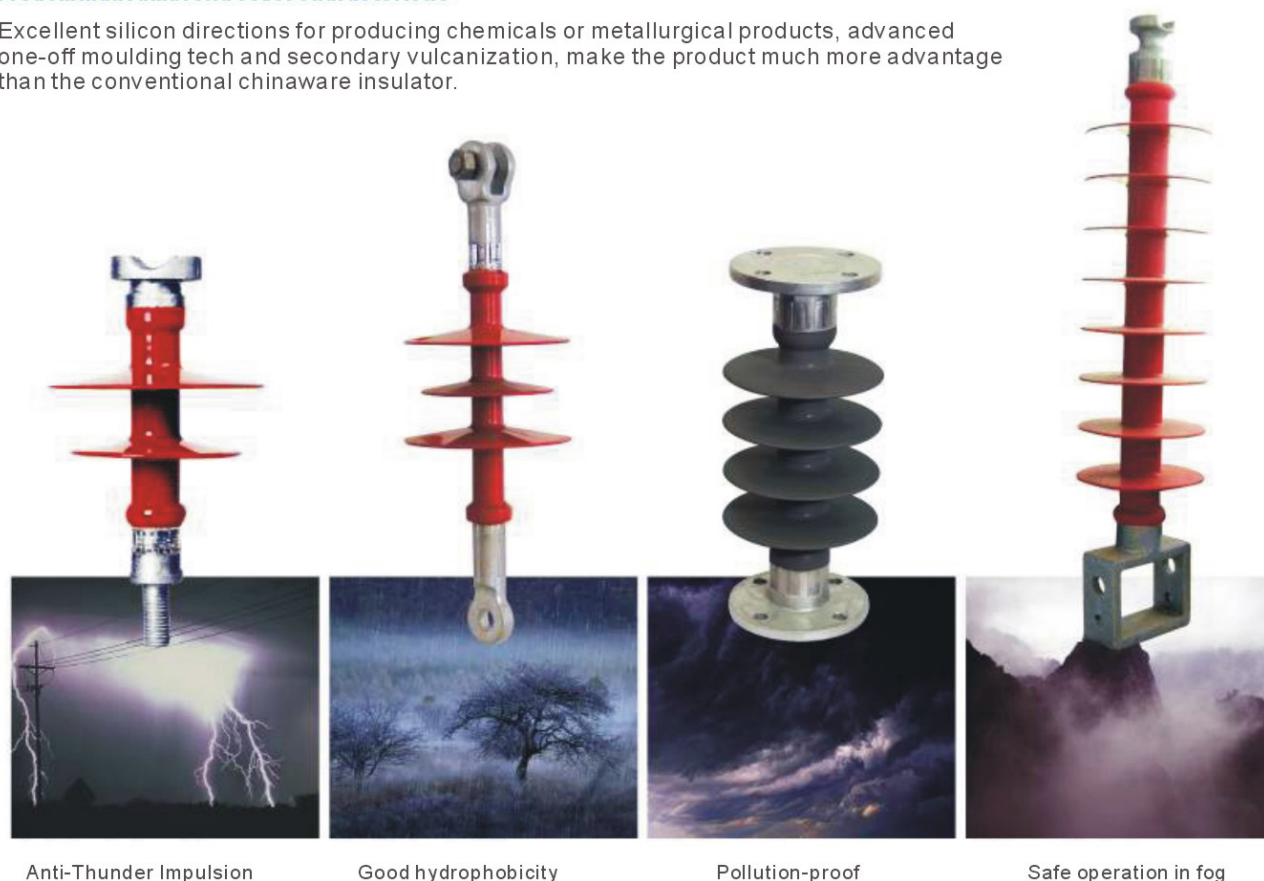
• The Compaction and Interlinkage Technique

The compaction and interlinkage of end fittings adopt advanced acoustic emission detection control system which is used for spaceflight and aviation test, it's sensitive to distinguish several 'fiberglass' break, and has alarm equipment to make sure the veracity. And it has advanced coaxial isobarically technique, can conquer the labiliza - tion of the compaction and interlinkage.



• Predominant umbrella cover characteristic

Excellent silicon directions for producing chemicals or metallurgical products, advanced one-off moulding tech and secondary vulcanization, make the product much more advantage than the conventional chinaware insulator.



Anti-Thunder Impulsion

Good hydrophobicity

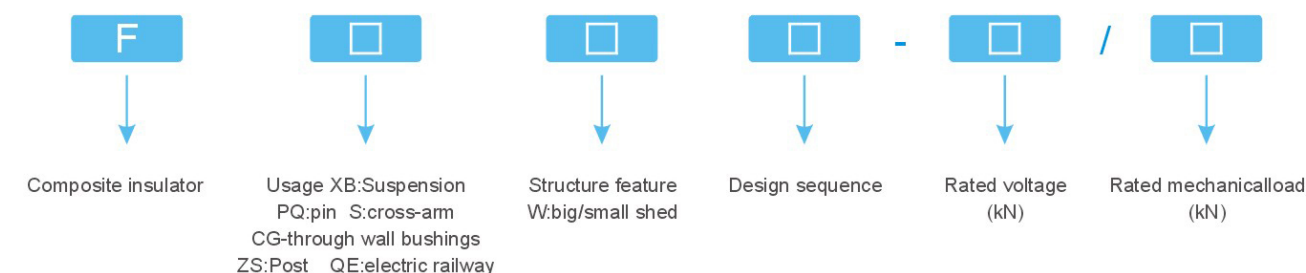
Pollution-proof

Safe operation in fog

Outdoor High-voltage Composite Insulator

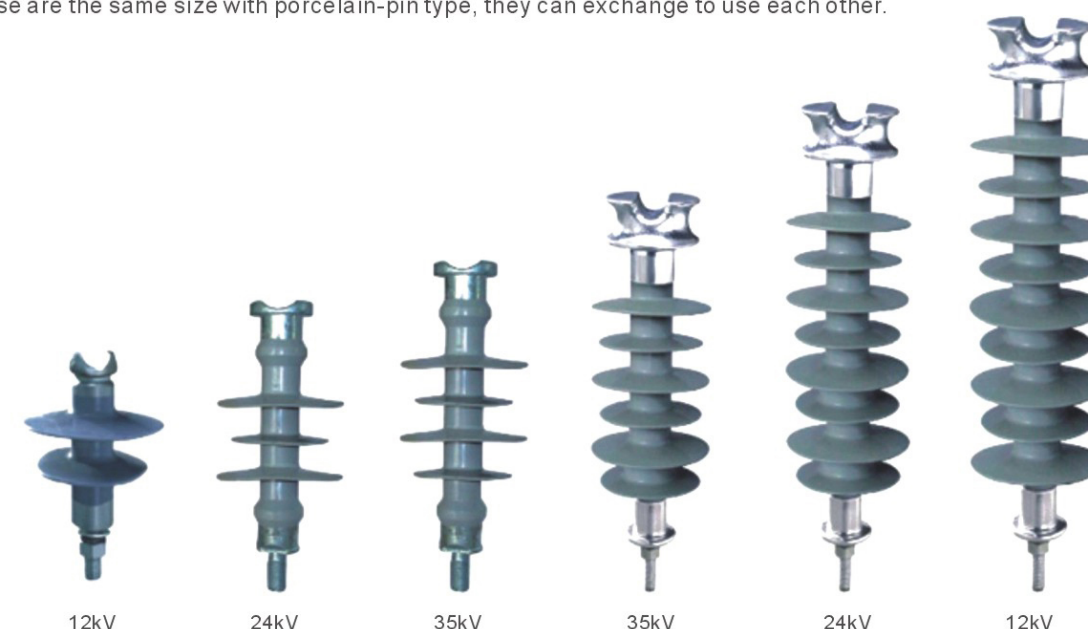
FPQ Series Pin Composite Insulator

• Model and meaning



• Pin composite insulator

This product is applied to high voltage power line service. And have features of good hydrophobicity, anti-ageing, antileakage trace and electric erode proof, tensile strength and bending strength strong mechanical strength, shock resistance good quakeproof and brittle failure proof, light weight, easy to installation and the installation outline of top and base are the same size with porcelain-pin type, they can exchange to use each other.



