



Hydro Instruments Calibration Columns



Hydro Instruments calibration columns are the newest addition to our growing line of liquid feed products. The durable, clear PVC and easy to read graduation markings enhance your ability to verify your flow rate. We now offer 2 models with 4 sizes to choose from:

- Sealed Cap or Loose Cap** (to enable cleaning of the column and/or manual filling)
- Capacities:** 100, 250, 500 & 1000 ML/Min or 1.5, 4, 8 & 16 GPH (four dual-scale sizes)

Model Numbers:

HCC-100	HCC-250	HCC-500	HCC-1000
1.5 GPH	4 GPH	8 GPH	16 GPH

Highlighted Features:

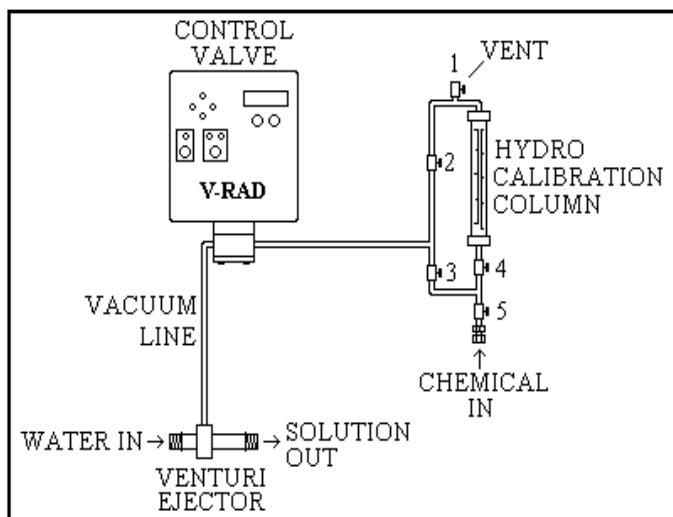
- Easy to read graduation markings
- High quality clear PVC / Mylar decal
- Accurate 60 second draw-down time
- Clear readout of ML/Min and GPH
- Durable machined construction
- Sealed Cap or Optional Loose (Slip-Fit) Cap

Instructions:

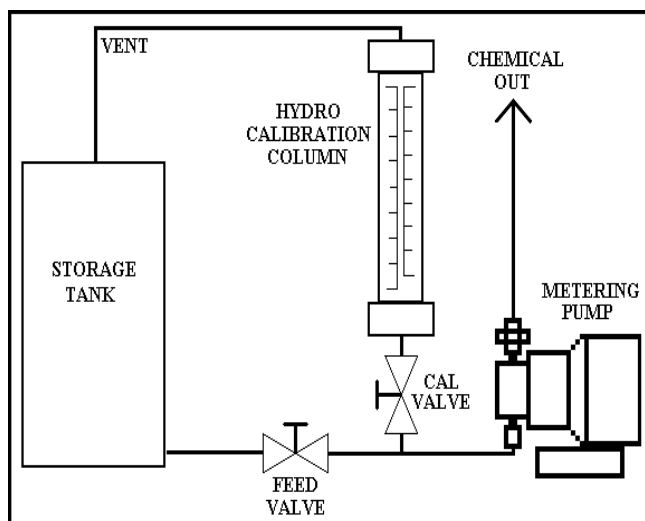
- Install the Calibration Column on the suction side of a metering pump or vacuum feed control valve as shown in the drawing below.
- Fill the column by aligning the valves as indicated in the drawings / tables below until the liquid chemical level reaches the “Zero” line.
- Align the valves as indicated in the drawings / tables below for “Calibrate” mode.
- Record the fluid level after 60 seconds. This will indicate the actual feed rate in both GPH and ML/Min.
- When not in use, the Calibration Column should be drained completely.

Note: When feeding Sodium Hypochlorite, extreme care should be taken to ensure portions of the chemical line never involve two valves shut with a slug of un-vented chemical between the valves. The chemical will off-gas, expand and ultimately cause the piping to burst.

Installation Examples



Installation in a vacuum feed system



Installation with Metering Pump

Operation	1	2	3	4	5
Normal Feed	Open	Shut	Open	Shut	Open
Fill Cal Column	Shut	Open	Shut	Open	Open
Calibrate	Open	Shut	Open	Open	Shut

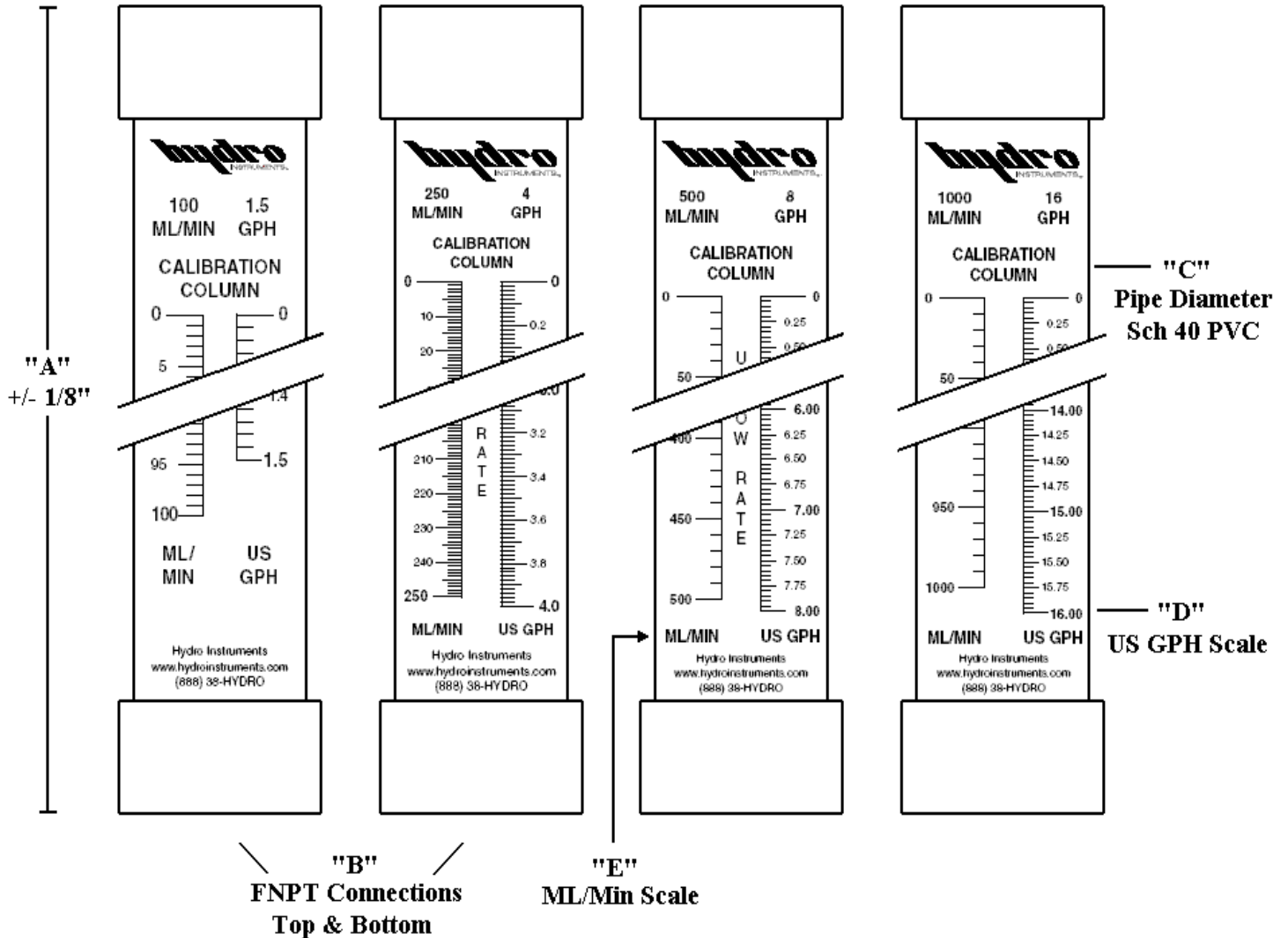
Operation	Feed Valve	Cal Valve
Normal Feed	Open	Shut
Fill Cal Column	Open	Open
Calibrate	Shut	Open

