

# VARIABLE AREA FLOW METER WITH PTFE VALVES

For Select Corrosive or Ultra-Pure Media

## FL-3000/3100 Series



Optional

- ✓ Excellent Chemical Compatibility for Use with Corrosive or Ultra-Pure Fluids
- ✓ High Accuracy: Up to  $\pm 2\%$  FS
- ✓ Shield Magnifies Scale for Accurate Readings

The FL-3000 and FL-3100 Series flow meters are designed for applications involving corrosive or ultra-pure fluids. The meters are equipped with built-in PTFE needle valves with Kel-F, borosilicate glass, sapphire, and Perflurorodastomer O-rings.

The special scale design, in which a vertical line runs up the length of the scale and intersects the horizontal scale divisions, reduces parallax and eye fatigue, thereby ensuring highly accurate readings. The front polycarbonate shield also acts as a magnifying glass.

### SPECIFICATIONS

**Accuracy:**  $\pm 2\%$  full scale

(FL-3007SA and FL-3145SA  $\pm 5\%$  FS)

**Repeatability:**  $\pm 0.25\%$  FS

**Maximum Pressure:** 6.7 bar (100 psig)

**Maximum Temperature:** 66°C (150°F)

**Connections:**  $\frac{1}{8}$  FNPT

**Mounting:**

Panel mount or optional tripod base

**Height/Center to Center Port**

**Distance:** 65 mm (6.156"/5.156");

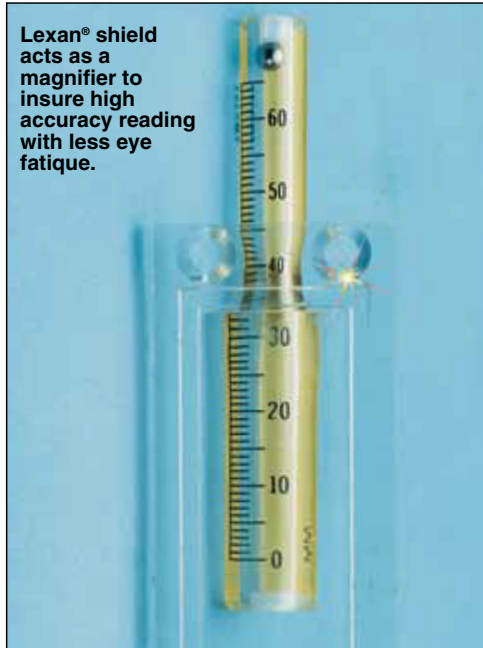
150 mm (10.469"/9.469")

### Accessories

PTFE Valves—1 psid @ 0.2 GPM

(Fluid Contacts PTFE and Kel-F Only)  
for 200°F Up to 25 psig.

Lexan® shield acts as a magnifier to insure high accuracy reading with less eye fatigue.



### To Order

Model No.	Maximum Flow Rate* (cc/min)	
	Air	Water*
<b>65 mm</b>		
FL-3007SA	8.30	0.251
FL-3035SA	72.3	0.98
FL-3013SA	159	3.00
FL-3010SA	299	4.7
FL-3051SA††	1399	33.3
FL-3092SA	1623	36.74
FL-3088SA	2704	61
FL-3096SA	8144	217
FL-3063SA	28,326	798
<b>150 mm</b>		
FL-3145SA	37	0.56
FL-3141SA	72	0.99
FL-3161SA	140	1.92
FL-3102SA	513	9.96
FL-3103SA	1092	26.1
FL-3104SA	3079	78
FL-3105SA	5000	126
FL-3139SA	11,887	315
FL-3140SA	29,364	829

\* Minimum flow rate is 10% of maximum rate shown.

Comes complete with operator's manual and correlation tables for air and water with instructions on back.

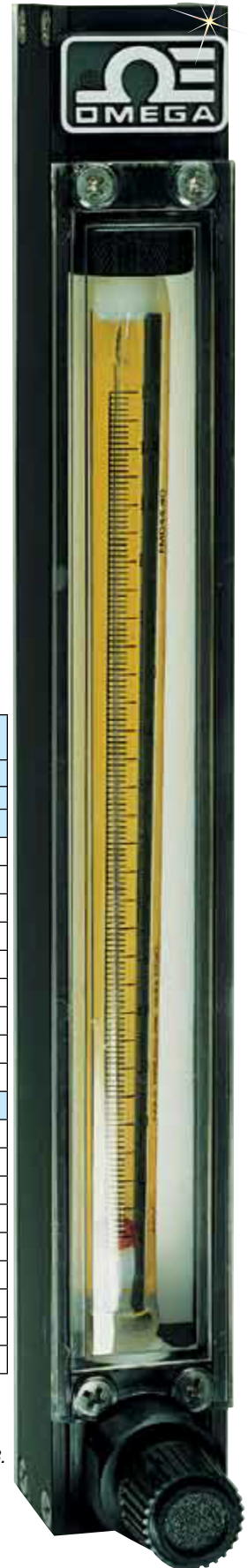
†† New flow rate values effective for purchases after January 1, 2013.

For NIST calibration add suffix "**-NIST AIR**" to model number for additional cost or add suffix "**-NIST WATER**" to model number for additional cost.

For oxygen cleaning, add suffix "**-O2CLEAN**" to model number for additional cost.

