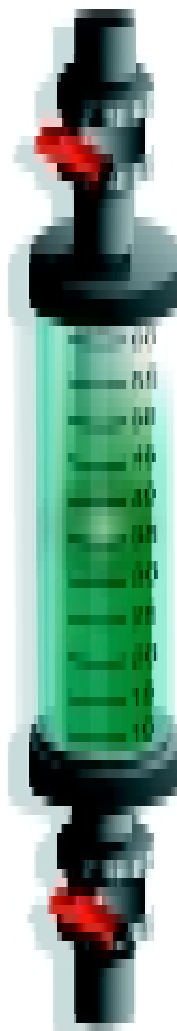


# Operating Instructions

## ProMinent® PVC Calibration Columns



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**Read the operating instructions before installation and use. The warranty does not cover damages due to faulty operation. Keep for reference and replacement information.**

BA PVCCC 02 7/01 NA    Order no. 7750069

## Operating Instruction for ProMinent® PVC Calibration Columns

### *General Safety Considerations*

#### **SAFETY INSTRUCTIONS**

- Wear protective clothing and glasses when working with or near chemicals.
- Refer to the MSDS for all chemicals being used.
- Use only ProMinent® parts, use of other parts may result in damage to equipment or injury.
- Secure all chemicals and equipment making them inaccessible to children and pets.
- Dispose of all chemicals and waste according to all local, state and federal regulations.
- Do not exceed the maximum operating pressure.

### *Safety Operating Procedures*

#### **UNPACKING**

CHECK ALL EQUIPMENT FOR DAMAGE AND FOR COMPLETENESS AGAINST THE ORDER. REPORT INCORRECT ORDERS OR DAMAGE TO THE SELLER IMMEDIATELY.

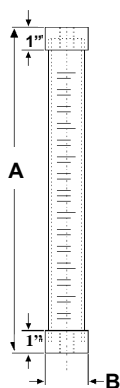
### *PVC Calibration Columns*

#### **INTRODUCTION**

The ProMinent® PVC calibration columns are designed to enhance the performance of chemical feed systems by providing a verification of the flow rate of the chemical feed pump. The calibration columns are constructed of PVC and offer a choice of a removable top or threaded end caps. The calibration columns are marked in both gallons and milliliters.

#### **SIZES AND PART NUMBERS**

<u>Cylinder size</u>	<u>Fitting size</u>	<u>Threaded base, removable top</u>	<u>Threaded both ends</u>
100 mL	1/2" FNPT	7356687	7302233
200 mL	1/2" FNPT	7356688	7302234
500 mL	3/4" FNPT	7356689	7302235
1000 mL	3/4" FNPT	7356690	7302236
2000 mL	1" FNPT	7356691	7302237
4000 mL	1" FNPT	7356692	7302238
10,000 mL	2" FNPT	7302266	7302267
20,000 mL	2" FNPT	7302268	7302269



