



2017

▶▶ PRODUCT CATLOGUE



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COMPANY INTRODUCTION



Every day, everywhere, thousands of electrical products come in handy. From household appliances to industrial production machinery, we depend upon electricity to support the life we enjoy and make it more fantastic.

It takes a lot more than an connection on the transmission line to bring the power of electricity into our lives. and what's more other devices in usage is to combine conductor and fittings, boxes and connectors, and something accessories applied in power construction.

From the range of Low voltage ABC accessories and fittings to Pole line hardware fittings, from the distribution box to protection device, our produce ability and comprehensive supply chain is continuously improving for being perfect.

Sometimes when you are alone and being calm down, take a look around. Turn back the walls of these buildings, look inside the electrical appliances that fill your home or workplace or mansions and department stores besides the road, you'll discover hundreds of electrical products help connect and transmit electricity for daily use.

You should keep in mind that we are CROP located in Wenzhou Yueqing which company will be an Century enterprise.

We promise we will make your life more perfect.

CROP CHINA
www.cropgroupcn.com

SUSPENSION INSULATORS



PIN TYPE INSULATORS



PIN TYPE INSULATORS



SPOOL INSULATORS



SHACKLE INSULATOR



FITTING



LINE POST INSULATORS



LINE POST INSULATORS

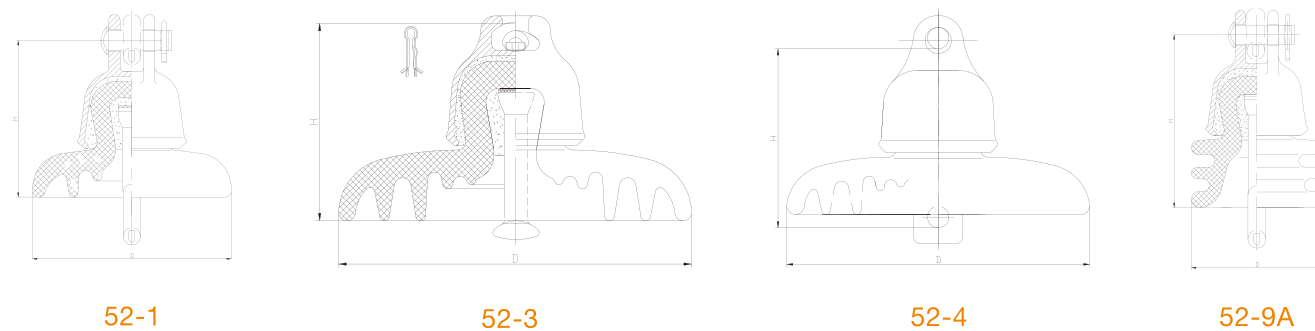


SUSPENSION INSULATORS

52 SERIES BALL SOCKET AND CLEVIS-TONGUE TYPE

STANDARD: APPLIED ANSI C29.1, ANSI C29.2 ⚡ VOLTAGE 6kV-33kV

Suspension insulators are widely apply for higher voltage that beyond 33kV to provide insulation due to its shirt surface construction design. Each unit has a single glass or porcelain shell bonded to a steel cap (above) and a steel pin (below). By using different numbers of discs, a suspension string can be made suitable for any voltage level. Meanwhile , If any one of the disc insulators in a suspension string is damaged, it can be replaced much easily.



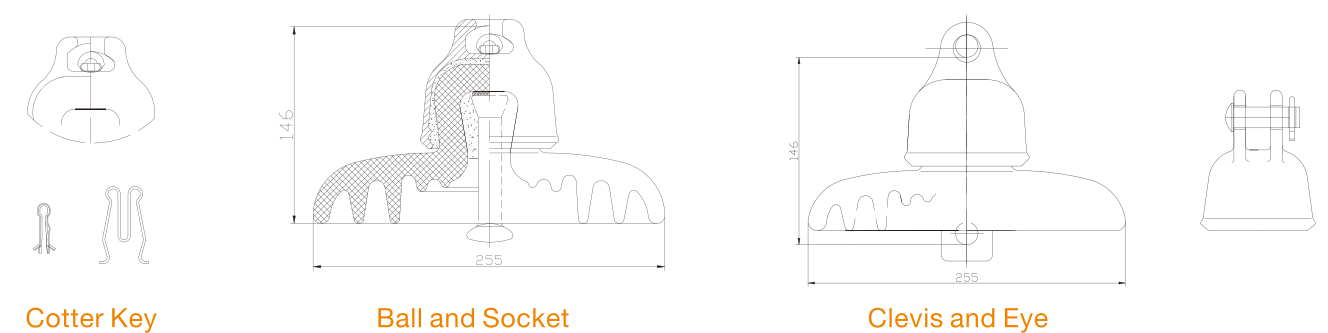
ANSI CLASS		52-1	52-2	52-3	52-4	52-5	52-9A/B
Porcelain Shell Diameter, D. mm		165	190	254	254	254	108
Unit Spacing, H. mm		140	146	146	146	146	159
Leakage Distance, mm		178	210	292	292	292	171
Combined M & E Strength, kN		44	70	70	70	111	44
Impact Strength, N-m		5	5	6	6	7	5
Tension Proof Load, kN		22	33.5	33.5	33.5	55.5	22
Low-Frequency Flashover Voltage	Dry, Kv	60	65	80	80	80	60
	Wet, Kv	30	35	50	50	50	30
Critical Impulse Flashover Voltage	Pos., kV	100	115	125	125	125	100
	Neg., kV	100	115	130	130	130	90
Lower- Frequency Puncture Voltage, kV		80	90	110	110	110	80
Radio Influence Voltage Data	Test Voltage to Ground, kV	7.5	7.5	10	10	10	7.5
	Max. RIV at 1000 KHz, uV	50	50	50	50	50	50
Net Weight,Each, Approx., kg		2.5	3.8	4.6	4.9	5.6	2.6

