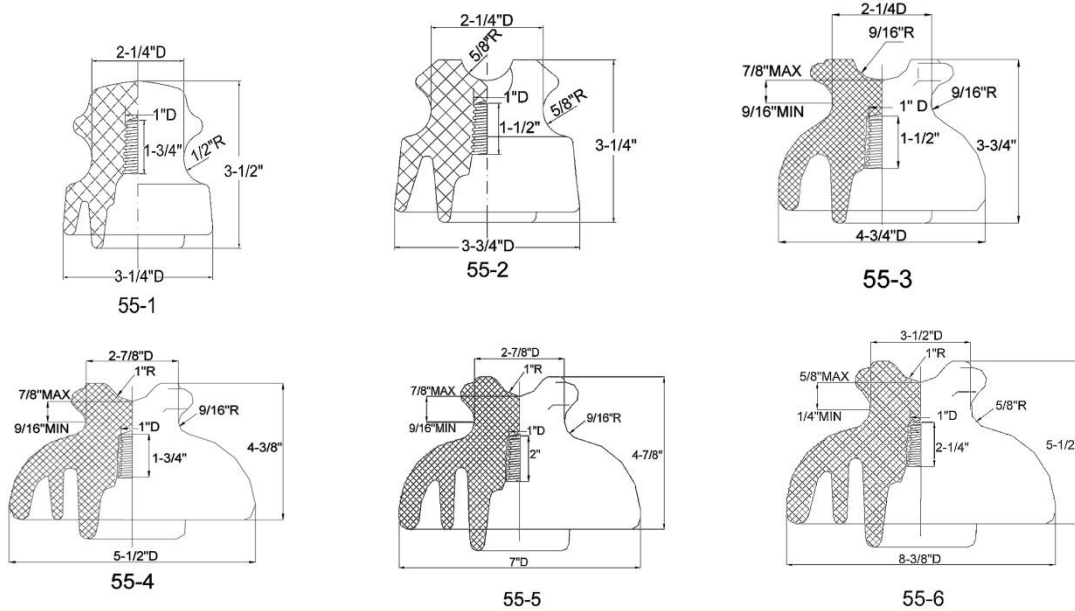




## **Porcelain Pin Type Insulator**

Overall Dimensions



Technical Data

Cat. No.		5501		5502		5503		5504		5505		5506	
ANSI Class		55-1		55-2		55-3		55-4		55-5		55-6	
Insulator Type		Plain	Radio Freed	Plain	Radio Freed	plain	Radio Freed	Plain	Radio Freed	Plain	Radio Freed	plain	Radio Freed
Neck Designation in accordance with ANSI C29.5		C		C		C		F		F		J	
Voltage Rating (U.S.Practice)/KV		7.2		7.2		7						13.2	
Leakage Distance/in(mm)		4(102)		5(127)		7(178)		9(299)		12(305)		15(381)	
Dry Arching Distance/in(mm)		2-1/4(57)		3-3/8(86)		4-1/2(114)		5(127)		6-1/4(159)		8(203)	
Minimum Pin Height/in(mm)		4(102)		4(102)		5 (127)		5 (127)		6(152)		7-1/2(190)	
Cantilever Strength/Average/lb(kN)		3000(13.3)		2500(11.1)		2500(11.1)		3000(13.3)		3000(13.3)		3000(13.3)	
Average Flashover Voltage	Low-frequency	Dry/kV	35	35	50	45	65	55	70	65	85	100	100
		Wet/kV	20	20	25	25	35	30	40	35	45	45	50
	Critical - impulse	Positive/kV	50	50	75	70	100	90	110	105	140	130	150
		Negative/kV	70	70	95	85	130	110	140	130	170	150	170
Low Frequency Puncture Voltage/Average/kV		50		70		90		95		115		135	
Radio-Influence Voltage Data	Test Voltage to Ground/kV	5	5	5	5	10	10	10	10	15	15	22	
	Maximum RIV at 1000kHz/uV	2500	50	2500	50	5500	50	5500	50	8000	100	8000	100
Net Weight/lb		1.2		1.4		2.4		3.7		6.4		8.5	

