

# HIGH-ACCURACY SHIELDED ROTAMETERS

Capacities: 0.002 to 1900 cc/min of Water  
0.2 to 77,000 cc/min of Air

FL-110 Series  
Starts at

**\$259**



Optional

- ✓ ±2% of Reading Accuracy
- ✓ ±1% of Reading Repeatability
- ✓ PTFE, Glass, and Viton® Construction for Broad Media Compatibility
- ✓ Glass and Stainless Steel Floats for Maximum Flow Range
- ✓ Polycarbonate Shield for Use in Pressurized Systems

The FL-110 Series calibrated laboratory rotameters have polycarbonate shields that confine fluid contact to the Viton® or PTFE inserts, polypropylene, and glass tube. The shields also allow for use in pressurized systems or in conditions not fit for glass. These rotameters come in 5 sizes, covering the full range of flows normally encountered with spherical floats.

## SPECIFICATIONS

**Metering Tube:** Borosilicate glass  
**O-Rings:** Viton®; PTFE EPR optional  
**Float:** 316 SS and glass  
**Float Stops:** PTFE  
**Accuracy:** ±2% of reading  
**Max Temp:**  
     Water: 82°C (180°F)  
     Other Fluids: 93°C (200°F)  
**Max Pressure:** 125 psig (8 bar)



High-clarity polycarbonate shield.

SS float included.



FL-110, \$259, shown smaller than actual size.

**MOST POPULAR MODELS HIGHLIGHTED!**

### To Order (Specify Model Number)

Model No.	Price	Nominal Ranges (cc/min)*		NPT Thread	Max Pressure psig
		Air	Water		
FL-110	\$259	0.2 to 100	0.002 to 1.1	¼	125
FL-111	235	1 to 280	0.01 to 4.0	¼	125
FL-112	254	10 to 1900	0.2 to 36	¼	100
FL-113	254	200 to 14,000	3.0 to 300	¼	75
FL-114	297	1000 to 36,000	10.0 to 850	½	60
FL-115	327	3000 to 77,000	30.0 to 1900	½	50

Comes with complete operator's manual.

For 5-point NIST calibration certificate, add "-NIST5" to model number and \$225 to price.

For 10-point NIST calibration certificate, add "-NIST10" to model number and \$275 to price.

\* For stainless steel float, multiply air ranges by 1.78 and water ranges by 2.14.

Ordering Example: FL-112, shielded rotameter, 10 to 1900 cc/min (air) range, \$254.

### Accessories

Model No.	Price	Compatible with Model No.	Description
FL-11	\$15	FL-110, FL-111	6 pack of PTFE O-rings; used to replace standard O-rings when Viton® is not acceptable
FL-12	23	FL-112	
FL-13	14	FL-113	
FL-14	44	FL-114	
FL-15	22	FL-115	
OP-20	79	Reference Book: Calibration: A Technician's Guide	

Tubing and Fittings Available. See Section T.

Viton® is a registered trademark of Dupont Dow Elastomers.



#### UNITED STATES

[www.omega.com](http://www.omega.com)  
1-800-TC-OMEGA  
Stamford, CT.

#### CANADA

[www.omega.ca](http://www.omega.ca)  
Laval(Quebec)  
1-800-TC-OMEGA

#### GERMANY

[www.omega.de](http://www.omega.de)  
Deckenpfronn, Germany  
0800-8266342

#### UNITED KINGDOM

[www.omega.co.uk](http://www.omega.co.uk)  
Manchester, England  
0800-488-488

#### FRANCE

[www.omega.fr](http://www.omega.fr)  
Guyancourt, France  
088-466-342

#### CZECH REPUBLIC

[www.omegaeng.cz](http://www.omegaeng.cz)  
Karviná, Czech Republic  
596-311-899

#### BENELUX

[www.omega.nl](http://www.omega.nl)  
Amstelveen, NL  
0800-099-33-44



## More than 100,000 Products Available!

### • Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Glass Bulb Thermometers, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders Relative Humidity Measurement Instruments, RTD Probes, Elements and Assemblies, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples Thermowells and Head and Well Assemblies, Transmitters, Wire

### • Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

### • pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

### • Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

### • Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

### • Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters