

# Corrosion Resistant Rotameters

10A4500-PVC Series

Fischer & Porter's V/A-Master line of glass tube flowmeters equipped with PVC fittings and teflon packing.  
End fittings rotate 360° for easy installation.  
Designed for use with highly corrosive liquids.

## SPECIFICATIONS

- Accuracy:** ±2% of full scale
- Repeatability:** 0.5% of full scale
- Rangeability:** 8 to 100% of full scale (12½ to 1 turndown)

## Scales

- Percent on tube.
- Direct reading on metal scale plate.
- Direct reading on glass tubes available at extra cost.

## Materials of construction

- End fittings: Polyvinyl Chloride (PVC)
- Float: 316 SST, Monel, Hastelloy B & C, Alloy 20, Teflon, lead loaded PVC, & Tantalum.
- Body: stainless steel (not wetted by process fluid).
- Shield: polycarbonate
- Float Stops: Teflon

**Packing:** Teflon.

**Dimensions:** See Table 1

**Capacities:** See Tables II and III

**Pressure Limits:** See Table I

**Temperature limits:** 32°F to 140°F (0°C to 60°C)

**Mounting:** In-line, rear or front panel mounting optional

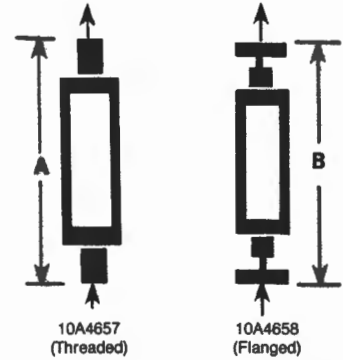
**Piping Connections:** NPT threaded or ANSI Class 125 flanged.

## Options and Accessories

- Front or Rear panel mounting
- Calibration for ±1% full scale accuracy

## How to Order

- Calculate air or water equivalent from P. 36 & 37.
- Determine size and capacity code from Capacity Tables:  
Table II, page 9  
Tables II, III, pages 29.
- Supply complete model number.
- Specify maximum flow rate, flow units, liquid density and viscosity or gas specific gravity, operating temperature and pressure.



**Table I - Dimensions and Pressure Ratings**

Tube Size Inches	Conn. Size Inches	Max. Press at 100°F		Dimns. (Inches)	
		psig	kPa g	A	B
½	½ NPT	260	1792	16⅞	—
	½ FLG	150	1034	—	20⅞
¾	¾ NPT	200	1379	17⅞	—
	1 FLG	150	1034	—	21⅞
1	¾ NPT	200	1379	17⅞	—
	1 FLG	150	1034	—	21⅞
1½	1½ NPT	130	896	20⅞	—
	1½ FLG	130	896	—	24½
2	1½ NPT	100	689	20⅞	—
	1½ FLG	100	689	—	24½

## Model Number Breakdown

### Connections

- Vertical Threaded \_\_\_\_\_ 7
- Vertical Flanged \_\_\_\_\_ 8

### Scale

- Percent on Metal Scale Plate \_\_\_\_\_ P
- Direct Reading Metal Scale \_\_\_\_\_ S

### Mounting

- Line Mounted \_\_\_\_\_ X
- Front Panel Mounted \_\_\_\_\_ Y
- Rear Panel Mounted \_\_\_\_\_ Z

### Tube Size

- ½" \_\_\_\_\_ H
- ¾" (Threaded only) \_\_\_\_\_ J
- ¾" (Flanged only) \_\_\_\_\_ L
- 1" (Threaded only) \_\_\_\_\_ K
- 1" (Flanged only) \_\_\_\_\_ M
- 1½" \_\_\_\_\_ N
- 2" \_\_\_\_\_ P

### Connection Type

- Threaded (NPT) \_\_\_\_\_ B
- Flanged (125 lb F.F.) \_\_\_\_\_ C

### Float Type

- Stainless Steel, Monel, Alloy 20 or Hastelloy Float \_\_\_\_\_ 1
- Teflon, Lead Loaded PVC or Tantalum Float \_\_\_\_\_ 2

### Capacity Code

Enter 2 digit code from Capacity Table Page 29 or Page 9 \_\_\_\_\_

### Calibrations

- Class A-N ±2% Full Scale \_\_\_\_\_ 1
- Class BTY ±1% Full Scale \_\_\_\_\_ 3

**Table II - Bead Guided Tantalum Floats**  
(Equivalent Flows Based on Tantalum Floats,  $\rho_{f2} = 16.6$  gms/cc)

Tube Size	Capacity Code	Maximum Flow Rates	
		gpm Water	V.I.C. (Note 1)
1/2"	JA	0.80	8.0
	JB	1.0	8.0
	JC	1.3	8.0
3/4"	KA	1.9	10.0
	KB	2.5	10.0
1"	LA	4.4	16.0
	LB	5.8	20.0
	LC	6.3	16.0
	LD	8.1	20.0
1 1/2"	MA	8.3	24.0
	MB	11.0	24.0
2"	NA	14.4	26.0
	NB	20.7	37.0
	NC	54.0	8.0
	ND	79.0	8.0

**Table III — Bead Guided Teflon & Lead Loaded PVC Floats**  
(Equivalent Flows Based on Listed Float Materials with Float Densities shown in Table) For Liquid Flow Only

Tube Size	Capacity Code	Maximum Flow Rates		
		gpm Water	V.I.C. (Note 1)	Float Density gcm <sup>3</sup>
1/2"	JF	0.55	1.80	2.31
	JG	0.66	1.80	2.31
	JH	0.96	1.80	2.31
	JJ	1.02	2.45	5.50
	JK	1.33	2.45	5.50
	JM	1.92	2.45	5.50
	JP	2.85	2.45	5.50
	3/4"	KC	1.95	2.20
KD		4.20	2.97	5.50
KE		5.87	2.97	5.50
1"	LE	4.55*	3.00	2.31
	LF	9.72*	3.89	5.50
	LG	14.7*	3.89	5.50
1 1/2"	MC	9.38*	3.98	2.31
	MD	13.3*	3.98	2.31
	MF	23.5*	6.40	5.50
	MG	32.6*	6.40	5.50
2"	NC	21.8*	5.95	2.31
	ND	56.7*	9.70	5.50

\*These Capacities have Ranges somewhat less than 10:1 (worst case 5:1)

For Floats made of 316 Stainless Steel, Monel, Alloy 20 or Hastelloy C use sizes and capacity codes from Table II on Page 9.