

# The very Best.



**T&D Insulators**



**PPC INSULATORS**

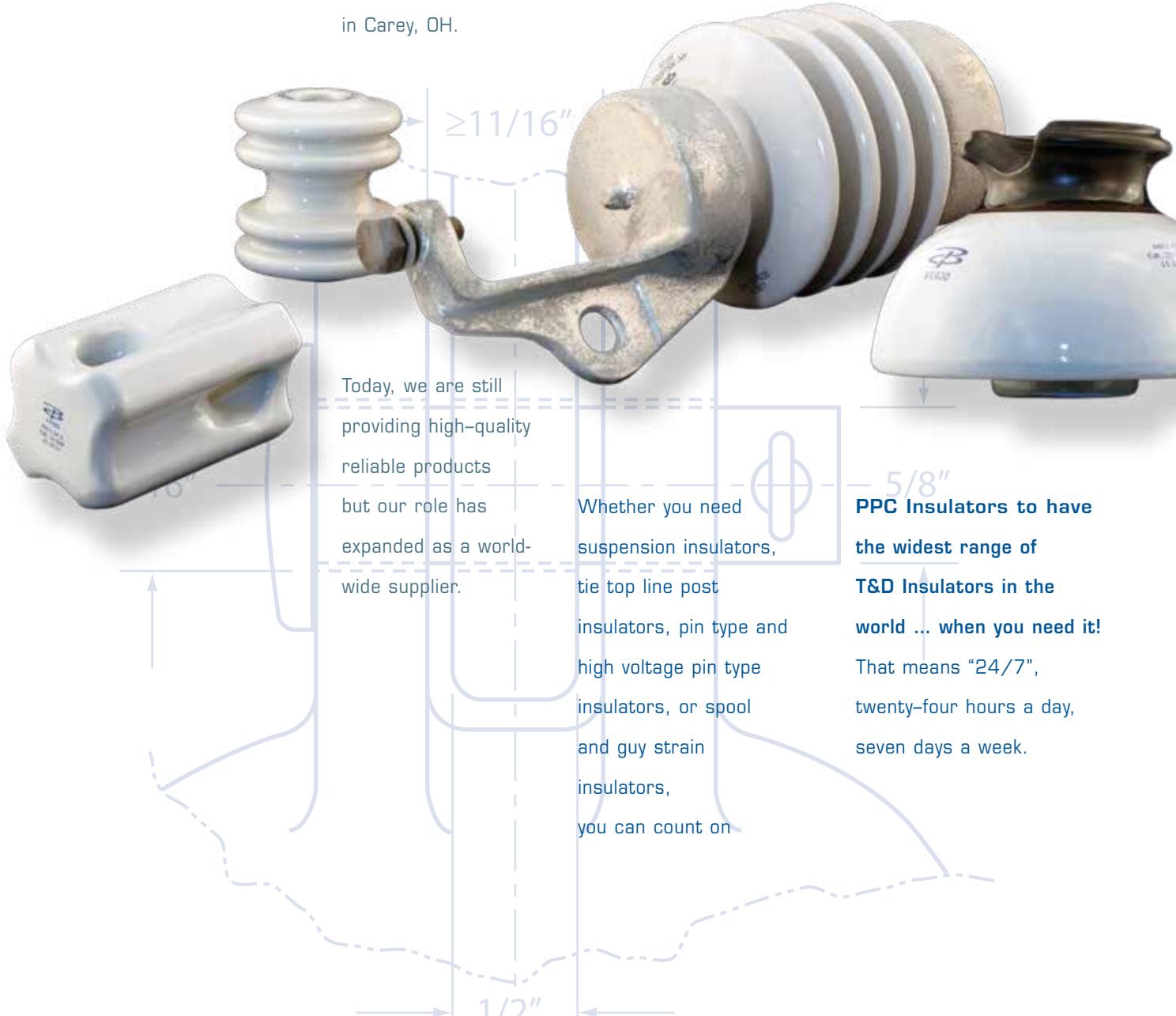
# Quality Engineered Expect

## Product

PPC insulators has its roots in providing high-quality, reliable transmission and distribution products dating back to 1917, when it was known as Federal Porcelain Co., in Carey, OH.

**you can trust**

ANSI



# T&D Insulators.

## The Best!

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T &amp; D

## Suspension Insulators

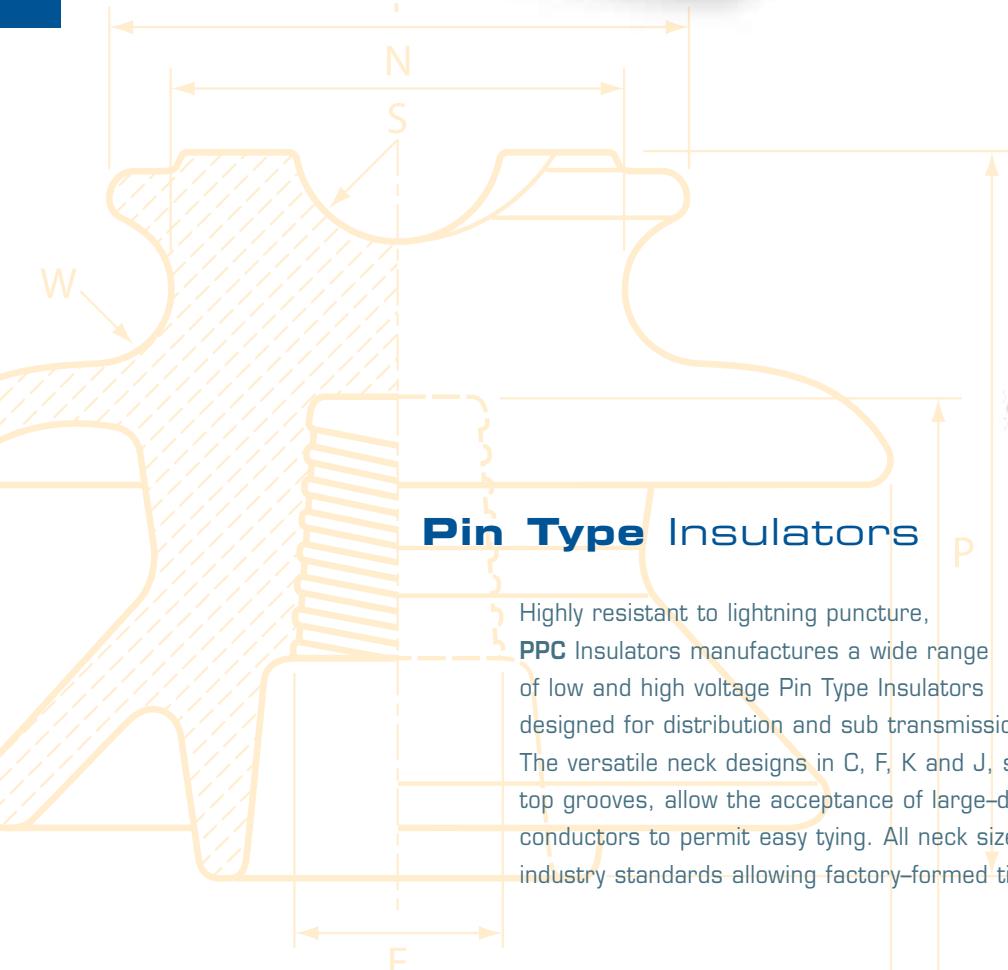


**PPC** Insulators standard suspension insulators with high mechanical and electrical strength are designed to meet the most modern demands of high voltage and EHV transmission line usage today.

**PPC** Insulators makes one of the widest ranges of ANSI approved Ball-Socket and Clevis type distribution suspension insulators for overhead distribution and transmission systems in the world.

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

Catalogue numbers 81022, 81012, 86012, 84300 conform to ANSI Class 52-1 through 52-9 specifications.



# Insulators Products

## Horizontal Clamp Top Line Post Insulators

PPC Insulators offer horizontal clamp top line post assemblies for ratings 15 kV through 45 kV.

PPC horizontal mounting line post assemblies are primarily recommended for downleads, jumper loop control and similar applications.

A galvanized metal cap is cemented to the outside of the line post head supporting the trunnion type clamp.

## Vertical Clamp Top Line Post Insulators

PPC Insulators offer vertical clamp top line post assemblies for ratings 15 kV through 45 kV.

