

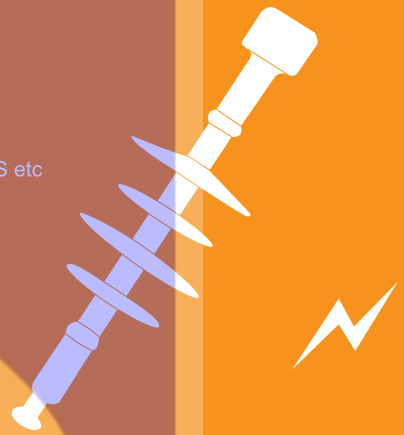
## POLYMER INSULATOR

### Application & Key Feature

- Widely used in power station, transmission and distribution line
- Product are in comply with various kinds of standards like NEMA/IEC/AS/BS etc

### Classification

- Polymer Suspension Insulator
- Polymer Pin Insulator
- Polymer (Line) Post Insulator

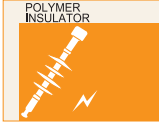


# Colmate

*Electric*

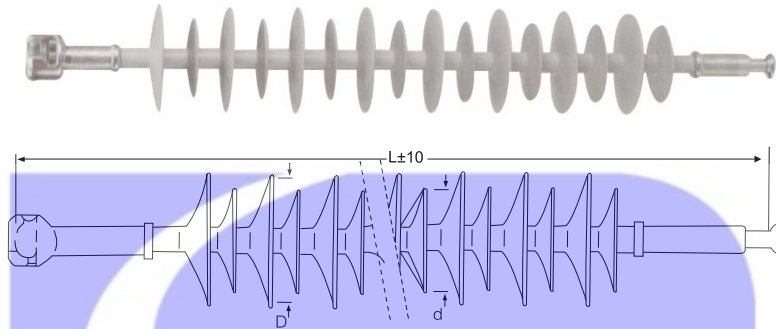
**Code System Of Polymer Insulator**

1-X	2-X	3-X	4-X	5-X	6-X	7-X, 8-X	Photo	Drawing
Material	Insulator Type	Shed Design	Rated Voltage (kV)	Min Leakage Distance (mm)	Mechanical Strength (kN)	Metal Ending Type		
S-Silicon E-Epoxy	S-Suspension		11	50~15000	5	B-Ball		
			12			S-Socket		
			15			T-Tongue		
			17			C-Clevis		
			18			E-Oval Eye		
			21			Y-Y Clevis		
			24			K-Hook		
			25					
			27					
			30			P-Pigtail		
			33					
			35					
			36			H		
			42					
			45					
46	Head: C							
52								
66								
69	X							
70								
70								
72	Bottom P							
115								
123								
132	Bottom R							
135								
145								
L-Line Post			170			H: Horizontal clamp		
			220			Top V: Vertical clamp		
			250			Bottom B: With mounting bracket		
			330			R: Round base		
T-Post			345			M: Round base with 4 ears		
			420			S: Square base		
			500			T: Others base		
			550					



Colmate Electric

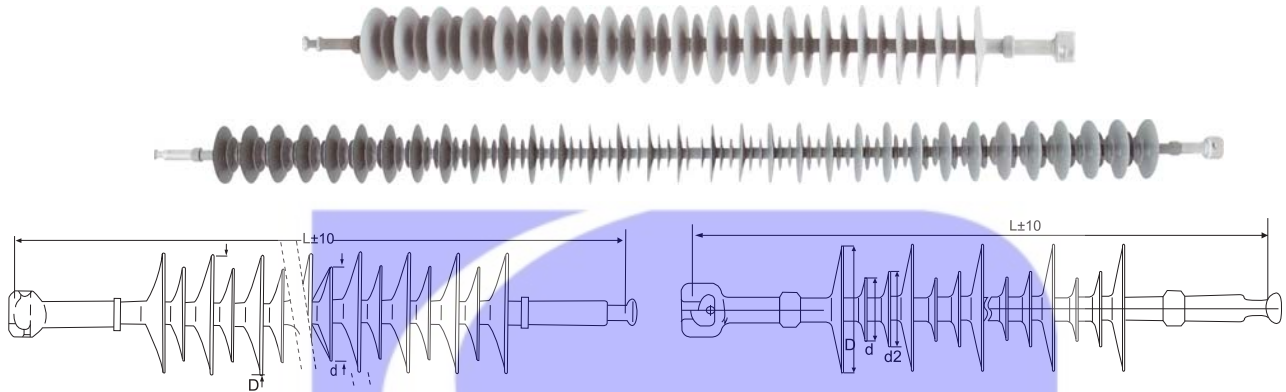
**Suspension (Dead End) Type Polymer Insulator**