SUSPENSION PORCELAIN INSULATOR

AC DISC SUSPENSION PORCELAIN INSULATORS(NORMAL TYPE)

STANDARD: IEC60383 ⚡ VOLTAGE 6kV-33kV

Suspension insulators are available for ball & socket or clevis-eye coupling. Standard caps are constructed of hot-dip galvanized malleable iron. Cotter keys for locking ball & socket and clevis pin connections are stainless steel. The normal type disc suspension insulators include standard type and large creepage distance type, which are widely used in clean area and light pollution area.



IEC CLASS		U70BL	U70C	U80BL	/	U100BL	U120B
Type		XP-70	XP-70C	XP-80	XP-90	XP-100	XP-120
Porcelain Nominal Diameter,D.mm		255	255	255	255	255	255
Unit Spacing,H.mm		146	146	146	146	146	146
Standard Coupling Size		16	16C	16	16	16	16
Nominal Creepage Distance,mm		295/320	295	295	295	295/320	295/320
Rated E&M Failing load,kN		70	70	80	90	100	120
Routine Tension Load,kN		35	35	40	45	50	60
Impact failing load,N-m		6	6	6	6	7	7
Power Frequency Withstand Voltage	Dry,Kv	70	70	70	70	70	70
	Wet,Kv	40	40	40	40	40	40
Dry Lightning Impulse Withstand Voltage,kV		100	100	100	100	100	100
Power Frequency Puncture Voltage,kV		110	110	110	110	110	110
Radio Influence Voltage Data	Test Voltage to Ground, kV	10	10	10	10	10	7.5
	Max. RIV at 1000 KHz, uV	50	50	50	50	50	50
Net Weight,Each, Approx., kg		4.6	4.8	4.9	5.3	5.7	6

Each suspension shell undergoes rigorous electrical testing before and after assembly before being shipped.

SUSPENSION PORCELAIN INSULATOR(ANTI-POLLUTION)

FOG TYPE, DOUBLE-SHED AND AERODYNAMIC TYPE

STANDARD: IEC AND GB ⚡ VOLTAGE 6kV-33kV

The fog type insulators usually serve in coastlands and rainy areas with large creepage distance structure and well flashover performance in wet condition.

The aerodynamic type insulators, with streamline structure, low deposit rate of insoluble material and great self-clean function take the special protection effect in insulator strings.

The double-shed and tri-shed type insulator with big diameter, large creepage distance, great self-clean function and strong resistance to pollution, especially serving in droughty, rainless and windy areas.

Fog Type XHP

Aerodynamic Type XMP

Double shed XWP2-70

IEC CLASS		U70BLP	U80BLP	U100BLP	U120BP	U70BL	U70BLP
Type		XHP-70	XHP-80	XHP2-100	XHP1-120	XMP-70	XWP2-70
Porcelain Nomimal Diameter,D.mm		255	255	255	255/280	350	255
Unit Spacing,H.mm		146	146	146	146	146	146
Standard Coupling Size		16	16	16	16B	16	16
Nominal Creepage Distance,mm		432/450	432	432/450	432/450	300	400/450
Rated E&M Failing load,kN		70	80	100	120	70	70
Routine Tension Load,kN		35	40	50	60	35	35
Impact failing load,N-m		6	6	7	7	/	/
Power Frequency Withstand Voltage	Dry,Kv	80	80	80	80	70	80
	Wet,Kv	42	42	42	42	40	42
Dry Lightning Impulse Withstand Voltage,kV		120	120	120	120	105	120
Power Frequency Puncture Voltage,kV		120	120	120	120	120	120
Radio Influence Voltage Data	Test Voltage to Ground, kV	10	10	10	10	10	10
	Max. RIV at 1000 KHz, uV	50	50	50	50	50	50
Net Weight,Each, Approx., kg		6.1/6.3	6.5	7.7/7.9	8/8.2	5.7	5.9/6.4