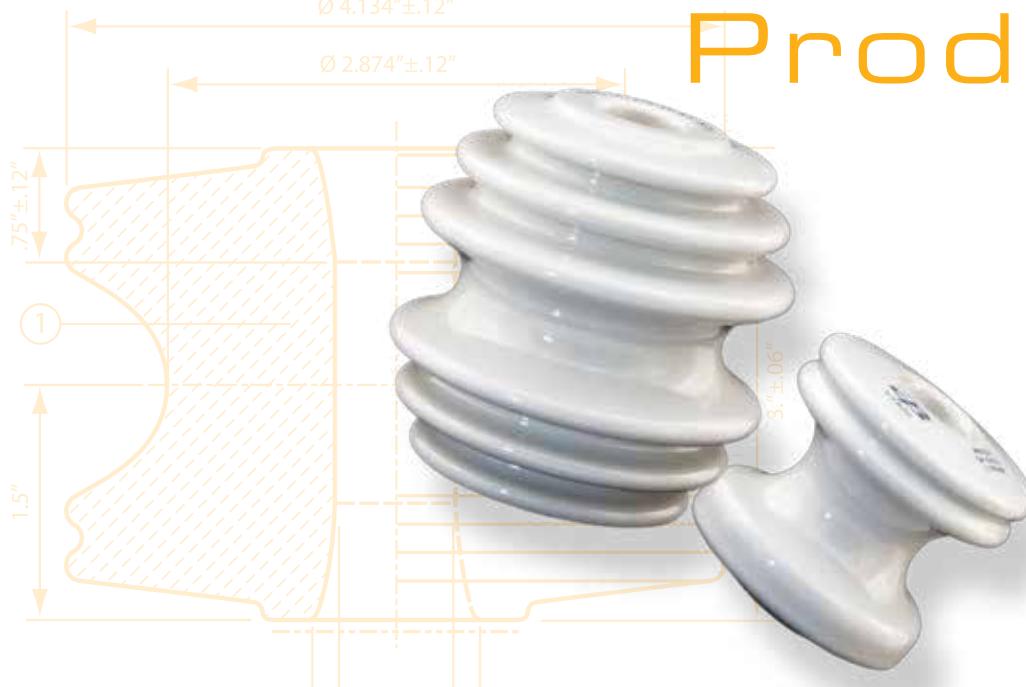
PPC vertical clamp top line post insulators are mounted upright on crossarms and structures. Rated at 2800 lb. cantilever strength these insulators offer strength with excellent mechanical as well as electrical characteristics.

## Tie Top Line Post Insulators

The one-piece design utilized in PPC Insulators tie top line post insulator eliminates the need for suspension shells while providing maximum protection under severe flashover and mechanical impact. Designed for upright or angle mounting on a crossarm, a choice of stud assemblies are available for both wood and steel crossarms. All Line Post Insulators are manufactured by PPC Insulators in strict compliance to ANSI standards.



# T&D Insulators Products



## Spool and Guy Strains

PPC Insulators makes spool and guy strain insulators out of the highest grade electrical wet-process porcelain in a wide range of electrical values and all resistant to mechanical breakage.

Strength ratings are made in accordance with ANSI Standard C29.4 for ultimate strength.



# T&D Insulators Features

## Hardware



ball & socket coupling



clevis-eye coupling

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.

## Cementing

Caps, ball bolts and eyebolts are cemented on to the porcelain, loading the porcelain in a large area, low intensity compression grip. PPC Insulators utilizes a special Portland cement, particularly suited for use on porcelain insulator assemblies.

- 1
- 2
- 3
- 4

## Hardware Coating

Prior to cementing, all hardware surfaces in contact with cement are coated with a bituminous (asphalt) compound. The compound protects the hardware from chemical attack by the cement and provides thermal movement between parts to relieve mechanical stress created by thermal movement or cement growth.

$\varnothing 0.6875"$

$\varnothing 10"$

# T&D Insulators Product

## Bonded Sand Bands



Sand bands bonded to the porcelain by glaze provide a rough surface for permanently attaching the hardware and distributing loading evenly through the porcelain. The high strength compression sand is manufactured by **PPC** Insulators to match the characteristics of the porcelain body.

### Glaze



### Porcelain Body

**PPC** transmission and distribution insulators are constructed of high quality electrical grade porcelain.

Each porcelain body receives a series of electrical tests prior to assembly. 100% of all bodies are subjected to high frequency puncture tests thereby insuring soundness and performance prior to assembly. This same test, in addition to other prescribed ANSI tests, are performed once again after assembly insuring the integrity of the porcelain and the assembled product.

Gray glaze (ANSI - 70, Munsell 5BG 7.0/0.4) is supplied as standard on all **PPC** suspension insulators unless otherwise specified.

Brown glaze is also available upon request; simply add the letter "B" at the end of the catalogue number.

## Reduced Incidence of Puncture

**PPC** Insulators, through extensive testing and design, reduce the hazard of puncture and are highly resistant to lightning puncture.

# Features

## Protected Leakage Configuration



The umbrella type spreading porcelain shell or shed protects the leakage corrugations on the underside of the insulator from contamination and mechanical damage. The sheds are designed to provide optimum normal and protected leakage distance in relation to size and shape.

## Forged Steel Eye & Ball Bolts

**PPC** Insulators utilizes hot dip galvanized forged steel for the ball bolt and the eyebolt. Standard production of suspension insulators incorporates a pregnant bolt design for both ball & socket and clevis type units. The extra mass of the pregnant bolt design plus the compound coating provides corrosion protection at the cement line caused by ozone, electrolytic action and other factors. A zinc sleeve may also be supplied on a straight bolt, for corrosion protection, when specified.

## Interference Free

**PPC** Insulators suspension insulators are radio & television interference free by design and have been completely tested, both individually and as assemblies. Our hardware is smooth contoured with well-rounded edges to reduce RIV build-up and does not require corona rings.

# T&D Insulators

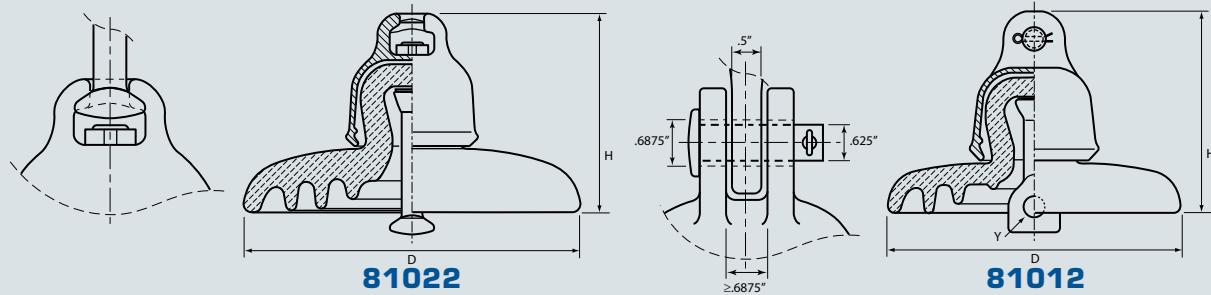
## Suspension Insulators

### Steel Hardware

Ball-Socket



Clevis Type



#### Mechanical & Electrical Characteristics

Catalog Number	81022	81012
ANSI Technical Reference Number	52-3	52-4
<b>Dimensions (inches)</b>		
Leakage Distance	11.5"	11.5"
H - Height	5.75"	5.75"
D - Diameter	10.125"	10.125"
Y - Diameter of Clevis Ring	0.6875"	
<b>Mechanical Values</b>		
ANSI M & E Category	15000 lbs.	15000 lbs.
Combined M & E Strength	20000 lbs.	20000 lbs.
Mechanical Impact Strength	55 inch lbs.	55 inch lbs.
Routine Proof Test	10000 lbs.	10000 lbs.
Time Load Test	13200 lbs.	13200 lbs.
<b>Electrical Values</b>		
Low Frequency Flashover Dry	80 kV	80 kV
Low Frequency Flashover Wet	50 kV	50 kV
Impulse Flashover Positive	125 kV	125 kV
Impulse Flashover Negative	130 kV	130 kV
Low Frequency Puncture Voltage	110 kV	110 kV
<b>Radio Influence Low Frequency Test Voltage Data</b>		
Test Voltage, Rms to Ground, KV	10 kV	10 kV
Maximum RIV at 1000 kHz - V	50	50
<b>Weight &amp; Packaging</b>		
Weight Per Unit	11 lbs.	11 lbs.
Weight Per Package	88 lbs.	88 lbs.
Package Quantity	6	6

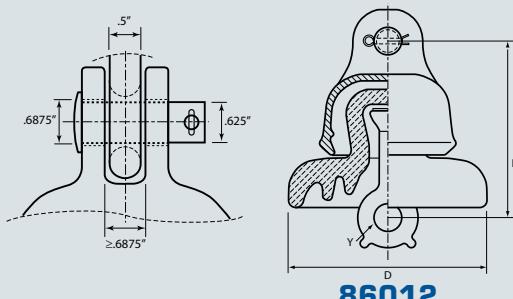
Standard Glaze: ANSI-70, Munsell 5 BG 7.0/0.4  
 Special Glaze Requirement Upon Request

