

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 PEEK, 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")

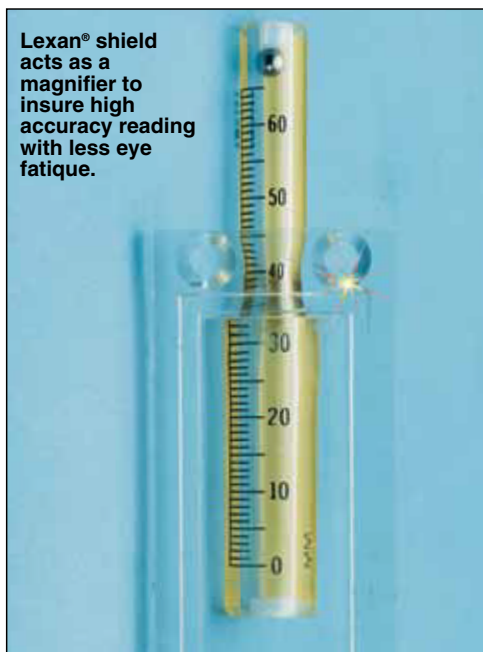
Accessories

PTFE Valves—1 psid @ 0.2 GPM

(Fluid Contacts PTFE and PEEK 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* |
| 65 mm | | |
| 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 |
| 150 mm | | |
| 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.

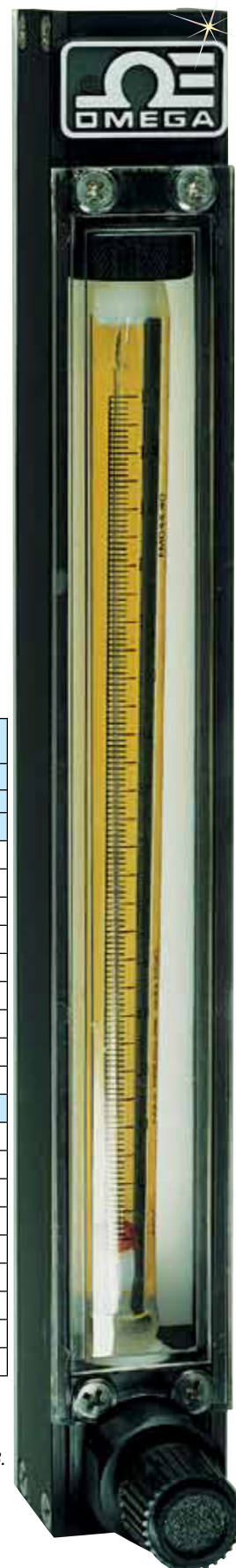
†† New flow rate values effective for purchases after January 1, 2013.

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 "**-02CLEAN**" 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.