PIN TYPE INSULATORS

55 SERIES STANDARD: ANSI C29.1, ANSI C29.5

⚡ VOLTAGE 4kV-12kV

52-2

52-3

52-4

52-5

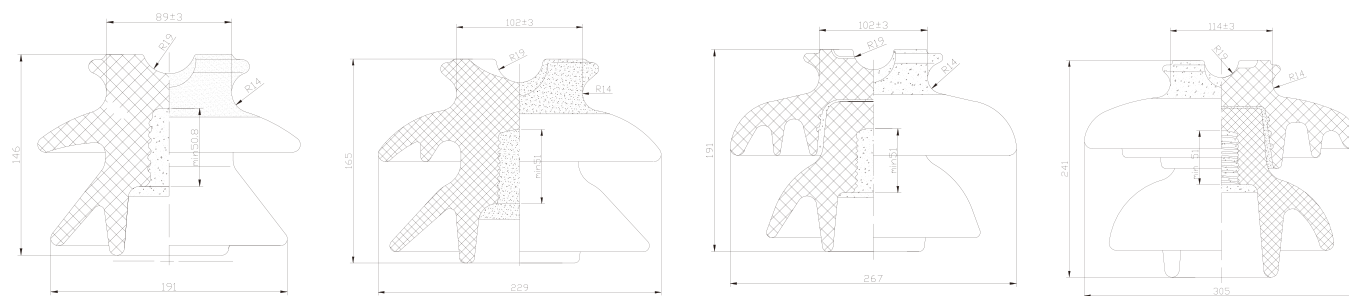
52-6/7

ANSI CLASS		55-2	55-3	55-4	55-5	55-6	55-7
Neck Type		C	C	F	F	J	J
Leakage Distance, mm		127	178	229	305	381	381
Dry Arcing Distance, mm		86	114	127	159	203	203
Minimum Pin Length, mm		102	127	127	152	190	190
Cantilever Strength, kN		11	11	13	13	13	13
Low-Frequency Flashover Voltage	Dry, Kv	45	55	65	80	100	100
	Wet, Kv	25	30	35	45	50	50
Critical Impulse Flashover Voltage	Pos., kV	70	90	105	130	150	150
	Neg., kV	85	110	130	150	170	170
Lower- Frequency Puncture Voltage, kV		70	90	95	115	135	135
Radio Influence Voltage Data	Test Voltage to Ground, kV	5	10	10	15	22	22
	Max. RIV at 1000 KHz, uV	50	50	50	100	100	100
Net Weight,Each, Approx., kg		0.75	1.1	1.7	2.9	4.4	4.4

PIN TYPE INSULATORS

56 SERIES STANDARD: ANSI C29.1, ANSI C29.6 ⚡ VOLTAGE 11kV-36kV

Pin Insulator is earliest developed overhead insulator, but still popularly used in power network up to 36KV system, It is single stag , Two insulators cannot be fixed together for higher voltage application, Conductor is fixed on the top of the insulator by binding and metallic fixing arrangement provided only on bottom end of the insulator.



56-1

56-2

56-3

56-4

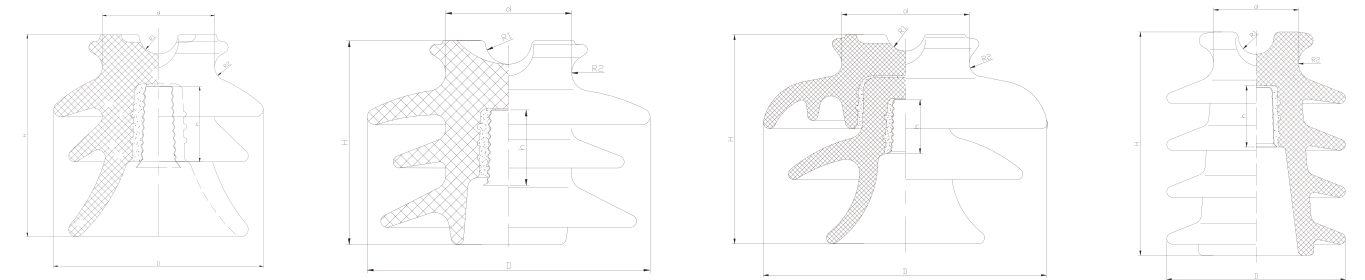
ANSI CLASS			56-1	56-2	56-3	56-4	56-5
Neck Type			J	K	K	/	/
Leakage Distance, mm			330	432	533	685	864
Dry Arcing Distance			178	210	241	285.8	355.6
Min. Pin Length, mm			152	178	203	254	305
Main Dimensions, mm	D-Diameter		191	229	267	305	343
	H-Height		146	165	191	241	318
	N-Neck Diameter		89	102	102	114	140
	E-Pin Diameter		35	35	35	35	35
	S-Saddle Groove Radius		19	19	19	19	19
	W-Wire Groove Radius		14	14	14	14	14
Cantilever Strength, kN			2500 (11)	3000 (13.2)	3000 (13.2)	3000 (13.2)	3000 (13.2)
Min Flashover Voltage	Power Frequency	Dry, Kv	95	110	125	140	175
		Wet, Kv	60	70	80	95	125
	Critical Impulse	Pos., kV	150	175	200	225	270
		Neg., kV	190	225	265	310	340
Radio Influence Voltage Data	Test Voltage to Ground, kV		15	22	30	30	44
	Max.RIV at 1000 KHz, uV		100	100	200	200	200
Power Frequency Puncture Voltage, kV			130	145	165	185	225

PIN TYPE INSULATORS

BS: 11kV, 22kV, 33kV PIN TYPE STANDARD: BS 137; IEC60383

⚡ VOLTAGE 11kV-36kV

Pin Insulator is earliest developed overhead insulator, but still popularly used in power network up to 36KV system, It is single stag , Two insulators cannot be fixed together for higher voltage application, Conductor is fixed on the top of the insulator by binding and metallic fixing arrangement provided only on bottom end of the insulator.