# T&D Insulators

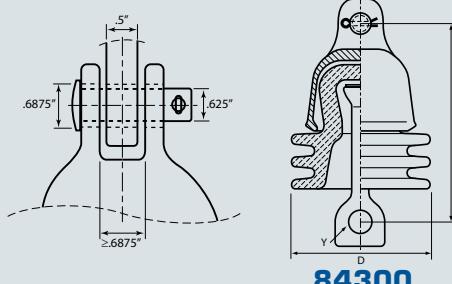
# Suspension Insulators

## Steel Hardware

Clevis Type



Clevis Type



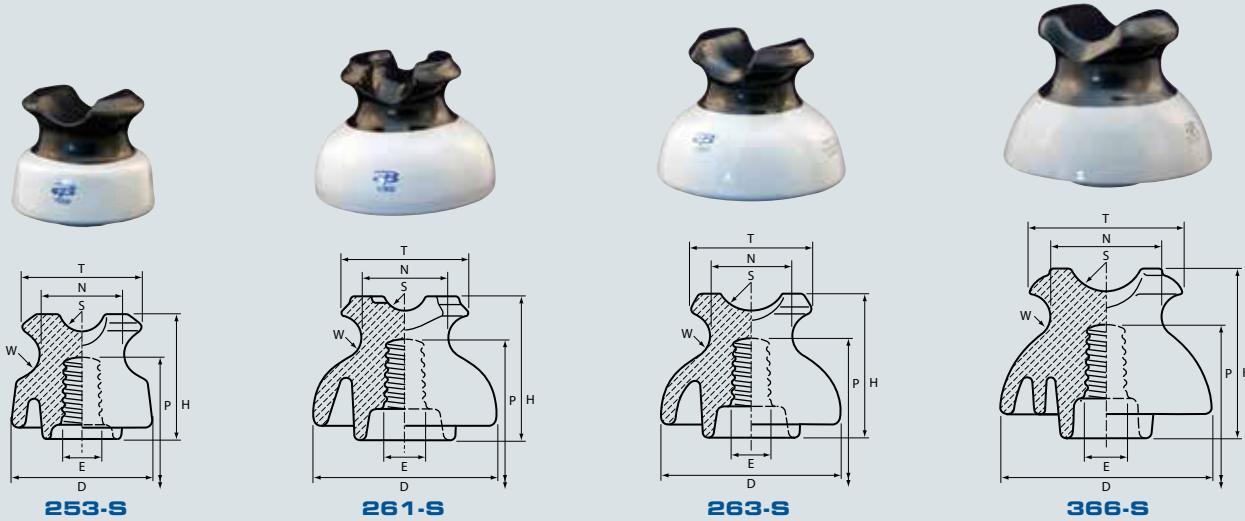
### Mechanical & Electrical Characteristics

Catalog Number	86012	84300		
ANSI Technical Reference Number	52-1	52-9-A		
<b>Dimensions (inches)</b>				
Leakage Distance	7"	6.75"		
H - Height	5.5"	6.25"		
D - Diameter	6.5"	4.5"		
Y - Diameter of Clevis Ring	0.875"	0.875"		
<b>Mechanical Values</b>				
ANSI M & E Category	10000	lbs.	10000	lbs.
Combined M & E Strength	10000	lbs.	10000	lbs.
Mechanical Impact Strength	45	inch lbs.	45	inch lbs.
Routine Proof Test	5000	lbs.	5000	lbs.
Time Load Test	6000	lbs.	6000	lbs.
<b>Electrical Values</b>				
Low Frequency Flashover Dry	60	kV	60	kV
Low Frequency Flashover Wet	30	kV	30	kV
Impulse Flashover Positive	100	kV	100	kV
Impulse Flashover Negative	100	kV	90	kV
Low Frequency Puncture Voltage	80	kV	80	kV
<b>Radio Influence Low Frequency Test Voltage Data</b>				
Test Voltage, Rms to Ground, KV	7.5	kV	7.5	kV
Maximum RIV at 1000 kHz - V	50		50	
<b>Weight &amp; Packaging</b>				
Weight Per Unit	4.9	lbs.	4.9	lbs.
Weight Per Package	71	lbs.	49	lbs.
Package Quantity	12		8	

Standard Glaze: ANSI-70, Munsell 5 BG 7.0/0.4  
Special Glaze Requirement Upon Request

# T&D Insulators

## Pintype Insulators



### Mechanical & Electrical Characteristics

Catalog Number	253-S	261-S	263-S	366-S
ANSI Technical Reference Number	55-2	55-3		55-4
Neck Type	C	C	C	F
<b>Dimensions (inches)</b>				
Leakage Distance	5"	7"	7"	9"
Dry Arcing Distance	3.375"	4.5"	4.5"	5"
H - Height	3.25"	3.75"	3.9375"	4.375"
D - Diameter	3.75"	4.75"	4.88"	5.5"
N - Neck Diameter ( $\pm 1/8"$ )	2.25"	2.25"	2.25"	2.875"
S - Saddle Groove Radius	0.625"	0.5625"	1"	1"
W - Wire Grooves Radius	0.625"	0.5625"	0.629"	0.5625"
T - Top Diameter Maximum	3.5"	3.375"	3.267"	4"
P - Pin Height Minimum	4"	5"	5"	5"
E - Pin Diameter	1"	1"	1"	1"
<b>Mechanical Values</b>				
Cantilever Strength	2500 lbs.	2500 lbs.	2500 lbs.	3000 lbs.
<b>Electrical Values</b>				
Low Frequency Flashover Dry	45 kV	55 kV	55 kV	65 kV
Low Frequency Flashover Wet	25 kV	30 kV	30 kV	35 kV
Impulse Flashover Positive	70 kV	90 kV	90 kV	105 kV
Impulse Flashover Negative	85 kV	110 kV	110 kV	130 kV
Low Frequency Puncture Voltage	70 kV	90 kV	90 kV	95 kV
<b>Radio Influence Low Frequency Test Voltage Data</b>				
Test Voltage, Rms to Ground, KV	5 kV	10 kV	10 kV	10 kV
Maximum RIV at 1000 kHz - V	50	50	50	50
<b>Weight &amp; Packaging</b>				
Weight Per Unit	1.7 lbs.	2.5 lbs.	2.6 lbs.	4 lbs.
Weight Per Package	43 lbs.	32 lbs.	33 lbs.	50 lbs.
Package Quantity	24	12	12	12

Standard Glaze: ANSI-70, Munsell 5 BG 7.0/0.4

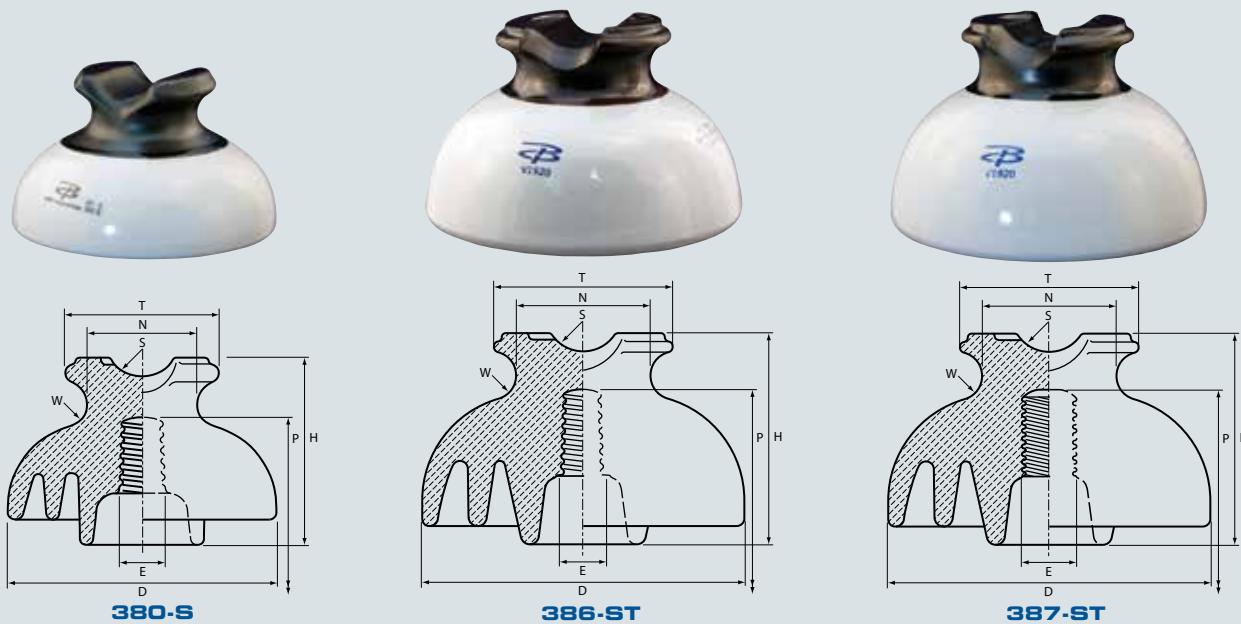
Above Insulators furnished Standard with Semi-Conductive Glaze (Type S) to eliminate noise.

Plain Glaze available on Special Order.

Type-S Insulator Characteristics shown above.

