

INTERCHANGEABLE

Designed for low flow rates, the **Model P** flow meter is a precision instrument embodying the inherent simplicity, versatility and economy of the classical rotameter. It is particularly suitable for metering carrier gases in chromatography, indicating and controlling gases in manufacturing processes, liquid and gas measurement in laboratories, pilot plants, flow and level indicating, etc.

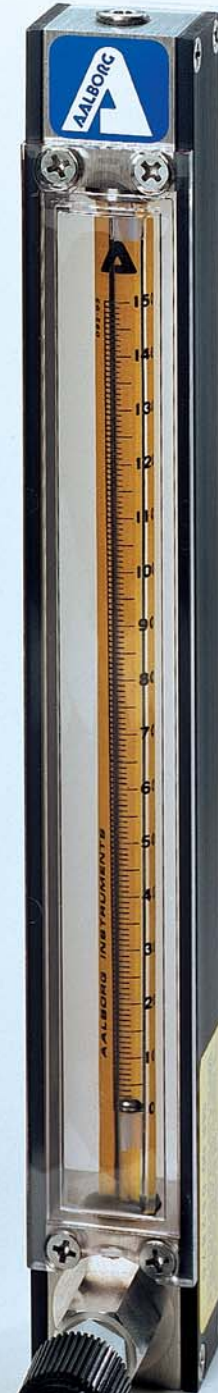
Shipped completely assembled, flow meters include standard mounting fittings in a choice of materials, side plates, thick protective magnifying front shield and back plate, optional built-in control valve, and flow tubes selected from the Flow Capacities tables. Panel mounting style is convertible to bench mounting through the use of the optional acrylic tripod. The tripod has a built-in spirit leveler and leveling screws.

For multiple tube meters see pages 7 and 8.

design features

- ✓ Rib-guided or fluted metering tubes facilitate stable, accurate readings.
- ✓ Magnifier lens in front shield to enhance reading resolution.
- ✓ Interchangeability of flow tubes and floats.
- ✓ Ease of installation and exchange of flow tubes.
- ✓ "Non-rotating" adapter feature - glass flow tubes are prevented from turning during the tightening phase of the assembly procedure.
- ✓ OPTIGRAD™ scales minimize parallax and eye fatigue.
- ✓ Chemical compatibility.
- ✓ Simple means of panel mounting.

150 mm Meter with CV™ Valve



65 mm Meter with MFV™ Valve

BUILT-IN VALVES

Meters are available with built-in needle valves (CV™), high precision metering valves (MFV™) with “non-rising stems”, or with no valves. The higher cost of MFV™ valves is justified whenever high sensitivity control and resolution are desirable particularly in conjunction with metering tubes of very low flow rates.

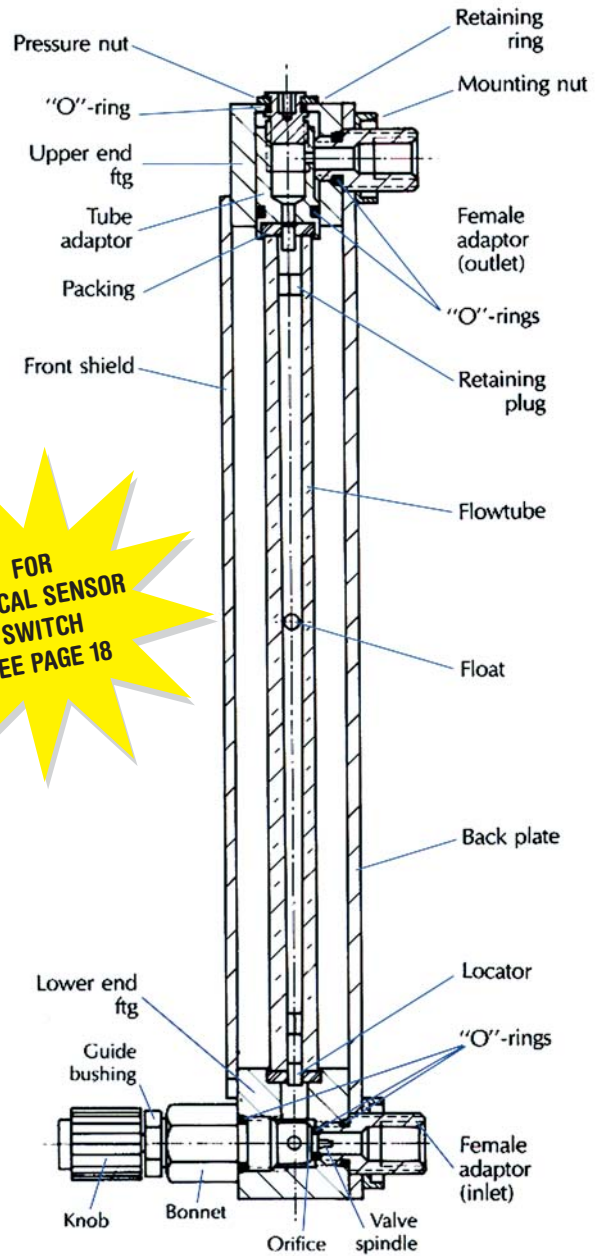
Generally, for gas metering it is recommended that valves are positioned at inlets (bottom) for liquids valves may be positioned either at inlets or outlets (top). For vacuum services, valves must be mounted at outlets. If unspecified at the time of ordering, meters will be shipped with valves mounted at the inlets.

Panel mounting is convertible to bench mounting through the use of an optional acrylic tripod base with spirit leveler (catalog No. TP1).

SPECIFICATIONS	
STANDARD ACCURACY	±2% FS (mm scales) except 042 flow tubes. ±5% FS (direct reading scales) and 042 mm.
CALIBRATED ACCURACY	±1% FS.
REPEATABILITY	±0.25%.
USEFUL FLOW RANGE	10:1 minimum with one float and better than 20:1 with combination of two floats installed in meters.
MAXIMUM OPERATING PRESSURE	200 psig/13.8 bars.
MAXIMUM OPERATING TEMPERATURE	250 °F/ 121 °C.

**MATERIALS OF CONSTRUCTION	
FLOW TUBES	Heavy walled borosilicate glass.
FLOATS	Glass, Sapphire, 316 Stainless Steel, Carboloy® and Tantalum.
CHOICE OF MOUNTING FITTINGS IN CONTACT WITH FLUIDS	a) Aluminum, black anodized. b) Brass, chrome plated. c) 316 stainless steel.
SIDE PANELS	Aluminum, black anodized.
FRONT SHIELD	Lexan® with longitudinal magnifier lens for enhanced reading resolution.
BACK PLATE	1/8" thick white acrylics.
O-RINGS AND PACKING	Buna-N® o-rings in aluminum/ brass model. Viton® o-rings in stainless steel meters. OPTIONAL Viton® PTFE Kalrez® and EPR.
CONNECTIONS	1/8" NPT female inlet and outlet connections. OPTIONAL 1/4" FNPT, hose and compression fittings are available.

Select flow tube consistent with requirements from flow capacity tables 6 to 22 (page 38 to 44).



FOR OPTICAL SENSOR SWITCH SEE PAGE 18

Assorted flow tubes may be used in conjunction with a single mounting frame, an apparent benefit in many laboratory applications.

Ordering information see page 9.
Dimensional information see page 8.

**The selection of materials of construction, is the responsibility of the customer. The company accepts no liability.