

**Cap and Pin Replacement Insulators  
Design Advantages and Specifications**

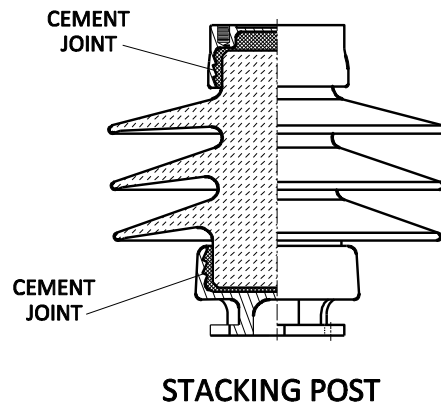
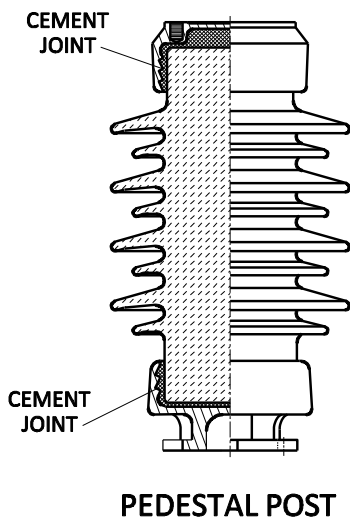
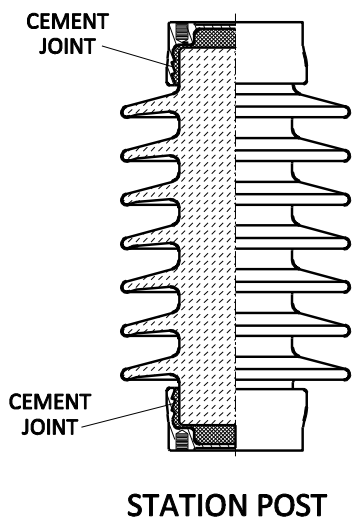
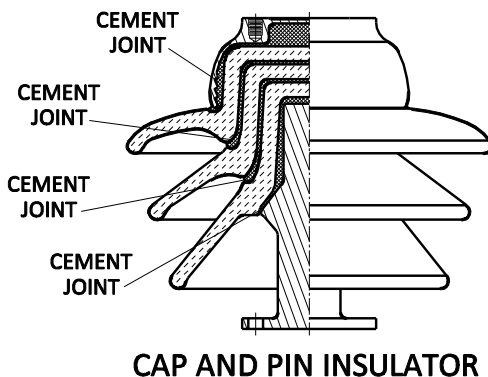
The LAPP Cap and Pin Replacement station post offers electric utilities a direct replacement for cap and pin insulators, featuring all the characteristics required for reliable substation operation. Long-term experience with both the station post and cap and pin insulator has shown that there are generic design deficiencies of the cap and pin that can almost certainly lead to insulator failure in service. When comparing the two designs, the station post's advantages become evident and its viability as a replacement for the cap and pin become clear.

Porcelain has very high compressive strength (80,000 psi), sixteen times greater than its tensile strength (5,000 psi). Station post insulators are designed to take advantage of this strength by avoiding conditions which place porcelain in tension. Cap and pin insulators can be subject to tensile forces generated between two or more porcelain shells from two possible sources: "growth" within the cement joint, and thermal expansion differences.

"Growth" within the cement joint can be a result of reactions between the cement and foreign chemical substances, such as industrial contaminants which may be in the service environment of the insulator. As these reactions proceed, the joint swells or "grows".

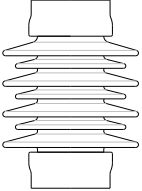
The cap and pin design may employ up to three separate internal joints, and swelling generates bursting (tensile) forces on the porcelain shells, ultimately leading to cracking.

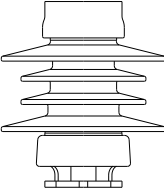
The station post design uses only external cement joints. Under conditions of "growth", external joints preclude the development of tensile stresses on the porcelain. Stresses are compressive in nature, loading the porcelain in its strongest state.

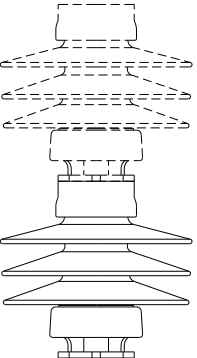


## Cap and Pin Replacement Insulators Design Advantages and Specifications

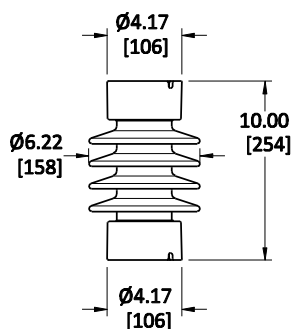
- The station post insulator design is simpler than the cap and pin insulator design. Each station post section employs a large, single piece of porcelain. In contrast, the cap and pin is composed of one to three individual porcelain shells nested together and joined by cement. The simpler design and use of fewer cemented joints means that station posts are more rigid and exhibit less deflection under load than do cap and pin insulators, an important feature in switch applications.
- **Specifications**
  - Light Gray-ANSI 70 glaze is standard on all Cap and Pin Replacement station post insulators. Brown glaze is also available.
  - The IEEE standard for maximum recommended working load is:
    - 40% of published cantilever rating
    - 50% of published torsion rating
    - 50% of published tension rating
  - For short circuit loads only, the maximum recommended working load is 100% of published ratings when using formulas from ANSI C37-1972.
  - Caps and flanges are made of drop forged steel, malleable iron or ductile iron and hot-dip galvanized.
  - Tapped holes are Unified National Coarse Thread Series: 1/2"-13 and 5/8"-11. Holes are tapped 0.15" oversize to allow for the use of galvanized cap screws

	T.R.	Height (in.)	Lt. Gray Glaze Catalog Number	RG® Glaze Catalog Number	Section Qty.	Cantilever Strength (lbs.)		Tension Strength (lbs.)	Torsion Strength (lbs.)	Compression Strength (lbs.)	BIL (kV)
						Upright	Underhung				
 <b>Station Post Replacements</b>	4	10.0	<b>315205-70</b>	<b>535205A</b>	1	2000	2000	8500	7000	10000	110
	44	10.0	<b>315044-70</b>	<b>535044A</b>	1	4000	4000	15000	14000	20000	110
	7	12.0	<b>315007-70</b>	<b>535007A</b>	1	2000	2000	5000	8000	10000	150
	46	12.0	<b>315046-70</b>	<b>535046A</b>	1	4000	4000	20000	16000	20000	150
	10	15.0	<b>315010-70</b>	<b>535010A</b>	1	2000	2000	7000	10000	15000	200
	49	15.0	<b>315049-70</b>	<b>535049A</b>	1	4000	4000	20000	20000	30000	200
	13	18.0	<b>315013-70</b>	<b>535013A</b>	1	2000	2000	8000	12000	15000	250
	53	20.0	<b>315053-70</b>	<b>535053A</b>	1	4000	4000	15000	20000	30000	250
	16	29.0	<b>315016-70</b>	<b>535016A</b>	1	1500	1500	12000	15000	25000	350
	56	29.0	<b>315056-70</b>	<b>535056A</b>	1	3000	3000	25000	40000	60000	350
	19	43.5	<b>315019-70</b>	<b>535019A</b>	1	1700	1700	20000	60000	60000	550
	173	43.5	<b>315173-70</b>	<b>535173A</b>	1	2900	2900	25000	90000	90000	550
	25	58.0	<b>315025-70</b>	<b>535025A</b>	1	1200	1070	20000	40000	60000	750
	174	58.0	<b>315174-70</b>	<b>535174A</b>	1	2000	1750	25000	90000	75000	750
	126	72.5	<b>315126-70</b>	<b>535126A</b>	2	910	910	20000	40000	60000	900
	175	72.5	<b>315175-70</b>	<b>535175A</b>	2	1450	1450	25000	90000	75000	900
128	87.0	<b>315128-70</b>	<b>535128A</b>	2	750	700	20000	40000	60000	1050	
176	87.0	<b>315176-70</b>	<b>535176A</b>	2	1170	1100	25000	90000	75000	1050	

 <b>Pedestal Post Replacements</b>	4	10.0	<b>317004-70</b>	<b>537004A</b>	1	2000	1000	5000	7000	10000	110
	44	10.0	<b>317044-70</b>	<b>537044A</b>	1	4000	3000	10000	14000	20000	110
	7	12.0	<b>317007-70</b>	<b>537007A</b>	1	2000	1000	5000	8000	10000	150
	46	12.0	<b>317046-70</b>	<b>537046A</b>	1	4000	3000	10000	16000	20000	150
	10	15.0	<b>317010-70</b>	<b>537010A</b>	1	2000	1000	7000	10000	15000	200
	49	15.0	<b>317049-70</b>	<b>537049A</b>	1	4000	3000	14000	20000	30000	200
	13	18.0	<b>317013-70</b>	<b>537013A</b>	1	2000	1000	8000	12000	15000	250
	53	20.0	<b>317053-70</b>	<b>537053A</b>	1	4000	2500	20000	40000	60000	250
	16	29.0	<b>317016-70</b>	<b>537016A</b>	1	1500	1000	12000	15000	25000	350
	56	29.0	<b>317056-70</b>	<b>537056A</b>	1	3000	2350	20000	40000	60000	350
	19	43.5	<b>317019-70</b>	<b>537019A</b>	1	1700	1470	20000	40000	60000	550
	173	43.5	<b>317173-70</b>	<b>537173A</b>	1	2900	2350	20000	40000	60000	550
	25	58.0	<b>317025-70</b>	<b>537025A</b>	1	1700	1470	20000	40000	60000	750
	174	58.0	<b>317174-70</b>	<b>537174A</b>	1	2000	1750	25000	90000	75000	750
	126	72.5	<b>317126-70</b>	<b>537126A</b>	2	910	840	20000	40000	60000	900
	175	72.5	<b>317175-70</b>	<b>537175A</b>	2	1450	1350	25000	90000	75000	900
128	87.0	<b>317128-70</b>	<b>537128A</b>	2	750	700	20000	40000	60000	1050	
176	87.0	<b>317176-70</b>	<b>537176A</b>	2	1170	1100	25000	90000	75000	1050	