Applied Voltage (kV)	Cat. No.	D (mm)	d (mm)	Sheds Qty (Pcs)	Overall Length (mm)	Leakage Distance (mm)	Min Arcing Distance (mm)	Power Frequency Withstand Voltage 50 Hz (kV)		Lightning Impulse Voltage under 1.2/50(kV)		Min Breaking Strength(kN)	Weight (kgs)
								Dry	Wet	Positive	Negative		
12	SSA12-295-70-BS	130	100	1+1	366	295	166	65	55	100	110	70/120	1.5
12/17	SSA17-435-70-*	130	100	2+1	407	435	207	75	60	130	140	70/120	1.6
12/17/24	SSA24-540-70-*	130	100	2+2	540	540	248	85	70	160	170	70/120	1.7
17/24/36	SSA36-680-70-*	130	100	3+2	680	680	289	100	85	180	200	70/120	1.8
24/36	SSA36-785-70-*	130	100	3+3	785	785	330	110	100	200	230	70/120	1.9
24/36/45	SSA45-925-70-*	130	100	4+3	571	925	336	120	110	220	250	70/120	2
36/45	SSA45-1030-70-*	130	100	4+4	612	1030	412	135	120	240	285	70/120	2.1
36/45	SSA45-1170-70-*	130	100	5+4	653	1170	453	150	130	260	315	70/120	2.2
45/66	SSA66-1275-70-*	130	100	5+5	694	1275	480	160	140	280	330	70/120	2.3
45/66	SSA66-1415-70-*	130	100	6+5	735	1415	535	175	155	305	355	70/120	2.4
45/66	SSA66-1570-70-*	130	100	6+6	1520	1570	576	190	165	325	375	70/120	2.5
45/66	SSA66-1660-70-*	130	100	7+6	817	1660	617	215	180	340	395	70/120	2.6
66	SSA66-1765-70-*	130	100	7+7	858	1765	658	230	200	370	430	70/120	2.7
66	SSA66-1905-70-*	130	100	8+7	899	1905	699	250	220	410	465	70/120	2.8
66	SSA66-2010-70-*	130	100	8+8	940	2010	740	260	230	450	490	70/120	2.9
66	SSA66-2150-70-*	130	100	9+8	981	2150	781	280	250	480	520	70/120	3
66	SSA66-2250-70-*	130	100	9+9	1022	2250	822	290	260	500	540	70/120	3.1
66	SSA66-2360-70-*	130	100	10+9	2395	2360	863	300	270	520	560	70/120	3.2
66	SSA66-2500-70-*	130	100	10+10	1104	2500	904	315	280	540	580	70/120	3.3
66	SSA66-2640-70-*	130	100	11+10	1145	2640	945	330	300	570	615	70/120	3.4
72/123	SSA123-2312-120-BS	145	118	9+8	915	2312	690	275	195	460	495	70/120	4.4
72/123/145	SSA145-2584-120-*	145	118	10+9	1010	2584	765	310	230	515	550	70/120	4.9
123/145/170	SSA170-3128-120-*	145	118	12+11	1160	3128	915	340	265	570	615	70/120	5.4
145/170	SSA170-3672-120-*	145	118	14+13	1310	3672	1065	380	300	620	670	70/120	5.9
145/170	SSA170-3944-120-*	145	118	15+14	1385	3944	1140	415	335	670	725	70/120	6.4
170/250	SSA250-4488-120-*	145	118	17+16	1535	4488	1290	450	370	720	780	70/120	6.9
170/250	SSA250-5032-120-*	145	118	19+18	1685	5032	1440	485	405	770	835	70/120	7.4
170/250	SSA250-5576-120-*	145	118	21+20	1835	5576	1590	520	435	830	900	70/120	7.9
170/250	SSA250-5848-120-*	145	118	22+21	1910	5848	1665	565	475	915	990	70/120	8.4
170/250	SSA250-6392-120-*	145	118	24+23	2060	6392	1815	615	515	1000	1080	70/120	8.9
170/250	SSA250-6936-120-*	145	118	26+25	2210	6936	1965	645	545	1070	1155	70/120	9.4
250/400	SSA400-7208-120-*	145	118	27+26	2285	7208	2040	675	575	1140	1230	70/120	9.7
400	SSA400-7752-120-*	145	118	29+28	2435	7752	2190	710	605	1210	1310	70/120	10.4
400	SSA400-8296-120-*	145	118	31+30	2585	8296	2340	760	640	1270	1370	70/120	10.9
400	SSA400-8840-120-*	145	118	33+32	2735	8840	2490	810	675	1330	1430	70/120	11.4
400	SSA400-9384-120-*	145	118	35+34	2885	9384	2640	860	710	1390	1490	70/120	11.9
400	SSA400-9656-120-*	145	118	36+35	2962	9656	2715	875	720	1450	1565	70/120	12.4
400	SSA400-10200-120-*	145	118	38+37	3110	10200	2865	890	740	1520	1640	70/120	12.9
400	SSA400-10744-120-*	145	118	40+39	3260	10744	3015	905	750	1585	1715	70/120	13.4
400	SSA400-11288-120-*	145	118	42+41	3410	11288	3165	920	760	1650	1800	70/120	13.9

