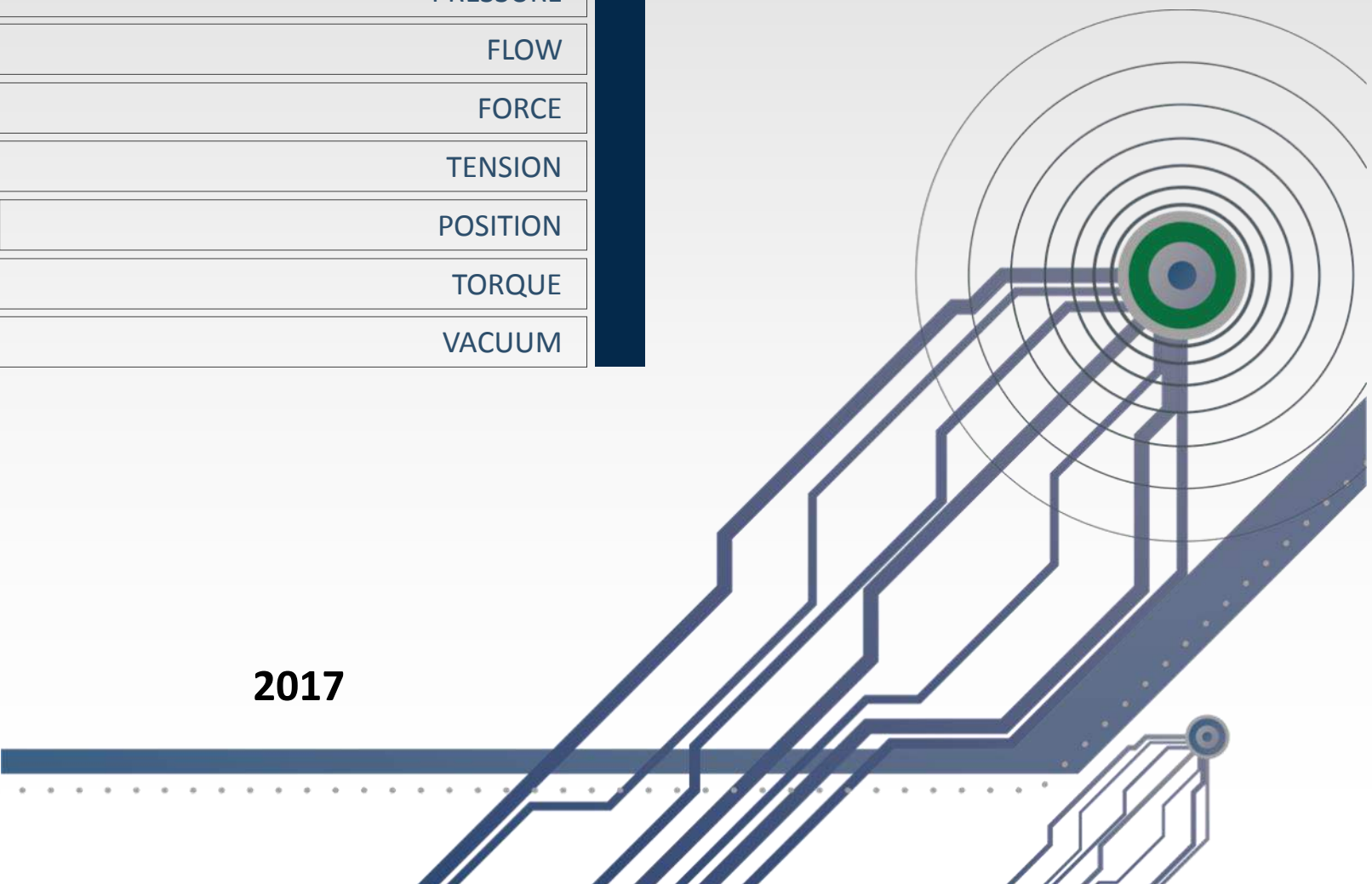
PROPORTION-AIR

Electro-Pneumatic Pressure Regulators & Flow Controllers

ELECTRO-PNEUMATIC PRESSURE REGULATORS & FLOW CONTROLLERS

PRODUCT CATALOG

- PRESSURE
- FLOW
- FORCE
- TENSION
- POSITION
- TORQUE
- VACUUM



2017

About Proportion-Air

Closed loop electro-pneumatic controls is our only business.
Our competitors are making thousands of products one way.
We make one product thousands of ways.

HISTORY

Proportion-Air, Inc. manufactures electronic air pressure regulators and air flow control valves. We were founded in 1985 by corporate President Daniel E. Cook to capitalize on the sales and marketing prospects of the unique invention of an electronic air pressure regulator. This air pressure device was designed to accept a variety of electronic analog and digital signals, in order to control pneumatic pressures with extreme accuracy while negating the effects of vibration, mounting position or environmental concerns.

THE PEOPLE

Proportion-Air's biggest asset has always been and will always be its people. Many companies offer similar products, but we understand how difficult it is to get a straight answer when you call them for help. We not only offer superior products, but we have the experienced people to back up those products. Our sole focus is electronic control of pressure and flow and this focus shows in every single product. Call us and find out for yourself.

WIDE VARIETY

Proportion-Air offers a large family of electronic air pressure regulators and air flow control valves that allow you to select the best product to match your exact application requirements. Whether you have specific package dimensions, housing requirements or an uncommon electrical interface. We have a product family to match your application.

WHERE OTHERS FEAR

Proportion-Air goes where others fear to tread; oxygen service, vacuum control, vacuum through positive pressure, absolute pressure, inches of water column, or direct control up to l000psi. Our variety of outputs can be controlled by an equally diverse range of calibrated electrical inputs including analog, digital and serial communications. All of our years of engineering and design experience gives us the confidence to take on the most problematic and exacting applications.

ADVANCED TECHNOLOGY

Proportion-Air handles these difficult requirements with unique advanced control technology resulting in products with superior accuracy, resolution and repeatability. This refinement of performance does not mean they are delicate. All of our products are built tough to handle the most adverse environments. Our advanced "dual loop" technology allows closed loop control using many different downstream sensors in order to control many different processes and applications.

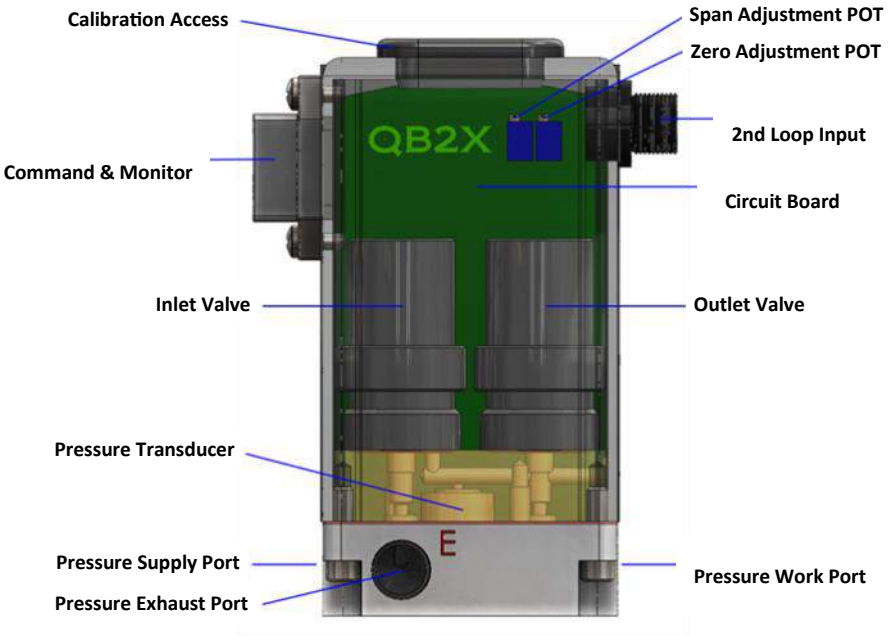
MADE IN U.S.A

Proportion-Air has Become the Future of Control
by Setting the Benchmark in Advanced Pneumatic Control Technology