## Overall Dimensions

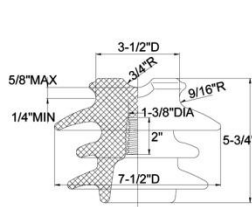


FIG.1

56-1

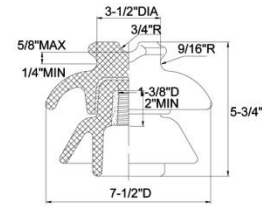


FIG.2

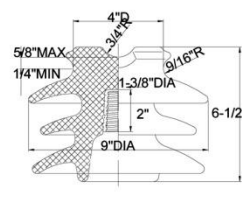


FIG.3

56-2

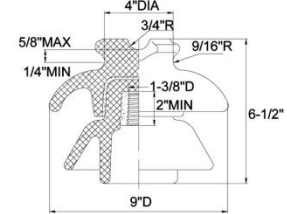


FIG.4

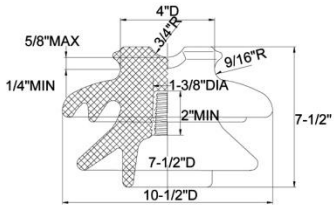


FIG.5

56-3

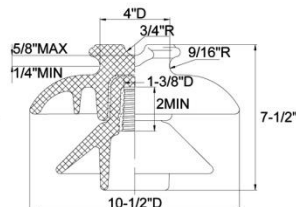


FIG.6

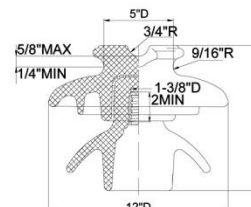


FIG.7

56-4

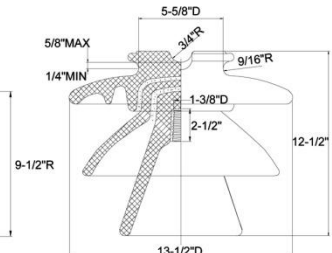


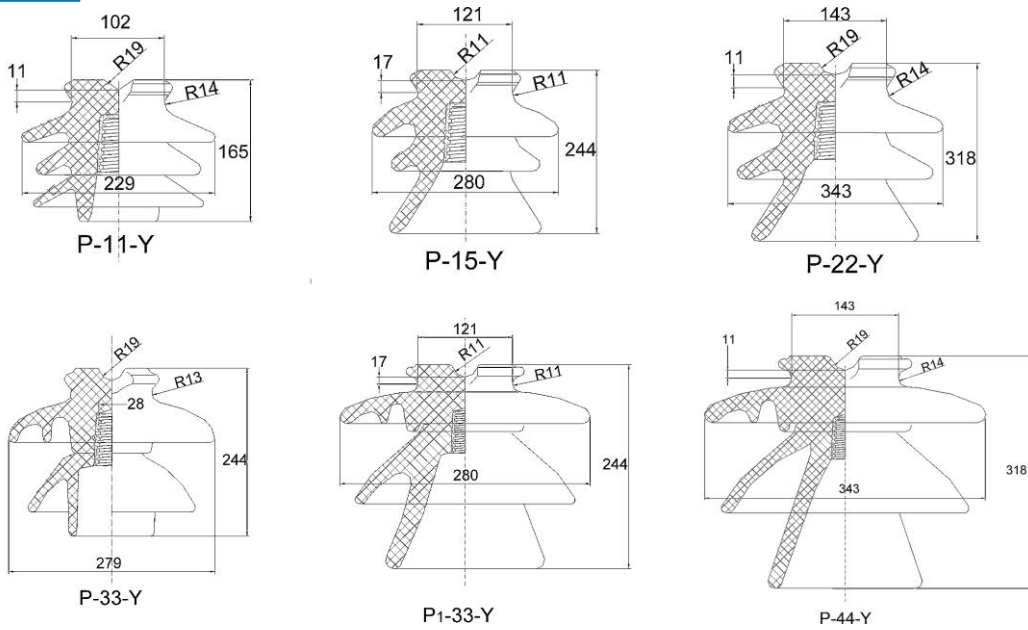
FIG.8

56-5

## Technical Data

Cat. No.		5601		5602		5603		5604		5605	
Fig.No.		1	2	3	4	5	6	7		8	
ANSI Class		56-1		56-2		56-3		56-4		56-5	
Insulator Type		Plain	Radio Freed	Plain	Radio Freed	Plain	Radio Freed	Plain	Radio Freed	Plain	Radio Freed
Neck Designation in accordance with ANSI C29.5		J		K		K		F		F	
Voltage Rating (U.S.Practice)/KV		23		23		34.5					
Leakage Distance/in(mm)		13(330)		17(432)		21(533)		27(686)		34(864)	
Dry Arching Distance/in(mm)		7(178)		8-1/4(210)		9-1/2(241)		11-1/4(286)		14(356)	
Minimum Pin Height/in(mm)		6(152)		7(178)		8 (203)		10(254)		12(305)	
Cantilever Strength/Average/lb(kN)		2500(11.1)		3000(13.3)		3000(13.3)		3000(13.3)		3000(13.3)	
Average Flashover Voltage	Low-frequency	Dry/kV	95	110		125		140		175	
		Wet/kV	60	70		80		95		125	
	Critical - impulse	Positive/kV	150	175		200		225		270	
		Negative/kV	190	225		265		310		340	
Low Frequency Puncture Voltage/Average/kV		130		145		165		185		225	
Radio-Influence Voltage Data	Test Voltage to Ground/kV	15	15	22	22	30	30	30	30	44	44
	Maximum RIV at 1000kHz/uV	8000	100	12000	100	16000	200	16000	200	25000	200
Net Weight/lb		7.3		11		17		24		30	