• Main technical parameters of pin composite insulator

Type	Rated Voltage (kV)	Rated mechanical stretch load (kN)	Structure Height (mm)	Minimum arcing distance (mm)	Minimum nominal creepage distance (mm)	Diameter of shed D (mm)	Lightning impulse withstand voltage [peak] > (kV)	Power frequency withstand voltage (wet) > (kV)
FPQ-10/4T20	10	4	215	125	280	148/118	75	42
FPQ4-10/5T20	10	5	250	165	460	148/118	105	42
FPS-105/5	10	5	250	180	380	90	105	42
FPS-15/5	15	5	250	180	380	148/118	105	42
FPQ-24/8	24	8	305	255	715	148/118	150	75
FPQ-36/8	36	12	440	360	1100	148/118	185	95
FPQ-36/8	36	12	440	360	1300	160	185	95

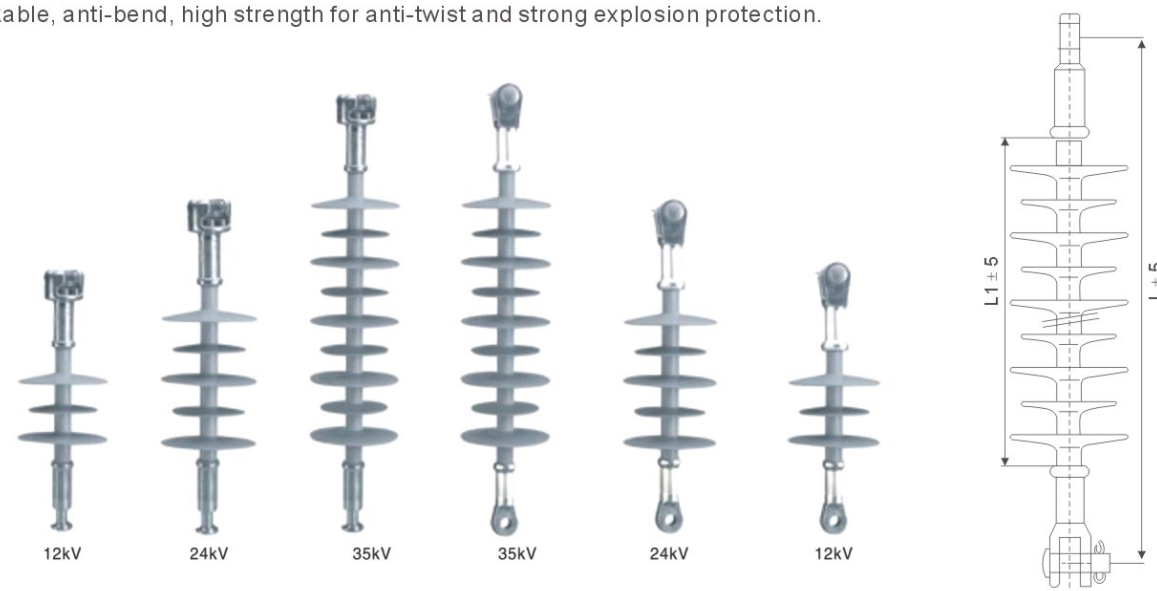
Outdoor High-voltage Composite Insulator

FXBW4 Series Suspension Composite Insulator

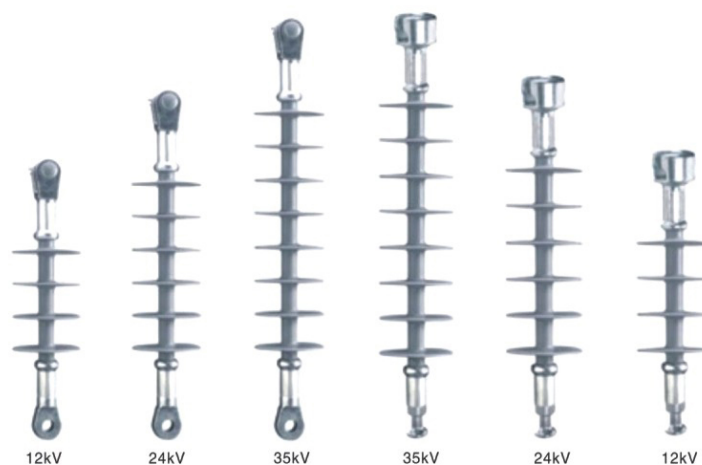
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FXBW4 Series Suspension Composite Insulator

This product is special for badly polluted areas, high mechanical tension load, long span and compact power line. And have features of light weight, small volume, unbreakable, anti-bend, high strength for anti-twist and strong explosion protection.



Type	Rated Voltage (kV)	Rated mechanical stretch load (kN)	Structure Height (mm)	Minimum arcing distance (mm)	Minimum nominal creepage distance (mm)	Lightning impulse withstand voltage [peak] > (kV)	Power frequency withstand voltage (wet) > (kV)
FXBW4-12	12-15	70/100/120	345	155	465	95	45
			355				
FXBW4-24	24-27	70/100/120	435	245	755	185	95
			445				
FXBW4-35	33-38	70/100/120	615	425	1300	230	105
			625				

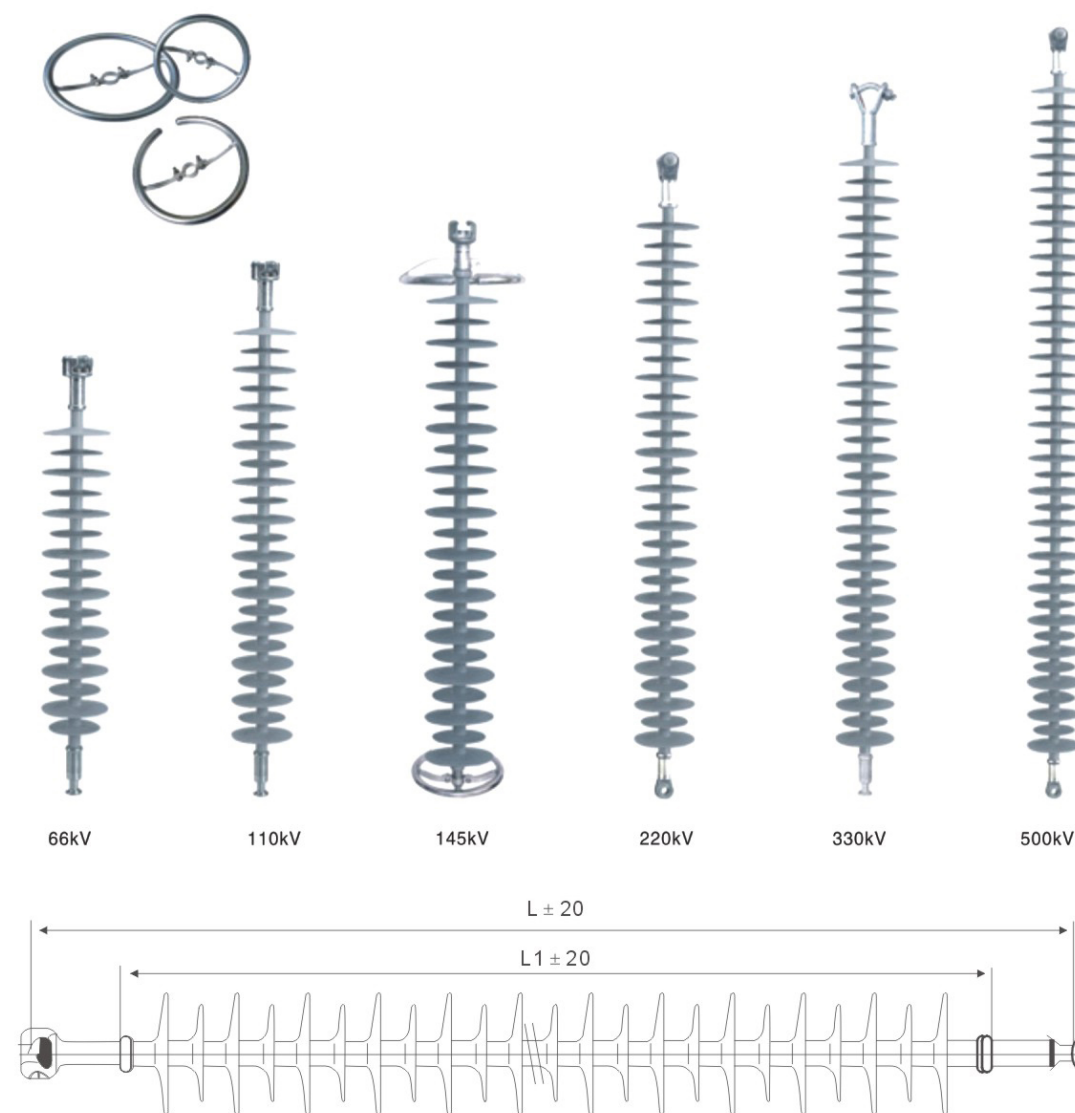


Outdoor High-voltage Composite Insulator

FXBW4 Series Suspension Composite Insulator

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FXBW4 Series Suspension Composite Insulator



• Main technical

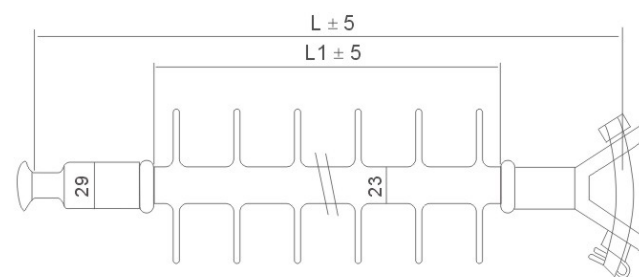
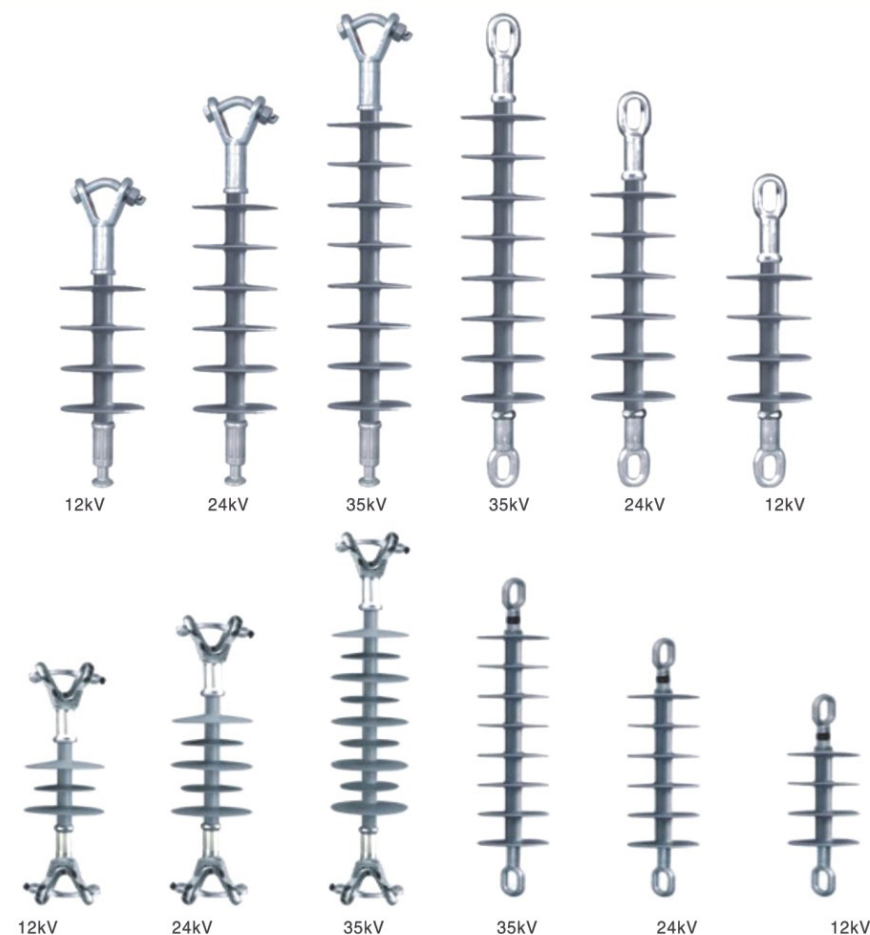
Type	Rated Voltage (kV)	Rated mechanical stretch load (kN)	Structure Height (mm)	Minimum arcing distance (mm)	Minimum nominal creepage distance (mm)	Lightning impulse withstand voltage [peak] > (kV)	Power frequency withstand voltage (wet) > (kV)
FXBW4-66	66-72	100/120/160	900	680	2200	410	185
FXBW4-110	110-132	100/120/160	1240	1012	3200	550	230
FXBW4-145	132-145	100/120/160	1660	1440	4600	600	260
FXBW4-220	220-240	120/160/210	2160	1930	6300	1000	395
FXBW4-330	210-350	120/160/210	2990	2600	8600	1425	570
FXBW4-500	500-550	120/160/210	4080	3730	12250	2250	740

Outdoor High-voltage Composite Insulator

FXB Series Suspension Composite Insulator

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FXB Series Suspension Composite Insulator



• Main technical

Type	Rated Voltage (kV)	Rated mechanical stretch load (kN)	Structure Height (mm)	Minimum arcing distance (mm)	Minimum nominal creepage distance (mm)	Lightning impulse withstand voltage [peak] > (kV)	Power frequency withstand voltage (wet) > (kV)
FXB-12	12-15	70/100	380	169	440	95	45
			415				
FXB-24	24-28	70/100	475	216	690	185	95
			496				
FXB-35	33-38	70/100	563	353	900	230	105
			588				

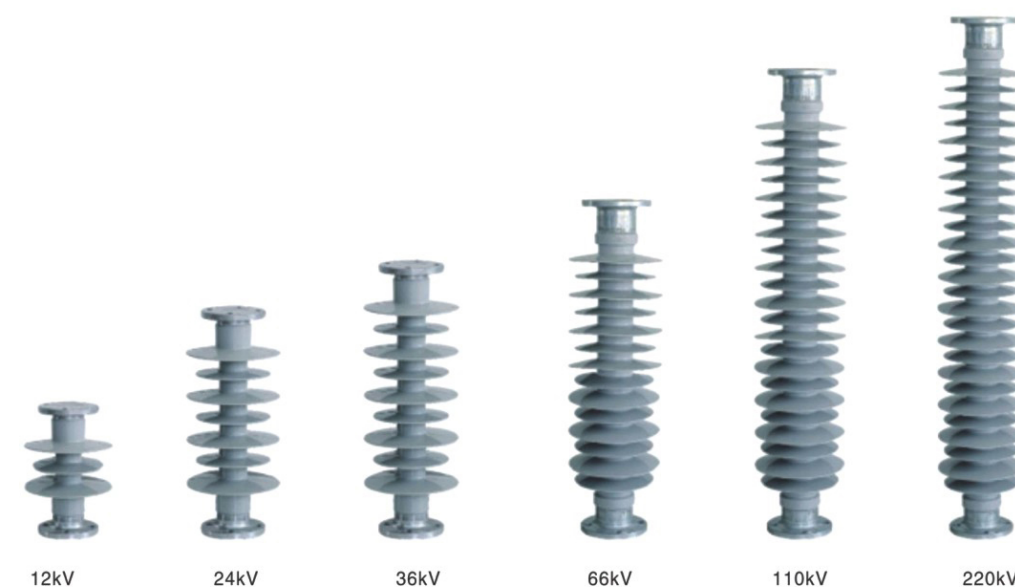
Outdoor High-voltage Composite Insulator

FZSW Series Post Composite Insulator

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FZSW Series Post Composite Insulator

This product is applied to high voltage power line service. And have features of good hydrophobicity, anti-ageing, antileakage trace and electric erode proof, tensile strength and bending strength strong mechanical strength, with good performance in shock resistance good quakeproof & brittle-breakproof, light weight, easy to installation, and the installation outline of top and base are the same size with porcelain type. They can exchange to use each other.



• Main technical parameters of post composite insulator

Type	Rated Voltage (kV)	Rated mechanical stretch load (kN)	Structure Height (mm)	Minimum arcing distance (mm)	Minimum nominal creepage distance (mm)	Diameter of shed D(mm)	Lightning impulse withstand voltage [peak] > (kV)	Power frequency withstand voltage (wet) > (kV)
FZSW-10/4	10	4	215	125	290	100/90	75	42
FZSW-15/5	15	5	245	170	600	150	125	50
FZSW-20/8	20	8	400	320	750	142	150	65
FZSW-35/6	35	6	450	360	946	148/118	185	95
FZSW-66/6	66	6	760	630	1886	160/130	410	185
FZSW-66/8	66	8	760	630	2010	220/190	410	185
FZSW-110/10	110	10	1220	1080	3530	220/190	500	230
FZSW-220/10	220	10	2440	2200	7060	220/190	1000	395

Outdoor High-voltage Composite Insulator

FQX Series Composite Insulators for Electric Railway

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FQX Series Composite Insulators for Electric Railway

The product is specially used electric railway, it can effectively prevent flashover due to pollution, and lessen the job of cleaning, which is the necessary device that other porcelain type or glass type insulators can never replace.