Remark: "\*" refers to metal ending code on both sides of insulator.

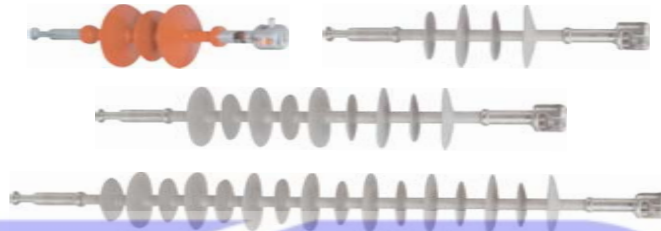
**Suspension (Dead End) Type Polymer Insulator**



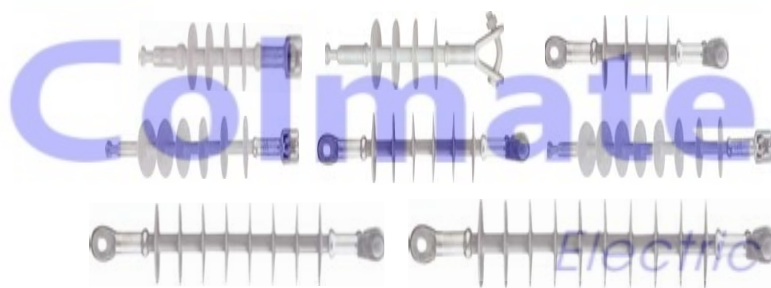
Applied Voltage(kV)	Cat. No.	D (mm)	d (mm)	d2 (mm)	Sheds Qty (Pcs)	Overall Length (mm)	Leakage Distance (mm)	Min Arcing Distance (mm)	Power Frequency Withstand Voltage 50 Hz (kV)		Lightning Impulse Voltage under 1.2/50(kV)		Withstand	Min Breaking Strength (kN)	Weight (kgs)
									Dry	Wet	Positive	Negative			
72/123/145	SSA145-2375-160-BS	145	117	-	9+8	988	2375	778	275	195	460	495	160/210	4.4	
72/123/145	SSA145-2650-160-*	145	117	-	10+9	1072	2650	862	310	230	515	550	160/210	4.9	
123/147/170	SSA170-3200-160-*	145	117	-	12+11	1240	3200	1020	340	265	570	615	160/210	5.4	
145/170	SSA170-3750-160-*	145	117	-	14+13	1408	3750	1198	380	300	620	670	160/210	5.9	
145/170/250	SSA250-4025-160-*	145	117	-	15+14	1492	4025	1282	415	335	670	725	160/210	6.4	
170/250	SSA250-4575-160-*	145	117	-	17+16	1660	4575	1450	450	370	720	780	160/210	6.9	
170/250	SSA250-5125-160-*	145	117	-	19+18	1828	5125	1618	485	405	770	835	160/210	7.4	
250	SSA250-5675-160-*	145	117	-	21+20	1996	5675	1786	520	435	830	900	160/210	7.9	
250	SSA250-5950-160-*	145	117	-	22+21	2080	5950	1870	565	475	915	990	160/210	8.4	
250/400	SSA400-6500-160-*	145	117	-	24+23	2248	6500	2038	615	515	1000	1080	160/210	8.9	
250/400	SSA400-7050-160-*	145	117	-	26+25	2416	7050	2206	645	545	1070	1155	160/210	9.4	
250/400	SSA400-7325-160-*	145	117	-	27+26	2500	7325	2274	675	575	1140	1230	160/210	9.7	
400	SSA400-7875-160-*	145	117	-	29+28	2668	7875	2458	710	605	1210	1310	160/210	10.4	
400	SSA400-8425-160-*	145	117	-	31+30	2836	8425	2626	760	640	1270	1370	160/210	10.9	
400	SSA400-8975-160-*	145	117	-	33+32	3004	8975	2784	810	675	1330	1430	160/210	11.4	
400	SSA400-9525-160-*	145	117	-	35+34	3172	9525	2962	860	710	1390	1490	160/210	11.9	
400	SSA400-9800-160-*	145	117	-	36+35	3256	9800	3046	875	720	1450	1565	160/210	12.4	
400	SSA400-10350-160-*	145	117	-	38+37	3424	10350	3214	890	740	1520	1640	160/210	12.9	