# T&D Insulators

## Pintype Insulators



### Mechanical & Electrical Characteristics

Catalog Number	380-S	386-ST	387-ST
ANSI Technical Reference Number	55-5	55-6	55-7
Neck Type	F	J	J
<b>Dimensions (inches)</b>			
Leakage Distance	12"	15"	15"
Dry Arcing Distance	6.25"	8"	8"
H - Height	4.875"	5.5"	5.5"
D - Diameter	7"	8.375"	8.375"
N - Neck Diameter ( $\pm 1/8"$ )	2.875"	3.5"	3.5"
S - Saddle Groove Radius	1"	1"	1"
W - Wire Groove Radius	0.5625"	0.625"	0.625"
T - Top Diameter Maximum	4"	4.75"	4.75"
P - Pin Height Minimum	6"	7.5"	7.5"
E - Pin Diameter	1"	1"	1.375"
<b>Mechanical Values</b>			
Cantilever Strength	3000 lbs.	3000 lbs.	3000 lbs.
<b>Electrical Values</b>			
Low Frequency Flashover Dry	80 kV	100 kV	100 kV
Low Frequency Flashover Wet	45 kV	50 kV	50 kV
Impulse Flashover Positive	130 kV	150 kV	150 kV
Impulse Flashover Negative	150 kV	170 kV	170 kV
Low Frequency Puncture Voltage	115 kV	135 kV	135 kV
<b>Radio Influence Low Frequency Test Voltage Data</b>			
Test Voltage, Rms to Ground, KV	15 kV	22 kV	22 kV
Maximum RIV at 1000 kHz - V	100	100	100
<b>Weight &amp; Packaging</b>			
Weight Per Unit	6.6 lbs.	11 lbs.	11 lbs.
Weight Per Package	41.8 lbs.	46.2 lbs.	46.2 lbs.
Package Quantity	6	4	4

Standard Glaze: ANSI-70, Munsell 5 BG 7.0/0.4

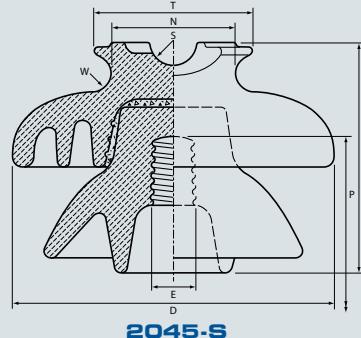
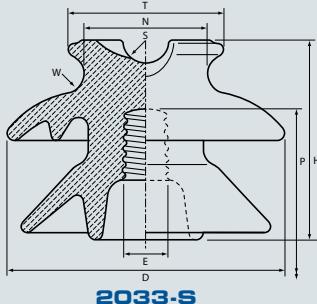
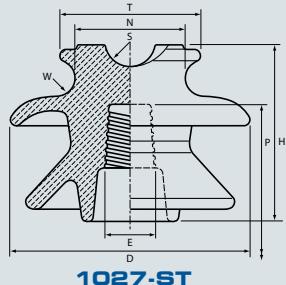
Above Insulators furnished Standard with Semi-Conductive Glaze (Type S) to eliminate noise.

Plain Glaze available on Special Order.

Type-S Insulator Characteristics shown above.

## T&D Insulators

# High Voltage Pin Type Insulators



### Mechanical & Electrical Characteristics

Catalog Number	1027-ST	2033-S	2045-S
ANSI Technical Reference Number	56-1	56-2	56-3
Neck Type	J	K	K
<b>Dimensions (inches)</b>			
Leakage Distance	13"	17"	21"
Dry Arcing Distance	7"	8.25"	9.5"
H - Height	5.75"	6.5"	7.5"
D - Diameter	7.5"	9"	10.5"
N - Neck Diameter ( $\pm 1/8"$ )	3.5"	4"	4"
S - Saddle Groove Radius	.75"	.75	.75"
W - Wire Grooves Radius	.5625"	.5625"	.5625"
T - Top Diameter Maximum	4.625"	5.125"	5.25"
P - Pin Height Minimum	6"	7"	8"
E - Pin Diameter	1.375"	1.375"	1.375"
<b>Mechanical Values</b>			
Cantilever Strength	2500 lbs.	3000 lbs.	3000 lbs.
<b>Electrical Values</b>			
Low Frequency Flashover Dry	95 kV	110 kV	125 kV
Low Frequency Flashover Wet	60 kV	70 kV	80 kV
Impulse Flashover Positive	150 kV	175 kV	200 kV
Impulse Flashover Negative	190 kV	225 kV	265 kV
Low Frequency Puncture Voltage	130 kV	145 kV	165 kV
<b>Radio Influence Low Frequency Test Voltage Data</b>			
Test Voltage, Rms to Ground, KV	15 KV	22 KV	30 KV
Maximum RIV at 1000 kHz - V	100	100	200
<b>Weight &amp; Packaging</b>			
Weight Per Unit	7.3 lbs.	12.1 lbs.	16.5 lbs.
Weight Per Package	46.2 lbs.	50 lbs.	35.2 lbs.
Package Quantity	6	4	2

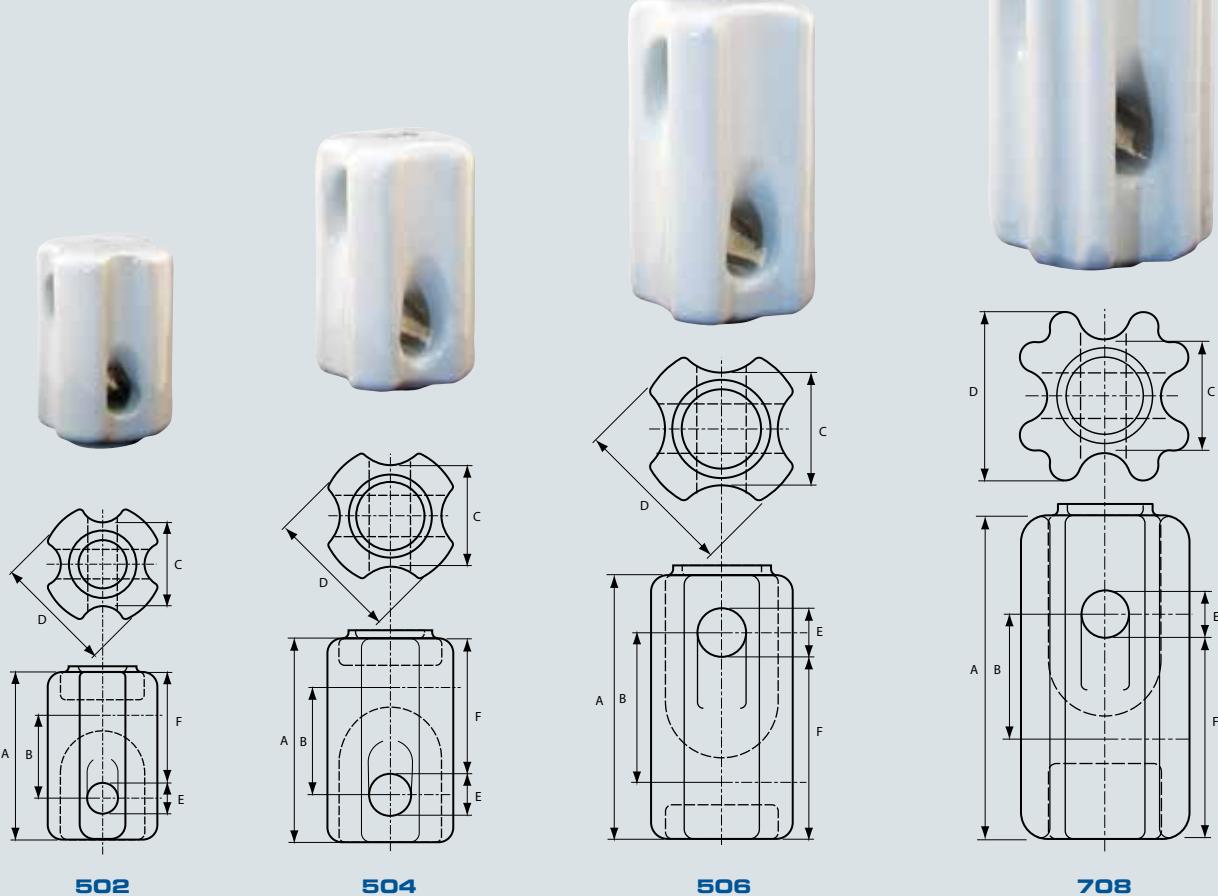
Standard Glaze: ANSI-70, Munsell 5 BG 7.0/0.4

Above Insulators furnished Standard with Semi-Conductive Glaze (Type S) to eliminate noise.

Plain Glaze available on Special Order.

Type-S Insulator Characteristics shown above.