• Main technical parameters of composite insulators for electric railway

Type	Rated Voltage (kV)	Rated mechanical stretch load (kN)	Structure Height (mm)	Minimum nominal creepage distance (mm)	Lightning impulse withstand voltage [peak] > (kV)	Power frequency withstand voltage (wet) > (kV)	Structure of connected marks
FQX1-25	25	60	650	1400	270	130	aa
FQX2-25	25	20	840	1400	270	130	bb
FQX3-25※	25	20	930	1400	270	130	bb
FQX3-25※	25	20	760	1400	270	130	ac
FQX4-25	25	20	806	1400	270	130	gh
FQX5-25	25	60	645	1400	270	130	af
FQE3-25※	25	60	640	1400	270	130	ff
FQE4-25※	25	20	836	1400	270	130	gc
FQE5-25※	25	20	695	1400	270	130	de
FQE5-25	25	20	695	1400	270	130	gi

※This specification shall be conducted the tdst of bent pull & extension load under force of 4kN. When the bent distance is 100mm, the distortion shall be less than 12mm.

**According to the different requirement, the weight will be not same.

Outdoor High-voltage Composite Insulator

FS Series Cross-arm Composite Insulator

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FS Series Cross-arm Composite Insulator

The products are suitable for the innovation of urban electrical network where its streets are narrow. It can effectively reduce the necessary height of the pole/tower, due to high bent resistant capacity, there will completely avoid the case that porcelain cross-arm happen to crack. More, it can be well pollution resistant.



• Main technical parameters of cross-arm composite insulator

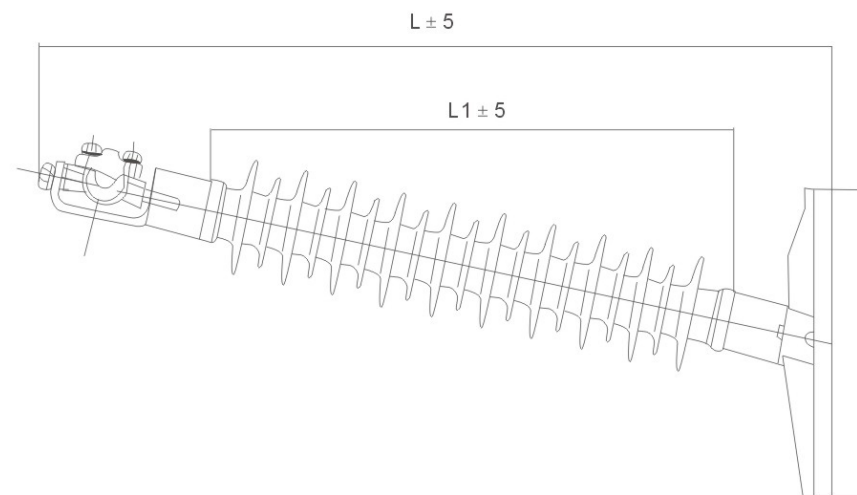
Type	Central distance between wire channel and installation axis (mm)	Min.Creepage distance (mm)	Minimum nominal creepage distance (mm)	Installation diameter (mm)	Rated mechanical stretch load (kN)	Power frequency withstand voltage (wet) > (kV)	Lightning impulse withstand voltage [peak] > (kV)
FS-10/2.5	390	274	362	18	2.5	45	165
FS-10/2.5	400	280	410	18	5.0	50	185
FS-10/2.5	620	490	1060	22	5.0	100	265
FS-10/2.5	890	735	1815	23	6.0	185	410
FS-10/2.5	1240	1070	3180	24	10	230	550

Outdoor High-voltage Composite Insulator

FZSW Series Line Post Insulator

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FZSW Series Line Post Insulator

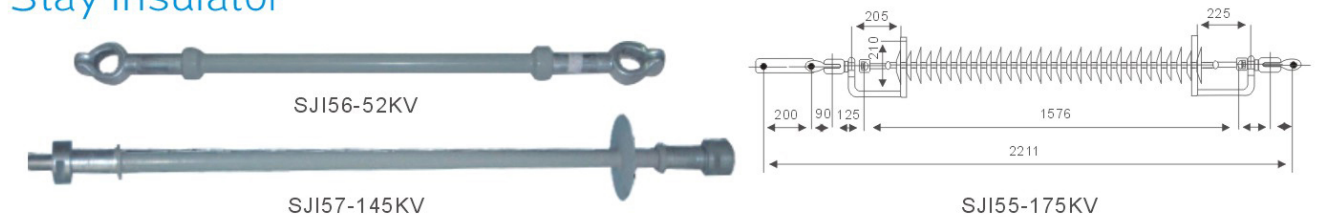


Type	Rated Voltage (kV)	Rated mechanical stretch load (kN)	Structure Height (mm)	Minimum arcing distance (mm)	Minimum nominal creepage distance (mm)	Lightning impulse withstand voltage [peak] ≥ (kV)	Power frequency withstand voltage (wet) ≥ (kV)
FZSW-12	10-15	12.5	380	148	355	75	42
FZSW-24	24-27	8/12	485	300	850	150	65
FZSW-35	35-38	6/8/12	555	369	1050	185	95
FZSW-66	66-72	6/8/12	960	650	1800	410	185
FZSW-115	115	6/8/12	1115	848	2130	620	295
FZSW-132	110-140	6/8/12	1450	1210	3210	760	430

Outdoor High-voltage Composite Insulator

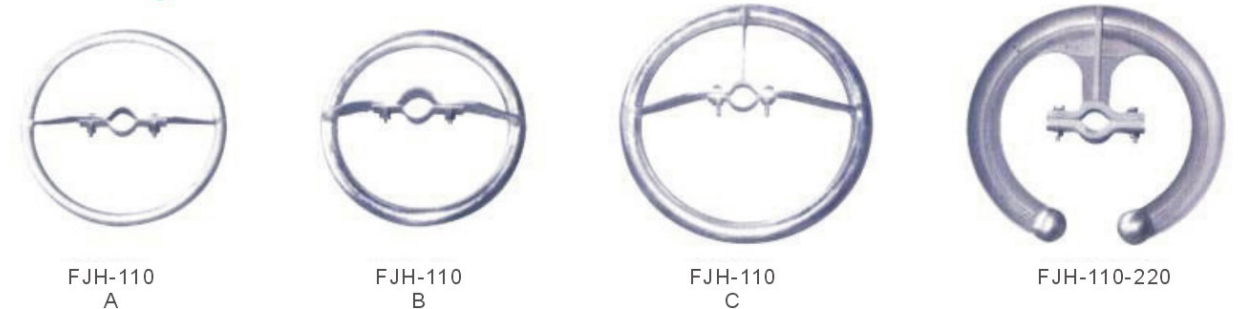
Other Series Insulators

Stay Insulator

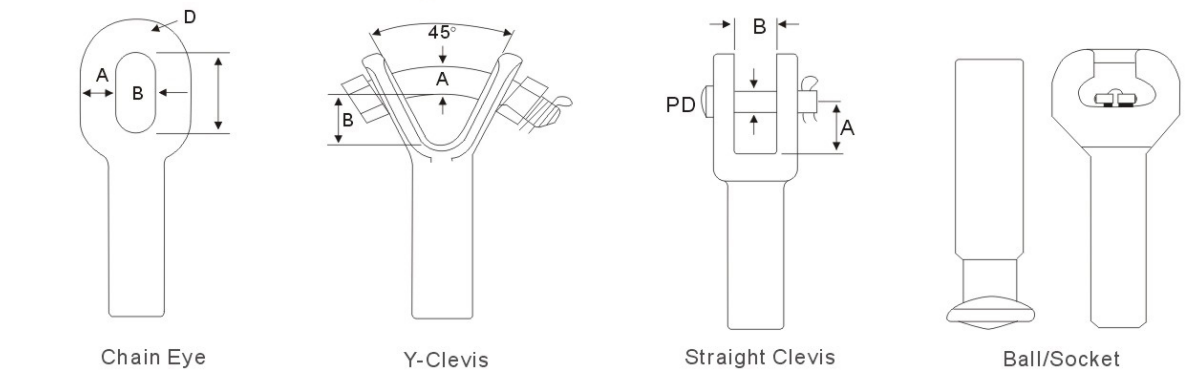


Rod Dia	Nominal system voltage	Creepage distance	Dry lightning impulse withstand voltage	Wet power frequency withstand voltage	Torsion	Tensile strength	Impulse flashover voltage	Flashover distance	Radio interference at 1KHz	Weight	Standard
17mm	24kV	420 mm	90kV	70 kV	0.5 kNm	4 kN	145 kV	190mm	< 1 uV at 10kV	0.65 kg	IEC61109/62217