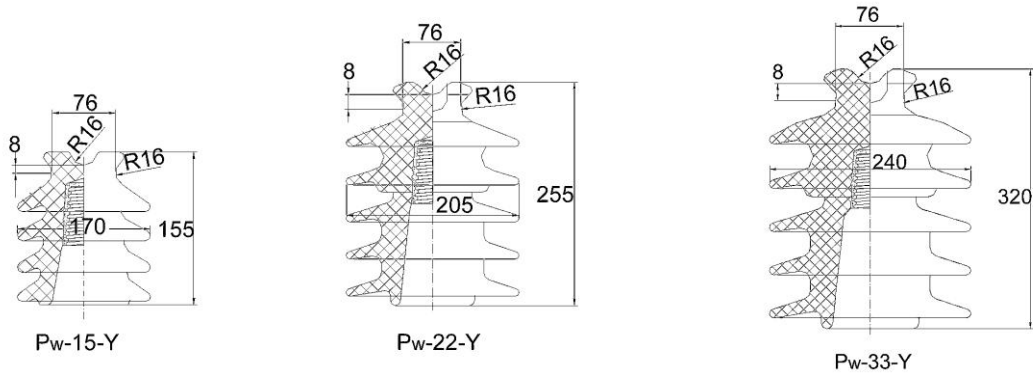
## Overall Dimensions



## Technical Data

Cat.No		P-11-Y		P-15-Y		P-22-Y		P-33-Y		P1-33-Y		P-44-Y	
BS Class		P-11-Y		P-15-Y		P-22-Y		P-33-Y		P1-33-Y		P-44-Y	
Insulator Type		Plain	Radio Freed	Plain	Radio Freed	plain	Radio Freed	Plain	Radio Freed	Plain	Radio Freed	Plain	Radio Freed
Recommended Nominal System Voltage/kV		11		15		22		33		33		44	
Total Creepage Distance/(mm)		254		298		432		630		699		864	
Protected Creepage Distance/imm)		102		133		200		381		381		483	
Recommended Pin Height/i(mm)		152		165		178		280		280		330	
Cantilever Strength/(kN)		11		11		11		11		Cat. No.		13.6	
Minimum Flashover Voltage	Power-frequency	Dry/kV	75	80	100	130	130	155					
		Wet/kV	50	55	60	85	95	110					
	50% impulse	Positive/kV	115	130	160	185	215	240					
		Negative/kV	150	175	205	260	290	305					
Radio-Influence Voltage Data	One-minute Power - Frequency	Dry/kV	65	70	90	110	115	140					
		Wet/kV	45	50	55	75	90	100					
	Impulse/kV	95	110	150	170	200	220						
Power Frequency Puncture Voltage/Average/kV		150		150		145		185		210		250	
Radio-Influence Voltage Data	Test Voltage to Ground/kV	15	15	15	15	22	22	22	22	30	30	44	44
	Maximum RIV at 1000kHz/uV	8000	100	8000	100	12000	100	16000	200	16000	200	25000	200
Dimension of Pin Head		Small Steel Head				Large Steel Head		Large Steel Head Specified in B.S.					
Net Weight/kg		1.7		2.0		5		11.5		10		13.6	