 <b>Stacking Post</b>	140	14.5	<b>319140-70</b>	<b>539140</b>	1	7000	4000	20000	40000	60000	210
	139	14.5	<b>319139-70</b>	<b>539139</b>	1	10000	6000	25000	90000	75000	210
	56	29.0	<b>319056-70</b>	<b>539056</b>	2	3000	2350	20000	40000	60000	350
	---	29.0	<b>314982-70</b>	<b>534982</b>	2	4500	3500	20000	40000	60000	350
	19	43.5	<b>319019-70</b>	<b>539019</b>	3	1700	1470	20000	40000	60000	550
	173	43.5	<b>319173-70</b>	<b>539173</b>	3	2900	2400	25000	90000	75000	550
	25	58.0	<b>319025-70</b>	<b>539025</b>	4	1200	1070	20000	40000	60000	750
	174	58.0	<b>319174-70</b>	<b>539174</b>	4	2000	1750	25000	90000	75000	750
	126	72.5	<b>319126-70</b>	<b>539126</b>	5	910	840	20000	40000	60000	900
	175	72.5	<b>319175-70</b>	<b>539175</b>	5	1450	1350	25000	90000	75000	900
128	87.0	<b>319128-70</b>	<b>539128</b>	6	750	700	20000	40000	60000	1050	
176	87.0	<b>319176-70</b>	<b>539176</b>	6	1170	1100	25000	90000	75000	1050	

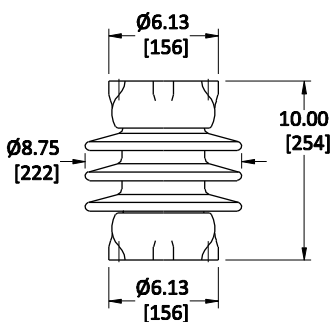
(4) TAPPED HOLES  
1/2-13 +.015" OVERSIZE  
.50 [13] FULL THREAD  
ON 3.00 [76] BOLT CIRCLE



(4) TAPPED HOLES  
1/2-13 +.015" OVERSIZE  
.50 [13] FULL THREAD  
ON 3.00 [76] BOLT CIRCLE

**315205-70  
STATION POST**

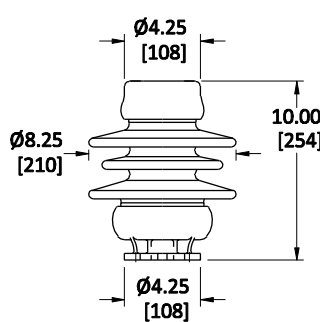
(4) TAPPED HOLES  
5/8-11 +.015" OVERSIZE  
.75 [19] FULL THREAD  
ON 5.00 [127] BOLT CIRCLE



(4) TAPPED HOLES  
5/8-11 +.015" OVERSIZE  
.75 [19] FULL THREAD  
ON 5.00 [127] BOLT CIRCLE

**315044-70  
STATION POST**

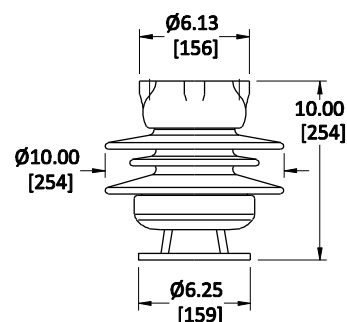
(4) TAPPED HOLES  
1/2-13 +.015" OVERSIZE  
.63 [16] FULL THREAD  
ON 3.00 [76] BOLT CIRCLE



(4) SLOTS  
.53 [13] WIDE  
ON 3.00 [76]  
BOLT CIRCLE

**317004-70  
PEDESTAL POST**

(4) TAPPED HOLES  
5/8-11 +.015" OVERSIZE  
.75 [19] FULL THREAD  
ON 5.00 [127] BOLT CIRCLE



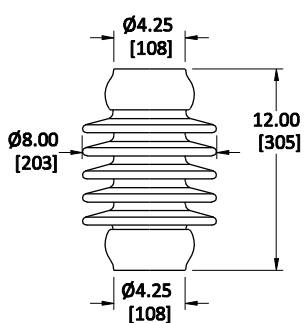
(4) THRU HOLES  
Ø.69 [17]  
ON 5.00 [127]  
BOLT CIRCLE

**317044-70  
PEDESTAL POST**

**Characteristics**

Catalog Number (Light Gray-ANSI 70)	315205-70	315044-70	317004-70	317044-70
Catalog Number (Brown)	315205	315044	317004	317044
Catalog Number (RG®)	535205A	535044A	537004A	537044A
ANSI Technical Reference Number	T.R. 4	T.R. 44	T.R. 4	T.R. 44
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	15.5 [394]	14.5 [368]	12 [305]	14 [356]
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	2000 [8.9]	4000 [17.8]	2000 [8.9]	4000 [17.8]
Cantilever Strength, Underhung, lbs. [kN]	2000 [8.9]	4000 [17.8]	1000 [4.4]	4000 [13.3]
Tensile Strength, lbs. [kN]	8500 [37.8]	15000 [66.7]	5000 [22.2]	10000 [44.5]
Torsion Strength, in-lbs. [kNm]	7000 [0.79]	14000 [1.6]	7000 [0.79]	14000 [1.58]
Compression Strength, lbs. [kN]	10000 [44.5]	20000 [89.0]	10000 [44.5]	20000 [89.0]
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	125	125	125	125
Low Frequency Withstand, 10 Sec. Wet, kV	45	45	45	45
Impulse Withstand, kV	110	110	110	110
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	10	10	10	10
Maximum RIV, Microvolts at 1000 kHz	50	50	50	50
Net Weight, Each, lbs. [kg]	15.4 [7.0]	32.2 [14.6]	22.0 [10.0]	31.3 [14.2]

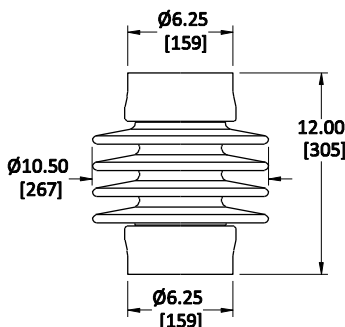
(4) TAPPED HOLES  
1/2-13 +.015" OVERSIZE  
.63 [16] FULL THREAD  
ON 3.00 [76] BOLT CIRCLE



(4) TAPPED HOLES  
1/2-13 +.015" OVERSIZE  
.63 [16] FULL THREAD  
ON 3.00 [76] BOLT CIRCLE

**315007-70  
STATION POST**

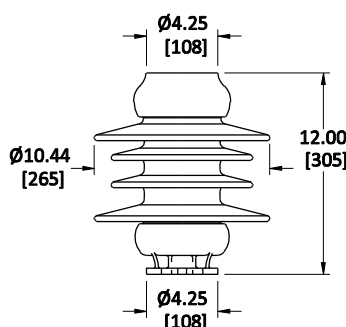
(4) TAPPED HOLES  
5/8-11 +.015" OVERSIZE  
.75 [19] FULL THREAD  
ON 5.00 [127] BOLT CIRCLE



(4) TAPPED HOLES  
5/8-11 +.015" OVERSIZE  
.75 [19] FULL THREAD  
ON 5.00 [127] BOLT CIRCLE

**315046-70  
STATION POST**

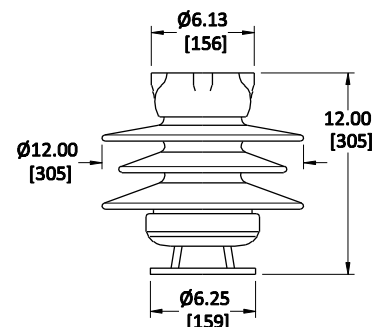
(4) TAPPED HOLES  
1/2-13 +.015" OVERSIZE  
.63 [16] FULL THREAD  
ON 3.00 [76] BOLT CIRCLE