P-11-Y

P-22-Y

P-33-Y

PW

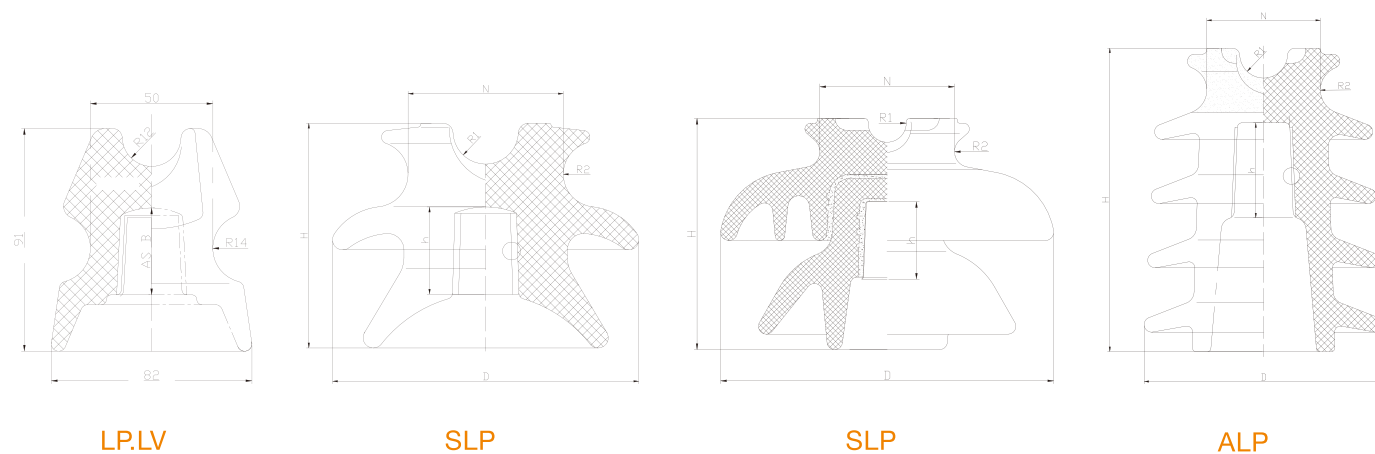
BS CLASS			P-11-Y	P-15-Y	P-22-Y	P-33-Y	PW-15-Y	PW-22-Y	PW-33-Y
Creepage Distance, mm			254	298	432	630	432	673	900
Dry Arcing Distance, m			102	133	200	360	197	267	419
Dimensions, mm	H - Height		130	137	165	244	185	255	249
	h- Depth of thread		140	152	229	280	170	205	225
	D-Diameter		48	48	52.6	52.6	52.6	52.6	52.6
	d- Pin diameter		18.3	18.3	27.8	27.8	27.8	27.8	27.8
	R1-Saddle Groove Radius		13	13	19	11	16	16	16
	R2-Wire Groove Radius		9.5	11	14.3	13	16	16	16
Cantilever Strength, kN			11	11	11	13	11	11	12
Min Flashover Voltage	Power Frequency	Dry, Kv	75	80	100	135	100	125	130
		Wet, Kv	50	55	60	95	65	95	95
	Critical Impulse	Pos., kV	115	130	160	180	150	190	200
		Neg., kV	150	175	205	290	190	235	240
Withstand Voltage	One Minute Power Frequency	Dry, Kv	65	70	90	110	90	110	125
		Wet, Kv	40	50	55	75	60	90	90
Impulse Withstand Voltage, kV			90	110	150	170	140	180	200
Radio Influence Voltage Data	Test Voltage to Ground, kV		15	15	22	30	22	30	33
	Max.RIV at 1000 KHz, uV		8000	8000	12000	16000	12000	16000	20000
Power Frequency Puncture Voltage, kV			150	150	145	210	150	199	210

PIN TYPE INSULATORS

AS PIN TYPE STANDARD: AS 4899-2007 & IEC 60383

⚡ VOLTAGE 0.4kV-36kV

Pin Insulator is earliest developed overhead insulator, but still popularly used in power network up to 36KV system, It is single stag ,Two insulators cannot be fixed together for higher voltage application, Conductor is fixed on the top of the insulator by binding and metallic fixing arrangement provided only on bottom end of the insulator.



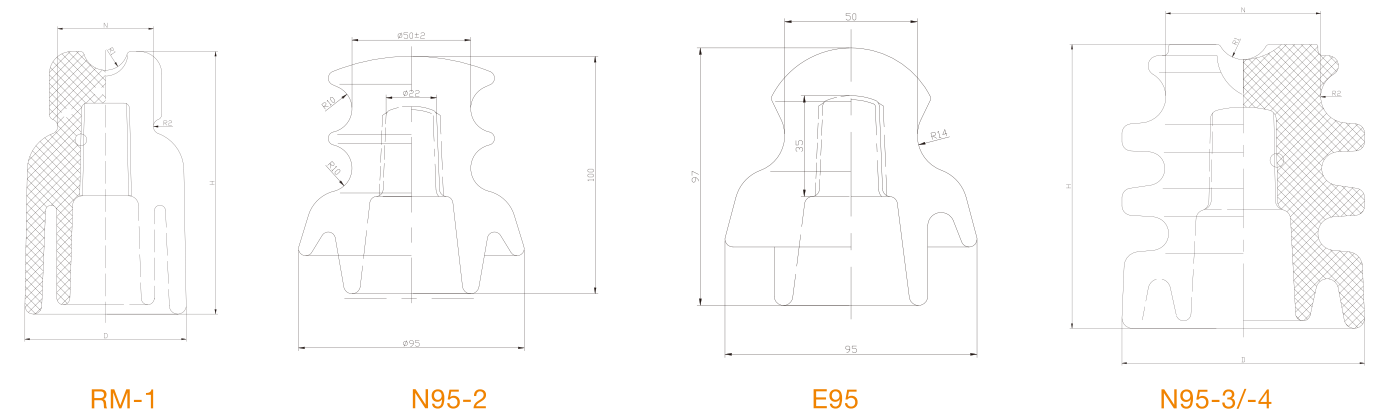
AS CLASS		LP.LV	SLP/11/180	SLP/22/420	SLP/33/534	ALP/11/275	ALP/22/450
Nominal Voltage, kV		-	11	22	33	11	22
Creepage Distance, mm		-	180	420	534	275	450
Dimensions, mm	H - Height	91	110	170	200	160	203
	D-Diameter	82	150	229	250	150	160
	N-Neck diame	50	76	113	113	76	76
	R1-top groove radius	12	16	16	16	16	16
	R2-side groove radius	14	16	13	13	16	16
	Thread Form, Pattern	B	A	C	C	C	C
Cantilever Strength,kN		7	7	11	11	7	11
Power Frequency Withstand Voltage Wet, Kv		-	28	50	70	28	50
Lighting Impulse Withstand, kV		-	95	145	200	95	145
Recommended Pin Type		1	A/130/7	C/200/11	C/200/7	C/150/7	C/200/11