# Guy Strain Insulators



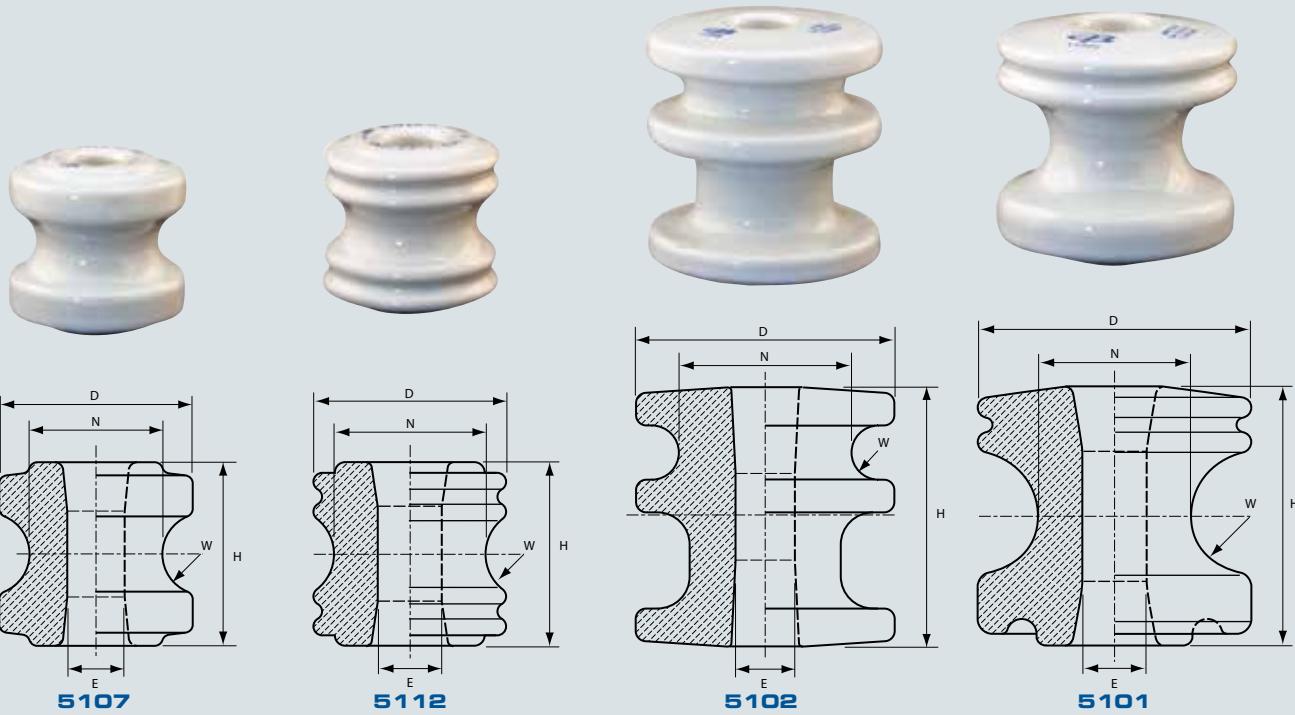
## Mechanical &amp; Electrical Characteristics

PPC Insulators Catalog Number	502	504	506	708
ANSI Technical Reference Number	54-1	54-2	54-3	54-4
<b>Dimensions (inches)</b>				
Leakage Distance	1.625"	1.875"	2.25"	3"
Maximum Cable Diameter	.375"	.5"	.625"	.625"
H - Height	3.5"	4.25"	5.5"	6.75"
B - Hole Centers Spacing ( $\pm 1/8"$ )	1.75"	2.25"	3.125"	2.625"
C - Inner Diameter ( $\pm 1/16"$ )	1.75"	2.125"	2.375"	2.375"
D - Outer Diameter	2.5"	2.875"	3.375"	3.5"
E - Cable Hole Diameter ( $\pm 1/16"$ )	.625"	.875"	1"	1"
F - Height To Hole	2.5"	3"	4.0625"	4.5"
<b>Mechanical Values</b>				
Tensile Strength	10000 lbs.	12000 lbs.	20000 lbs.	20000 lbs.
<b>Electrical Values</b>				
Low Frequency Flashover Dry	25 kV	30 kV	35 kV	40 kV
Low Frequency Flashover Wet	12 kV	15 kV	18 kV	23 kV
<b>Weight &amp; Packaging</b>				
Weight Per Carton	50 lbs.	45 lbs.	48 lbs.	50 lbs.
Carton Quantity	48	25	16	12

Standard Glaze: ANSI-70, Munsell 5 BG 7.0/0.4; B - Brown, W - White

# T&D Insulators

## Spool Insulators



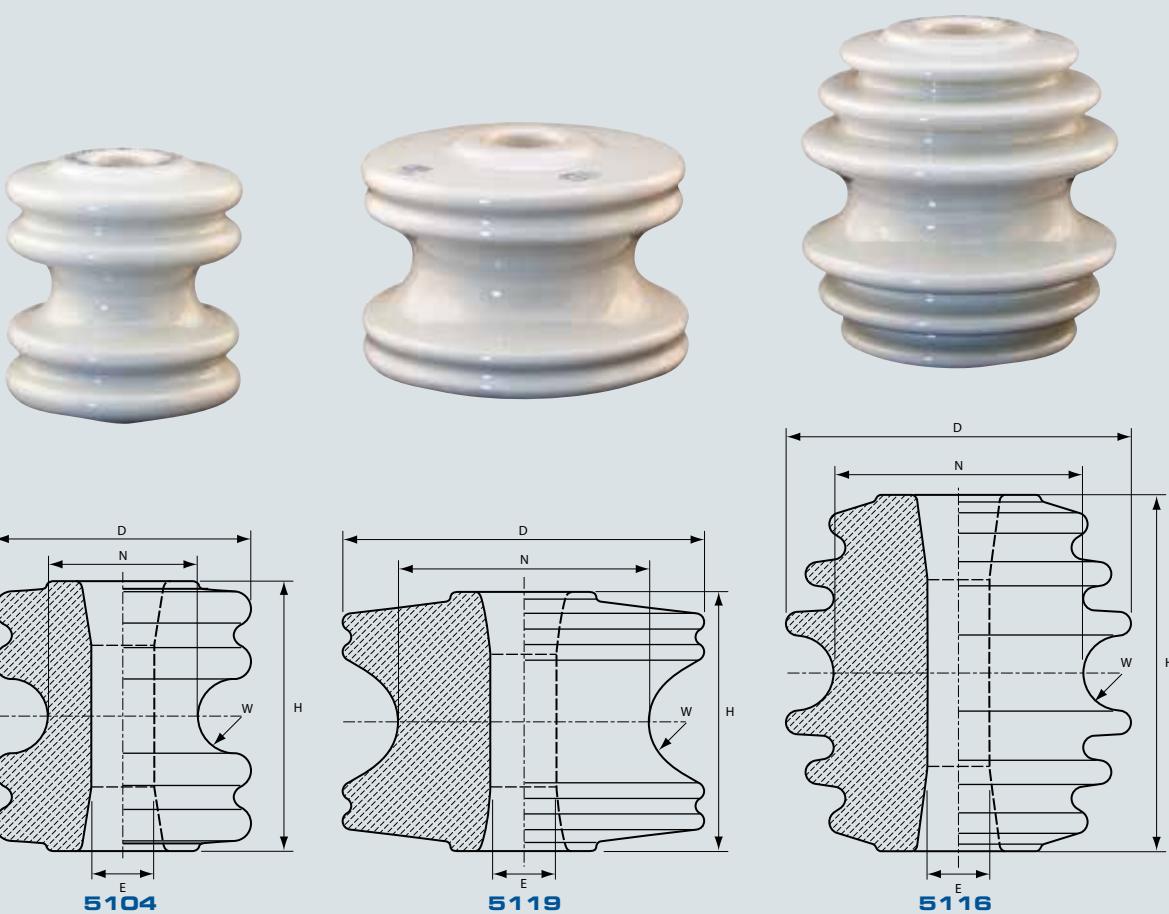
### Mechanical & Electrical Characteristics

Catalog Number	5107	5112	5102	5101
ANSI Technical Reference Number		53-1		53-2
<b>Dimensions (inches)</b>				
H - Height ( $\pm 1/16"$ )	2.125"	2.125"	3"	3"
D - Diameter ( $\pm 1/16"$ )	2.25"	2.25"	3"	3.11"
N - Neck Diameter ( $\pm 1/8"$ )	1.5"	1.75"	2"	1.75"
W - Wire Grooves Radius	.4375"	.4375"	.3175"	.709"
E - Hole Diameter ( $+ 1/16" - 0$ )	.669"	.709"	.6875"	.709"
<b>Mechanical Values</b>				
Transverse Strength	2000 lbs.	2000 lbs.	3000 lbs.	3000 lbs.
<b>Electrical Values</b>				
Low Frequency Flashover Dry	18 kV	20 kV	20 kV	25 kV
Low Frequency Flashover Wet				
Horizontal	7 kV	8 kV	10 kV	12 kV
Vertical	9 kV	10 kV	12 kV	15 kV
<b>Weight &amp; Packaging</b>				
Weight Per Carton	48.6 lbs.	48.6 lbs.	48.4 lbs.	30 lbs.
Carton Quantity	100	100	50	24

Standard Glaze: ANSI-70, Munsell 5 BG 7.0/0.4, B - Brown, W - White

# T&D Insulators

## Spool Insulators



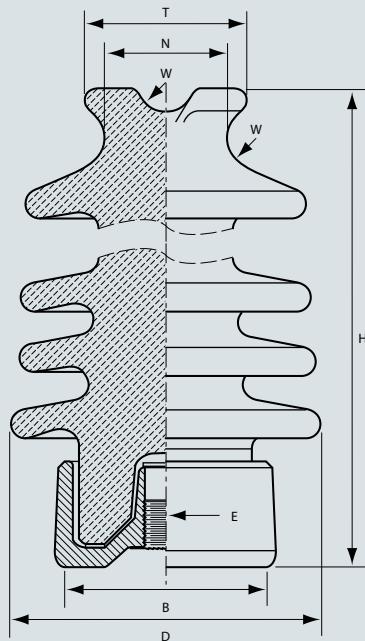
### Mechanical & Electrical Characteristics

