

FLOW MONITORS

F-SERIES

| | |
|---------------------------------|-------------------------|
| PRESSURE RANGE | up to 150 psig (10 Bar) |
| ACCURACY REPEATABILITY | ±4% F.S. ±0.25% F.S. |
| MAX FLOW | 250 SCFM (7,080 slpm) |
| PORTS | ¼ to 1½" NPT |

FR flow monitor is a pressure regulated mass flow transducer which provides flow measurement in real time, less than 10ms. There are no moving parts and it is immune to vibration up to 25G. They operate with standard industrial air filtered to 40 micron. Saturated or lubed air will not affect the F-Series performance.

It is an ideal flow monitoring device where real time flow measurement is critical to a process. Analog outputs of 0-10 VDC and 4-20 mA are available. It can be teamed up with a Proportion-Air flow controller for closed loop flow control. The FR flow monitor can be calibrated for a variety of inert gases. Pressure compensated models also available.



*Optional Digital Display Shown
Oxygen Service Available*

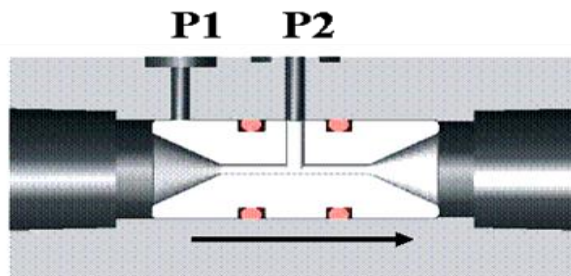
FLOW CONTROL

Real-time flow control meets the challenges of “high cycle” production

The high cycle rates of many manufacturing processes call for flow control that reacts immediately to system changes. Most flow meters monitor the flow by sensing physical changes in resistance or temperature then using this information to calculate and output the result. These devices are relatively slow with update rates from one or two hundred milliseconds to several seconds. These lengthy update times are often so slow that the cycle is complete before the actual flow rate can be determined.

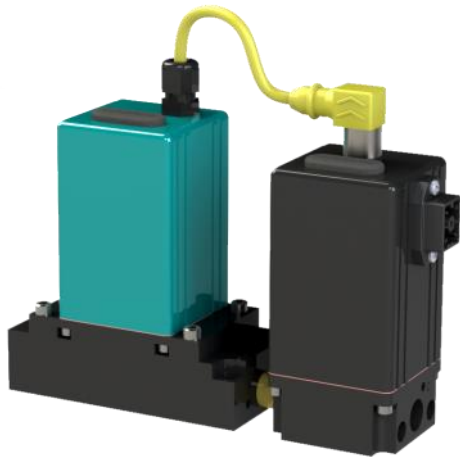
Proportion-Air’s F-Series flow monitor senses differential pressure across a calibrated venturi. Its output is virtually instantaneous <10ms and is continuous.

Differential Pressure Based Flow Measurement



FLOW CONTROL

FQPV2



*Optional Digital Display Available
Oxygen Service Available*

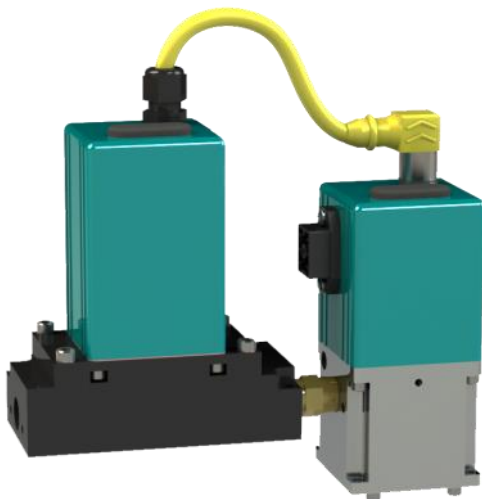
| | |
|---------------------------------|-------------------------|
| PRESSURE RANGE | up to 150 psig (10 Bar) |
| ACCURACY REPEATABILITY | ±4% F.S. ±0.25% F.S. |
| MAX FLOW | 1 SCFM (28 slpm) |
| PORTS | ¼" to 1½" NPT |

The FQPV/F-Series closed loop flow control is built in a compact IP65 rated housing. The FQPV compares the command signal from the customer's controller with feedback from the F-Series flow transducer for active closed loop control. The unit controls the flow of air & a variety of inert gases.

These assemblies are unaffected by mounting position or vibrations to 25Gs. They operate with standard industrial air filtered to 40 micron.

Minimum inlet pressure is 15 psig.

FQB3



*Optional Digital Display Available
Oxygen Service Available*

| | |
|---------------------------------|-------------------------|
| PRESSURE RANGE | up to 150 psig (10 Bar) |
| ACCURACY REPEATABILITY | ±4% F.S. ±0.25% F.S. |
| MAX FLOW | 25 SCFM (708 slpm) |
| PORTS | ¼" to 1½" NPT |

The FQB3/F-Series can be used for closed loop flow control. The FQB3 compares the command signal from the customer's controller with feedback from the F-Series flow transducer for active closed loop control. This series offers a flow monitor and control valve assembly with a <10ms response time.

A variety of command signals are available on the FQB3. The assembly operates with standard industrial air filtered to 40 micron. Saturated air and lubed air will not affect performance. Optional digital display is available.

FLOW CONTROL

FQB2/PSR

| | |
|---------------------------------|-------------------------|
| PRESSURE RANGE | up to 150 psig (10 Bar) |
| ACCURACY REPEATABILITY | ±4% F.S. ±0.25% F.S. |
| MAX FLOW | 250 SCFM (7,080 slpm) |
| PORTS | ¼" to 1½" NPT |

The FQB2/PSR/F-Series allows for high flow closed loop flow control offering active “real time” flow control. The FQB2 compares the command signal from the customer’s controller with feedback from the F-Series flow transducer for active closed loop control. The pressure compensated model controls flow regardless of input pressure fluctuation (up to 50% fluctuation). They can be used to control the velocity of pneumatic cylinders with great repeatability.

Standard industrial air quality filtered to 40 micron will not harm this controller. Saturated air and lubed air will not affect performance.



*Optional Digital Display Available
Oxygen Service Available*

FCV

| | |
|------------------------------|---------------------------|
| PRESSURE RANGE | up to 250 psig (17 Bar) |
| ACCURACY RESOLUTION | ±5% F.S. ±0.3% F.S. |
| VALVE Cv | 0 to 19 Linear to Command |
| PORT | 1" NPT |

303 Stainless Steel Valve Body with 300:1 Turndown Ratio

The FCV flow control valve is a robust flow control product that compares a command signal input with feedback from an on-board LVDT to proportionally control Cv. The maximum valve travel is 1 inch. An analog monitor output showing position of the plug from the seat can be used for data acquisition. A double-lip radial seal takes the place of standard valve packing so packing nut adjusting is eliminated. Seal replacement and seat replacement can be accomplished without removing the valve body from piping.

The FCV is available with 0-10 VDC differential or 4-20 mA differential command signal. Valve position monitor can be 0-10 VDC or 4-20 mA. Parabolic valve trim allows output to be linear and proportional to command input. Reduce trim of 3/4" available. The FCV contains a replaceable seat and trim.