400	SSA400-10900-160-*	145	117	-	40+39	3592	10900	3382	905	750	1585	1715	160/210	13.4	
400	SSA400-11450-160-*	145	117	-	42+41	3760	11450	3550	920	760	1650	1800	160/210	13.9	
115	SSA115-1920-300-BS	176	86	102	7+6+6	916	1920	628	350	275	580	625	300	3.6	
115/145	SSA145-2560-300-*	176	86	102	9+8+8	1082	2560	844	385	300	620	670	300	4.4	
115/145/170	SSA-170-3200-300-*	176	86	102	11+10+10	1248	3200	1010	415	335	670	725	300	5.2	
145/170	SSA-170-3840-300-*	176	86	102	13+12+12	1414	3840	1176	455	375	725	785	300	6.1	
145/170	SSA-170-4480-300-*	176	86	102	15+14+14	1580	4480	1342	480	400	765	830	300	6.9	
170/345	SSA-345-5120-300-*	176	86	102	17+16+16	1746	5120	1508	525	440	840	910	300	7.8	
170/345	SSA-345-5760-300-*	176	86	102	19+18+18	1912	5760	1674	570	480	920	995	300	8.6	
170/345	SSA-345-6400-300-*	176	86	102	21+22+22	2078	6400	1840	610	510	990	1070	300	9.5	
345/420	SSA-420-7040-300-*	176	86	102	23+22+22	2244	7040	2006	645	545	1050	1155	300	10.3	
345/420	SSA-420-7680-300-*	176	86	102	25+24+24	2410	7680	2172	685	585	1150	1240	300	11.1	
420/500	SSA-500-8320-300-*	176	86	102	27+26+26	2576	8320	2338	700	595	1200	1300	300	12	
420/500	SSA-500-8960-300-*	176	86	102	29+28+28	2742	8960	2504	740	620	1250	1350	300	12.8	
420/500	SSA-500-9600-300-*	176	86	102	31+30+30	2908	9600	2670	815	660	1340	1440	300	13.7	
420/500	SSA-500-10240-300-*	176	86	102	33+32+32	3074	10240	2836	845	685	1380	1480	300	14.5	
420/500	SSA-500-10880-300-*	176	86	102	35+34+34	3240	10880	3002	865	710	1485	1585	300	15.4	
420/500	SSA-500-11520-300-*	176	86	102	37+36+36	3406	11520	3168	900	750	1670	1820	300	16.2	
420/500	SSA-500-12160-300-*	176	86	102	39+38+38	3572	12160	3334	930	780	1760	1860	300	17	
500	SSA-500-12800-300-*	176	86	102	41+40+40	3738	12800	3500	960	820	1780	1930	300	17.9	
500	SSA-500-13440-300-*	176	86	102	43+42+42	3904	13440	3666	1140	1020	2030	2110	300	18.7	
500	SSA-500-14720-300-*	176	86	102	47+46+46	4236	14720	3998	1280	1100	2400	2510	300	19.5	

Remark: "\*" refers to metal ending code on both sides of insulator.