PRESSURE CONTROL

Advanced Pneumatic Control Technology

Many manufacturing processes demand the need for closed loop pneumatic pressure control. Control loops are a chain of events or processes that always lead back to the point of origin. The feedback loop allows the system to achieve the greatest level of accuracy. Since Proportion-Air is committed to providing the customer with exceptional products and service to meet this demand, all Proportion-Air electro-pneumatic control valves utilize closed loop control technology. Burling manufactures both single and dual closed loop control valves.



Single loop control valves have a built in pressure transducer that constantly monitors control pressure. When an electronic command signal is given, the "commanded pressure" is compared to the actual pressure and the inlet or exhaust solenoid valves are actuated until desired pressure is achieved. Dual loop control valves expand on the single loop operation by combining an additional feedback input (in conjunction with the internal transducer) from another external sensing device. The ability of the dual loop to accept electrical feedback from an external sensor allows precise control of conditions such as pressure of large volume systems, vacuum and flow.

Proportion-Air carries a selection of regulators and sensors to interface with dual loop model valves to meet a variety of applications.

PRESSURE CONTROL

QB1T | QB2T

Optional Digital Display Shown
Oxygen Service Available

PRESSURE RANGE	Full Vacuum to 175 psig *(12 Bar)*
ACCURACY | REPEATABILITY	±0.2% F.S. | ±0.02% F.S.
MAX FLOW	1.2 SCFM *(34 slpm)*
PORTS	⅛" NPT

Available with Modbus RS232 & RS485

The QB1T & QB2T electro-pneumatic closed loop pressure control valves are in a compact IP65 housing. Analog monitor output is standard, select 0-10 VDC or 4-20 mA. The dual loop accepts a feedback signal from a wide range of external sensors.

These valves are unaffected by mounting position or vibrations to 25Gs. They operate with standard industrial air filtered to 40 micron while not consuming air in a steady state, reducing operating cost.

These units can be assembled to an air piloted regulator (volume booster) for higher flows up to 3,000 SCFM, higher pressures to 7,000 psig and control of various gaseous and liquid media.

QB1S | QB2S

Optional Digital Display Available
Oxygen Service Available

PRESSURE RANGE	Full Vacuum to 500 psig *(34 Bar)*
ACCURACY | REPEATABILITY	±0.25% F.S. | ±0.05% F.S.
MAX FLOW	1.2 SCFM *(34 slpm)*
PORTS	⅛" NPT

Available with Modbus RS232 & RS485

The QB1S & QB2S electro-pneumatic closed loop pressure control valves are in a compact IP65 housing. Analog monitor output is standard, select 0-10 VDC or 4-20 mA. The dual loop accepts a feedback signal from a wide range of external sensors.

These valves are unaffected by mounting position or vibrations to 25Gs. They operate with standard industrial air filtered to 40 micron while not consuming air in a steady state, reducing operating cost.

These units can be assembled to an air piloted regulator (volume booster) for higher flows up to 3,000 SCFM, higher pressures to 7,000 psig and control of various gaseous and liquid media.

QB1X | QB2X

PRESSURE RANGE	Full Vacuum to 175 psig *(12 Bar)*
ACCURACY | REPEATABILITY	±0.2% F.S. | ±0.02% F.S.
MAX FLOW	1.2 SCFM *(34 slpm)*
PORTS	⅛" NPT

Available with Modbus RS232 & RS485

The QB1X & QB2X electro-pneumatic closed loop pressure control valves are in a compact IP65 housing. Analog monitor output is standard, select 0-10 VDC or 4-20 mA. The dual loop accepts a feedback signal from a wide range of external sensors.

These valves are unaffected by mounting position or vibrations to 25Gs. They operate with standard industrial air filtered to 40 micron while not consuming air in a steady state, reducing operating cost.

These units can be assembled to an air piloted regulator (volume booster) for higher flows up to 3,000 SCFM, higher pressures to 7,000 psig and control of various gaseous and liquid media.

