



Cap and Pin Replacement Station Posts

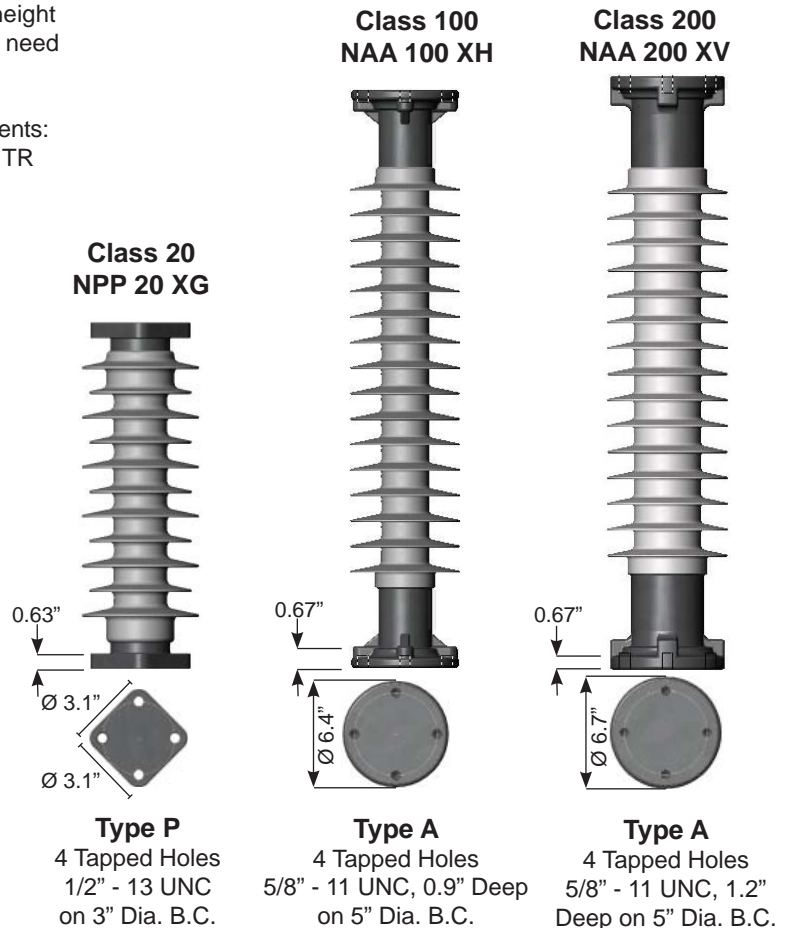
Cap and Pin Insulator Replacement Insulators

For many years, substations were constructed using porcelain cap and pin insulators. Many of these substations are now reaching an age where the cap and pin designs have problems and need to be replaced. Many utilities using the cap and pin designs have experienced failures in service in which the insulators separate and come apart. By stacking multiple cap and pins on top of each other to get the required insulation voltage, this meant there were multiple joints to allow separation and failure. These failures can usually be attributed to cement growth.

As a result of age problems, many utilities have now found the need to replace the old cap and pin style insulators. A major problem has been that cap and pin insulators were generally a different height from the current station posts being used today. To solve this problem, MacLean Power Systems has developed a series of silicone insulators that are the one piece units that are direct height replacements for the old cap and pin designs. This means no need to adjust bus or switches.

Advantages of using MacLean Silicone Cap and Pin Replacements:

- Direct height replacement for porcelain cap and pin TR numbers in ANSI C-29.8
- Lighter weight one piece designs
- Assembly cost savings
- Superior contamination performance from silicone
- Superior seismic performance
- Damage resistant



TR No.	Catalog No.	Voltage	Height	SML (lbs)	Leakage	Top BC	Bottom BC
4	NPP20XG07S	15	10	2000	14.6	3" tapped	3" tapped
7	NPP20XG09S	23	12	2000	26.0	3" tapped	3" tapped
10	NPP20XG13S	35	15	2000	38.0	3" tapped	3" tapped
16	NPP20XG25S	69	29	1500	70.0	3" tapped	3" tapped
56	NPA100XH15S	69	29	4552	70.0	5" tapped	5" thru
Special	NPA100XH23S0-121	115	40	3150	106.0	5" tapped	5" thru
19	NPA100XH23S0	115	43.5	2800	106.0	5" tapped	5" thru
173	NAAXV23S0	115	43.5	7100	94.0	5" tapped	5" tapped
25	NPA100XH33S0	138/161	58	2000	157.0	5" tapped	5" thru
123/174	NAAXV31S0	138/161	58	5550	131.0	5" tapped	5" tapped
175	NAA200XV40S1	161/230	72.5	4400	180.0	5" tapped	5" tapped
176	NAA200XV50S1	230	87	3600	216.0	5" tapped	5" tapped
Special	NPA100XH47S1	230	80	1600	216.0	5" tapped	5" thru