PIN TYPE INSULATORS

OTHER TPYE INSULATORS

⚡ VOLTAGE 0.4kV-36kV

Pin insulator consists of a single piece of ceramic or two or more ceramic components permanently connected together and intended to be mounted rigidly on a supporting structure by an insulator pin/spindle. Normally, Pin Insulator can be Zinc thimble with thread type and porcelain thread type.



NBR		N95-3	N95-4
Dimensions, mm	D-diameter	100	130
	H-Height	120	152
	N-Neck Diameter	60	80
	T-Top diameter	80	100
	S-Top groove radius	14	14
	W-Wire Groove Radius	14	14
Minimum leakage Distance, mm		230	318
Dry arcing distance, mm		152	180
Cantilever Strength , kN		9.8	13.5
Low frequency Puncture voltage, kv		95	115
Critical Impulse flashover (1.2*50μs), kV	Positive	115	140
	Negative	140	170
Low frequency Flashover, kV	Dry	70	85
	Wet	45	55
Net Weight, Each, Approx. kg		1.34	2.6

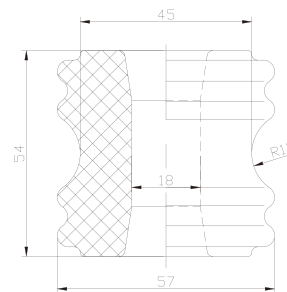
TELEGRAPH INSULATORS		RM-1	RM-2
Dimensions, mm	D-diameter	86	70
	H-Height	140	100
	N-Neck Diameter	51	47
	T-Top diameter	/	/
	S-Top groove radius	12	8.5
	W-Wire Groove Radius	4	4
Insulation Resistance M Ω		50000	40000
Net Weight, Each, Approx. kg		1.1	0.5

TYPE	E95	N95-2
Leakage distance, mm	140	130
Minimun Breaking Load, kg	1250	1250
1 minite withstand volate wet, kV	10	10
Weight, kg	0.55	0.63

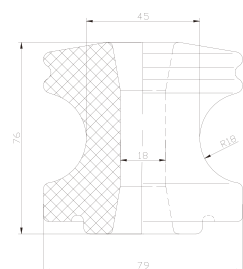
SPOOL INSULATORS

53 SERIES AND AS ⚡ LOW VOLTAGE

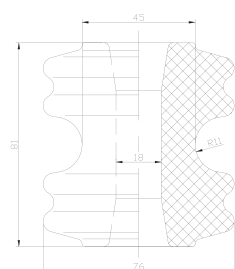
TCI Spool Insulators are molded from a proprietary blend of gray, track and UV resistant, thermoplastic polymers. They are more durable and reliable than traditional wet-process porcelain insulators.



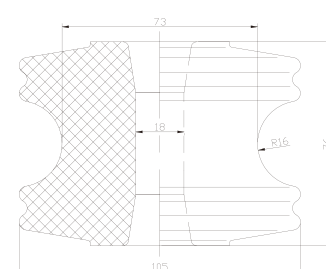
53-1



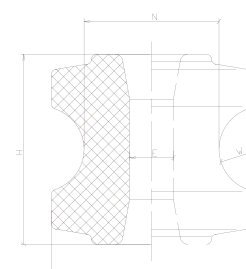
53-2



53-3



53-4



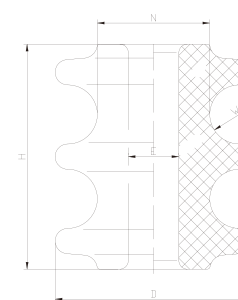
SHLV1/SHLV2

SPOOL INSULATORS		ANSI					AS	
Type		53-1	53-2	53-3	53-4	53-5	SHLV1	SHLV2
Mechanical Failing Load, kN		8.9	13.3	17.8	20	26.7	9	20
Low Frequency Dry Flashover Voltage, kV		20	25	25	25	35	/	/
Low Frequency Wet Flashover Voltage, kV	Vertical, kV	8	12	12	12	18	/	/
	Horizontal, kV	10	15	15	15	25	/	/
Dimensions, mm	H - Height	54	76	81	76	105	54	76
	D - Diameter	57	79	76	105	102	57	80
	N - Neck Diameter	45	45	45	73	73	39	54
	E - Hole Diameter	18	18	18	18	18	17	17
	W-Wire Grooves Radius	11	18	11	16	11	12	17
Net Weight, Each, Approx, kg		0.2	0.55	0.6	1.1	1.16	2.4	5.9

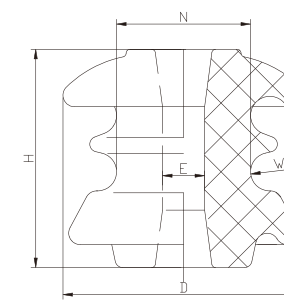
SHACKLE AND SPOOL INSULATOR

⚡ LOW VOLTAGE

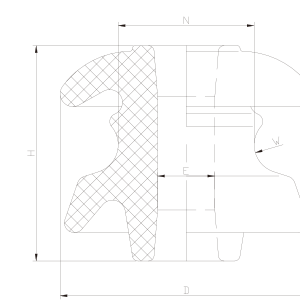
Shackle insulator: A shackle insulator is an insulator of generally cylindrical form. It has two or more sheds and an axial mounting hole. Through the thread nails, it can be fixed firmly.