Optional Ethernet Model Shown
Optional Digital Display Available
Oxygen Service Available

MM1 | MM2

PRESSURE RANGE	Full Vacuum to 175 psig *(12 Bar)*
ACCURACY | REPEATABILITY	±0.2% F.S. | ±0.02% F.S.
MAX FLOW	1.2 SCFM *(34 slpm)*
PORTS	⅛" NPT

The MM1 & MM2 electro-pneumatic closed loop air pressure control valves re available with DIN rail, panel mount or up to 16 station sub-base manifold mounting. Analog monitor output is standard, select 0-10 VDC or 4-20 mA. Jumper selectable command 0-10 VDC or 4-20 mA.

Common supply and exhaust ports on sub-base manifold for easy plumbing. Adjustable dead band allows field tuning of system stability. The dual loop design accepts feedback signal from a wide range of external sensors.

PRESSURE CONTROL

QB3

Optional Digital Display Shown
Oxygen Service Available

PRESSURE RANGE	Full Vacuum to 150 psig *(10 Bar)*
ACCURACY | REPEATABILITY	±0.25% F.S. | ±0.2% F.S.
MAX FLOW	30 SCFM *(850 slpm)*
PORTS	¼" NPT

Available with Modbus RS232 & RS485

The QB3 is a complete electronic pressure regulator package consisting of two feed and bleed solenoid valves, a control circuit, pressure transducer, and an integral air pilot operated volume booster all in a rugged IP65 housing.

Analog monitor output signal is standard, select 0-10 VDC or 4-20 mA. Select 0-10 VDC or 4-20 mA differential command signal.

Available options include digital display, manifold mount, a variety of wetted elastomers and brass body version cleaned for oxygen service.

QB3H

Oxygen Service Available

PRESSURE RANGE	Full Vacuum to 500 psig *(34 Bar)*
ACCURACY | REPEATABILITY	±0.5% F.S. | ±0.2% F.S.
MAX FLOW	50 SCFM *(1,416 slpm)*
PORTS	⅜" NPT *(½" Optional)*

Available with Modbus RS232 & RS485

The QB3H electronic pressure regulator consists of two solenoid valves which add or subtract pressure to the pilot of an integral volume boosting regulator. An internal stainless steel pressure sensor measures the high pressure output of the integral volume booster and sends this signal to the on-board controller.

Available in lightweight aluminum, stainless steel or oxygen service compatible brass bodies.

QB4

PRESSURE RANGE	Full Vacuum to 150 psig *(10 Bar)*
ACCURACY | REPEATABILITY	±0.4% F.S. | ±0.3% F.S.
MAX FLOW	200 SCFM *(5,663 slpm)*
PORTS	½" NPT *(3/4" Optional)*

Available with Modbus RS232 & RS485

The QB4 is made up of two solenoid valves, internal pressure transducer and an electronic control circuit mounted to an integral volume booster in a compact IP65 rated housing. Output pressure is proportional to an electrical input (command signal). Command signals come in a choice of either a differential 0-10 VDC or 4-20 mA.

The QB4 also provides an electrical monitor signal for output to a panel meter or controller for data acquisition or quality assurance needs. It is the actual work pressure that is sensed and fed back to the control circuit so any mechanical hysteresis of the air piloted volume booster is automatically compensated for; allowing for extraordinary accuracy and repeatability.

Optional Digital Display Available
Oxygen Service Available

GX1 | GX2

PRESSURE RANGE	Full Vacuum to 1,000 psig *(69 Bar)*
ACCURACY | REPEATABILITY	±0.25% F.S. | ±0.15% F.S.
RESOLUTION	±0.10% F.S.
MAX FLOW	26 SCFM @ 1,000 psi *(736 slpm)*
PORTS	⅛" NPT