Corona Rings



Most Common End Fittings



SML	Dimensions mm(in.)				SML	Dimensions mm(in.)				SML	Dimensions mm(in.)				SML	Class
	A	B	C	D		A	B	Bolt Dia.			Class	A	B	PD		
111kN (25K lbs.)	15.74 (0.62)	25.4 (1.00)	50.8 (2.00)	15.74 (0.62)	111kN (25K lbs.)	19.05 (0.75)	38.86 (1.53)	19 (0.75)		111kN (25K lbs.)	ANSI 52-6	36 (1.41)	19 (0.75)	16 (0.62)	111kN (25K lbs.)	ANSI 52-5
120kN	15.74 (0.62)	25.4 (1.00)	50.8 (2.00)	15.74 (0.62)	120kN	19.05 (0.75)	38.86 (1.53)	19 (0.75)		120kN	IEC 16C	36 (1.41)	19 (0.75)	16 (0.62)	120kN	IEC 16mm
133kN (30K lbs.)	19.05 (0.75)	25.4 (1.00)	50.8 (2.00)	21.59 (0.85)	133kN (30K lbs.)	22.35 (0.88)	40.39 (1.59)	22 (0.88)		133kN (30K lbs.)	ANSI 52-6	36 (1.41)	19 (0.75)	16 (0.62)	133kN (30K lbs.)	ANSI 52-5
160kN (36K lbs.)	19.05 (0.75)	25.4 (1.00)	50.8 (2.00)	21.59 (0.85)	160kN (36K lbs.)	22.35 (0.88)	40.39 (1.59)	22 (0.88)		160kN (36K lbs.)	IEC 19L	46 (1.81)	21 (0.83)	19 (0.75)	160kN (36K lbs.)	IEC 20mm (ANSI 52-8)
210kN	19.05 (0.75)	25.4 (1.00)	50.8 (2.00)	21.59 (0.85)	210kN	22.35 (0.88)	40.39 (1.59)	22 (0.88)		210kN	IEC 19L	46 (1.81)	21 (0.83)	19 (0.75)	210kN	IEC 20mm
222kN (50K lbs.)	19.05 (0.75)	25.4 (1.00)	50.8 (2.00)	21.59 (0.85)	222kN (50K lbs.)	22.35 (0.88)	40.39 (1.59)	22 (0.88)		222kN (50K lbs.)	N/A				222kN (50K lbs.)	ANSI 52-11

Outdoor High-voltage Composite Insulator

Other Series Insulators

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Other Series Insulators



Insulators for Fuse cutouts



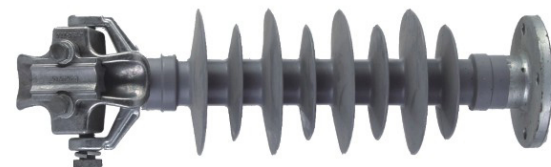
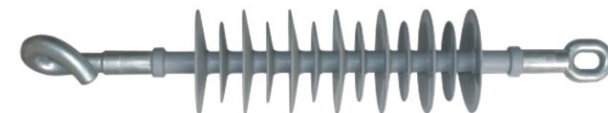
ZW8-12
Support



ZW8-12
Pulling rod



ZW7-40.5/1250
Composite pulling
insulator



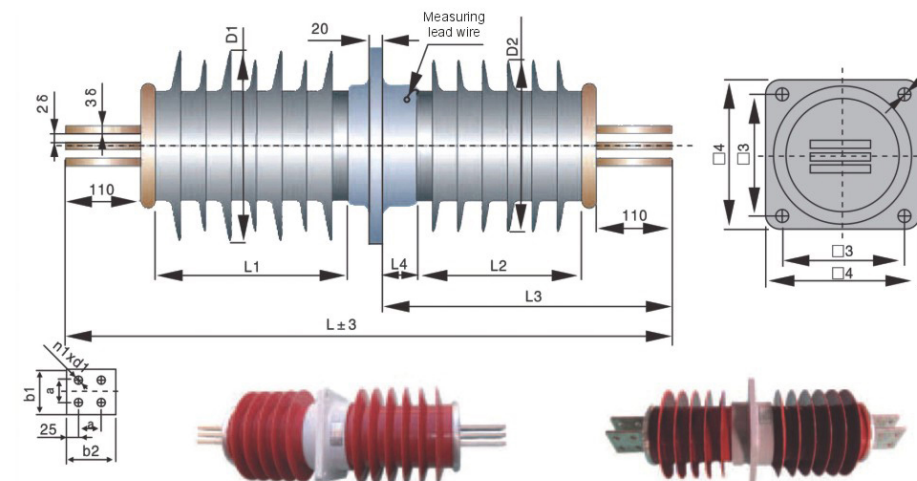
Outdoor High-voltage Composite Insulator

FCWW Series Through Wall Bushing

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Through Wall Bushing

The product are one of new generation, inner in sulation applied to new material, outer insulation made of high-temperature resitant sulfureted silicon rubber, to perform excellent pollution proof function and explosion proof. It is the right trend for the requirement for minimizing the size and for bidding oil by power industry ureau. It can well meet with the need of urban and suburban electric networke.



• Main performance

Technical standards	GB/T 4109-2008 IEC 60137 Ed.60		
Rated voltage	12kV	24kV	40.5kV
Rated current	4000-5000A		
1min power frequency dry voltage withstand	28kV	50kV	95kV
Full-wave impulse withstand voltage of lightning	75kV	125kV	200kV
Under 1.05 times of maximum phase voltage tan δ	< 0.004		
Partial discharge under the rated voltage	< 10pC		
Bending resistant test load	3150N	3150N	4000N
Minimum nominal creepage distance	31mm/kV		

• Main technical parameters

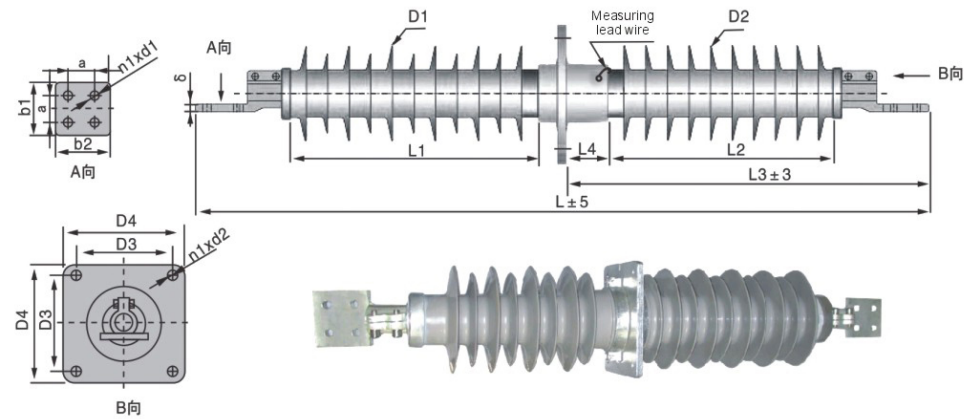
Main dimension (mm)	Total length of casing	Outdoor				Indoor				Wiring terminal				Flange			Casing weight
		Insulation distance	Nominal creepage distance	Maximum umbrella diameter	Insulation distance	Length of indoor	Length of ground part	Maximum umbrella diameter	Nominal creepage distance	Hole number and diameter	Hole distance	Panel surface	Panel thickness	Outer diameter of flange plate	Center distance of installation hole	Hole number and diameter	
Type	L	L1	S	D1	L2	L3	L4	S	D2	n1xd1	a	b1xb1	δ	4	3	n1xn1	kg
FCWW-12/4000	645	160	405	230	125	305	50	305	230	4x18	50	100x110	10	250x250	200x200	4x18	30
FCWW-12/5000	645	160	405	230	125	305	50	305	230	4x18	50	100x110	12	250x250	200x200	4x18	33
FCWW-24/4000	865	270	820	260	235	415	50	610	230	4x18	50	100x110	10	250x250	200x200	4x18	43
FCWW-24/5000	865	270	820	260	235	415	50	610	230	4x18	50	100x110	12	250x250	200x200	4x18	48
FCWW-40.5/4000	1190	435	1310	268	395	575	50	1180	268	4x20	50	100x110	10	280x280	200x230	4x18	66
FCWW-40.5/5000	1190	435	1310	268	395	575	50	1180	268	4x20	50	100x110	12	280x280	200x230	4x18	73

Note:the overall dimension of product in this Table is recommended; all dimensions may be designed according to the users' requirements. Only one kind of CT length is listed in this Table CT length may be the users according to the requirements of the products.Relevant dimension may variation as requested.