### Suspension (Dead End) Type Polymer Insulator

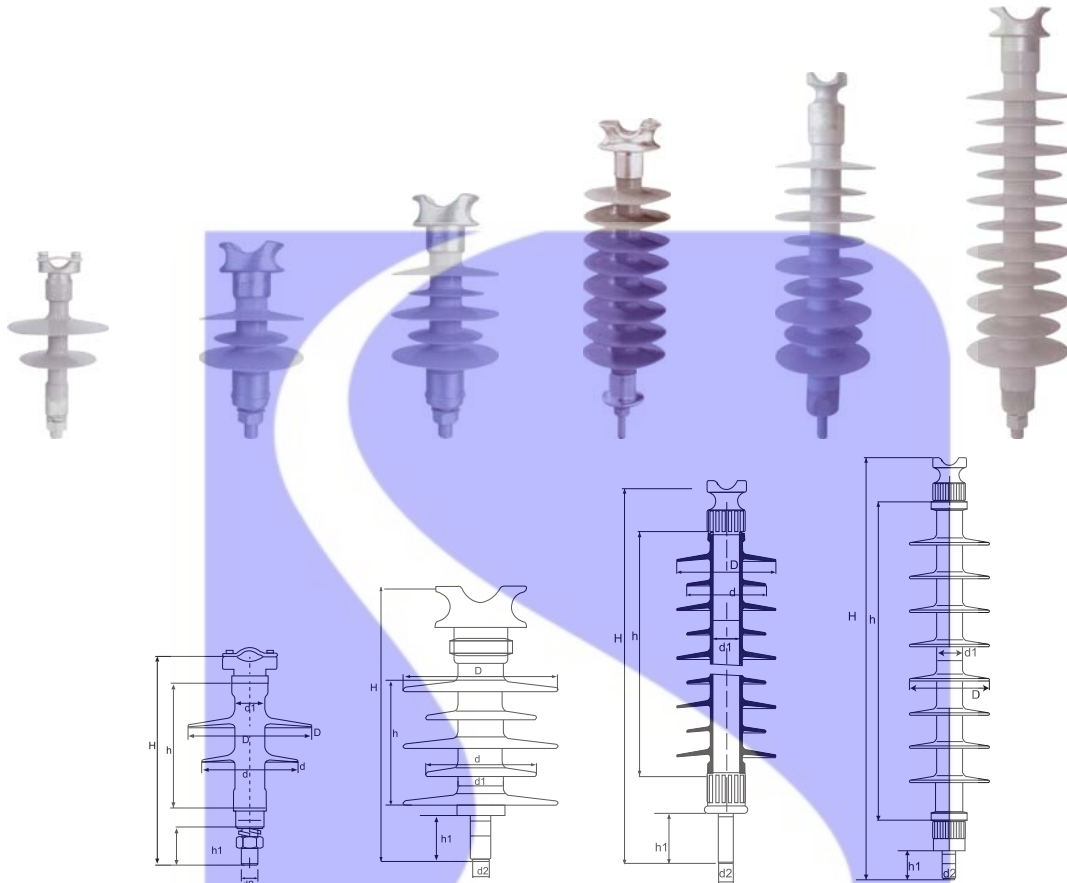


Cat. No.	Rated Voltage(kV)	Rated Mechanical Load(kN)	Structure Height(mm)	Insulating Distance(mm)	Min Creepage Distance(mm)	Lightning Impulse Withstand Voltage, Peak (kV)	Power Frequency Withstand Voltage(kV)
SAR-11-320-70BS	11	70	292	155	320	95	38
SAA-11-320-70BS	11	70	292	155	320	95	38
SAR-11-360-45BS	11	45	285	155	360	75	35
SAR-11-385-70BS	11	70	285	141	385	95	38
SAR-12-449-70BS	12	70	358	187	449	95	38
SAA-12-480-70BS	12	70/100	370/405	200	480	75	35
SAR-24-337-70TC	24/30	70	453	305	667	145	70
SAR-24-670-70BS	24/30	70	455	296	670	185	75
SAR-28-820-70TC	28	70	510	342	820	185	105
SAA-24-850-70BS	24/30	70/100	550/590	370	850	185	75
SAR-33-900-70BS	33	70	535	385	900	200	90
SAR-33-925-120BS	33	120	545	338	925	145	65
SAA-33-1000-70BS	33	70	415	255	1000	217	97
SAA-33-1050-70BS	33	70	558	380	1050	200	90
SAA-33-1120-70BS	33	70	607	442	1120	235	95
SAA-35-1225-70BS	35	70/100	650/690	450	1225	230	95
SAA-66-1980-70BS	66	70/100	900/940	710	1980	410	185