(4) SLOTS  
.53 [13] WIDE  
ON 3.00 [76]  
BOLT CIRCLE

**317007-70  
PEDESTAL POST**

(4) TAPPED HOLES  
5/8-11 +.015" OVERSIZE  
.75 [19] FULL THREAD  
ON 5.00 [127] BOLT CIRCLE

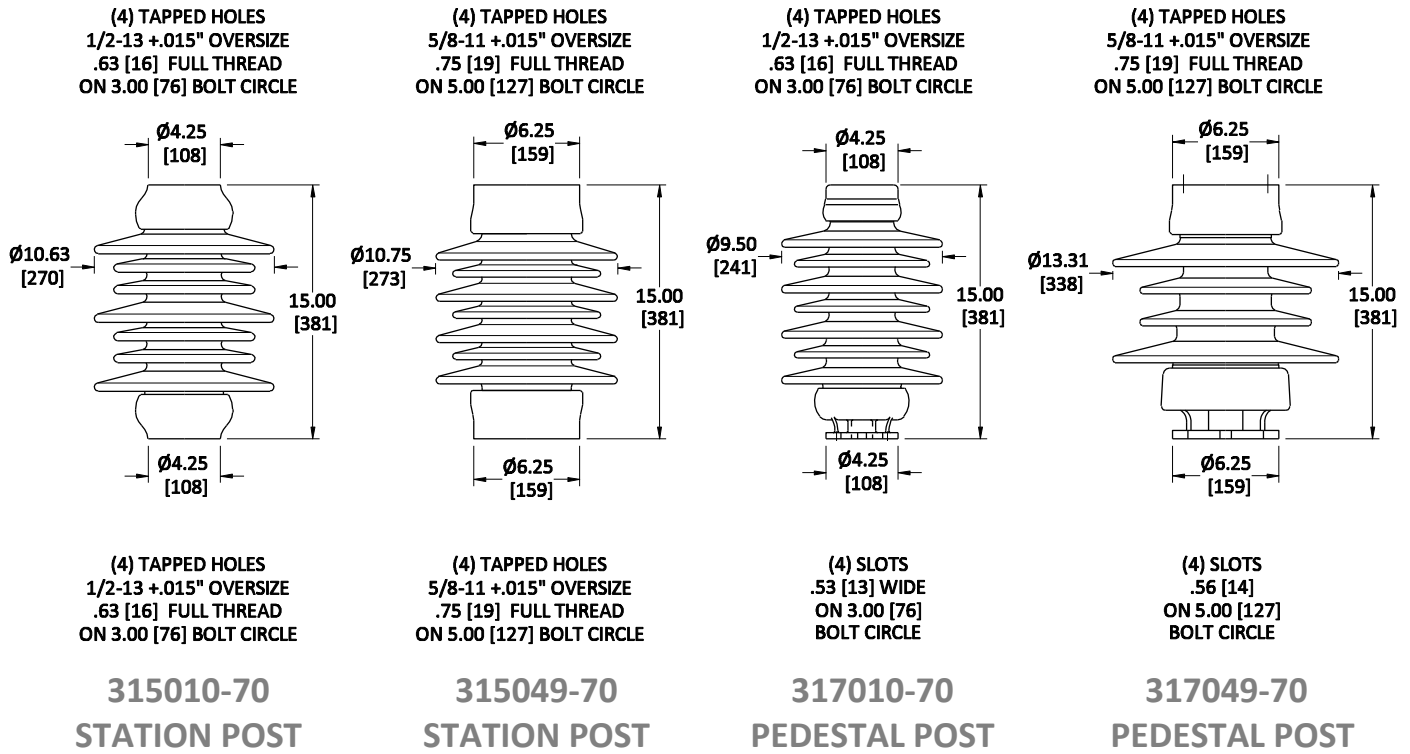


(4) THRU HOLES  
Ø.69 [17]  
ON 5.00 [127]  
BOLT CIRCLE

**317046-70  
PEDESTAL POST**

**Characteristics**

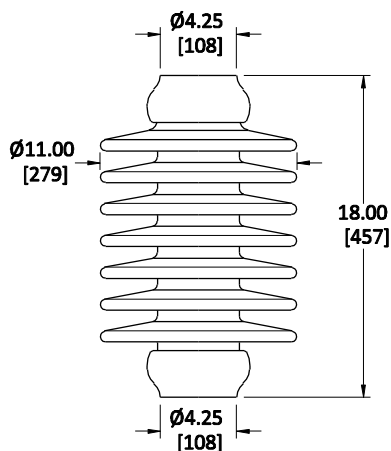
Catalog Number (Light Gray-ANSI 70)	315007-70	315046-70	317007-70	317046-70
Catalog Number (Brown)	315007	315046	317007	314046
Catalog Number (RG®)	535007A	535046A	537007A	537046A
ANSI Technical Reference Number	T.R. 7	T.R. 46	T.R. 7	T.R. 46
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	20 [508]	24 [610]	20 [508]	18 [457]
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	2000 [8.9]	4000 [17.8]	2000 [8.9]	4000 [17.8]
Cantilever Strength, Underhung, lbs. [kN]	2000 [8.9]	4000 [17.8]	1000 [4.4]	3000 [13.3]
Tensile Strength, lbs. [kN]	5000 [22.2]	20000 [89.0]	5000 [22.2]	10000 [44.5]
Torsion Strength, in-lbs. [kNm]	8000 [0.90]	16000 [1.81]	8000 [0.90]	16000 [1.81]
Compression Strength, lbs. [kN]	10000 [44.5]	20000 [89.0]	10000 [44.5]	20000 [89.0]
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	170	170	170	170
Low Frequency Withstand, 10 Sec. Wet, kV	60	60	60	60
Impulse Withstand, kV	150	150	150	150
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	15	15	15	15
Maximum RIV, Microvolts at 1000 kHz	100	100	100	100
Net Weight, Each, lbs. [kg]	32.0 [14.5]	49.4 [22.4]	32.3 [14.7]	41.0 [18.6]



**Characteristics**

Catalog Number (Light Gray-ANSI 70)	315010-70	315049-70	317010-70	317049-70
Catalog Number (Brown)	315010	315049	317010	314049
Catalog Number (RG®)	535010A	535049A	537010A	537049A
<b>ANSI Technical Reference Number</b>	T.R. 10	T.R. 49	T.R. 10	T.R. 49
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	38 [965]	35 [889]	28 [711]	28 [711]
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	2000 [8.9]	4000 [17.8]	2000 [8.9]	4000 [17.8]
Cantilever Strength, Underhung, lbs. [kN]	2000 [8.9]	4000 [17.8]	1000 [4.4]	3000 [13.3]
Tensile Strength, lbs. [kN]	7000 [31.1]	20000 [89.0]	7000 [31.1]	14000 [62.3]
Torsion Strength, in.-lbs. [kNm]	10000 [1.13]	20000 [2.26]	10000 [1.13]	20000 [2.26]
Compression Strength, lbs. [kN]	15000 [66.7]	30000 [133.4]	15000 [66.7]	30000 [133.4]
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	225	225	225	225
Low Frequency Withstand, 10 Sec. Wet, kV	80	80	80	80
Impulse Withstand, kV	200	200	200	200
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	22	22	22	22
Maximum RIV, Microvolts at 1000 kHz	100	100	100	100
Net Weight, Each, lbs. [kg]	43.4 [19.7]	56.8 [25.8]	39.1 [17.7]	68.5 [31.1]

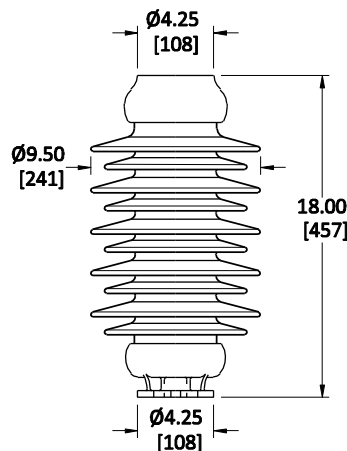
(4) TAPPED HOLES  
1/2-13 +.015" OVERSIZE  
.63 [16] FULL THREAD  
ON 3.00 [76] BOLT CIRCLE



(4) TAPPED HOLES  
1/2-13 +.015" OVERSIZE  
.63 [16] FULL THREAD  
ON 3.00 [76] BOLT CIRCLE

**315013-70**  
**STATION POST**

(4) TAPPED HOLES  
1/2-13 +.015" OVERSIZE  
.63 [16] FULL THREAD  
ON 3.00 [76] BOLT CIRCLE



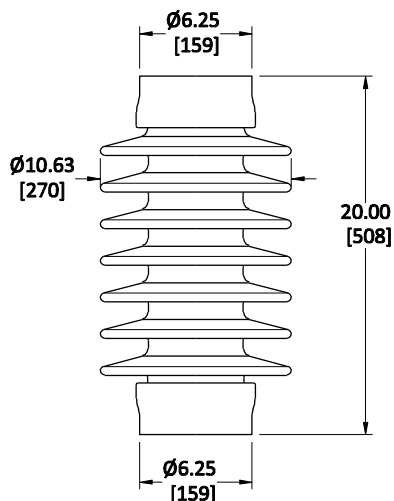
(4) SLOTS  
.56 [14] WIDE  
ON 3.00 [76]  
BOLT CIRCLE

**317013-70**  
**PEDESTAL POST**

**Characteristics**

Catalog Number (Light Gray-ANSI 70)	315013-70	---	317013-70	---
Catalog Number (Brown)	315013	---	317013	---
Catalog Number (RG®)	535013A	---	537013A	---
ANSI Technical Reference Number	T.R. 13	---	T.R. 13	---
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	50 [1270]	---	45 [1143]	---
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	2000 [8.9]	---	2000 [8.9]	---
Cantilever Strength, Underhung, lbs. [kN]	2000 [8.9]	---	1000 [4.4]	---
Tensile Strength, lbs. [kN]	8000 [35.5]	---	8000 [35.6]	---
Torsion Strength, in-lbs. [kNm]	12000 [1.36]	---	12000 [1.36]	---
Compression Strength, lbs. [kN]	15000 [66.7]	---	15000 [66.7]	---
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	280	---	280	---
Low Frequency Withstand, 10 Sec. Wet, kV	100	---	100	---
Impulse Withstand, kV	250	---	250	---
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	30	---	30	---
Maximum RIV, Microvolts at 1000 kHz	200	---	200	---
Net Weight, Each, lbs. [kg]	59.9 [27.0]	---	42.3 [19.2]	---

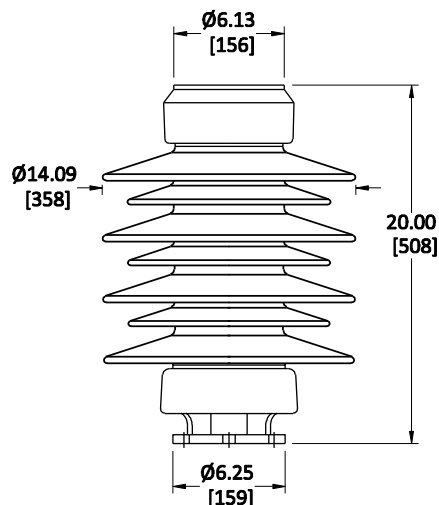
(4) TAPPED HOLES  
5/8-11 +.015" OVERSIZE  
.75 [19] FULL THREAD  
ON 5.00 [127] BOLT CIRCLE