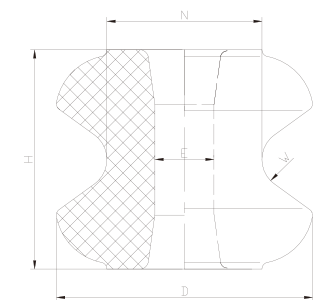
R6



S.03/S.05



ED



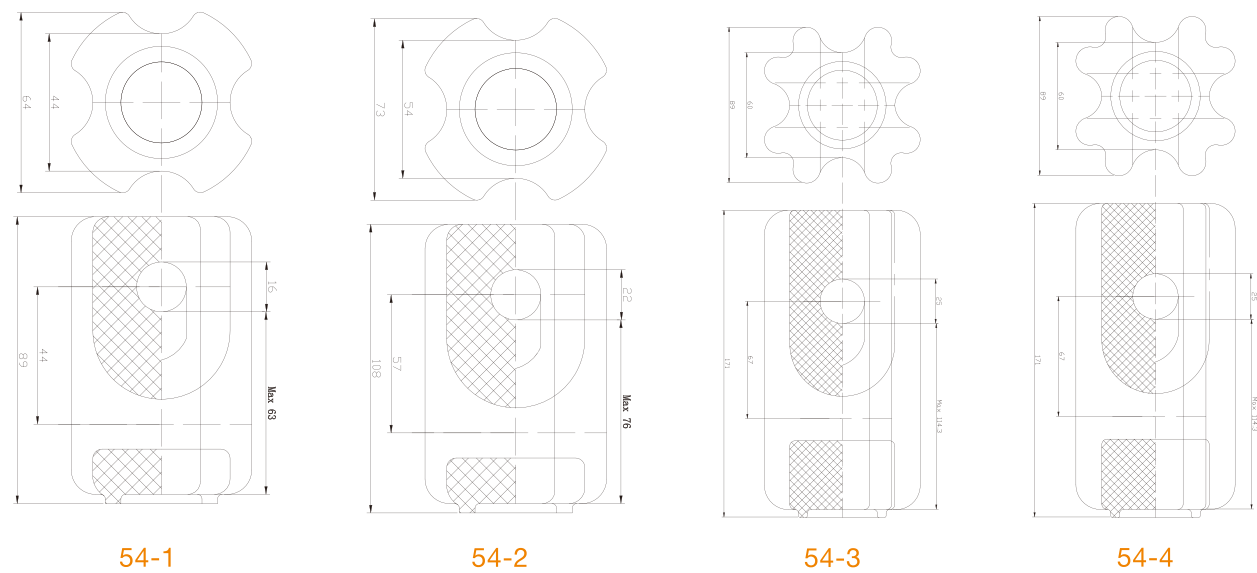
1617

STANDARD APPLIED IED 60383		Shackle					Spool	
BS CLASS		S.03	S.05	ED-2	ED-2B	ED-3	1617	R6
Dimensions, mm	H - Height	57	75	75	76	65	65	80
	D - Diameter	63	88	80	89	70	76	70
	N - Neck Diameter	35	41	42	48	36	46	40
	E - Hole Diameter	11	17	20	21	16	17.5	18
	W-Wire Grooves Radius	5	8	10	10	8	9	10
Mechanical Failing Load, kN		6.25	15	10	12.5	8	9	240N
Power Frequency Flashover Voltage	Dry, Kv	17	22	18	23	16	20	12
	Wet, Kv	8	11	9	12	7	9	15
Net Weight, Each, Approx., kg		0.3	0.48	0.4	0.48	0.25	0.4	0.4

SHACKLE AND SPOOL INSULATOR

54 SERIES ⚡ VOLTAGE 0.4kV-33kV

The following strain insulators comply with the ANSI standard. The glaze colour of the insulators are brown . etc.