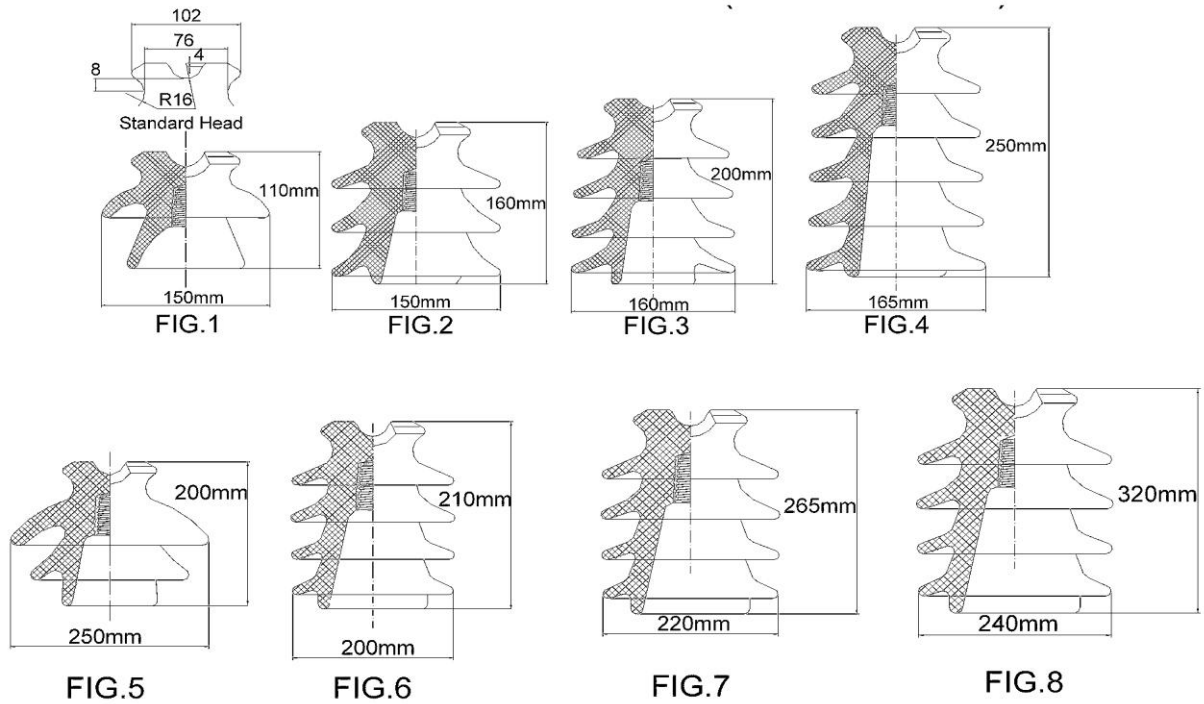
## Overall Dimensions



## Technical Data

Cat. No.		Pw-15-Y		Pw-22-Y		Pw-33-Y	
BS Class		Pw-15-Y		Pw-22-Y		Pw-33-Y	
Insulator Type		Plain	Radio Freed	Plain	Radio Freed	plain	Radio Freed
Recommended Nominal System Voltage/kV		15		22		33	
Total Creepage Distance/(mm)		432		673		851	
Protected Creepage Distance/(mm)		197		267		419	
Recommended Pin Height/i(mm)		216		280		330	
Cantilever Strength/(kN)		11		11		11	
Minimum Flashover Voltage	Power-frequency	Dry/kV	100	125	140		
		Wet/kV	65	95	110		
	50% impulse	Positive/kV	150	190	210		
Radio-Influence Voltage Data	One-minute Power -Frequency	Dry/kV	90	110	125		
		Wet/kV	60	90	100		
	Impulse/kV	140	180	200			
Power Frequency Puncture Voltage/Average/kV		150		200		210	
Radio-Influence Voltage Data	Test Voltage to Ground/kV	22	22	30	30	44	44
	Maximum RIV at 1000kHz/uV	12000	100	16000	200	25000	200
Dimension of Pin Head		Large Steel Head Specified in B.S.					
Net Weight/kg		5		10		13	

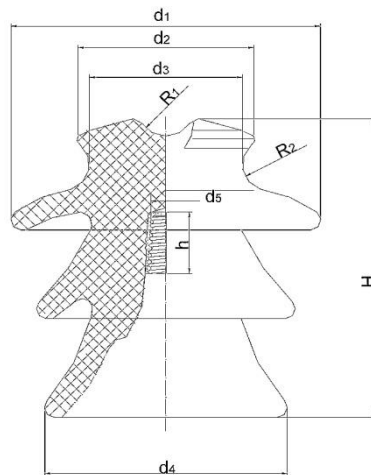
## Overall Dimensions



## Technical Data

Cat.No								
Fig.No.	1	2	3	4	5	6	7	8