(4) TAPPED HOLES  
5/8-11 +.015" OVERSIZE  
.75 [19] FULL THREAD  
ON 5.00 [127] BOLT CIRCLE

**315053-70**  
**STATION POST**

(4) TAPPED HOLES  
5/8-11 +.015" OVERSIZE  
.69 [17] FULL THREAD  
ON 5.00 [127] BOLT CIRCLE



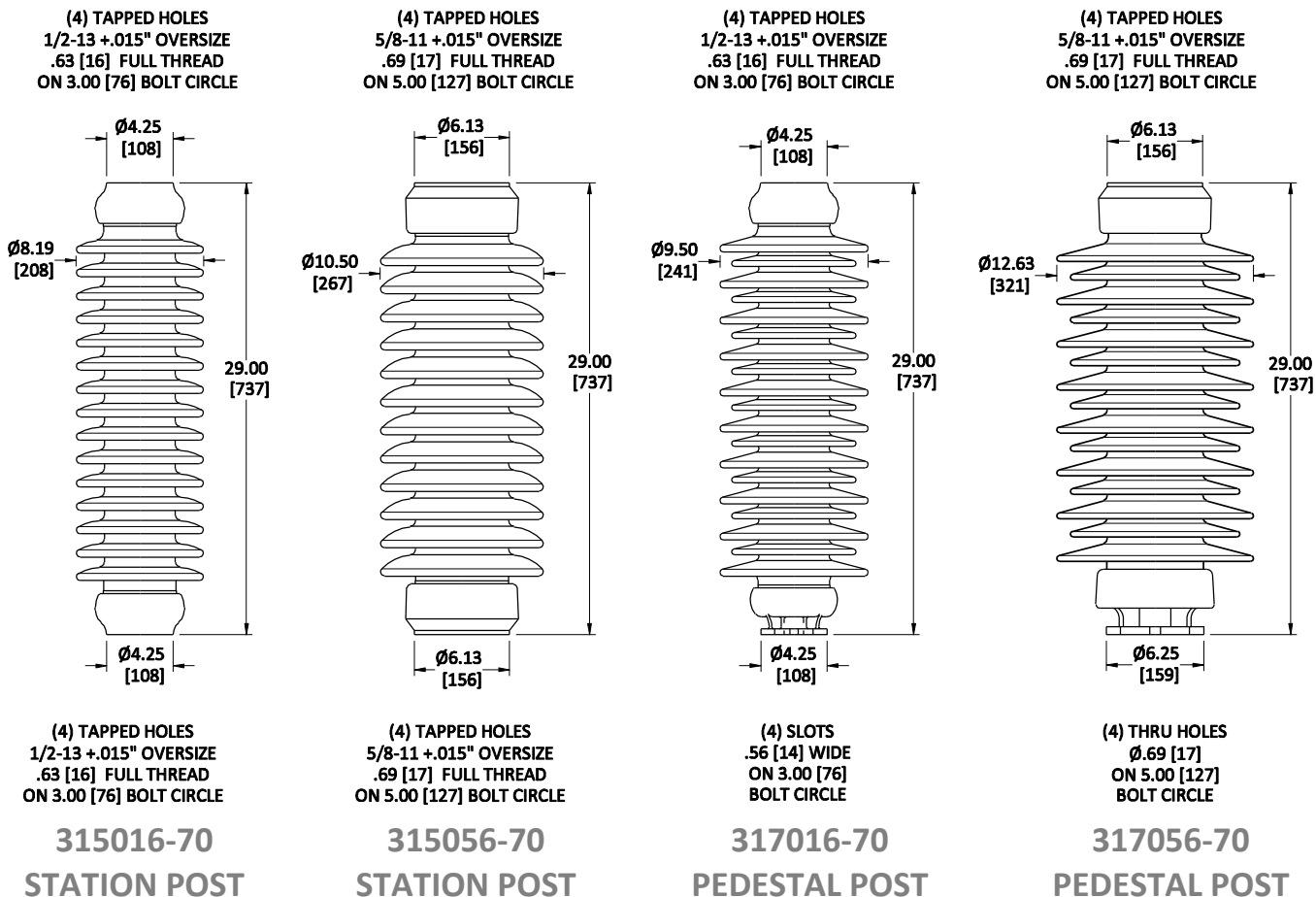
(4) SLOTS  
.69 [17] WIDE  
ON 5.00 [127]  
BOLT CIRCLE

**317053-70**  
**PEDESTAL POST**

### Characteristics

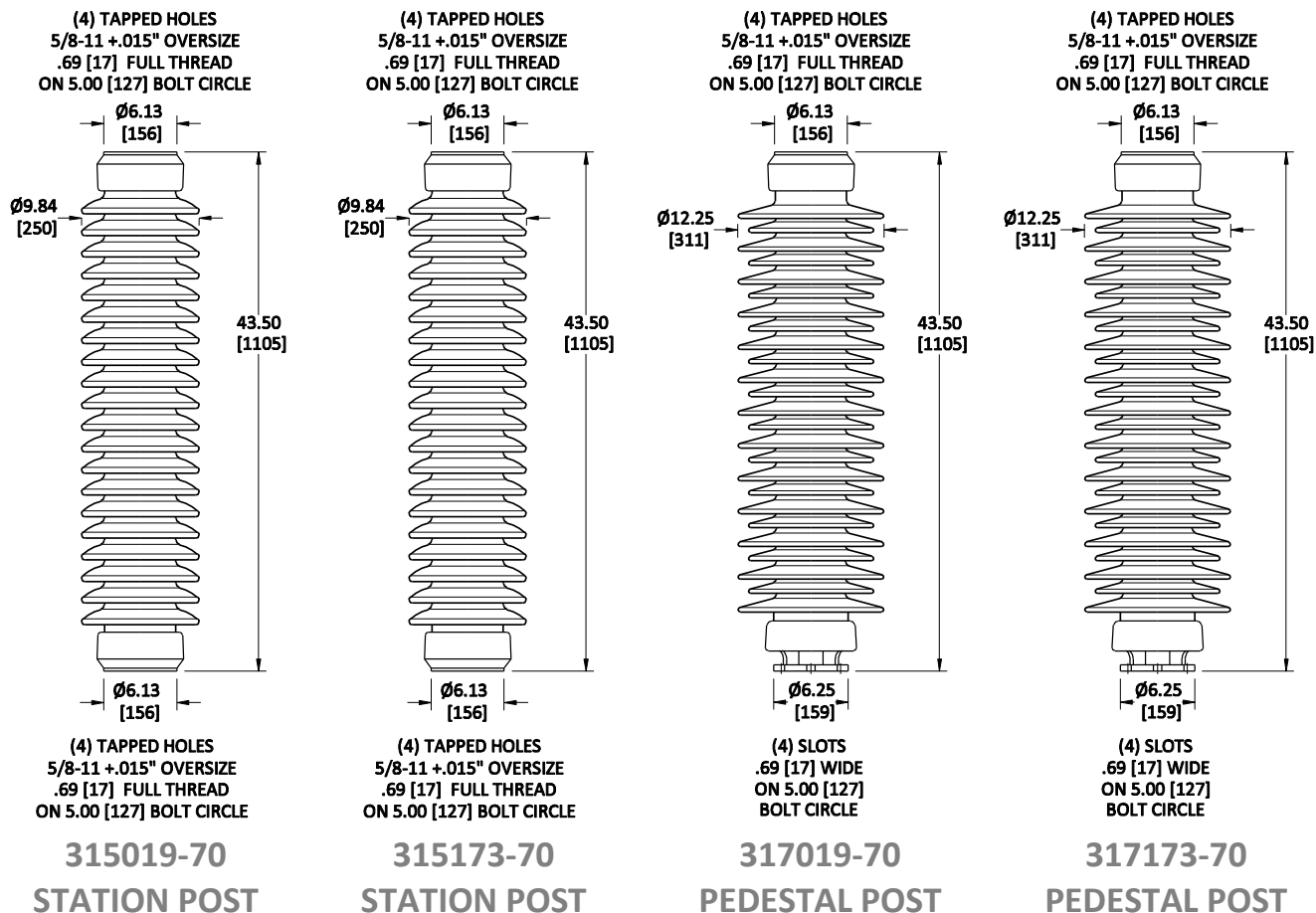
Catalog Number (Light Gray-ANSI 70)	315053-70	---	317053-70	---
Catalog Number (Brown)	315053	---	317053	---
Catalog Number (RG®)	535053A	---	537053A	---
ANSI Technical Reference Number	T.R. 53	---	T.R. 53	---
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	40 [1016]	---	37 [940]	---
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	4000 [17.8]	---	4000 [17.8]	---
Cantilever Strength, Underhung, lbs. [kN]	4000 [17.8]	---	2500 [11.1]	---
Tensile Strength, lbs. [kN]	15000 [66.7]	---	20000 [89.0]	---
Torsion Strength, in-lbs. [kNm]	20000 [2.26]	---	40000 [4.52]	---
Compression Strength, lbs. [kN]	30000 [133.4]	---	60000 [266.9]	---
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	280	---	280	---
Low Frequency Withstand, 10 Sec. Wet, kV	100	---	100	---
Impulse Withstand, kV	250	---	250	---
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	30	---	30	---
Maximum RIV, Microvolts at 1000 kHz	200	---	200	---
Net Weight, Each, lbs. [kg]	77.9 [35.3]	---	88.4 [40.1]	---