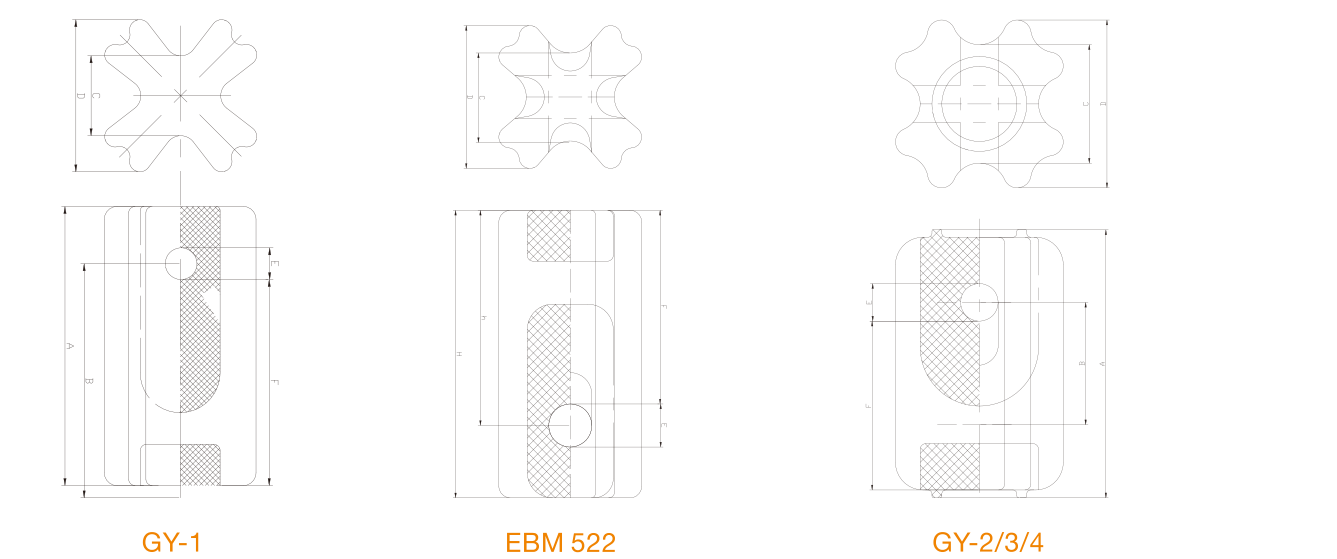
ANSI Class		54-1	54-2	54-3	54-4
Dimensions, mm		41	48	57	76
Dimensions, mm	A - Height	89	108	140	171
	B - Hole Centers Spacing	44	57	79	67
	C - Inner Diameter	44	54	60	60
	D - Outer Diameter	64	73	86	89
	E - Cable Hole Diameter	16	22	25	25
	F - Height To Hole	64	76	103	114
Mechanical Failing Load, kN		44	53	89	89
Low Frequency Flashover Voltage	Dry, Kv	25	30	35	40
	Wet, Kv	12	15	18	23
Net Weight, Each, Approx. kg		0.5	0.65	1.2	2.2

SHACKLE AND SPOOL INSULATOR

GY SERIES AND BS CLASS ⚡ VOLTAGE 0.4kV-36kV

Strain insulators are mainly used on the guy wire structure to balance the tension strength and also provide the insulating.

The following strain insulators comply with the ANSI standard. The glaze colour of the insulators are brown . etc.



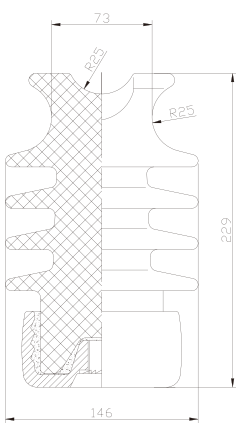
GUY STRAIN INSULATORS FOR LINES				BS-137			AS-3609	
Type				11.1075	11.0522	11-3257G	GY-1	GY-2
Dimensions, mm	A - Height	78	140	220	90	146	216	280
	B - Hole Centers Spacing	50	62	80	48	73	89	89
	C - Inner Diameter	37	60	120	40	44	67	67
	D - Outer Diameter	57	85	135	68	73	115	115
	E - Cable Hole Diameter	19	19	22	16	22	38	38
	F - Height To Hole				60	99	133	165
Mechanical Failing Load, kN				45	110	110	27	71
Low Frequency Flashover Voltage	Dry, Kv	30	35	23	/	/	/	/
	Wet, Kv	15	18	48	10	15	20	30
Net Weight, Each, Approx. kg				1	1.4	4.8	0.7	1.25

LINE POST INSULATORS

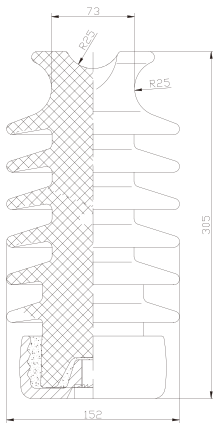
57 SERIES ⚡ VOLTAGE 0.4kV-36kV

All Line Post Insulators are manufactured by TCI Insulators in strict compliance to ANSI standards

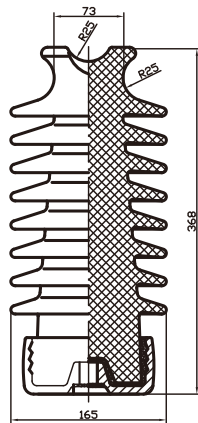
Line post insulator is used for supporting wires and resisting electric current ,which is made of one piece of porcelain but has fixing clamp arrangement are in both top and bottom end. It has higher numbers of petticoats and has greater height for upgrading the capacity of existing lines with a narrow right of way for higher voltage application.



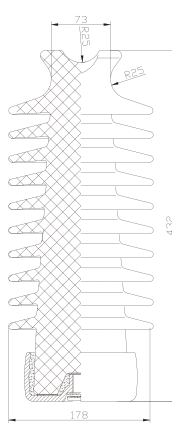
57-1



57-2



57-3



57-4

ANSI CLASS	57-1	57-2	57-3	57-4
Creepage Distance (mm)	356	559	737	1015
Dry Arcing Distance (mm)	165	241	311	368
Cantilever Strength (kn)	12.5	12.5	12.5	12.5
Low Frequency Flashover Voltage-Dry (kV)	80	110	125	150
Low Frequency Flashover Voltage-Wet (kV)	60	85	100	125
Critical Impulse Flashover Voltage-Pos. (kV)	130	180	210	255
Critical Impulse Flashover Voltage-Neg. (kV)	155	208	260	340
Test Voltage to Ground (kV)	15	22	30	44
Maximum RIV at 1000KHZ (μv)	110	100	200	200
Net Weight (kg)	4.8	7.8	11.0	18.0