Catalog Number	5104	5119	5116
ANSI Technical Reference Number	53-3	53-4	53-5
<b>Dimensions (inches)</b>			
H - Height ( $\pm 1/16"$ )	3.125"	3"	4.125"
D - Diameter ( $\pm 1/16"$ )	3"	4.125"	4"
N - Neck Diameter ( $\pm 1/8"$ )	1.75"	2.875"	2.875"
W - Wire Grooves Radius	.4375"	.625"	.4375"
E - Hole Diameter ( $+ 1/16" - 0$ )	.709"	.709"	.709"
<b>Mechanical Values</b>			
Transverse Strength	4000 lbs.	4500 lbs.	6000 lbs.
<b>Electrical Values</b>			
Low Frequency Flashover Dry	25 kV	25 kV	35 kV
Low Frequency Flashover Wet			
Horizontal	12 kV	12 kV	18 kV
Vertical	15 kV	15 kV	25 kV
<b>Weight &amp; Packaging</b>			
Weight Per Carton	32 lbs.	44.5 lbs.	48.4 lbs.
Carton Quantity	24	18	18

Standard Glaze: ANSI-70, Munsell 5 BG 7.0/0.4, B - Brown, W - White

## T&D Insulators

# Tie Top Line Post Insulators



### Mechanical & Electrical Characteristics

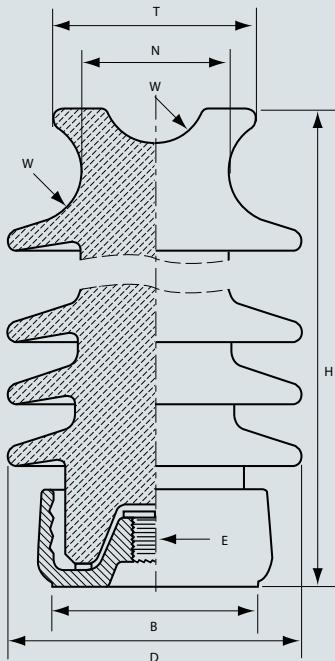
Catalog Number	5015	5020	5025	5027	5035	5045
ANSI Technical Reference Number			57-1		57-2	57-3
Type "Neck"	C	C	C	C	C	C
<b>Dimensions (inches)</b>						
Leakage Distance	7.5"	11"	14"	16"	22"	29"
Dry Arcing Distance	5"	5.75"	6.5"	7.625"	9.5"	12.25"
H - Height	7.75"	8.75"	9"	9.875"	12"	15"
D - Diameter	4.75"	5.25"	5.5"	5.25"	6"	6.5"
N - Neck Diameter ( $\pm 1/8"$ )	2.25"	2.25"	2.25"	2.25"	2.25"	2.25"
W - Wire Grooves Radius	1"	1"	1"	1"	1"	1"
T - Top Diameter Maximum	3.375"	3.375"	3.375"	3.375"	3.375"	3.375"
B - Base Diameter	3.5"	3.5"	4"	4"	4.5"	4.5"
E - Bolt Thread	3/4" - 10*	3/4" - 10*	3/4" - 10*	3/4" - 10*	3/4" - 10*	3/4" - 10*
<b>Mechanical Values</b>						
Cantilever Strength	2000 lbs.	2000 lbs.	2800 lbs.	1500 lbs.	2800 lbs.	2800 lbs.
Cantilever Proof Load	800 lbs.	800 lbs.	1120 lbs.	800 lbs.	1120 lbs.	1120 lbs.
<b>Electrical Values</b>						
Low Frequency Flashover Dry	65 kV	80 kV	80 kV	95 kV	110 kV	125 kV
Low Frequency Flashover Wet	40 kV	55 kV	60 kV	65 kV	85 kV	100 kV
Impulse Flashover Positive	100 kV	110 kV	130 kV	140 kV	180 kV	210 kV
Impulse Flashover Negative	130 kV	140 kV	155 kV	190 kV	205 kV	260 kV
<b>Radio Influence Low Frequency Test Voltage Data</b>						
Test Voltage, Rms to Ground, KV	10 kV	15 kV	15 kV	20 kV	22 kV	30 kV
Maximum RIV at 1000 kHz - V	50	50	100	50	100	200
<b>Weight &amp; Packaging</b>						
Weight Per Unit	7.4 lbs.	10.1 lbs.	11.0 lbs.	10.6 lbs.	16.1 lbs.	22.9 lbs.
Weight Per Package	41.5 lbs.	44.8 lbs.	36.9 lbs.	36.3 lbs.	36 lbs.	49.8 lbs.
Package Quantity	5	4	3	3	2	2

Standard Glaze: ANSI-70, Munsell 5 BG 7.0/0.4

\* 3/4" - 10; Oversize +0.015"; 7/8" Thread Depth

## T&D Insulators

# Tie Top Line Post Insulators



### Mechanical & Electrical Characteristics

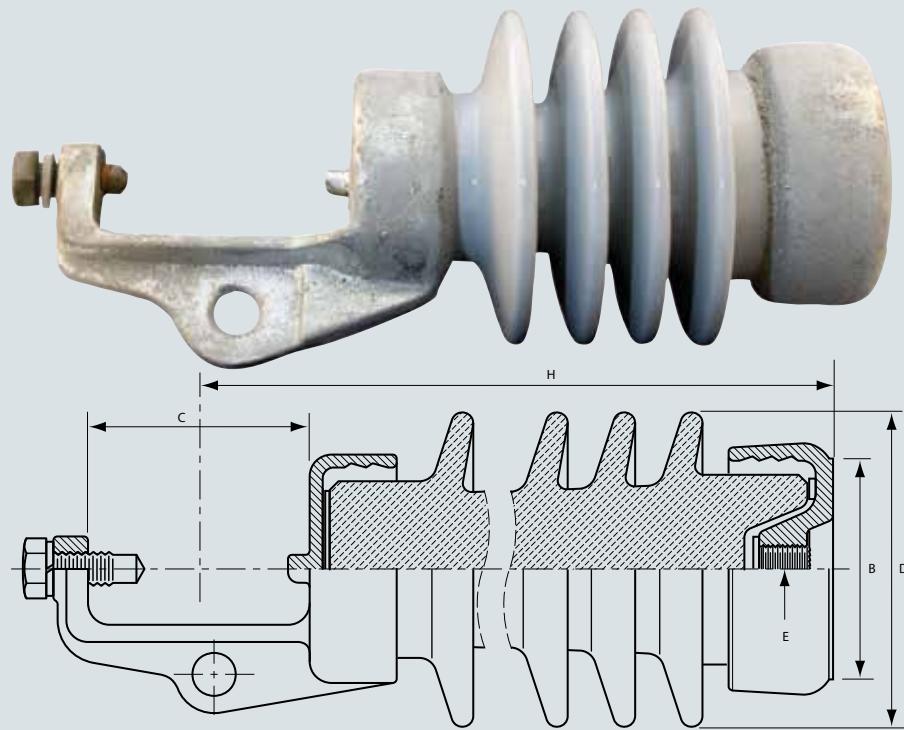
Catalog Number	5115	5120	5125	5127	5135	5145
ANSI Technical Reference Number			57-1		57-2	57-3
Type "Neck"	F	F	F	F	F	F
<b>Dimensions (inches)</b>						
Leakage Distance	7.5"	11"	14"	16"	22"	29"
Dry Arcing Distance	5"	5.75"	6.5"	7.6"	9.5"	12.25"
H - Height	7.75"	8.75"	9"	9.875"	12"	15"
D - Diameter	4.75"	5.25"	5.5"	5.25"	6"	6.5"
N - Neck Diameter ( $\pm 1/8"$ )	2.875"	2.875"	2.875"	2.875"	2.875"	2.875"
W - Wire Groove Radius	1"	1"	1"	1"	1"	1"
T - Top Diameter Maximum	3.9"	3.9"	3.9"	3.9"	3.9"	3.9"
B - Base Diameter	3.5"	3.5"	4"	4"	4.5"	4.5"
E - Bolt Thread	3/4" - 10*	3/4" - 10*	3/4" - 10*	3/4" - 10*	3/4" - 10*	3/4" - 10*
<b>Mechanical Values</b>						
Cantilever Strength	2000 lbs.	2000 lbs.	2800 lbs.	1500 lbs.	2800 lbs.	2800 lbs.
Cantilever Proof Load	800 lbs.	800 lbs.	1100 lbs.	800 lbs.	1120 lbs.	1120 lbs.
<b>Electrical Values</b>						
Low Frequency Flashover Dry	65 kV	80 kV	80 kV	95 kV	110 kV	125 kV
Low Frequency Flashover Wet	40 kV	55 kV	60 kV	65 kV	85 kV	100 kV
Impulse Flashover Positive	100 kV	110 kV	130 kV	140 kV	180 kV	210 kV
Impulse Flashover Negative	130 kV	140 kV	155 kV	190 kV	205 kV	260 kV
<b>Radio Influence Low Frequency Test Voltage Data</b>						
Test Voltage, Rms to Ground, KV	10 kV	15 kV	15 kV	20 kV	22 kV	30 kV
Maximum RIV at 1000 kHz - V	50	50	100	50	100	200
<b>Weight &amp; Packaging</b>						
Weight Per Unit	7.5 lbs.	10.3 lbs.	11.2 lbs.	10.8 lbs.	16.3 lbs.	23.1 lbs.
Weight Per Package	42.0 lbs.	45.6 lbs.	37.5 lbs.	36.9 lbs.	36.6 lbs.	46.3 lbs.
Package Quantity	5	4	3	3	2	2