**Characteristics**

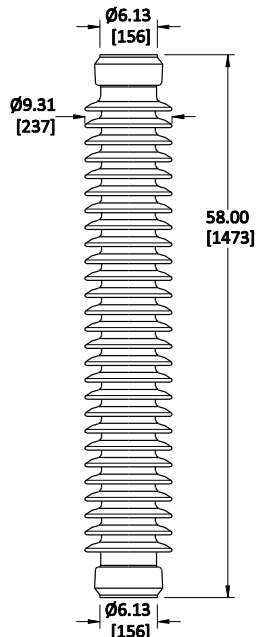
Catalog Number (Light Gray-ANSI 70)	315016-70	315056-70	317016-70	317056-70
Catalog Number (Brown)	315016	315056	317016	317056
Catalog Number (RG®)	535016A	535056A	537016A	537056A
<b>ANSI Technical Reference Number</b>	T.R. 16	T.R. 56	T.R. 16	T.R. 56
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	69 [1752]	70 [1778]	80 [2032]	94 [2388]
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	1500 [6.7]	3000 [13.3]	1500 [6.7]	3000 [13.3]
Cantilever Strength, Underhung, lbs. [kN]	1500 [6.7]	3000 [13.3]	1000 [4.4]	2350 [10.4]
Tensile Strength, lbs. [kN]	12000 [53.4]	25000 [111.2]	12000 [53.3]	20000 [89.0]
Torsion Strength, in-lbs. [kNm]	15000 [1.69]	40000 [4.52]	15000 [1.69]	40000 [2.26]
Compression Strength, lbs. [kN]	25000 [111.2]	60000 [266.9]	25000 [111.2]	60000 [266.9]
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	390	365	390	410
Low Frequency Withstand, 10 Sec. Wet, kV	145	145	145	160
Impulse Withstand, kV	350	350	350	350
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	44	44	44	44
Maximum RIV, Microvolts at 1000 kHz	200	200	200	200
Net Weight, Each, lbs. [kg]	72.2 [32.7]	129.0 [58.5]	94.0 [42.6]	140.0 [63.9]



Characteristics

Catalog Number (Light Gray-ANSI 70)	315019-70	315173-70	317019-70	317173-70
Catalog Number (Brown)	315019	315173	317019	317173
Catalog Number (RG®)	535019A	535173A	537019A	537173A
ANSI Technical Reference Number	T.R. 19	T.R. 173	T.R. 19	T.R. 173
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	99 [2515]	99 [2515]	157 [3988]	157 [3988]
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	1700 [6.7]	2900 [12.9]	1700 [7.6]	2900 [12.9]
Cantilever Strength, Underhung, lbs. [kN]	1700 [6.7]	2900 [12.9]	1700 [89.0]	2350 [10.5]
Tensile Strength, lbs. [kN]	20000 [89.0]	25000 [111.2]	20000 [89.0]	25000 [111.2]
Torsion Strength, in-lbs. [kNm]	40000 [4.52]	90000 [10.16]	40000 [4.52]	90000 [10.16]
Compression Strength, lbs. [kN]	60000 [266.9]	75000 [333.6]	60000 [266.9]	75000 [333.6]
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	610	610	610	610
Low Frequency Withstand, 10 Sec. Wet, kV	230	230	230	230
Impulse Withstand, kV	550	550	550	550
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	73	73	73	73
Maximum RIV, Microvolts at 1000 kHz	200	200	200	200
Net Weight, Each, lbs. [kg]	194.3 [88.1]	194.3 [88.1]	221.8 [100.6]	221.8 [100.6]

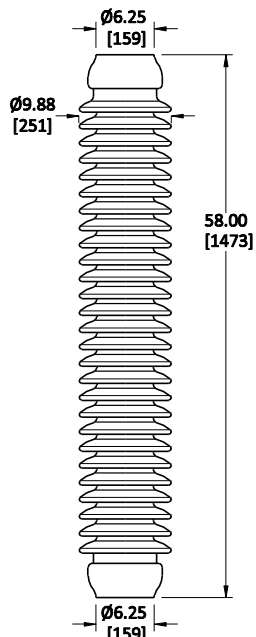
(4) TAPPED HOLES  
5/8-11 +.015" OVERSIZE  
.69 [17] FULL THREAD  
ON 5.00 [127] BOLT CIRCLE



(4) TAPPED HOLES  
5/8-11 +.015" OVERSIZE  
.69 [17] FULL THREAD  
ON 5.00 [127] BOLT CIRCLE

**315025-70**  
STATION POST

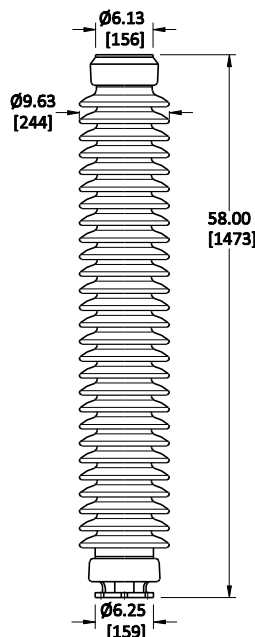
(4) TAPPED HOLES  
5/8-11 +.015" OVERSIZE  
.75 [19] FULL THREAD  
ON 5.00 [127] BOLT CIRCLE



(4) TAPPED HOLES  
5/8-11 +.015" OVERSIZE  
.75 [19] FULL THREAD  
ON 5.00 [127] BOLT CIRCLE

**315174-70**  
STATION POST

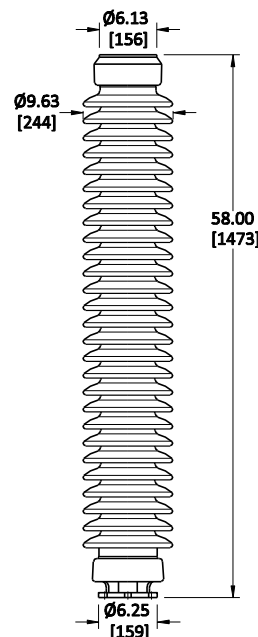
(4) TAPPED HOLES  
5/8-11 +.015" OVERSIZE  
.69 [17] FULL THREAD  
ON 5.00 [127] BOLT CIRCLE



(4) SLOTS  
.69 [17] WIDE  
ON 5.00 [127]  
BOLT CIRCLE

**317025-70**  
PEDESTAL POST

(4) TAPPED HOLES  
5/8-11 +.015" OVERSIZE  
.69 [17] FULL THREAD  
ON 5.00 [127] BOLT CIRCLE

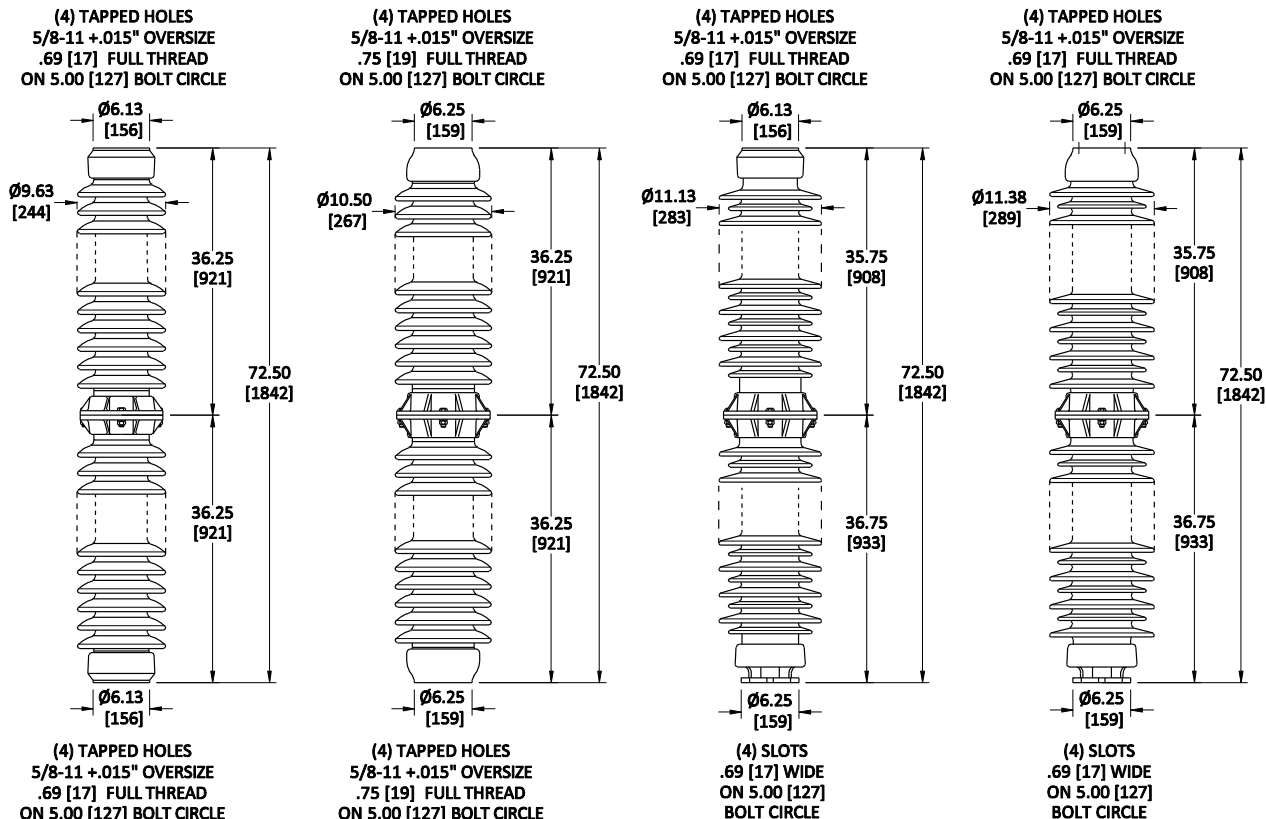


(4) SLOTS  
.69 [17] WIDE  
ON 5.00 [127]  
BOLT CIRCLE

**317174-70**  
PEDESTAL POST

**Characteristics**

	<b>315025-70</b>	<b>315174-70</b>	<b>317025-70</b>	<b>317174-70</b>
Catalog Number (Light Gray-ANSI 70)	<b>315025-70</b>	<b>315174-70</b>	<b>317025-70</b>	<b>317174-70</b>
Catalog Number (Brown)	<b>315025</b>	<b>315174</b>	<b>317025</b>	<b>317174</b>
Catalog Number (RG®)	<b>535025A</b>	<b>535174A</b>	<b>537025A</b>	<b>537174A</b>
ANSI Technical Reference Number	T.R. 25	T.R. 174	T.R. 25	T.R. 174
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	132 [3353]	132 [3353]	142 [3607]	142 [3607]
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	1200 [5.3]	2000 [8.9]	1200 [5.3]	2000 [8.9]
Cantilever Strength, Underhung, lbs. [kN]	1070 [4.8]	2000 [8.9]	1070 [4.8]	1750 [7.8]
Tensile Strength, lbs. [kN]	20000 [89.0]	25000 [111.2]	20000 [89.0]	25000 [111.2]
Torsion Strength, in-lbs. [kNm]	40000 [4.52]	90000 [10.16]	40000 [4.52]	90000 [10.16]
Compression Strength, lbs. [kN]	60000 [266.9]	75000 [333.6]	60000 [266.9]	75000 [333.6]
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	810	810	810	810
Low Frequency Withstand, 10 Sec. Wet, kV	315	315	315	315
Impulse Withstand, kV	750	750	750	750
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	103	103	103	103
Maximum RIV, Microvolts at 1000 kHz	200	200	200	200
Net Weight, Each, lbs. [kg]	202.4 [91.8]	261.6 [118.7]	217.9 [98.8]	246.0 [111.6]