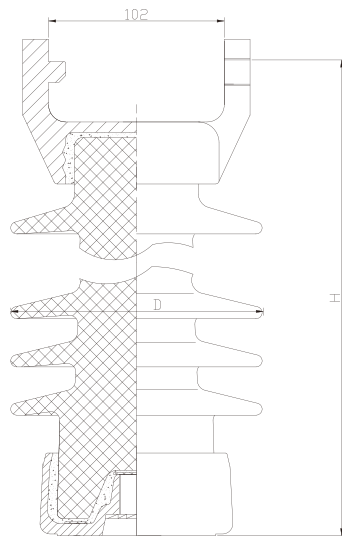
LINE POST INSULATORS

57 SERIES ⚡ VOLTAGE 15kV-45kV

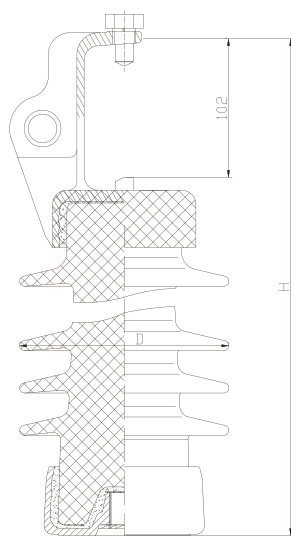
Vertical Clamp Type Line Post mounted upright on crossarms and structures

Horizontal Clamp Type Line Post assemblies for ratings 15 kV through 45 kV.

This type of insulator can be mounted on supporting structure horizontally as well as vertically.



57-1

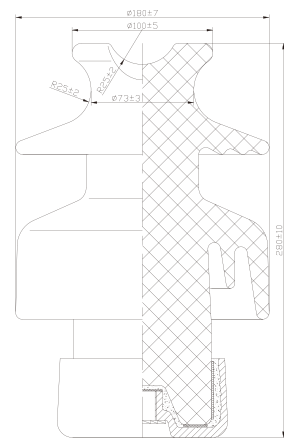


57-2

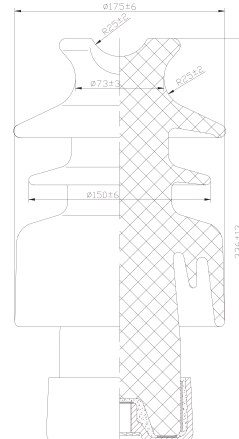
ANSI CLASS	57-11	57-21	57-12	57-22	57-13	57-23
Creepage Distance (mm)	356	356	559	559	737	737
H - Height To Middle of Clamp Assembly	257	276	333	352	400	419
D - Diameter	146	146	160	160	160	160
C - Clamp Throat Width	102	102	102	102	102	102
Dry Arcing Distance(mm)	165	165	241	241	311	311
Cantilever Strength(kn)	12.5	12.5	12.5	12.5	12.5	12.5
Low Frequency Flashover Voltage-Dry(kV)	80	80	110	110	125	125
Low Frequency Flashover Voltage-Wet(kV)	60	60	85	85	100	100
Critical Impulse Flashover Voltage-Pos.,(kV)	130	130	180	180	210	210
Critical Impulse Flashover Voltage-Neg.,(kV)	155	155	208	208	260	260
Test Voltage to Ground(kV)	15	15	22	22	30	30
Maximum RIV at 1000KHZ(μv)	110	110	100	100	200	200

TR STATION AND PIN POST INSULATORS

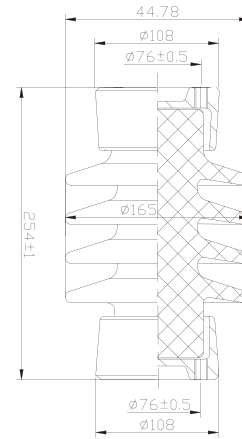
Standard applied IEC60383, AS2947.2



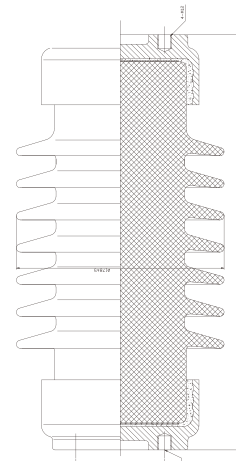
TR202



TR205



TR208



11PC

CLASS	TR 202	TR 205	TR 208
Creepage Distance(mm)	267	394	610
H - Height	190.5	254	356
D - Diameter	178	178/160	178/160
Cantilever Strength(kN)	8.9	8.9	8.9
Tension strength	31.2	38	44.5
Torison Strength, N-m	678	791	904
Compression Strength, kN	44.5	44.5	44.5
Low Frequency Flashover Voltage-Dry(kV)	60	85	110
Low Frequency Flashover Voltage-Wet(kV)	40	55	75
Critical Impulse Flashover Voltage-Pos.,(kV)	105	125	170
Critical Impulse Flashover Voltage-Neg.,(kV)	120	200	250
Power frequency withstand voltage kV	30	50	70
Impulse withstand voltage kV	95	110	150

CLASS	11PC	22PC	33PC
Rate Voltage	267	394	610
H - Height	190.5	254	356
D - Diameter	178	178/160	178/160
Creepage Distance mm	8.9	8.9	8.9
Cantilever Strength KN	31.2	38	44.5
Low frequency	678	791	904
Flashover Voltage (kV)	44.5	44.5	44.5

WIRING AND OTHER INSULATORS