Standard Glaze: ANSI-70, Munsell 5 BG 7.0/0.4

\* 3/4" - 10; Oversize +0.015"; 7/8" Thread Depth

## T&D Insulators

# Horizontal Clamp Type Line Posts



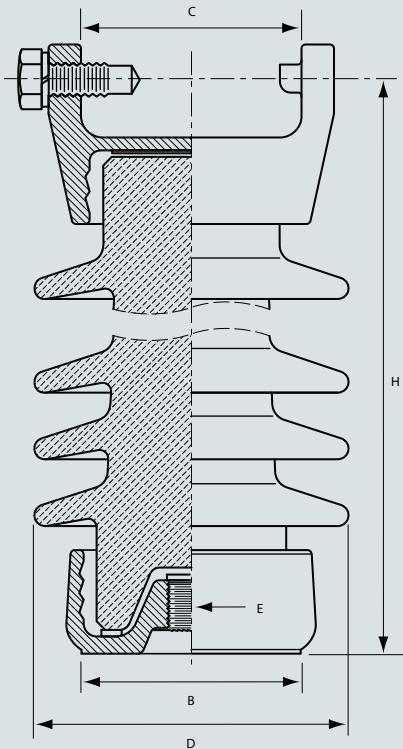
### Mechanical & Electrical Characteristics

Catalog Number	5220	5225	5235	5245
ANSI Technical Reference Number		57-21	57-22	57-23
<b>Dimensions (inches)</b>				
Leakage Distance	10"	14"	22"	29"
Dry Arcing Distance	5"	6.5"	9.5"	12.25"
H - Height To Middle of Clamp Assembly	9.75"	11"	14"	16.5"
D - Diameter	5.9"	6"	6.5"	6.5"
C - Clamp Throat Width (+ .09375 -.00)	4"	4"	4"	4"
B - Base Diameter	4"	4"	4"	4.5"
E - Bolt Thread	3/4" - 10*	3/4" - 10*	3/4" - 10*	3/4" - 10*
<b>Mechanical Values</b>				
Cantilever Strength	2800 lbs.	2800 lbs.	2800 lbs.	2800 lbs.
Cantilever Proof Load	1120 lbs.	1120 lbs.	1120 lbs.	1120 lbs.
<b>Electrical Values</b>				
Low Frequency Flashover Dry	70 kV	70 kV	100 kV	125 kV
Low Frequency Flashover Wet	50 kV	50 kV	70 kV	95 kV
Impulse Flashover Positive	100 kV	120 kV	160 kV	200 kV
<b>Radio Influence Low Frequency Test Voltage Data</b>				
Test Voltage, Rms to Ground, KV	15 KV	15 KV	22 KV	30 KV
Maximum RIV at 1000 kHz - V	50	100	100	200
<b>Weight &amp; Packaging</b>				
Weight Per Unit	13.1 lbs.	14.6 lbs.	19.4 lbs.	26.7 lbs.
Weight Per Package	42.3 lbs.	33.4 lbs.	41.8 lbs.	56.4 lbs.
Package Quantity	3	2	2	2

Standard Glaze: ANSI-70, Munsell 5 BG 7.0/0.4  
 \* 3/4" - 10; Oversize +0.015"; 7/8" Thread Depth

**T&D Insulators**

# Vertical Clamp Type Line Posts



## Mechanical & Electrical Characteristics

Catalog Number	5320	5325	5335	5345
ANSI Technical Reference Number		57-11	57-12	57-13
<b>Dimensions (inches)</b>				
Leakage Distance	10"	14"	22"	29"
Dry Arcing Distance	5"	6.5"	9.5"	12.25"
H - Height to Middle of Clamp	8.75"	10"	13"	16"
D - Diameter	5.9"	6"	6.5"	6.5"
C - Clamp Throat Width (+ .09375 -.00)	4"	4"	4"	4"
B - Base Daimeter	4"	4"	4"	4.5"
E - Bolt Thread	3/4" - 10*	3/4" - 10*	3/4" - 10*	3/4" - 10*
<b>Mechanical Values</b>				
Cantilever Strength	2800 lbs.	2800 lbs.	2800 lbs.	2800 lbs.
Cantilever Proof Load	1120 lbs.	1120 lbs.	1120 lbs.	1120 lbs.
<b>Electrical Values</b>				
Low Frequency Flashover Dry	70 kV	70 kV	100 kV	125 kV
Low Frequency Flashover Wet	50 kV	50 kV	70 kV	95 kV
Impulse Flashover Positive	100 kV	120 kV	160 kV	200 kV
<b>Radio Influence Low Frequency Test Voltage Data</b>				
Test Voltage, Rms to Ground, KV	15 KV	15 KV	22 KV	30 KV
Maximum RIV at 1000 kHz - V	50	100	100	200
<b>Weight &amp; Packaging</b>				
Weight Per Unit	12.8 lbs.	14.3 lbs.	19.2 lbs.	26.2 lbs.
Weight Per Package	43.2 lbs.	46.5 lbs.	41.4 lbs.	55.5 lbs.
Package Quantity	3	3	2	2

Standard Glaze: ANSI-70, Munsell 5 BG 7.0/0.4

\* 3/4" - 10; Oversize +0.015"; 7/8" Thread Depth

# T&D Insulators

## HDPE Pintype Insulators



HDPE-15F

HDPE-25F

HDPE-35F

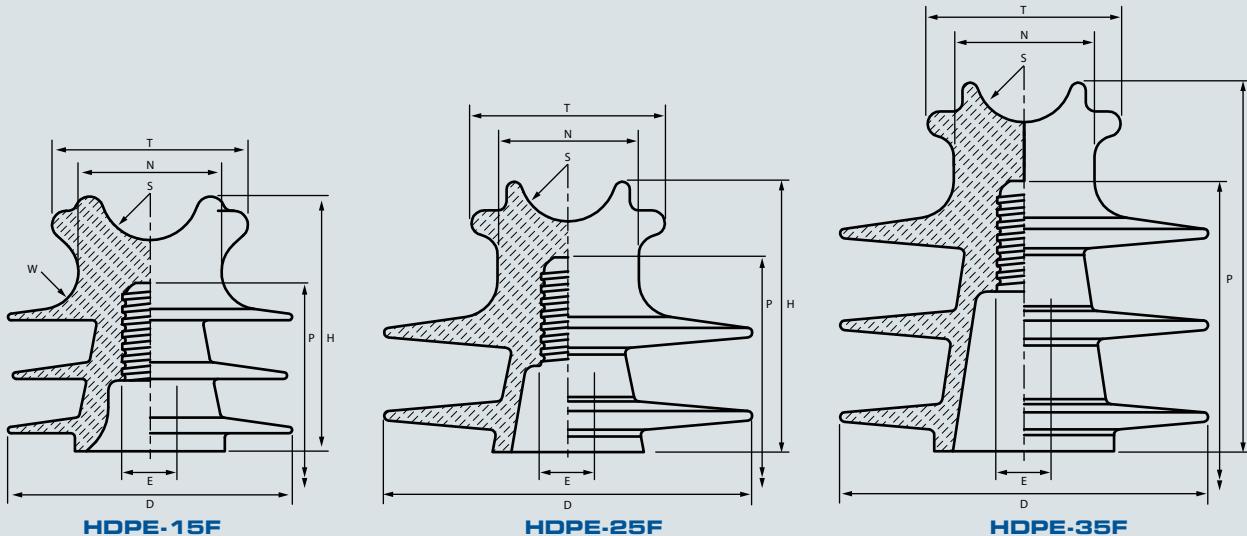


### High Density Polyethylene Body

PPC Insulators, HDPE pintype insulators offer equal or better electrical characteristics than their porcelian counterparts, are easier to handle, light weight and shatter resistant.