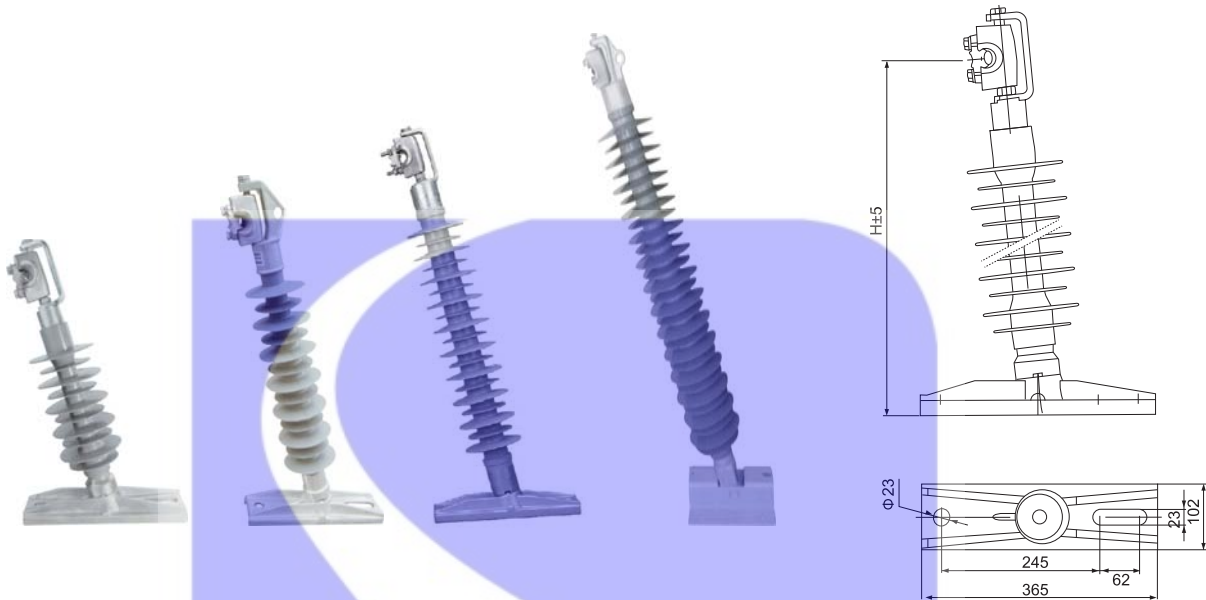
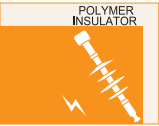
Cat. No.	Rated Voltage(kV)	Sheds Qty (Pcs)	Section Length (mm)	Min Creepage Distance(mm)	Min Arcing Distance(mm)	Min Mechanical Failing Load(kN)	Low Frequency Flashover Voltage(kV)		Critical Impulse Flashover Voltage(kV)		Max R.I.V Test at 1000 KHz(μV)
							Dry	Wet	Positive	Negative	
SSR-15-445-70BS	15	4	352	445	215	10000	100	70	180	260	1
SSR-15-445-70BY	15	4	352	445	215	10000	100	70	180	260	1
SSR-15-445-70CC	15	4	352	445	215	10000	100	70	180	260	1
SSR-25-674-70BS	25	6	449	674	320	10000	150	115	235	320	1
SSR-25-674-70CC	25	6	449	674	320	10000	150	115	235	320	1
SSR-35-886-70BS	35	8	540	886	410	10000	170	140	255	345	1
SSR-35-886-70CC	35	8	540	886	410	10000	170	140	255	345	1
SSR-45-2190-70CC	45	10	630	2190	1100	10000	190	170	275	370	1