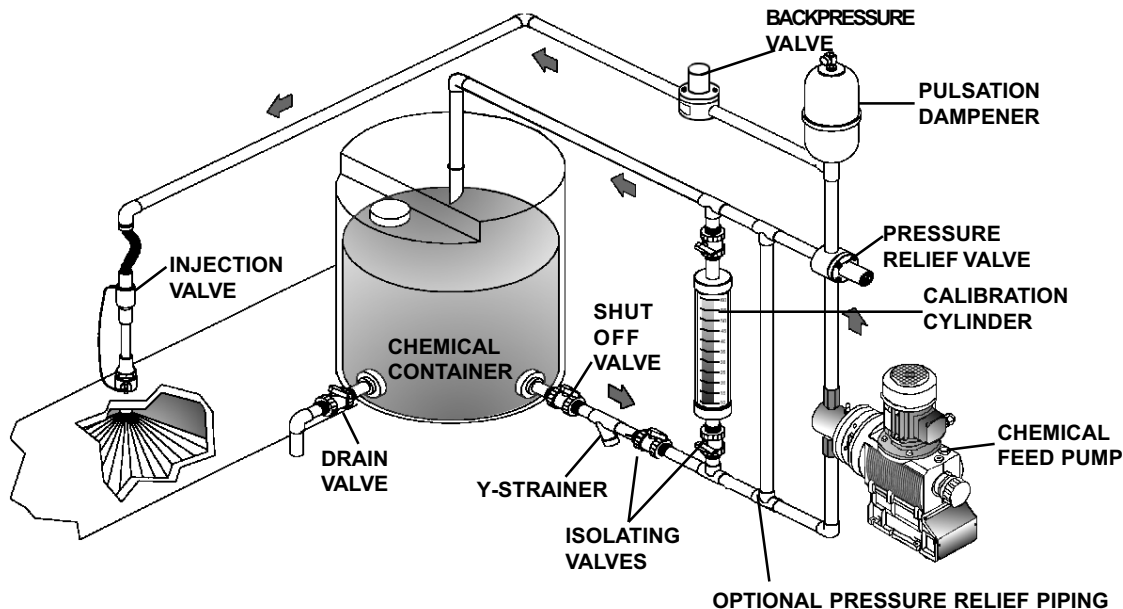
## DIMENSIONS

Capacity mL	Size US gph	A in. (cm)	B in. (cm)
100	3.2	11 (27.9)	1.5 (3.8)
200	6.4	19 (48.3)	1.5 (3.8)
500	16.0	13 (33.0))	2.5 (6.4)
1000	32.0	22 (55.9)	2.5 (6.4)
2000	63.0	20 (50.8)	3.7 (9.4)
4000	127	37 (94.0)	3.7 (9.4)
10000	320	26 (66.0)	7.25 (18.4)
20000	640	48 (122)	7.28 (18.4)

## INSTALLATION

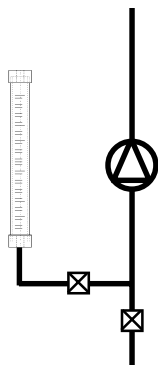
The calibration cylinder is installed on the suction line leading to the chemical metering pump. Isolating valves must be installed in the suction line as shown in the drawing below. The top of the calibration column should be vented back to the chemical tank or to a drain.

Typical  
Installation



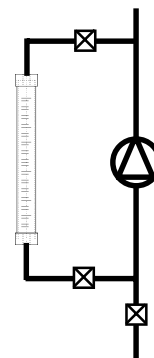
### Column w/removable top

**Note:** Top must be removed must during calibration.



### Column threaded both ends

**Note:** If plumbed as shown, a vent hole be drilled into the top of the calibration column.



## DESCRIPTION OF CONTROLS AND OPERATION

*Note:* The maximum pressure that can be exerted on the calibration column is 15 psig (1bar).

- Open the valve from the chemical tank to the calibration column.
- Fill the column to the top mark.
- Close the valve from the chemical tank to the pump.
- Turn on the chemical feed pump.
- Pump chemical from the calibration column for 30 seconds or the amount of time desired.
- Turn off the chemical feed pump.
- The reading on the left of the column is in gph (if the pump ran for 30 seconds).
- Alternatively, observe the volume withdrawn in mL from the mL scale
- Convert to liters per hour or gallons per hour with the following formulas.

$$\text{LPH} = (\text{volume} \div \text{draw time}) \times 3.6$$

$$\text{gph} = (\text{volume} \div \text{draw time}) \times 0.952$$

## HELPFUL TIPS

1L = 0.264 gallon

1000 mL = 1 L

1 bar = 14.5 psig

## MAINTENANCE

Keep calibration column clean.

Routinely look for leaks or cracks in the column.

## SPARE PARTS

Call your distributor for part numbers.

## REPAIR SERVICE

Repairs must be done by ProMinent® Fluid Controls. Call your distributor or ProMinent® at (412) 787-2484 for a return goods authorization. **DO NOT** return any goods without authorization. All returned items must be free of hazardous chemicals and clean when returned.

## TROUBLESHOOTING

Check for clogs in line if calibration column will not fill.