**315126-70**  
STATION POST

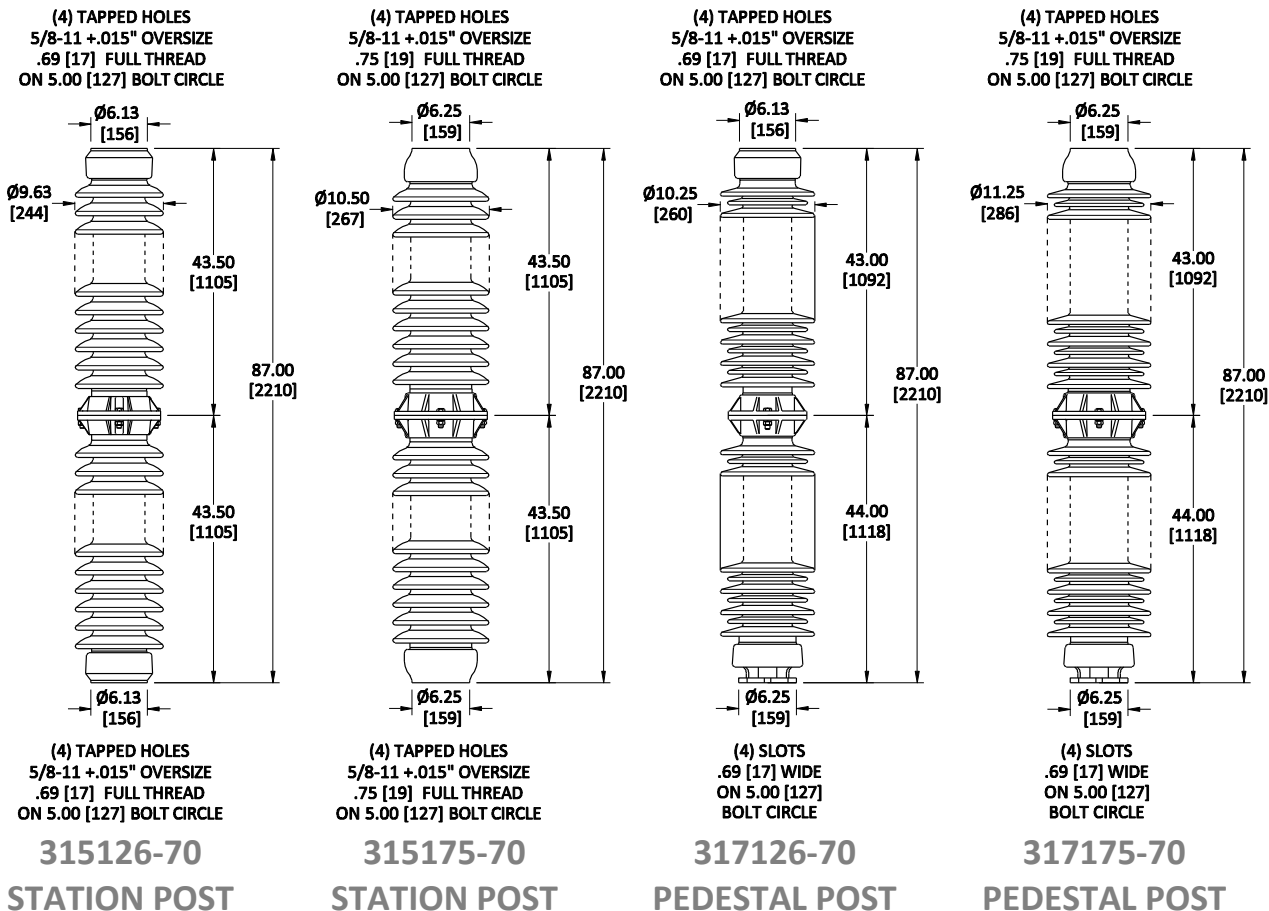
**315175-70**  
STATION POST

**317126-70**  
PEDESTAL POST

**317175-70**  
PEDESTAL POST

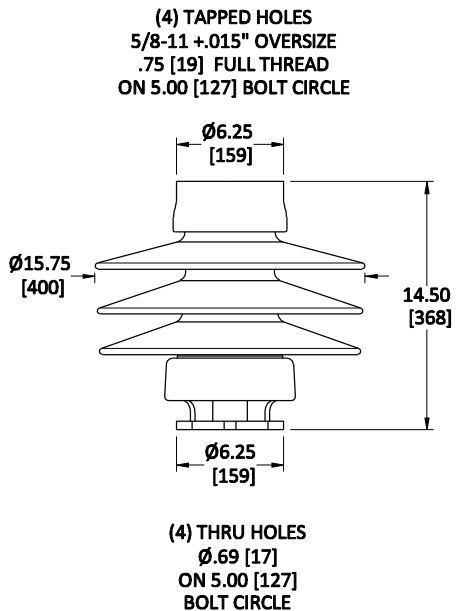
**Characteristics**

	<b>315126-70</b>	<b>315175-70</b>	<b>317126-70</b>	<b>317175-70</b>
Catalog Number (Light Gray-ANSI 70)	<b>315126-70</b>	<b>315175-70</b>	<b>317126-70</b>	<b>317175-70</b>
Catalog Number (Brown)	<b>315126</b>	<b>315175</b>	<b>317126</b>	<b>317175</b>
Catalog Number (RG®)	<b>535126A</b>	<b>535175A</b>	<b>537126A</b>	<b>537175A</b>
ANSI Technical Reference Number	T.R. 126	T.R. 175	T.R. 126	T.R. 175
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	165 [4191]	165 [4191]	182 [4623]	230 [5842]
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	910 [4.0]	1450 [6.4]	910 [4.0]	1450 [6.4]
Cantilever Strength, Underhung, lbs. [kN]	910 [4.0]	1450 [6.4]	840 [3.7]	1350 [6.0]
Tensile Strength, lbs. [kN]	20000 [89.0]	25000 [111.2]	20000 [89.0]	25000 [111.2]
Torsion Strength, in-lbs. [kNm]	40000 [4.52]	90000 [10.16]	40000 [4.52]	90000 [10.16]
Compression Strength, lbs. [kN]	60000 [266.9]	75000 [333.6]	60000 [266.9]	75000 [333.6]
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	1010	1010	1010	1010
Low Frequency Withstand, 10 Sec. Wet, kV	385	385	385	385
Impulse Withstand, kV	900	900	900	900
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	125	125	125	125
Maximum RIV, Microvolts at 1000 kHz	500	500	500	500
Net Weight, Each, lbs. [kg]	273.9 [124.2]	338.2 [153.4]	287.5 [130.4]	380.9 [172.8]

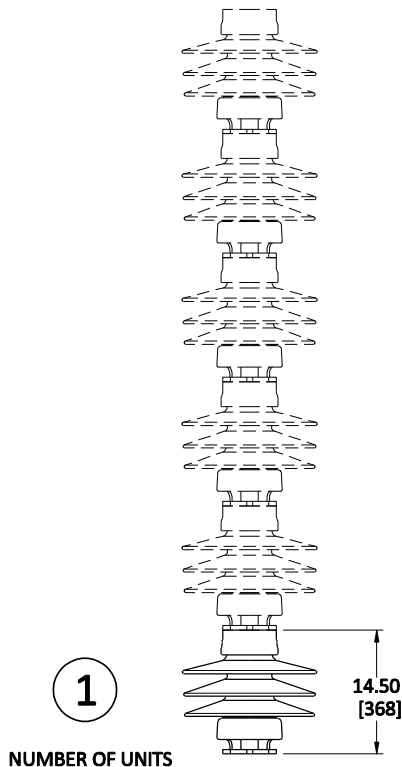


**Characteristics**

Catalog Number (Light Gray-ANSI 70)	<b>315128-70</b>	<b>315176-70</b>	<b>317128-70</b>	<b>317176-70</b>
Catalog Number (Brown)	<b>315128</b>	<b>315176</b>	<b>317128</b>	<b>317176</b>
Catalog Number (RG®)	<b>535128A</b>	<b>535176A</b>	<b>537128A</b>	<b>537176A</b>
ANSI Technical Reference Number	T.R. 128	T.R. 176	T.R. 128	T.R. 176
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	198 [5029]	198 [5029]	198 [5029]	285 [7239]
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	750 [3.3]	1170 [5.2]	750 [3.3]	1170 [5.2]
Cantilever Strength, Underhung, lbs. [kN]	750 [3.3]	1170 [5.2]	700 [3.1]	1100 [4.9]
Tensile Strength, lbs. [kN]	20000 [89.0]	25000 [111.2]	20000 [89.0]	25000 [111.2]
Torsion Strength, in-lbs. [kNm]	40000 [4.52]	90000 [10.16]	40000 [4.52]	90000 [10.16]
Compression Strength, lbs. [kN]	60000 [266.9]	75000 [333.6]	60000 [266.9]	75000 [333.6]
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	1210	1210	1210	1210
Low Frequency Withstand, 10 Sec. Wet, kV	455	455	455	455
Impulse Withstand, kV	1050	1050	1050	1050
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	146	146	146	146
Maximum RIV, Microvolts at 1000 kHz	500	500	500	500
Net Weight, Each, lbs. [kg]	317.5 [144.0]	391.9 [177.8]	330.7 [150.0]	409.2 [185.6]