**Pin Type Polymer Insulator**



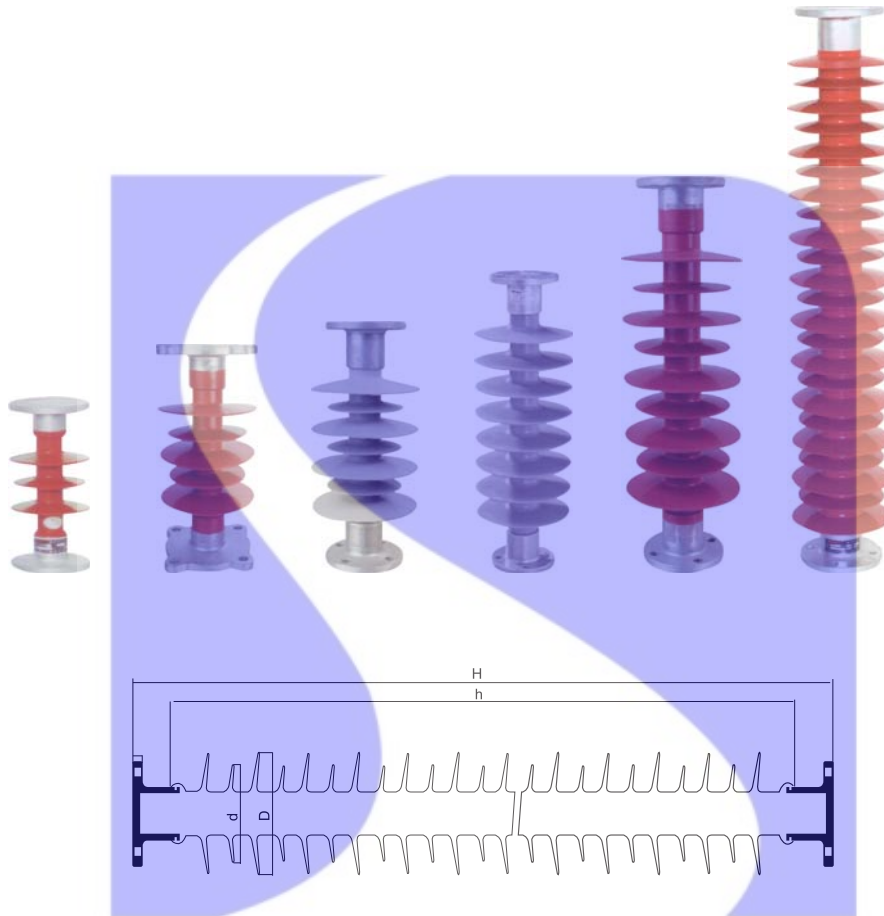
Cat. No.	Rated Voltage (kV)	Rated Mechanical Failing Load(kN)	Min Creepage Distance(mm)	Structure Height (mm)	Insulation Length (mm)	Lightning Impulse Withstand Voltage, Positive(kV)	1 Min Power Frequency Withstand Voltage, Wet (kV)	Shed Qty (Pcs)	Main Dimension(mm)						
									D	d	d1	d2	H	h	h1
SPA-11-280-10XP	11	10	280	158	114	95	28	2	145	120	45	20	158	114	55
SPR-11-290-10-XP	11	10	290	275	203	95	28	3	80	-	38	20	275	203	45
SPA-11-300-5XP	11	5	300	210	150	95	38	2	146	112	32	18	210	150	42
SPA-11-300-5XP	11	5	300	210	142	95	38	2	130	112	45	20	210	142	50
SPA-11-300-12-XP	11	12	300	200	90	75	35	3	133	93	40	20	200	90	45
SPA-11-320-5-HP	11	5	320	205	150	95	38	2	145	112	32	18	205	150	43
SPA-11-320-10-HP	11	10	320	205	150	95	38	2	145	112	36	20	205	150	40
SPA-15-387-10XP	15	10	387	225	115	95	38	4	133	93	40	20	225	115	45
SPA-15-392-10XP	15	10	392	229	167	95	45	5	106	76	36	20	229	167	50
SPA-11-410-10XP	11	10	410	250	140	95	45	3	146	114	36	20	250	140	50
SPA-11-440-6XP	11	6	440	272	155	95	38	3	150	120	34	20	272	155	75
SPA-15-480-12XP	15	12	480	250	140	100	42	5	133	93	40	20	250	140	45
SPA-24-660-10XP	24	10	660	300	190	145	50	7	133	93	40	20	300	190	55
SPR-33-737-12XP	33	12	737	431	311	200	95	5	131	-	40	20	431	311	45
SPR-33-850-10XP	33	10	850	285	228	170	70	8	146	120	40	20	285	228	45
SPA-33-900-10XP	33	10	900	442	320	200	90	8	148	118	45	20	442	320	45
SPA-33-900-10XP	33	10	900	375	307	200	90	8	138	112	50	20	375	307	42
SPA-33-1040-10XP	33	10	1040	460	330	200	90	9	148	118	45	20	460	330	45
SPA-33-1120-12XP	33	12	1120	421	318	200	90	10	148	118	46	20	421	318	200
SPR-33-1160-5XP	33	5	1160	645	525	260	100	8	131	-	44	20	645	525	48
SPA-33-1260-10XP	33	10	1260	218	408	200	90	9	139	110	45	20	518	408	70
SPA-70-1950-10.5XP	70	10.5	1950	736	556	350	170	19	115	63	53	20	736	556	45