Outdoor High-voltage Composite Insulator

FCGW Series Through Wall Bushing

FCGW Through Wall Bushing



- **Main performance**

Technical standards	GB/T 4109-2008 IEC 60137 Ed.60	
Rated voltage	24kV	40.5kV
Rated current	630-315A	
1min power frequency dry voltage withstand	50kV	95kV
Full-wave impulse withstand voltage of lightning	125kV	200kV
Under 1.05 times of maximum phase voltage tan δ	≤0.004	
Partial discharge under the rated voltage	≤10pC	
Bending resistant test load	1000-3000N	1600-3150N
Minimum nominal creepage distance	31mm/kV	

- **Main technical parameters**

Type	Main dimension (mm)	Total length of casing	Outdoor			Indoor					Wiring terminal				Flange			Casing weight
			Insulation distance	Nominal creepage distance	Maximum umbrella diameter	Insulation distance	Length of indoor	Length of ground part	Maximum umbrella diameter	Nominal creepage distance	Hole number and diameter	Hole distance	Panel surface	Panel thickness	Outer diameter of flange plate	Center distance of installation hole	Hole number and diameter	
	L	L1	S	D1	L2	L3	L4	S	D2	1x1x1	a	b1xb1	δ	4	3	1x1x1	kg	
FCGW-24/630-800	930	295	745	155	255	440	40	640	155	4x14	30	63x63	11	250x250	200x200	4x15	18	
FCGW-24/1000	960	295	745	155	255	455	40	640	155	4x14	40	80x80	12	250x250	200x200	4x15	19	
FCGW-24/1250	1000	295	745	155	255	475	40	640	155	4x18	40	100x100	13	250x250	200x200	4x15	20	
FCGW-24/1600	1040	295	745	155	255	495	40	640	155	4x18	40	100x100	16	250x250	200x200	4x15	22	
FCGW-24/2000	1040	295	745	155	255	495	40	640	155	4x18	50	100x100	16	250x250	200x200	4x15	29	
FCGW-24/2500	1040	295	745	155	255	495	40	640	155	4x18	50	100x100	20	250x250	200x200	4x15	33	
FCGW-24/3150	1130	295	745	155	255	540	40	640	155	4x18	60	125x125	20	250x250	200x200	4x15	35	
FCGW-40.5/630-800	1240	450	1310	185	410	595	40	1055	155	4x14	30	63x63	11	250x250	200x200	4x15	22	
FCGW-40.5/1000	1270	450	1310	185	410	610	40	1055	155	4x14	40	80x80	12	250x250	200x200	4x15	23	
FCGW-40.5/1250	1310	450	1310	185	410	630	40	1055	155	4x18	50	100x100	13	250x250	200x200	4x15	24	
FCGW-40.5/1600	1350	450	1310	185	410	650	40	1055	155	4x18	50	100x100	16	250x250	200x200	4x15	31	
FCGW-40.5/2000	1350	450	1310	185	410	650	40	1055	155	4x18	50	100x100	16	250x250	200x200	4x15	32	
FCGW-40.5/2500	1330	450	1310	185	400	640	40	1055	165	4x18	50	100x100	20	250x250	200x200	4x15	43	
FCGW-40.5/3150	1420	450	1310	185	400	685	40	1055	165	4x18	60	125x125	20	250x250	200x200	4x15	46	

Note: the overall dimension of product in this Table is recommended; all dimensions may be designed according to the users' requirements. Only one kind of CT length is listed in this Table CT length may be the users according to the requirements of the products. Relevant dimension may variation as requested.

Porcelain Composite Insulator

ANSI Porcelain Disc Suspension Insulators

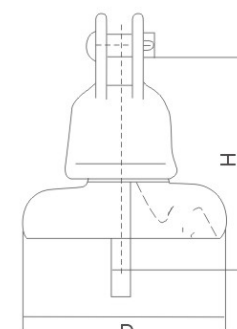


Fig1

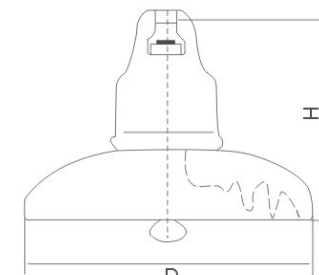


Fig2

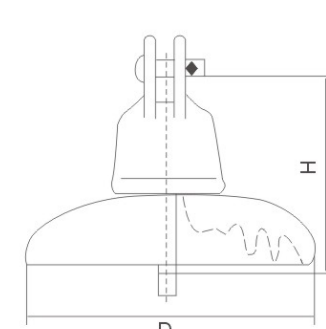


Fig3

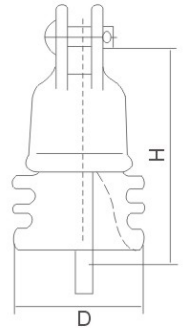


Fig4

- **Main technical parameters of ANSI porcelain disc suspension Insulators**

Class ANSI	Fig	Main Dimension in (mm)		Leakage Distance in (mm)	Combined M&E Strength b (KN)	Mechanical Impact Strength in-1b(H-m)	Time Load Test Value 1b (KN)	Average Flashover Voltage				Power Frequency Puncture Voltage KV	Redio Influence Voltage	
								Power Frequency		Critical Impulse			Test Voltage To Ground KV	Max Riv At 1 Mhz μ V
		D (max)	H					Dry kV	Wet kV	Positive kV	Negative kV			
55-1	1	6 ^{1/2} (165)	5 ^{1/2} (141)	7 (178)	10000 (44)	45 (5.0)	6000 (27)	60	30	100	100	80	7.5	50
55-2	1	8 (203)	5 ^{3/4} (146)	8 ^{1/2} (210)	15000 (67)	50 (5.5)	10000 (44)	65	35	115	115	90	7.5	50
55-3	2	10 ^{3/4} (273)	5 ^{3/4} (146)	11 ^{1/2} (292)	15000 (67)	55 (6.0)	10000 (44)	80	50	125	130	110	10	50
55-4	3	10 ^{3/4} (273)	5 ^{3/4} (146)	11 ^{1/2} (292)	15000 (67)	55 (6.0)	10000 (44)	80	50	125	130	110	10	50
55-5	2	10 ^{3/4} (273)	5 ^{3/4} (146)	11 (279)	25000 (111)	60 (7.0)	15000 (67)	80	50	125	130	110	10	50
55-6	3	10 ^{3/4} (273)	5 ^{3/4} (146)	11 (279)	25000 (111)	60 (7.0)	15000 (67)	80	50	125	130	110	10	50
55-9	4	4 1/2 (114)	6 1/4 (160)	6 3/4 (171)	10000 (44)	45 (5.0)	60000 (27)	60	30	100	90	80	7.5	50

Porcelain Composite Insulator

ANSI Low/Medium Voltage Pin Type Insulators

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Electric Professional
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ANSI Low/Medium Voltage Pin Type Insulators