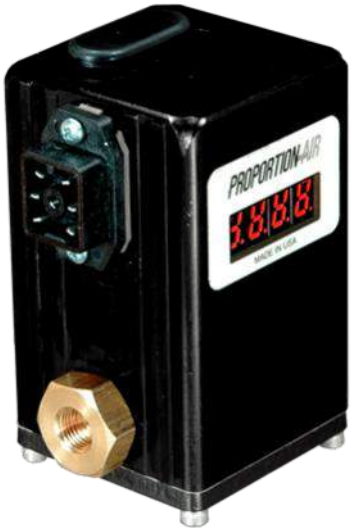
The GX1 & GX2 high pressure control pressure valve offers precision pressure control without the need for a ratio amplifying regulator. This series includes a power and status indicator LED and is field serviceable with field modifiable command and monitor signals.

Analog monitor output is standard, select 0-10 VDC or 4-20 mA TTL. Select 0-10 VDC or 4-20 mA differential command signal. The GX1 & GX2 can be assembled to a volume booster for higher flow. This is a complete re-design of the popular GP model. The GX improves upon the GP in *virtually* every aspect.

Oxygen Service Available
The GP Re-Designed

PROPORTIONAL PRESSURE CONTROL

QPV1 | QPV2



Optional Digital Display Shown
Oxygen Service Available

PRESSURE RANGE	Full Vacuum to 150 psig *(10 Bar)*
ACCURACY | RESOLUTION	±0.2% F.S. | *up to* ±0.005% F.S.
MAX FLOW	1 SCFM *(28 slpm)*
PORTS	⅛" NPT

Available with Modbus RS232 & RS485

The QPV1 & QPV2 is an ultra-high resolution electro-pneumatic closed loop proportional pressure control valve. The QPV utilizes a variable orifice valve on the inlet side which eliminates the digital steps of traditional ON/OFF solenoids. The field adjustable hysteresis potentiometer allows users to virtually eliminate the dead-band of the control circuit, resulting in superior system resolution. Ideal for very sensitive applications such as leak testing at low pressures and dispensing applications.

Analog monitor output is standard, select 0-10 VDC or 4-20 mA. The dual loop design accepts a feedback signal from a wide range of external sensors, including the F-Series flow monitor for closed loop flow control and pressure, vacuum or force transducers.

MPV1 | MPV2

PRESSURE RANGE	Full Vacuum to 150 psig *(10 Bar)*
ACCURACY | RESOLUTION	±0.2% F.S. | *up to* ±0.005% F.S.
MAX FLOW	1 SCFM *(28 slpm)*
PORTS	⅛" NPT

The MPV1 & MPV2 is an ultra-high resolution electro-pneumatic closed loop proportional pressure control valve. The QPV utilizes a variable orifice valve on the inlet side which eliminates the digital steps of traditional ON/OFF solenoids. The field adjustable hysteresis potentiometer allows users to virtually eliminate the dead-band of the control circuit, resulting in superior system resolution. Ideal for very sensitive applications such as leak testing at low pressures and dispensing applications.

Common supply inlet and exhaust ports with manifold mount assembly. MPV2 accepts feedback signal of pressure, vacuum or force. DIN Rail, panel mount or up to 16 station sub-base manifold mounting options available.

PROPORTIONAL PRESSURE CONTROL

SPV1 | SPV2

PRESSURE RANGE	Full Vacuum to 150 psig *(10 Bar)*
ACCURACY | REPEATABILITY	±0.2% F.S. | *up to* ±0.02% F.S.
MAX FLOW	1 SCFM *(28 slpm)*
PORTS	⅛" NPT

The SPV is a high resolution electro-pneumatic closed loop proportional pressure control valve. It uses a variable orifice inlet valve which eliminates the digital steps of traditional ON/OFF solenoids.

The field adjustable hysteresis potentiometer allows users to virtually eliminate the dead-band of the control circuit, resulting in superior system resolution. Its small foot print makes it a space saver. Analog monitor output signal is 0-10 VDC.