**Line Post Type Polymer Insulator (Horizontal)**



Cat. No.	Rated Voltage(kV)	Rated Cantilever Strength(kN)	Shed Qty(Pcs)	Overall Height H(mm)	Creepage Distance(mm)	Dry Arc Distance(mm)	Power Frequency Withstand Voltage (kV)		Lightning Impulse Withstand Voltage(kV)		Weight (Kgs)
							Dry	Wet	Positive	Negative	
SLA-12-390-10-HB	12	10	2+1	365	390	165	70	65	115	160	6.5
SLA-17-585-8-HB	17	8.4	3+2	420	585	225	110	100	150	190	7
SLA-24-780-7-HB	24	7.2	4+3	480	780	285	120	110	180	215	7.5
SLA-33-860-12-HB	33	12.5	4+4	460	860	300	130	120	190	225	7.5
SLA-36-975-6-HB	36	6.3	5+4	540	975	340	150	140	235	270	8
SLA-36-1020-12-HB	36	12.5	5+5	520	1120	530	160	150	250	280	8.3
SLA-45-1170-5-HB	45	5.5	6+5	600	1170	400	170	155	270	300	8.5
SLA-52-1365-5-HB	52	5	7+6	660	1365	460	180	165	285	325	9
SLA-52-1560-4-HB	52	4.5	8+7	715	1560	520	200	185	305	355	9.5
SLA-52-1755-4-HB	52	4.2	9+8	775	1755	575	225	210	345	405	10
SLA-72-1950-4-HB	72	3.9	10+9	840	1950	635	270	225	450	490	10.5
SLA-72-2060-4-HB	72	3.9	11+10	900	2060	703	280	230	470	480	11
SLA-72-2340-3-HB	72	3.3	12+11	955	2340	750	310	245	515	550	11.5
SLA-115-2730-3-HB	115	3	14+13	1070	2730	870	355	285	570	615	12.5
SLA-115-3120-3-HB	115	2.7	16+15	1185	3120	985	400	320	625	670	13.5
SLA-115-3510-2-HB	115	2.4	18+17	1300	3510	1105	435	355	680	735	14.5
SLA-150-3900-2-HB	150	2.2	20+19	1415	3900	1220	475	390	750	805	15.5
SLA-150-4290-2-HB	150	2	22+21	1525	4290	1335	520	460	820	890	16.5
SLA-150-4680-2-HB	150	1.8	24+23	1640	4680	1455	560	475	870	940	17.5
SLA-220-7060-8-HB	220	8	22+22	1868	7060	1868	-	-	-	-	-

**Post Type Polymer Insulator**



Cat. No.	Rated Voltage (kV)	Rated Cantilever Strength(kN)	Creepage Distance (mm)	Main Dimension (mm)				Lightning Impulse Withstand Voltage (kV)	Power Frequency Withstand Voltage(kV)
				H	h	D	d		
STA-10-290-4-MM	10	4	290	215	125	100	90	75	42
STR-24-750-8-RR	24	8	750	300	220	142	-	150	65
STA-35-946-6-RR	35	6	946	450	360	148	118	185	95
STA-66-1886-6-RR	66	6	1886	760	630	160	130	410	185
STA-66-2010-8-RR	66	8	2010	760	630	220	100	410	185
STA-110-3530-10-RR	110	10	3530	1220	1080	220	190	500	230
STA-132-4305-7-RR	132	7	4305	1900	1640	215	185	750	430
STA-132-4150-6-RR	132	6	4150	1458	1320	208	168	650	275
STA-132-4292-8-RR	132	8	4292	1298	1166	220	190	874	470
STA-150-4725-6-RR	150	6	4725	1630	1500	208	168	710	305
STA-220-7060-10-RR	220	10	7060	2440	2200	220	190	1000	395