• Main technical parameters of ANSI low/medium voltage pin type Insulators

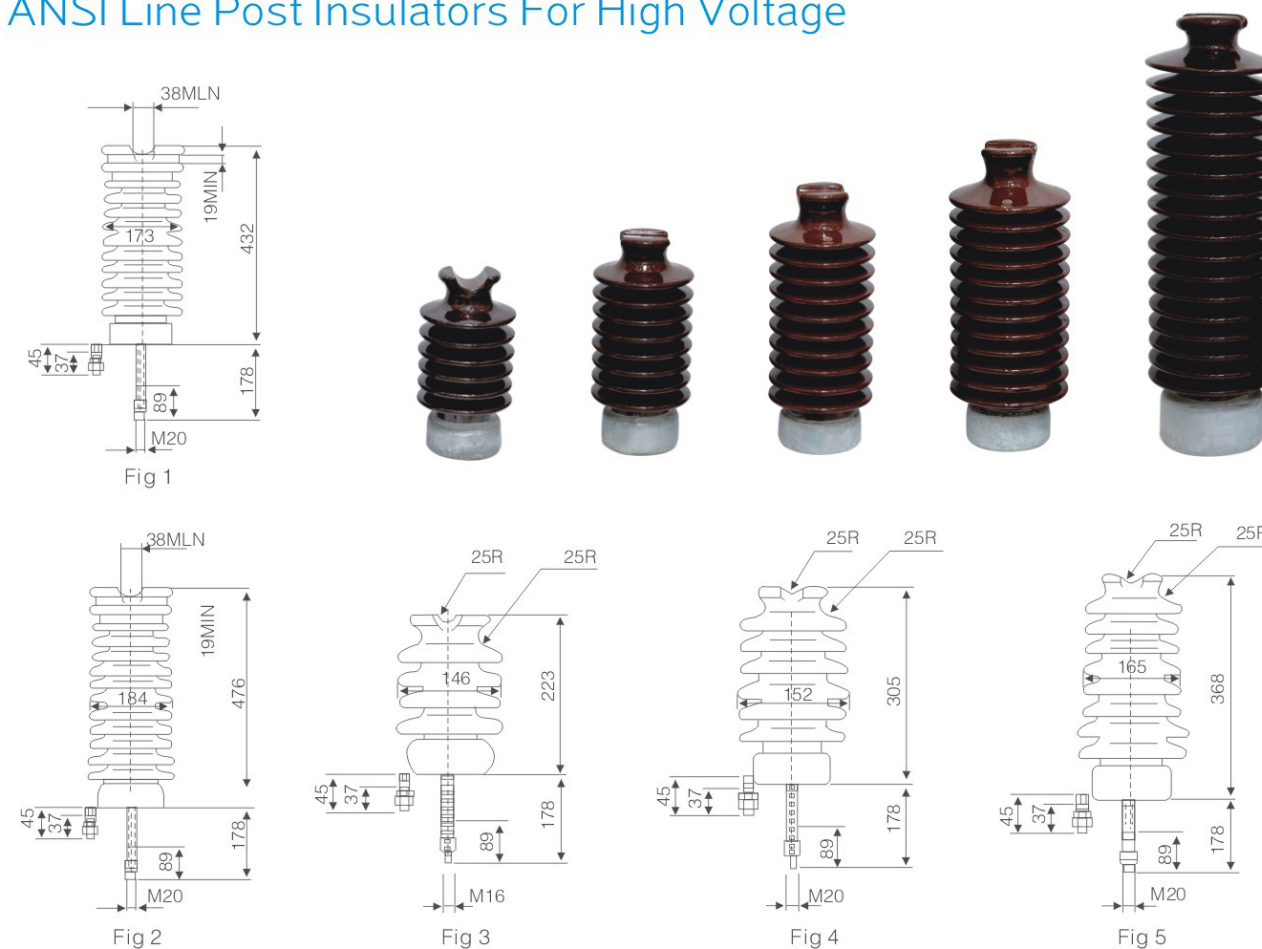
Class ANSI	Main Dimension in (mm)			Leakage Distance in (mm)	Min.Pin Length in (mm)	Cantilever Strength 1b (KN)	Flashover Voltage				Power Frequency Puncture Voltage KV	Radio Influence Voltage	
							Power Frequency Imprlse					Test Voltage To Ground KV	Max Riv At 1 Mhz μ V
	D (max)	H	h				Dry kV	Wet kV	Positive kV	Negative kV			
55-1	3 ¹ / ₄ (83)	3 ¹ / ₂ (89)	1 ³ / ₄ (44)	4 (102)	4 (102)	3000 (13)	35	20	50	70	50	5	2500/50
55-2	3 ³ / ₄ (95)	3 ¹ / ₄ (83)	1 ¹ / ₂ (38)	5 (127)	4 (102)	2500 (11)	50/45	25	75/70	95/85	70	5	2500/50
55-3	3 ³ / ₄ (121)	3 ³ / ₄ (95)	1 ¹ / ₂ (38)	7 (178)	5 (127)	2500 (11)	65/55	35/30	100/90	130/110	90	10	5500/50
55-4	5 ¹ / ₂ (140)	4 ³ / ₈ (111)	1 ³ / ₄ (44)	9 (229)	5 (127)	3000 (13)	70/65	40/35	110/105	140/130	95	10	5500/50
55-5	7 (178)	4 ⁷ / ₈ (124)	2 (51)	12 (305)	6 (152)	3000 (13)	85/80	45	40/130	170/150	115	15	8000/100

Porcelain Composite Insulator

ANSI Line Post Insulators For High Voltage

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ANSI Line Post Insulators For High Voltage

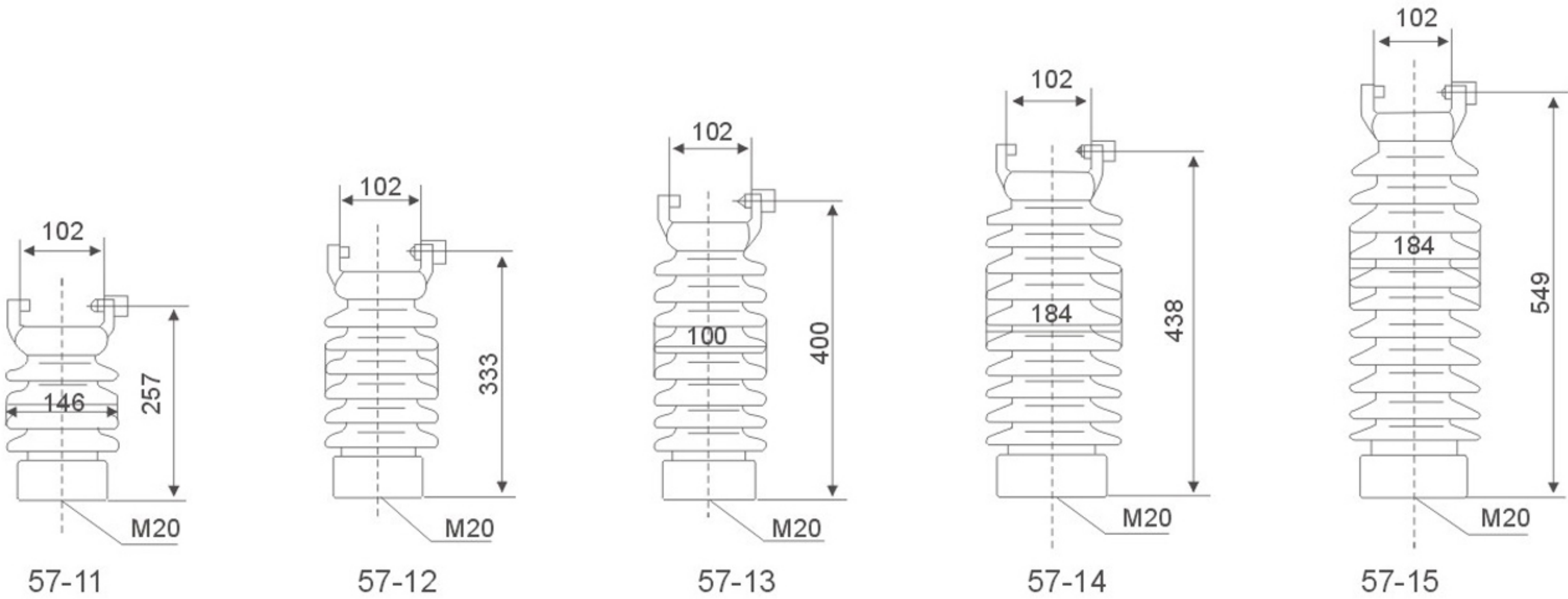


• Main technical parameters of ANSI line post insulators for high voltage

ANSI class		57-1S 57-1L	57-2S 57-2L	57-3S 57-3L	57-4S 57-4L	57-5S 57-5L
Fig.No		3	4	5	1	2
Dimensions of the pin mm		M16	M20(M16)	M20	M20	M20
Creepage distance mm		356h	559	737	1015	1145
Dry arcing distance mm		165	241	311	368	438
Cantiever strength KN		12.5	12.5	12.5	12.5	12.5
Low frequency flashover voltage	Dry flashover KV	80	110	12.5	150	175
	Wet flashover KV	60	85	100	125	150
Critical impulse flashover voltage	positive KV	130	180	210	255	290
	Negative KV	155	205	260	340	380
Radio influence votage data		Test voltage to ground KV	15	22	30	44
		At 1000KHZ Max. RIV uV	100	100	200	200
Weight kg		5	9.8	12	16	18

Porcelain Composite Insulator
ANSI Line Post Insulators For High Voltage

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• Main technical parameters of ANSI line post insulators for high voltage

ANSI class		57-11	57-12	57-13	57-14	57-15
Creepage distance(mm)		356	559	737	1015	1145
Dry arcing distance(mm)		165	241	311	368	438
Cantiever strength(kN)		12.5	12.5	12.5	12.5	12.5
Low frequency flashover voltage	Dry flashover(kV)	80	110	125	150	175
	Wet flashover(kV)	60	85	100	125	150
Critical impulse flashover voltage	positive(kV)	130	180	210	255	290
	Negative (kV)	155	205	260	340	380
Radio influence votage data	Test voltage to ground (kV)	15	22	30	44	44
	At 1000K Hz Max.RIV(uV)	100	100	200	200	200
Weight(kg)		6.8	10	11.8	15.9	18.6

