



Vanguard Electric LLC.

Distribution insulators

Spool type insulators 53 series according to ANSI C29.3.

ANSI Class	53-1	53-2	53-3	53-4	53-5
VE Catalog Number	53015G	53025G	53035G	53045G	53055G
Mechanical Properties					
Transverse strength, lbs	2 000	3 000	4 000	4 500	6 000
Electrical Values					
Low-frequency dry flashover, kV	20	25	25	25	35
Low-frequency wet flashover, kV					
Vertical	8	12	12	12	18
Horizontal	10	15	15	15	25





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Distribution insulators

Guy Strain insulators 54 series according to ANSI C29.4.

ANSI Class	54-1	54-2	54-3	54-4
VE Catalog Number	5401SG	5402SG	5403SG	5404SG
Dimensions inches				
Leakage Distance, inches	1-5/8	1-7/8	2-1/4	3
Mechanical Properties				
Tensile strength, lbs	10 000	12 000	20 000	20 000
Electrical Values				
Low-frequency dry flashover, kV	25	30	35	40
Low-frequency wet flashover, kV	12	15	18	23





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Distribution insulators



Low Voltage Pin type insulators 55 series according to ANSI C29.5.

ANSI Class	55-2		55-3		55-4		55-5		55-6
VE Catalog Number	5502SG		5503SG		5504SG		5505SG		5506SG
	Plain	Radio Freed	Plain	Radio Freed	Plain	Radio Freed	Plain	Radio Freed	-
Dimensions inches									
Leakage Distance, inches	5	5	7	7	9	9	12	12	15
Dry-arcing Distance, inches	3-3/8	3-3/8	4-1/2	4-1/2	5	5	6-1/4	6-1/4	8
Minimum Pin Height, inches	4	4	5	5	5	5	6	6	7-1/2
Mechanical Properties									
Cantilever strength, lbs	2 500	2 500	2 500	2 500	3 000	3 000	3 000	3 000	3 000
Electrical Values									
Low-frequency dry flashover, kV	50	45	65	55	70	65	85	80	100
Low-frequency wet flashover, kV	25	25	35	30	40	35	45	45	50
Critical impulse flashover, positive, kV	75	70	100	90	110	105	140	130	150
Critical impulse flashover, negative, kV	95	85	130	110	140	130	170	150	170
Low-frequency puncture voltage, kV	70	70	90	90	95	95	115	115	135
Radio-Influence Voltage Data									
Low-frequency test voltage, rms to ground, kV	5	5	10	10	10	10	15	15	22
Maximum RIV at 1000 kHz	2 500	50	5 500	50	5 500	50	8 000	100	-



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Distribution insulators

High Voltage Pin type insulators 56 series according to ANSI C29.6.

ANSI Class	56-1	56-3	56-4
VE Catalog Number	5601SG	5603SG	5604SG
Dimensions inches			
Leakage Distance, inches	13	21	27
Dry-arcing Distance, inches	7	9.5	11.25
Minimum Pin Height, inches	6	8	10
Mechanical Properties			
Cantilever strength, lbs	2 500	3 000	3 000
Electrical Values			
Low-frequency dry flashover, kV	95	125	140
Low-frequency wet flashover, kV	60	80	95
Critical impulse flashover, positive, kV	150	200	225
Critical impulse flashover, negative, kV	190	265	310
Low-frequency puncture voltage, kV	130	165	185
Radio-Influence Voltage Data			
Low-frequency test voltage, rms to ground, kV	15	30	30
Maximum RIV at 1000 kHz			
Radio freed, microvolts	100	200	200
Plain, microvolts	8 000	16 000	16 000





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Distribution insulators

Line Post insulators 57 series according to ANSI C29.7.

ANSI C29.7 Reference	57-1	57-2	57-3	57-11	57-12	57-13
VE Catalog #	5701SSG1	5702SSG1	5703SSG1	5711SSG1	5712SSG1	5713SSG1
Neck type	F	F	F	N/A	N/A	N/A
Dimensions inches						
H Height/Length	9	12	15	10.8	13.5	16.6
D Nominal diameter insulating	5.5	6	6.5	6	6.5	6.5
Center Hole nominal Threaded size	3/4	3/4	3/4	3/4	3/4	3/4
Leakage distance inches	14	22	29	14	22	29
Dry arcing distance inches	6.5	9.5	12.25	6.5	9.5	12.25
Net weight (approx.) lb	11	17	26	18	23	30
Mechanical Properties						
Cantilever strength lb	2800	2800	2800	2800	2800	2800
Electrical Properties						
Critical impulse flashover (+) kV	120	160	200	120	160	205
Low-Frequency Flashover voltage (Dry) kV	70	100	125	70	100	125
Low-Frequency Flashover voltage (Wet) kV	50	70	95	50	70	95
Radio Influence Voltage Data						
Test voltage to ground kV	15	22	30	15	22	30
Maximum RIV at 1000 kHz μ V	100	100	200	100	100	200

