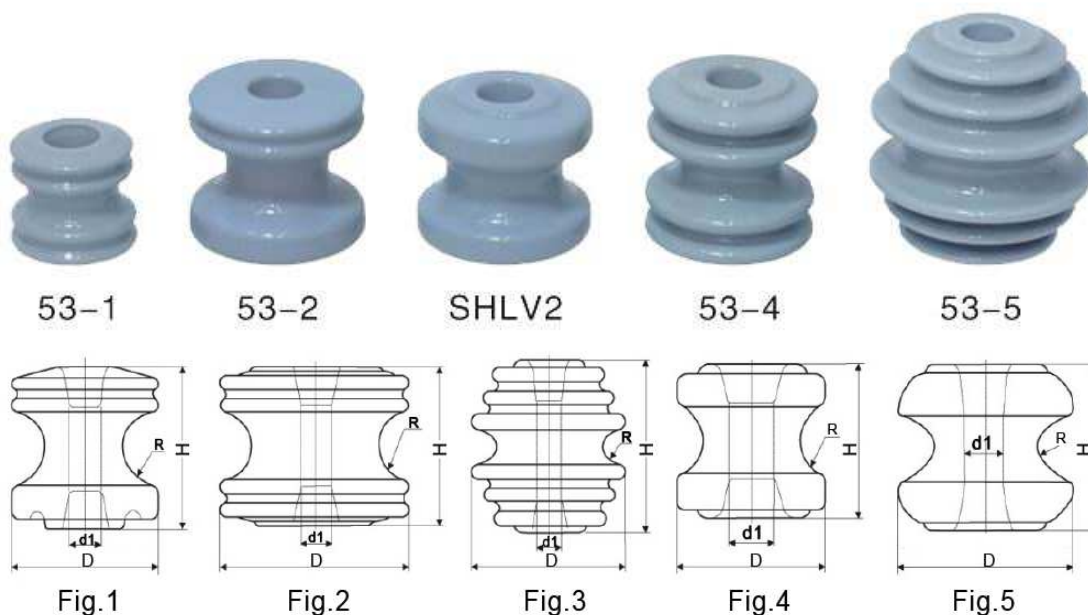




### Porcelain Spool Insulator

The spool insulators supplied by Winning Electrical are manufactured from wet process porcelain. This process allows the spool insulators to shed water and keep dirt away, thus requiring little-to-no maintenance. They are shaped like spinning spools, which allow them to hold wires in place, and keep them from slipping off. These spool insulators are designed, manufactured and tested to the spool insulator requirements of ANSI Standard C29.3.

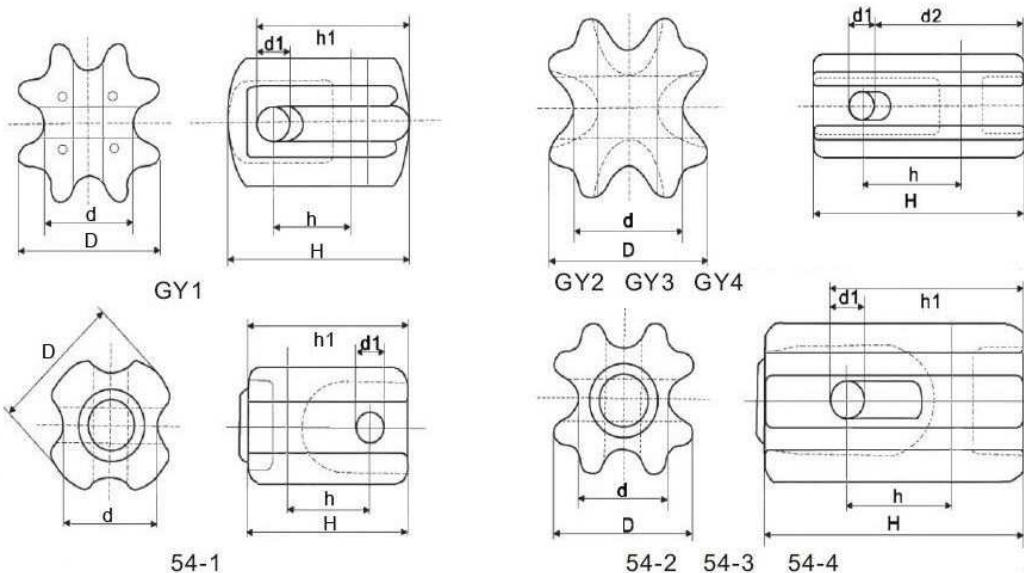


Standard Type	Fig.	Main Dimensions				Strength (kN)	Low Frequency Flashover Voltage (kV)		
		H	D	d1	R		Dry	Wet	
								Vertical	Horizontal
ANSI-53-1	1	54	57	17.5	11	8.9	20	8	10
ANSI-53-2	1	76	80	17.5	17.5	13.3	25	12	15
ANSI-53-3	2	81	76	17.6	11	17.8	25	12	15
ANSI-53-4	1	76	105	17.5	16	20	25	25	15
ANSI-53-5	3	105	102	17.5	11	27	35	18	25
AS-R-1	4	54	57	17	12	9	20	8	9.2
AS-R-2	4	76	80	17.5	17.5	20.1	15	66	9
AS-R-8	4	32	57.5	17.5	9	5	20	9	12.5
BS-1617	5	65	76	17.5	9	9.2	20	10	9
BS-1617B	5	75	89	17	12.5	10.2	25	12	12

Standard color is sky gray, with brown or white available upon request.



**Porcelain Stay Insulator**



Type	54-1	54-2	54-3	54-4	GY-1	GY-2	GY-3	GY-4	
Leakage Distance (mm)	41	48	57	76					
Main Dimensions (mm)	H	89	108	140	171	90	146	216	280
	h	44	57	79	67	48	73	89	89
	h1	64	76	103	114	60	99	133	165
	D	64	73	86	89	68	73	115	115
	d	44	54	60	60	40	44	67	67
	d1	16	22	25	25	16	22	38	38
Mechanical Failure Load (kN)	44	53	89	89	10	15	20	30	
Power Frequency Flashover Voltage (kV)	Dry	25	30	35	40	27	71	222	222
	Wet	12	15	18	23	-	-	-	-
Applicable Standards	ANSI Standard				AS Standard				

Standard color is sky gray, with brown or white available upon request.