

# P SERIES GAS FLOWMETERS

Designed for low flow rates, the model "P" flowmeter is a precision instrument embodying the inherent simplicity, versatility and economy of the classical variable area meter. 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. All flowmeters contain dual floats constructed of different material offering dual readings within the same flowmeter.



## DESIGN FEATURES

- Rib-guided or fluted glass metering tubes facilitate stable and accurate readings
- Magnifier lens in front shield to enhance reading resolution
- OPTIGRAD™ scales minimize parallax and eye fatigue
- Chemical compatibility
- Capable of being panel mounted

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

## Metering Valves

Meters are available with built-in standard needle valves or high precision metering valves with "non-rising stems". The higher precision metering valves have 16 full turns compared to our 6 turn standard valves and are justified whenever high sensitivity control and resolution is desirable particularly in conjunction with metering tubes of very low flow-rates.

Conversion charts for air and water are supplied with each flow-meter.  
Conversion charts for routine gases are supplied on request.

Part Number	Size	Frame Material	Valve Style	Float Material	Max Flow Rate AIR		Max Pressure
					ML/MIN	SCFH	
16000	150mm	Aluminum	Standard	Glass/Stainless Steel	49/143	.104/.303	200psig
16001	150mm	Aluminum	Standard	Glass/Stainless Steel	374/814	.792/1.725	200 psig
16002	150mm	Aluminum	Standard	Glass/Stainless Steel	2313/4562	4.90/9.66	200psig
16003	150mm	Aluminum	Standard	Glass/Stainless Steel	8505/16,737	18.02/35.46	200psig
16004	150mm	Aluminum	Standard	Glass/Stainless Steel	23,742/45,227	50.30/95.83	200psig
16005	150mm	Aluminum	High Res.	Glass/Stainless Steel	49/143	.104/.303	200psig
16006	150mm	Aluminum	High Res.	Glass/Stainless Steel	374/814	.792/1.725	200psig
16007	150mm	Aluminum	High Res.	Glass/Stainless Steel	2313/4562	4.90/9.66	200psig
16008	150mm	Aluminum	High Res.	Glass/Stainless Steel	8505/16,737	18.02/35.46	200psig
16009	150mm	Aluminum	High Res.	Glass/Stainless Steel	23,742/45,227	50.30/95.83	200psig
16010	150mm	Stainless Steel	Standard	Glass/Stainless Steel	49/143	.104/.303	200psig
16011	150mm	Stainless Steel	Standard	Glass/Stainless Steel	374/814	.792/1.725	200psig
16012	150mm	Stainless Steel	Standard	Glass/Stainless Steel	2313/4562	4.90/9.66	200psig
16013	150mm	Stainless Steel	Standard	Glass/Stainless Steel	8505/16,737	18.02/35.46	200psig
16014	150mm	Stainless Steel	Standard	Glass/Stainless Steel	23,742/45,227	50.30/95.83	200psig
16015	150mm	Stainless Steel	High Res.	Glass/Stainless Steel	49/143	.104/.303	200psig
16016	150mm	Stainless Steel	High Res.	Glass/Stainless Steel	374/814	.792/1.725	200psig
16017	150mm	Stainless Steel	High Res.	Glass/Stainless Steel	2313/4562	4.90/9.66	200psig
16018	150mm	Stainless Steel	High Res.	Glass/Stainless Steel	8505/16,737	18.02/35.46	200psig
16019	150mm	Stainless Steel	High Res.	Glass/Stainless Steel	23,743/45,227	50.30/95.83	200psig

**NOTE:** Specific Gravity Conversion chart available on Smith website.