AS Class	ALP/11/80	ALP/11/275	ALP/22/450	ALP/22/490	ALP/22/480	ALP/22/520	ALP/33/710	ALP/33/920
Nominal System Voltage/kV	11	11	22	22	22	22	33	33
Min.Nominal Creepage Distance/mm	180	275	450	490	480	520	710	920
Recommended Pin Type	A/130/7	C/150/7	C/200/11	C/200/11	C/150/11	C/220/11	C/300/7	C/300/7
Min.Cantilever Strength/kN	7	7	11	11	11	11	11	11
Power Frequency Withstand Voltage/kV	30	30	50	50	50	50	90	90
Lightning Impulse Withstand Voltage/kV	105	105	150	160	150	150	220	220
Power Frequency Puncture Voltage/kV	95	105	145	160	130	160	210	220
Weight/kg	1.5	3.2	3.8	4.2	5.4	4.8	10.0	14.3

## Overall Dimensions



## Technical Data

Cat.No.						
DIN NO.			St10	St15	St20	St30
Main Dimension/mm	d1		135	150	175	230
	d2		62	72	82	92
	d3		80	90	100	110
	d4		110	120	145	185
	d5		31	28	31	38
	H		138	158	185	250
	h		55	60	65	90
	R1		10	10	10	10
	R2		12.5	12.5	12.5	12.5
Nominal Voltage/kV			10	15	20	30
Creepage Distance/mm			240	270	340	430
Power-Frequency Puncture Voltage/kV			110	120	140	165
Cantilever Failing Load/kN			12.5	12.5	14.7	14.7
Minimum Flashover Voltage	Power -Frequency	Dry/kV	70	75	90	130
		Wet/kV	70	75	90	130
	50% Impulse	Positive/kV	100	110	130	200
Weight/kg			1.5	2.3	3.4	6.5