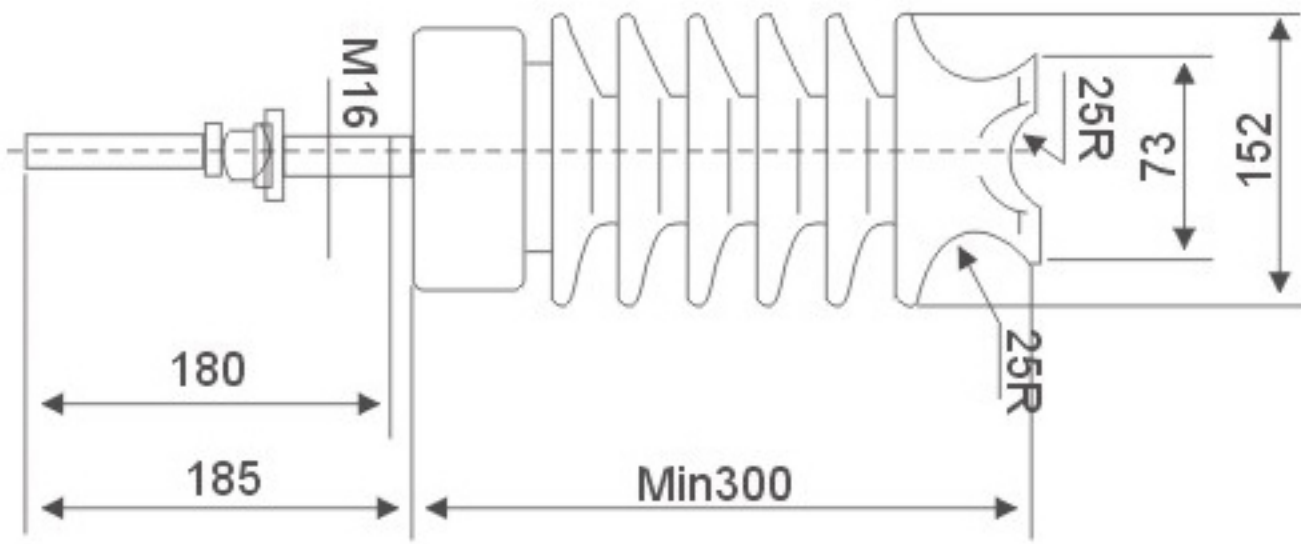


Fig1

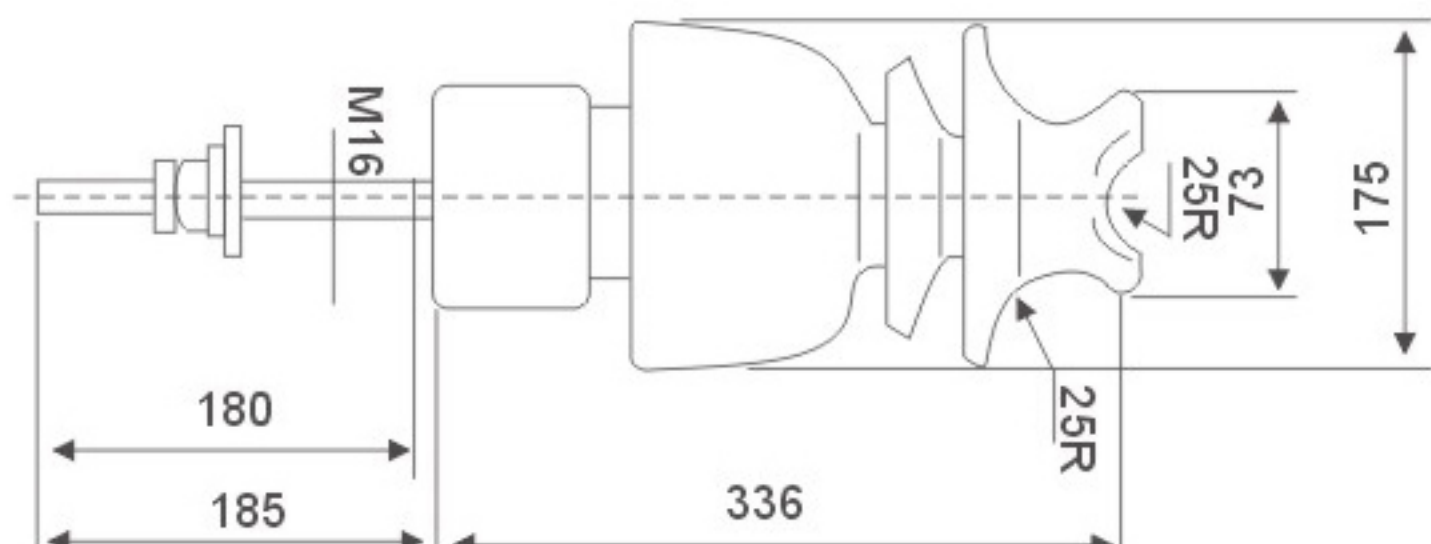


Fig2

Type		ANSI 57-2L-1	PIN POST
Creepage distance(mm)		599	520
Protected creepage distance(mm)		200	260
Dry arcing distance(mm)		240	260
Cantiever strength(kN)		12.5	12.5
Power frequency	Dry(kV)	90	90
Withstand voltage	Wet(kV)	65	65
Impulse withstand voltage (kv)		150	150
Radio influence	Teat voltage to ground (kv)	22	22
Voltage data	Max.Riv at 1000kh	100	100
Net weight, each, approx.,kg		9.2	10

Composite Insulator
HDPE Insulator

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55-3

55-5

55-4H

56-1

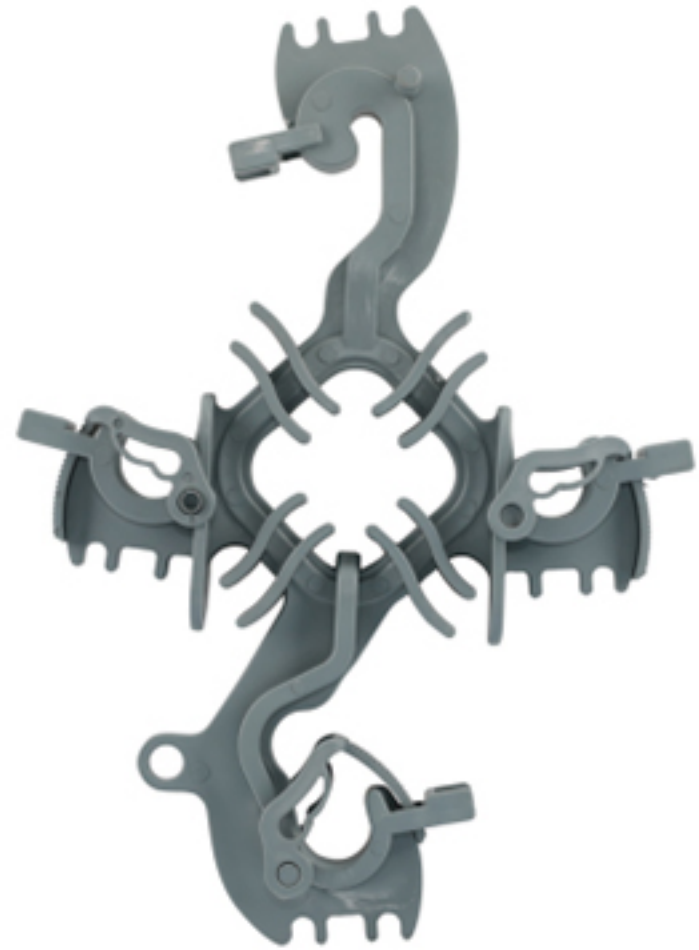
55-7



55-5-VISE



55-6-VISE



15kv cablespace



15KV-ARM

• Maintechnical parameters

Figure No	Type	Rated Voltage (kV)	Specified Mechanical Bending Load (kN)	Section Length (mm)	Dry Arcing Distance (mm)	Min Creepage Distance (mm)	Lightning Withstand Voltage (kV)	Wet Power Frequency Voltage (kV)
1	55-3-C-25.4	15	11	114	150	263	+109 -105	45
2	55-4-F-25.4	15	13.4	135	170	363	+122 -202	51
3	55-5-F-25.4-01	25	13.4	151	177	393	+144 -179	51
4	55-5-C-25.4-02	25	13.4	151	200	385	+137 -197	58
5	56-1-J-35	25	13.4	151	197	368	+143 -190	57
6	55-6-J-25.4	35	13.4	191	240	545	+175 -240	70
7	55-7-F-35	25	13.4	191	240	545	+175 -240	70

Note :
We can design and make products according to customer's specific requirements.