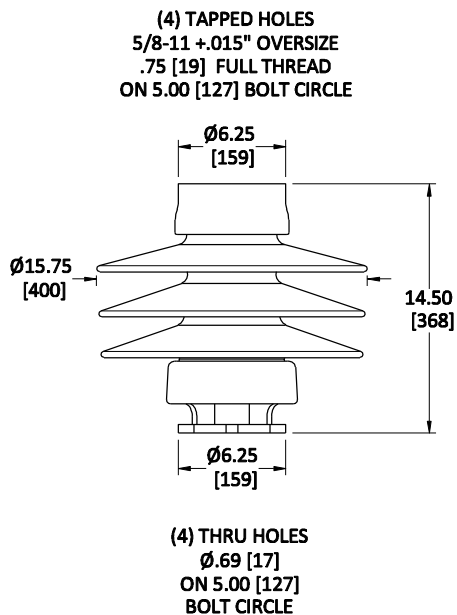
319140-70 & 319139-70  
PEDESTAL POST UNIT



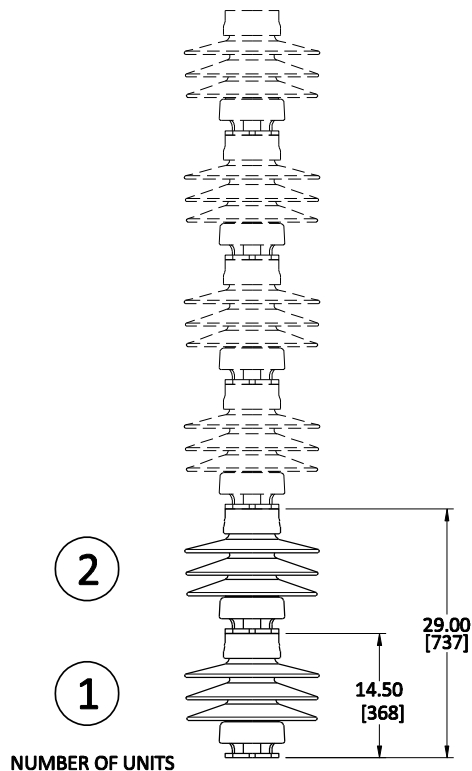
NUMBER OF UNITS  
IN ASSEMBLY

Characteristics

Catalog Number (Light Gray-ANSI 70)	319140-70	319139-70	---	---
Catalog Number (Brown)	319140	319139	---	---
Catalog Number (RG®)	539140	539139	---	---
ANSI Technical Reference Number	T.R. 140	T.R. 139	---	---
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	33 [838]	33 [838]	---	---
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	7000 [31.1]	10000 [44.4]	---	---
Cantilever Strength, Underhung, lbs. [kN]	4000 [17.8]	6000 [26.6]	---	---
Tensile Strength, lbs. [kN]	20000 [89.0]	25000 [111.2]	---	---
Torsion Strength, in-lbs. [kNm]	40000 [4.52]	90000 [10.16]	---	---
Compression Strength, lbs. [kN]	60000 [266.9]	75000 [333.6]	---	---
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	235	235	---	---
Low Frequency Withstand, 10 Sec. Wet, kV	75	75	---	---
Impulse Withstand, kV	210	210	---	---
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	22	22	---	---
Maximum RIV, Microvolts at 1000 kHz	100	100	---	---
Net Weight, Each, lbs. [kg]	76.8 [34.8]	84.3 [38.2]	---	---



PEDESTAL POST UNIT

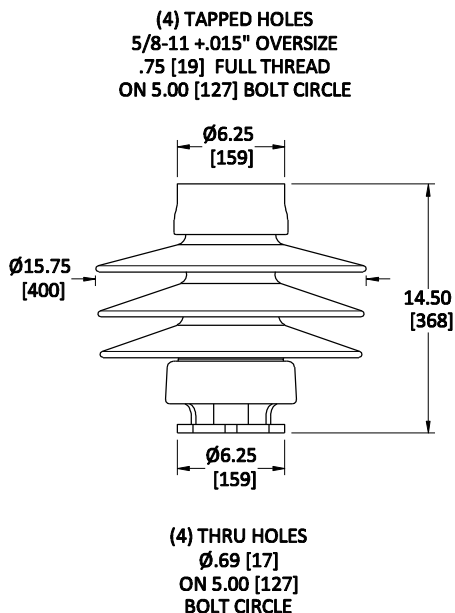


NUMBER OF UNITS  
IN ASSEMBLY

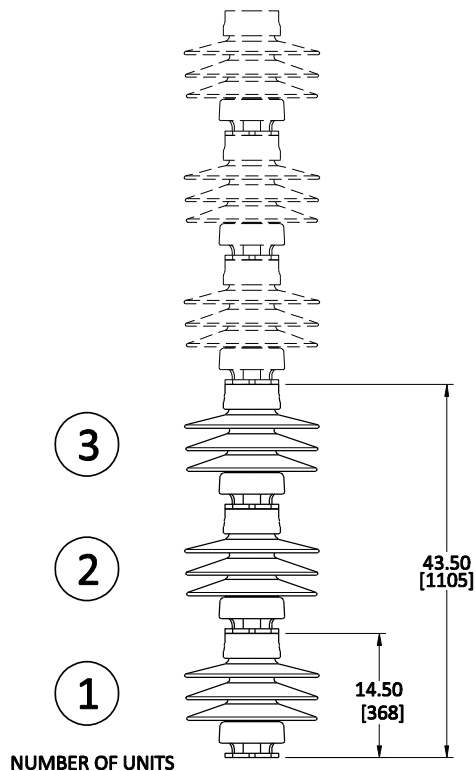
Characteristics

Catalog Number (Light Gray-ANSI 70)	319056-70	314982-70	---	---
Catalog Number (Brown)	319056	314982	---	---
Catalog Number (RG®)	539056	500264	---	---
ANSI Technical Reference Number	T.R. 56	---	---	---
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	66 [1676]	66 [1676]	---	---
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	3000 [13.3]	4500 [20.0]	---	---
Cantilever Strength, Underhung, lbs. [kN]	2350 [10.5]	3500 [15.5]	---	---
Tensile Strength, lbs. [kN]	20000 [89.0]	20000 [89.0]	---	---
Torsion Strength, in-lbs. [kNm]	40000 [4.52]	40000 [4.52]	---	---
Compression Strength, lbs. [kN]	60000 [266.9]	60000 [266.9]	---	---
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	410	410	---	---
Low Frequency Withstand, 10 Sec. Wet, kV	160*	160*	---	---
Impulse Withstand, kV	350*	350*	---	---
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	44	44	---	---
Maximum RIV, Microvolts at 1000 kHz	200	200	---	---
Net Weight, Each, lbs. [kg]	153.5 [69.6]	161.1 [73.1]	---	---

\*Withstand ratings are predicated on the use of a subbase 3.50" high or its equivalent.



PEDESTAL POST UNIT



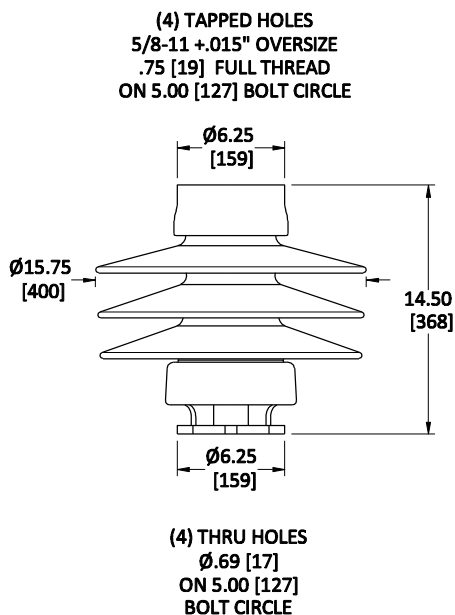
NUMBER OF UNITS  
IN ASSEMBLY

Characteristics

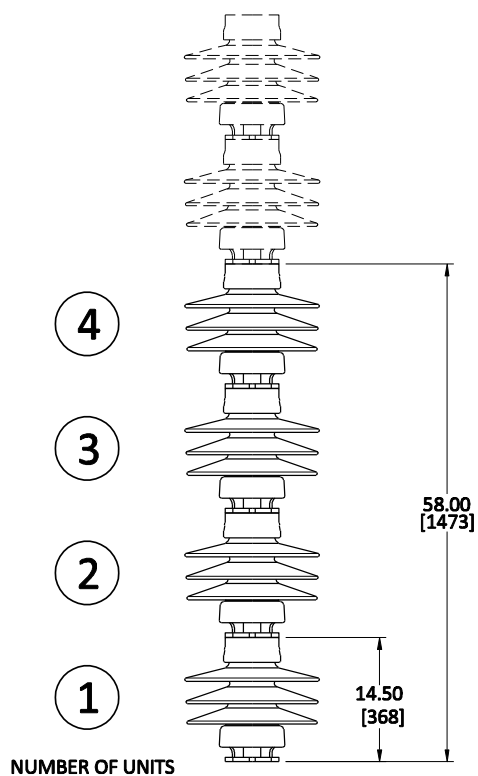
Catalog Number (Light Gray-ANSI 70)	319019-70	319173-70	---	---
Catalog Number (Brown)	319019	319173	---	---
Catalog Number (RG®)	539019	539173	---	---
ANSI Technical Reference Number	T.R. 19	T.R. 173	---	---
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	99 [2515]	99 [2515]	---	---
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	1700 [7.6]	2900 [12.9]	---	---
Cantilever Strength, Underhung, lbs. [kN]	1470 [6.5]	2400 [10.6]	---	---
Tensile Strength, lbs. [kN]	20000 [89.0]	25000 [111.2]	---	---
Torsion Strength, in-lbs. [kNm]	40000 [4.52]	90000 [10.16]	---	---
Compression Strength, lbs. [kN]	60000 [266.9]	75000 [333.6]	---	---
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	610	610	---	---
Low Frequency Withstand, 10 Sec. Wet, kV	230*	230*	---	---
Impulse Withstand, kV	550*	550*	---	---
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	73	73	---	---
Maximum RIV, Microvolts at 1000 kHz	200	200	---	---
Net Weight, Each, lbs. [kg]	230.3 [507.7]	161.0 [73.0]	---	---

\*Withstand ratings are predicated on the use of a subbase 3.50" high or its equivalent.