Chemical Resistance Guide

RECOMMENDED

Acetic Acid 10-20%	Barium Sulphate	Cupric Fluoride	Lithium Bromide	Potassium Permanganate
Acetylene	Barium Sulfide	Detergents	Malic Acid	Plating Solutions
Adipic Acid	Beer	Dextrose	Mercuric Acid	Sea Water
Alum	Benzoic Acid	Distilled Water	Mercuric Chloride	Silicic Acid
Aluminium Alum	Black Liquors	Ethylene Glycol	Mercuric Cyanide	Silver Cyanide
Aluminium Chloride	Bleach (12% Cl)	Fatty Acids	Mercury	Silver Nitrate
Aluminium Fluoride	Borax	Ferric Chloride	Methyl Alcohol	Silver Acetate
Aluminium Hydroxide	Boric Acid	Ferric Hydroxide	Methyl Sulfuric Acid	Sodium Alum
Aluminium Oxychloride	Bromic Acid	Ferric Nitrate	Milk	Sodium Bicarbonate
Aluminium Nitrate	Cadmium Cyanide	Ferric Sulfate	Muratic Acid	Sodium Bisulfate
Aluminium Sulfate	Calcium Bisulfide	Ferrous Chloride	Nitric Acid 10%-60%	Sodium Carbonate
Ammonia (dry-gas)	Calcium Bisulfite	Ferrous Sulfate	Oleic Acid	Sodium Cyanide
Ammonium Acetate	Cadmium Carbonate	Fluorosilicic Acid 25%	Ozone	Sodium Hydroxide
Ammonium Alum	Calcium Chloride	Gallic Acid	Palmitric Acid 10%	Sodium Hypochlorite
Ammonium Bifluoride	Calcium Hydroxide	Glycerine	Perchloric Acid 10%	Stannic Chloride
Ammonium Carbonate	Calcium Hypochlorite	Glycol	Phosphoric Acid 10%	Sulfuric Acid 3%
Ammonium Chloride	Calcium Nitrate	Glycolic Acid	Phosphoric Acid 25%	Sulfuric Acid 10%
Ammonium Hydroxide	Carbon Dioxide	Hydrobromic Acid 20%	Phosphoric Acid 75%	Sulfuric Acid 33%
Ammon. Metaphosphate	Carbonic Acid	Hydrochloric Acid 35%	Phosphoric Acid 85%	Sulfuric Acid 50%
Ammonium Nitrate	Caustic Soda	Hydrocyanic Acid	Potassium Alum	Sulfuric Acid 70%
Ammonium Oersulfate	Chorine Water	Hydrogen Peroxide 90%	Potassium Bicarbonate	Trisodium Phosphate
Ammonium Phosphate	Chrome Alum	Hydrogen Sulfite	Potassium Borate	Water, Deionized
Ammonium Sulfate	Citric Acid	Kraft Liquors	Potassium Bromate	Water, Distilled
Ammonium Sulfide	Copper Carbonate	Lactic Acid 25%	Patassium Carbonate	Water, Salt
Ammonium Thiocyanate	Copper Chloride	Lead Acetate	Potassium Chloride	Zinc Chloride
Arsenic Acid	Copper Cyanide	Lead Chloride	Potassium Cyanide	Zinc Sulfate
Barium Carbonate	Copper Fluoride	Lead Sulfate	Potassium Fluoride	
Barium Chloride	Copper Nitrate	Linoleic Acid	Potassium Hydroxide	
Barium Hydroxide	Copper Sulphate	Linseed Oil	Potassium Nitrate	

Dimensional Information



Size	"A"	"B"	"C"	"D"	"E"
100 ML	12-3/4"	1/2"	1"	1.5	100
250 ML	12-3/4"	1/2"	1-1/2"	4.0	250
500 ML	15-3/4"	3/4"	2"	8.0	500
1000 ML	25"	3/4"	2"	16.0	1000

NOTE: USE 1 MINUTE TEST TO DETERMINE FLOWRATE