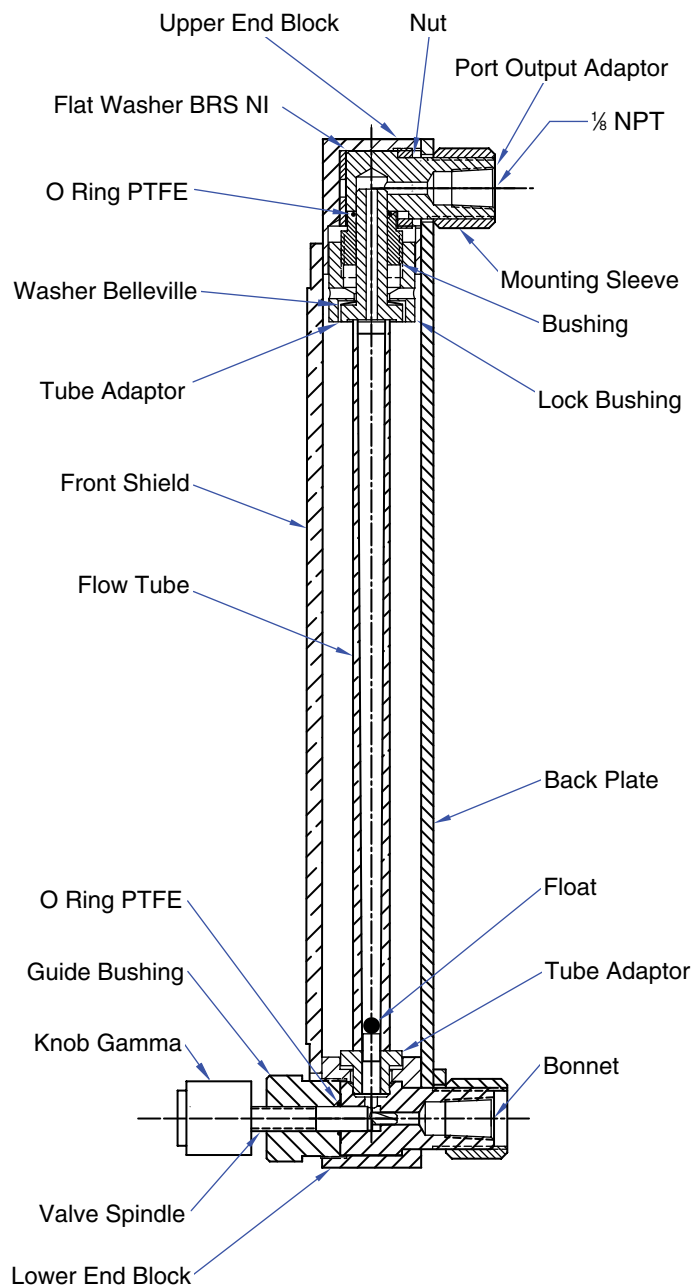
FL-3102SA, 150 mm flowtube variable area flow meter, with a range of 513 cc/min air, 9.96 cc/min water.



FL-3145SA shown smaller than actual size.

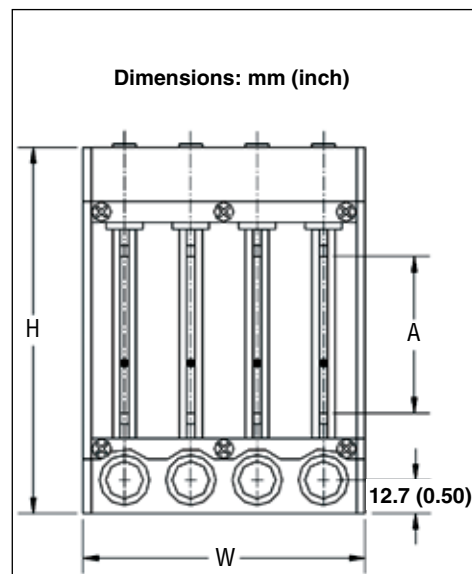
| Model No. | Connections |
|------------|-------------------------------|
| FVLT102 | $\frac{1}{8}$ FNPT |
| FLV-2 | Glass hose nipples |
| FVLT104-SS | $\frac{1}{8}$ TFE compression |

| 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 |

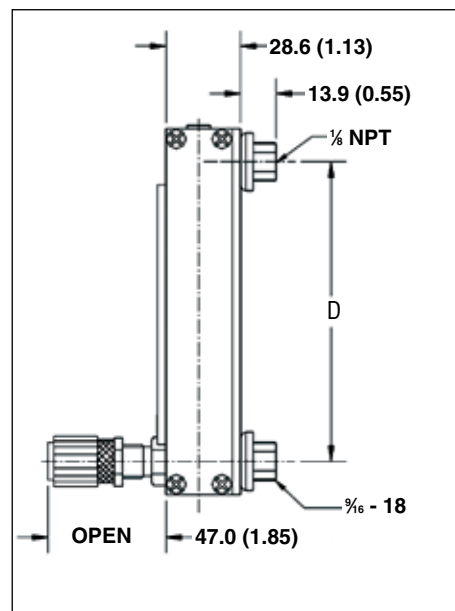


FL-3000

Front view



Side view



| Dimensions: (inches) | | | | | | |
|----------------------|------------|----------------------|-----------|--------|--------|--------|
| | All Meters | | Width (W) | | | |
| Scale Length (A) | 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) | | | | | | |
|------------------|------------|----------------------|-----------|--------|--------|--------|
| | All Meters | | Width (W) | | | |
| Scale Length (A) | 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 |