



## Station Service Transformer

### Application

Type PST voltage transformers are designed to provide remote location power needs up to 167 kVA on a systems rated 46 kV, 27,600 volts line to ground at 250 kV BIL primary.

### Product Mechanical Details

Transformer tanks and expansion chambers are fabricated from mild steel and protected with the latest technology, powder coated external finish ANSI 70 light gray is the standard finish color. All PST's are hermetically sealed, full vacuum assemblies provided with a dry nitrogen cushion.

One-piece, wet processed porcelain bushings are used on all PST's. Bushings are designed to exceed IEEE standards for creep and strike distances. The standard bushing color is ANSI 70 light Gray.

The primary terminal is a NEMA standard 4-hole pad, suitable for copper or aluminum bus connectors. The secondary power terminations are NEMA 6-hole spades located in a 20" x 22" x 10" terminal box with removable bottom plate. Optional metering winding terminations are 1/4"-20 studs with flat and lock washers located inside a separate 8" x 8" x 6" terminal box with three (3) 1.5" conduit hubs. A NEMA 2-hole, stainless steel tank ground pad is provided.

All PST's are equipped with a 5kV HO bushing, magnetic oil level gauge, 3/4" drain valve, 3/4" oil fill plug and pressure relief valve.

### Winding Options

The standard PST voltage transformer has two (2) isolated power windings that are designed to be connected in either series or parallel to provide the rated output voltages 125/250V for control power. Optional metering winding configurations are available. The transformer is accurate from 90% to 110% or rated primary voltage. 0.3% accuracy is available through IEEE burdens of W, X, Y, Z and ZZ.

The metering windings are typically used for control or relay applications and will remain accurate up to 10% loading of rated KVA. The metering windings will be less accurate as the power winding loading is increased.



### Mounting

All PST voltage transformers are designed for outdoor, vertical platform mounting and must not be tilted more than 15 degrees from vertical.

### Testing

Every transformer is tested in accordance with IEEE Standard C57.13 (latest revision).

### Seismic Withstand Capability

All PST designs are rated for high seismic withstand per IEEE 693 through dynamic analysis.

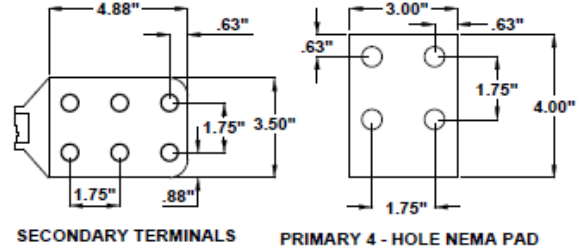
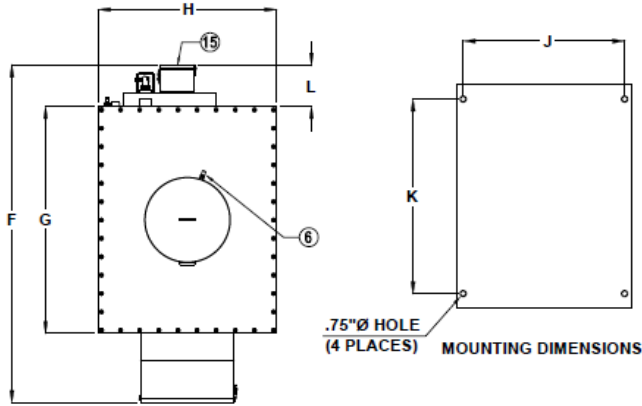
### Options

Stainless Steel Tank and/or Expansion Chamber  
Extra Creep Bushings

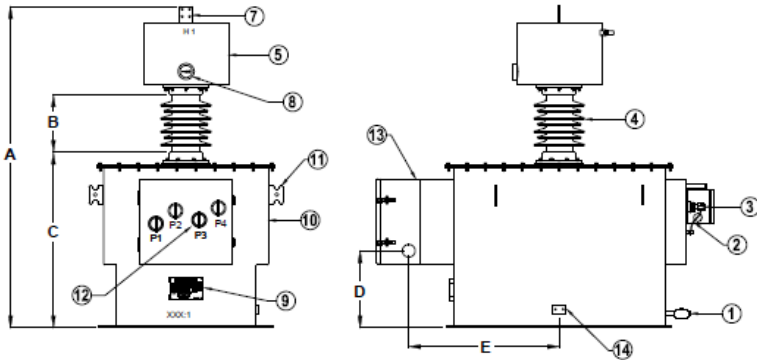


## Station Service Transformer

### Dimensions and Details



1. 3/4" NPT Drain Valve
2. HO Neutral Bushing w/ removable ground strap
3. HO Bushing Guard
4. Porcelain Insulator, ANSI 70 Lt. Gray
5. Expansion Chamber
6. 3/4" NPT Vacuum/Fill Port
7. Primary Terminal 4 hole NEMA Pad
8. Oil Level Indicator
9. Stainless Steel Nameplate
10. Mild Steel Tank
11. Lifting Eyes
12. Secondary Terminals NEMA 6 hole NEMA Pad
13. Secondary Terminal Box with removable bottom plate.
14. 2 Hole NEMA Ground Pad
15. Optional - Metering Terminal Box with (3) 1.5 conduit hubs.



**PST-250**  
 250 kV BIL  
 Creep Min: 37 inches  
 Strike Min: 15 inches

### Voltages, Ratios and Catalog Numbers

KVA	Primary Voltage	Power Winding Voltage	Power Winding Ratio	Metering Winding Voltage	Metering Winding Ratio	Catalog Number	
						Power	Metering
10	27600	250/125	110/221:1	115/69 & 115/69	240/400 & 240/400:1	PA1025022110P01	PA1025022110M01
25	27600	250/125	110/221:1	115/69 & 115/69	240/400 & 240/400:1	PA1025022125P01	PA1025022125M01
50	27600	250/125	110/221:1	115/69 & 115/69	240/400 & 240/400:1	PA1025022150P01	PA1025022150M01
100	27600	250/125	110/221:1	115/69 & 115/69	240/400 & 240/400:1	PA1025022199P01	PA1025022199M01
167	27600	250/125	110/221:1	115/69 & 115/69	240/400 & 240/400:1	PA1025022167P01	PA1025022167M01

### Dimensions and Weights

KVA	A	B	C	D	E	F	G	H	J	K	L	Weight	Gals
10	63.53"	13.62"	29.13"	9.13"	20.12"	46.51"	28.60"	26.60"	23.50"	26.75"	6.53"	2,680	105
25	63.50"	13.62"	29.00"	7.26"	24.44"	58.29"	37.13"	31.63"	30.75"	30.75"	9.84"	4,000	150
50	76.00"	13.62"	41.50"	19.49"	29.25"	69.59"	47.00"	41.00"	38.00"	46.00"	9.84"	4,670	270
100	76.00"	13.62"	41.50"	18.19"	34.45"	79.79"	53.63"	42.00"	38.00"	46.00"	9.84"	5,100	270
167	84.00"	13.62"	49.38"	16.50"	45.38"	99.57"	73.60"	53.60"	46.50"	72.00"	9.84"	10,500	665

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Other ratings and options may be available  
 Please contact the factory with your requirements.

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