**Ordering Examples:** FL-3051SA, variable area flow meter with range of 1399 cc/min air, 33.3 cc/min water.

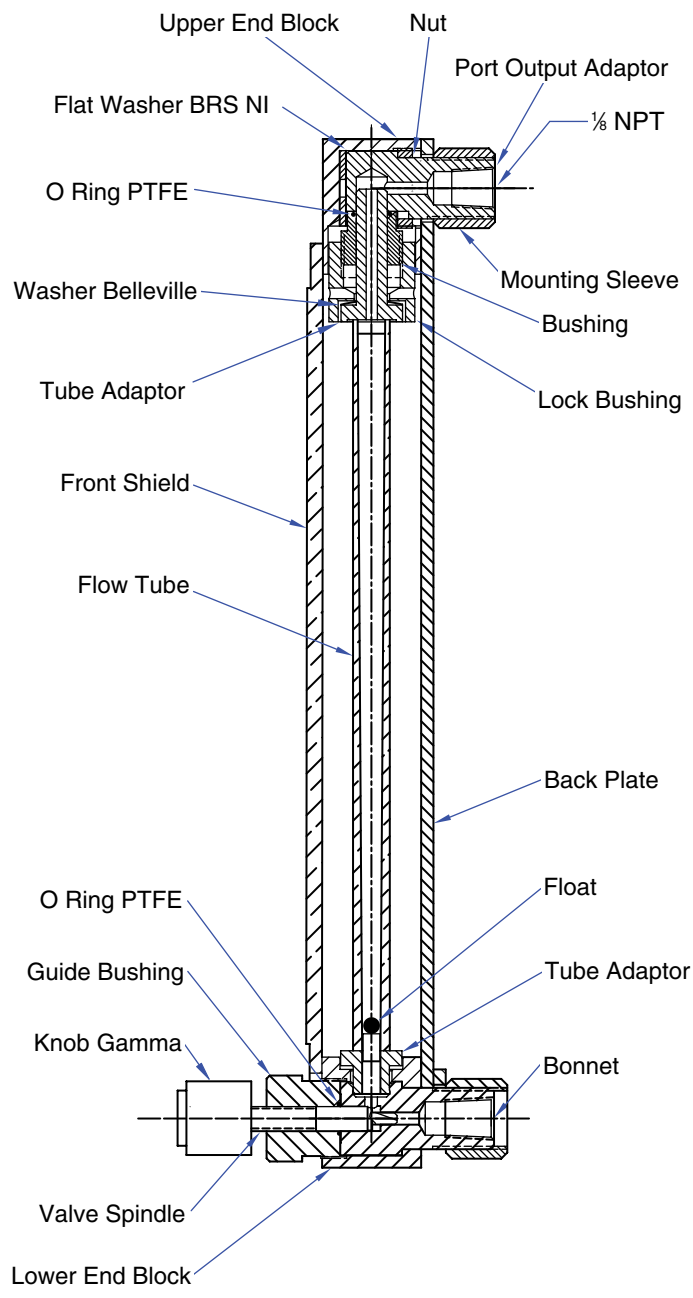
FL-3102SA, 150 mm flowtube variable area flow meter, with a range of 513 cc/min air, 9.96 cc/min water.



FL-3145SA shown smaller than actual size.

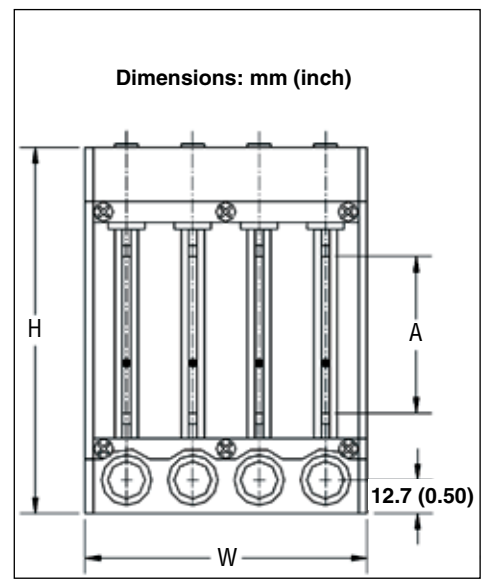
Model No.	Connections
FVLT102	$\frac{1}{8}$ FNPT
FLV-2	Glass hose nipples
FVLT104-SS	$\frac{1}{8}$ " TFE compression

Tripods	Description
FLTR-1	For 1 variable area flow meter
FLTR-2	For 2 variable area flow meter
FLTR-3	For 3 variable area flow meter

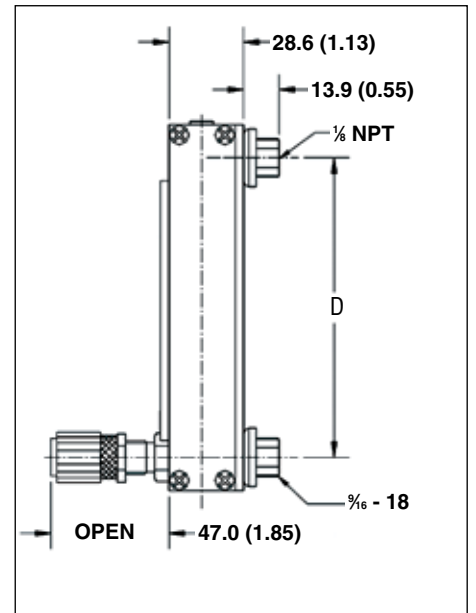


FL-3000

Front view



Side view



Dimensions: (inches)						
Scale Length (A)	All Meters		Width (W)			
	Height (H)	Center to Center (D)	Tube 1	Tube 2	Tube 3	Tube 4
65 mm	6.16	5.16	1.25	2.25	3.25	4.25
150 mm	10.46	9.47	1.25	2.25	3.25	4.25

Dimensions: (mm)						
Scale Length (A)	All Meters		Width (W)			
	Height (H)	Center to Center (D)	Tube 1	Tube 2	Tube 3	Tube 4
65 mm	156.4	131.0	31.75	57.5	82.55	107.95
150 mm	265.7	240.5	31.75	57.5	82.55	107.95

B-X