## T&D Insulators

# HDPE Pintype Insulators



### Mechanical & Electrical Characteristics

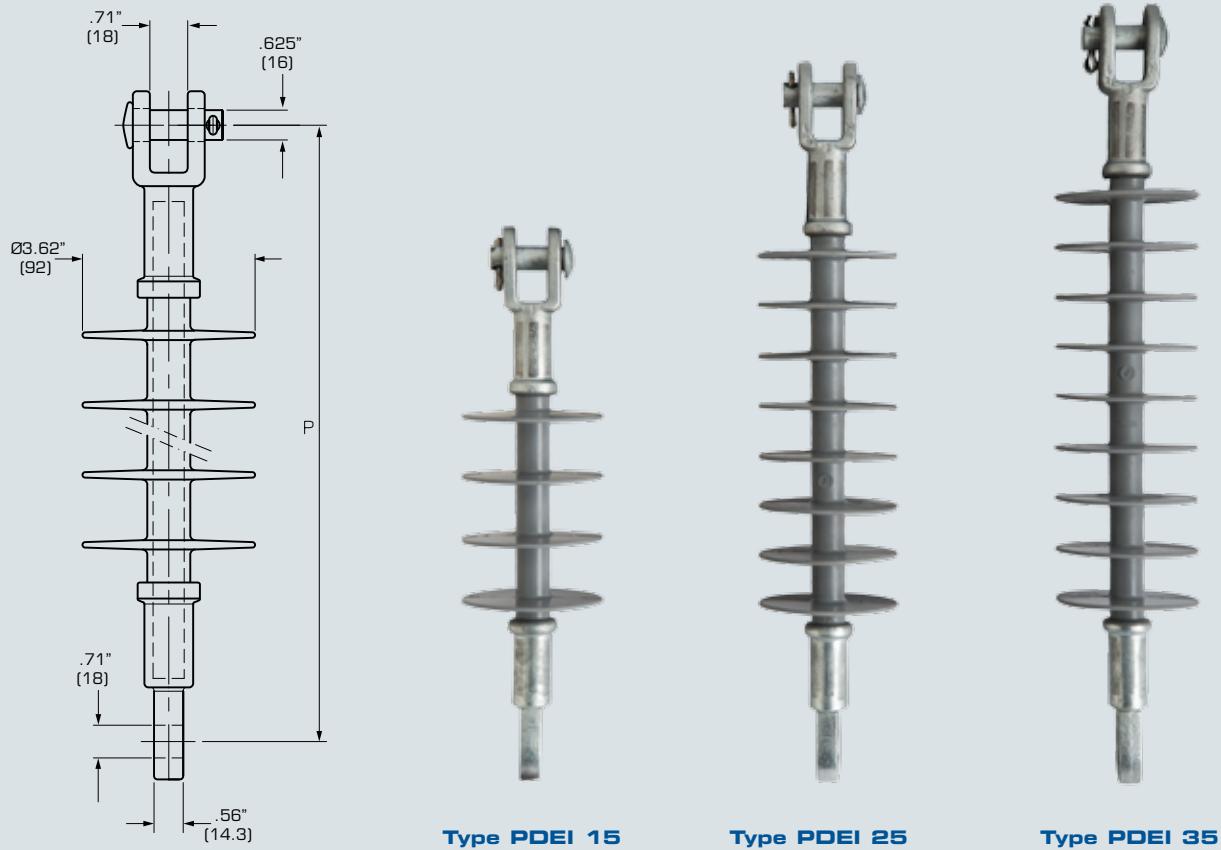
Catalog Number	HDPE-15F	HDPE-25F	HDPE-35F
ANSI Technical Reference Number	55-4	55-5	55-6
Neck Type	F	F	F
<b>Dimensions (inches)</b>			
Leakage Distance	12.5"	14.3"	21"
Dry Arcing Distance	6.5"	7.75"	9.7"
H - Height	5.12"	5.5"	7.5"
D - Diameter	5.7"	7.5"	7.5"
N - Neck Diameter ( $\pm 1/8"$ )	2.875"	2.875"	2.875"
S - Saddle Groove Radius	1"	1"	1"
W - Wire Grooves Radius	0.75"		
T - Top Diameter Maximum	3.9"	3.9"	3.9"
P - Pin Height Minimum	5"	6"	7.5"
E - Pin Diameter	1"	1"	1"
<b>Mechanical Values</b>			
Cantilever Strength	3000 lbs.	3000 lbs.	3000 lbs.
<b>Electrical Values</b>			
Low Frequency Flashover Dry	70 kV	85 kV	100 kV
Low Frequency Flashover Wet	40 kV	45 kV	50 kV
Impulse Flashover Positive	110 kV	140 kV	150 kV
Impulse Flashover Negative	140 kV	170 kV	170 kV
Low Frequency Puncture Voltage	95 kV	115 kV	135 kV
<b>Radio Influence Low Frequency Test Voltage Data</b>			
Test Voltage, Rms to Ground, kV	10 kV	15 kV	22 kV
Maximum RIV at 1000 kHz - V	50 $\mu$ V	100 $\mu$ V	100 $\mu$ V
<b>Weight &amp; Packaging</b>			
Weight Per Unit	1.45 lbs.	2.01 lbs.	2.75 lbs.
Weight Per Package	34.8 lbs.	36.2 lbs.	33 lbs.
Package Quantity	24	18	12

HDPE (High Density Polyethylene) ANSI-70, Munsell 5 BG 7.0/0.4

RUS acceptance pending.

# T&D Insulators

# Polymer Deadend Insulators



## Mechanical & Electrical Characteristics

Catalog Number	PDEI-15	PDEI-25	PDEI-35
KV Rating	15kV	25kV	35kV
<b>Dimensions</b> inches (mm)			
Leakage Distance	16.0" (400)	30.5" (775)	34.4" (875)
Arc Distance	7.9" (200)	12.2" (310)	13.4" (340)
P - Connection Length, Between Centers	12.5" (320)	17.0" (430)	18.3" (465)
D - Shed Diameter	3.62" (92)	3.62" (92)	3.62" (92)
Minimum Housing Thickness	.118" (3)	.118" (3)	.118" (3)
Number of Sheds	4	8	9
<b>Mechanical Values</b>			
Mechanical Failing Load	15000 lbs.	15000 lbs.	15000 lbs.
<b>Electrical Values</b>			
Power Frequency Flashover Dry	90 kV	130 kV	145 kV
Power Frequency Flashover Wet (horizontal)	65 kV	100 kV	130 kV
CIFO (+)	140 kV	190 kV	250 kV
RIV (Test)	15 kV	20 kV	30 kV
RIV (Max)	<10 µV	<10 µV	<10 µV
<b>Weight &amp; Packaging</b>			
Weight Per Carton	34.8 lbs.	41 lbs.	43.6 lbs.
Carton Quantity	15	15	15
Pallet Quantity	360	240	240

SML = 15,000 Lbs. (70kN)

RTL = 7,500 Lbs. (35kN)

Silicone Rubber; Excellent hydrophobicity, High performance in polluted environments and UV rays

Corrosion resistant boron free fiberglass core, 16mm diameter

ANSI 52-4 Clevis and Tongue End Fittings

# T&D Insulators

## Cross Reference Guide

The comparative catalog numbers are intended as a guide only. It is recommended that each item be further identified by referring to that item in this catalog. All possible care has been exercised in preparing this Cross Reference Guide; however, we cannot assume responsibilities for discrepancies.

Suspension Insulators								
ANSI Class Number	PPC Insulators	Ohio Brass	NGK (Locke)	Lapp	Joslyn (Pinco)	A.B. Chance	McGraw Edison	Victor
52-1	86012	32433	16583	6605 G	L 1510	C 907-1001		804
52-3	81022	32440	205840	8200	L 2060	C 907-1003		900
52-4	81012	32439	205580	8100	L 2070	C 907-1004		800
52-9	84300	42399	16044	6815	L 1814	C 907-1009		817

Tie Top Line Post Insulators And Studs								
ANSI Class Number	PPC Insulators	Ohio Brass	NGK (Locke)	Lapp	Joslyn (Pinco)	A.B. Chance	McGraw Edison	Victor
	5015	37600		4315 X		C 903-1710		
	5020	43400		4320 X		C 903-1711		
	5027	43401		4327 X		C 903-1712		
57-2	5035			4335 X				
	5115			4315-PX		C 903-1910		
	5120			4320-PX		C 903-1911		2120
57-1	5125	37610		9325 X		C 903-1813		2025
	5127	47101		4327-PX		C 903-1912		2127
57-2	5135	37820		9335 X		C 903-1814		62055
57-3	5145	41640		9345 X		C 903-1815		62056
Studs								
	6500	87563		301613		C 903-9507		72090
	6502	87573		301614		C 903-9508		72088
	6510	87564		11612 A		C 903-9514		72091
	6512	87574		10187 A		C 903-9517		72087

Pin Type Insulators								
ANSI Class Number	PPC Insulators	Ohio Brass	NGK (Locke)	Lapp	Joslyn (Pinco)	A.B. Chance	McGraw Edison	Victor
55-2	253-S				L 223 R	C 905-1302	NP 8D8	8 R
55-3	261-S	38148			L 63 R	C 905-1303	NP 9D8	5 R
55-4	366-S	38149			L 2064 R	C 905-1304	NP 21D8	6 R
55-5	380-S	38151			L 367 R	C 905-1305	NP 22D8	9 R
55-6	386-ST					C 905-1306	NP 23D8	11 R
56-1	1027-S	38246			L 1123 R	C 906-1311		27 R
56-2	2033-S	38222			L 72 R	C 906-1302		133 R
56-3	2045-S	38223			L 75 R	C 906-1303		245 R

Guy Strain Insulators								
ANSI Class Number	PPC Insulators	Ohio Brass	NGK (Locke)	Lapp	Joslyn (Pinco)	A.B. Chance	McGraw Edison	Victor
54-1	502		31502		L 502	C 909-1041		502
54-2	504		31504		L 504	C 909-1042		504
54-3	506		31506		L 506	C 909-1043		506
54-4	708		31352		L 539	C 909-1044		556

Spool Insulators								
ANSI Class Number	PPC Insulators	Ohio Brass	NGK (Locke)	Lapp	Joslyn (Pinco)	A.B. Chance	McGraw Edison	Victor
	5107				J 150	C 909-1931		
53-1	5112	36139			J 98	C 909-1031		2011
	5102				J 105	C 909-1932		
53-2	5101	36361			J 151	C 909-1032		2012
53-3	5104				J 97	C 909-1033		2013
53-4	5119	38911			J 0101	C 909-1034		2026
53-5	5116	36140			J 0613	C 909-1035		2014



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