PEDESTAL POST UNIT

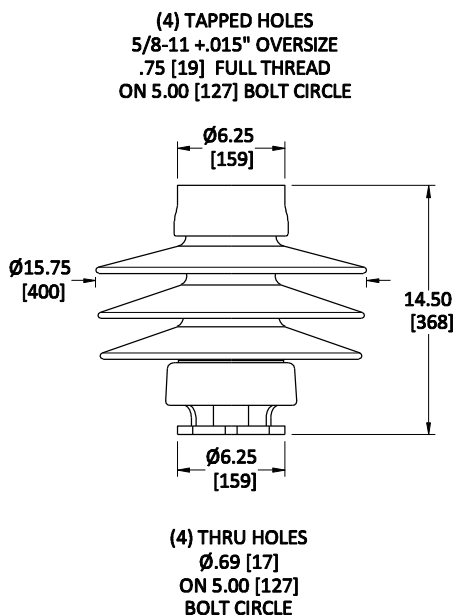


NUMBER OF UNITS  
IN ASSEMBLY

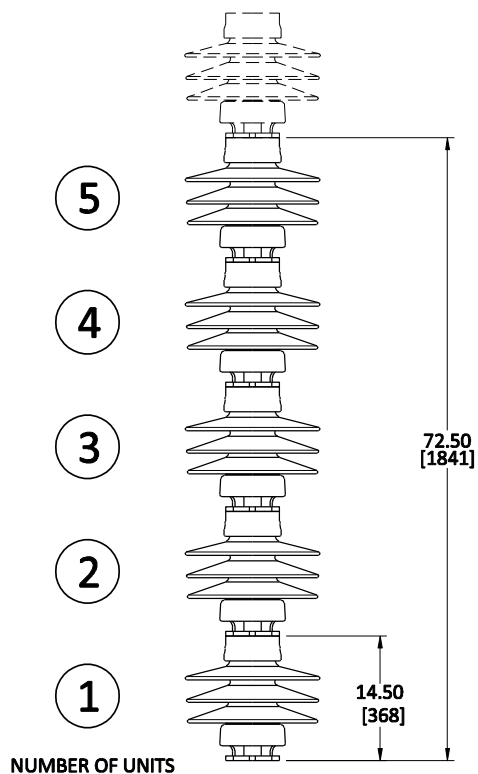
Characteristics

Catalog Number (Light Gray-ANSI 70)	319025-70	319174-70	---	---
Catalog Number (Brown)	319025	319174	---	---
Catalog Number (RG®)	539025	539174	---	---
ANSI Technical Reference Number	T.R. 25	T.R. 174	---	---
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	132 [3353]	132 [3353]	---	---
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	1200 [5.3]	2000 [8.8]	---	---
Cantilever Strength, Underhung, lbs. [kN]	1070 [4.8]	1750 [7.7]	---	---
Tensile Strength, lbs. [kN]	20000 [89.0]	25000 [111.2]	---	---
Torsion Strength, in-lbs. [kNm]	40000 [4.52]	90000 [10.16]	---	---
Compression Strength, lbs. [kN]	60000 [266.9]	75000 [333.6]	---	---
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	810	810	---	---
Low Frequency Withstand, 10 Sec. Wet, kV	315*	315*	---	---
Impulse Withstand, kV	750*	750*	---	---
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	103	103	---	---
Maximum RIV, Microvolts at 1000 kHz	200	200	---	---
Net Weight, Each, lbs. [kg]	307.0 [676.8]	337.3 [743.6]	---	---

\*Withstand ratings are predicated on the use of a subbase 3.50" high or its equivalent.



PEDESTAL POST UNIT

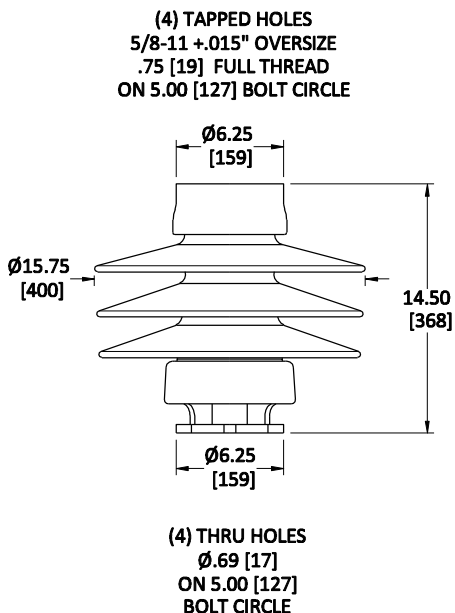


NUMBER OF UNITS  
IN ASSEMBLY

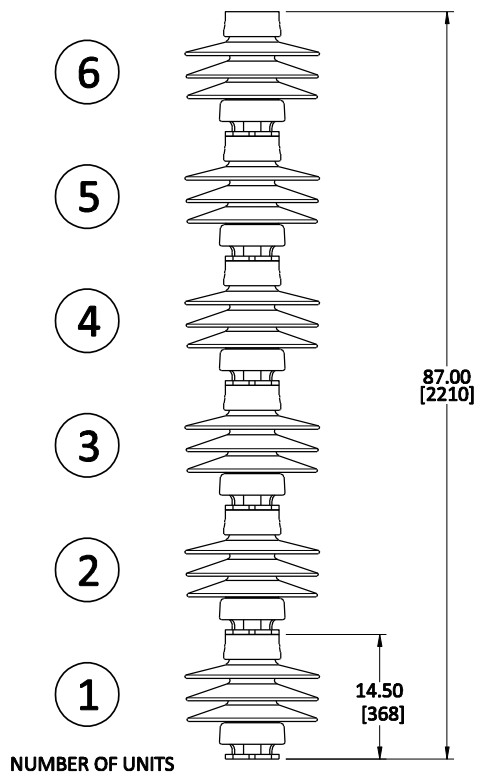
### Characteristics

Catalog Number (Light Gray-ANSI 70)	319126-70	319175-70	---	---
Catalog Number (Brown)	319126	319175	---	---
Catalog Number (RG®)	539126	539175	---	---
ANSI Technical Reference Number	T.R. 126	T.R. 175	---	---
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	165 [4191]	165 [4191]	---	---
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	910 [4.0]	1450 [6.4]	---	---
Cantilever Strength, Underhung, lbs. [kN]	840 [3.7]	1350 [6.0]	---	---
Tensile Strength, lbs. [kN]	20000 [89.0]	25000 [111.2]	---	---
Torsion Strength, in-lbs. [kNm]	40000 [4.52]	90000 [10.16]	---	---
Compression Strength, lbs. [kN]	60000 [266.9]	75000 [333.6]	---	---
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	1010	1010	---	---
Low Frequency Withstand, 10 Sec. Wet, kV	385*	385*	---	---
Impulse Withstand, kV	900*	900*	---	---
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	125	125	---	---
Maximum RIV, Microvolts at 1000 kHz	500	500	---	---
Net Weight, Each, lbs. [kg]	383.7 [174.0]	421.7 [191.3]	---	---

\*Withstand ratings are predicated on the use of a subbase 3.50" high or its equivalent.



PEDESTAL POST UNIT



NUMBER OF UNITS  
IN ASSEMBLY

Characteristics

Catalog Number (Light Gray-ANSI 70)	319128-70	319176-70	---	---
Catalog Number (Brown)	319128	319176	---	---
Catalog Number (RG®)	539128	539176	---	---
ANSI Technical Reference Number	T.R. 128	T.R. 176	---	---
<b>Dimensions</b>				
Leakage Distance, Reference Standard, in. [mm]	198 [5029]	198 [5029]	---	---
<b>Mechanical Values</b>				
Cantilever Strength, Upright, lbs. [kN]	750 [3.3]	1170 [5.2]	---	---
Cantilever Strength, Underhung, lbs. [kN]	700 [3.1]	1100 [4.8]	---	---
Tensile Strength, lbs. [kN]	20000 [89.0]	25000 [111.2]	---	---
Torsion Strength, in-lbs. [kNm]	40000 [4.52]	90000 [10.16]	---	---
Compression Strength, lbs. [kN]	60000 [266.9]	75000 [333.6]	---	---
<b>Electrical Values</b>				
Impulse Flashover, Positive, kV	1210	1210	---	---
Low Frequency Withstand, 10 Sec. Wet, kV	455*	455*	---	---
Impulse Withstand, kV	1050*	1050*	---	---
<b>Radio Influence Voltage Data</b>				
Test Voltage, Rms to Ground, kV	146	146	---	---
Maximum RIV, Microvolts at 1000 kHz	500	500	---	---
Net Weight, Each, lbs. [kg]	460.5 [208.8]	506.0 [229.5]	---	---

\*Withstand ratings are predicated on the use of a subbase 3.50" high or its equivalent.