QL3

PRESSURE RANGE	0-5 psig through 0-125 psig *(8.6 Bar)*
ACCURACY | REPEATABILITY	±0.4% F.S. | ±0.05% F.S.
MAX FLOW	25 SCFM *(708 slpm)*
PORTS	¼" NPT

Available with Modbus RS232 & RS485

Optional Digital Display Available
Oxygen Service Available

The QL3 electro-pneumatic closed loop pressure control valves are in a compact IP65 rated housing. The QL3 allows high volumes of air to move quickly and precisely using proportional solenoid valves with a unique analog PID circuit. Ideal for use with flow meters, it provides high resolution and smooth pressure control at high and low flow rates and avoids the "steps" prevalent in most feed and bleed I/Ps. The pneumatic output is proportional to the input command signal.

Analog monitor output is standard, select 0-10 VDC or 4-20 mA. Select 0-10 VDC or 4-20 mA differential command signal. Available options include digital display and manifold mount.

HAZARDOUS AREA PRESSURE CONTROL

ISQB1

PRESSURE RANGE	0 to 150 psig *(10 Bar)*
ACCURACY | REPEATABILITY	±0.5% F.S. | ±0.2% F.S.
MAX FLOW	0.8 SCFM *(23 slpm)*
PORTS	⅛" NPT

The ISQB1 is an intrinsically safe-Factory Mutual (Class I, II, III, Division 1 Groups C, D, E, F, G) electro-pneumatic closed loop pressure control valve offered with standard 4-20 mA analog command signal. It can be assembled to air piloted regulator for high flow, higher pressure and various media.

HAZARDOUS AREA CLASSIFICATION

ISQB: Rated intrinsically safe and is Factory Mutual approved for Class I, II & III, Division 1, Groups C, D, E, F, & G.

ISF1

PRESSURE RANGE	Full Vacuum to 150 psig *(10 Bar)*
ACCURACY | REPEATABILITY	±0.5% F.S. | ±0.2% F.S.
MAX FLOW	0.8 SCFM *(23 slpm)*
PORTS	⅛" NPT

Hazardous media such as natural gas can be directly controlled with the ISF1 Nonincindive-Factory Mutual (Class II, Division 2 Groups C, D) electro-pneumatic closed loop pressure control valve. Offered with standard 4-20 mA analog command signal and 13.5 to 29 VDC supply voltage. Can be assembled to air piloted regulator for high flow, higher pressures and various media control.

HAZARDOUS AREA CLASSIFICATION

ISF1: Nonincindive for use in Class II, Division 2, Groups C and D T4; Type 4X hazardous (classified) locations and suitable for use in Class II, Division 2, Groups E, F and G T4; Type 4X hazardous (classified) locations.

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

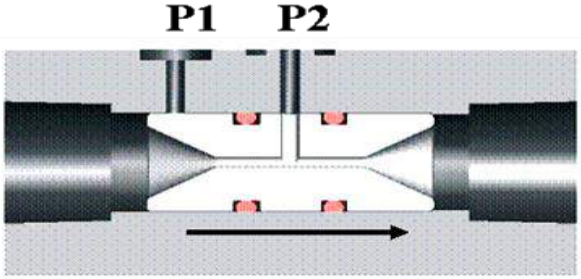
FLOW CONTROL

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



FQPV2

Optional Digital Display Shown
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 FPQV 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 Shown
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

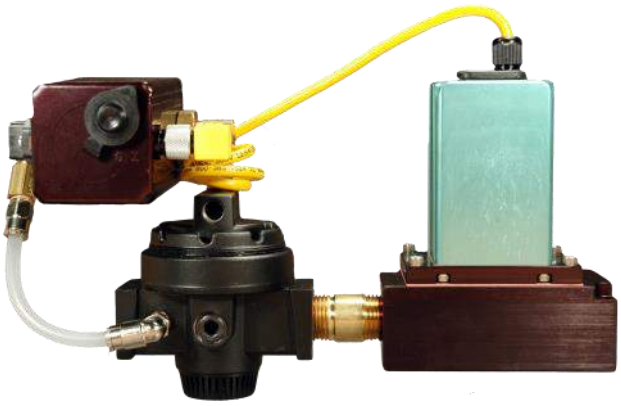
The FQB3/F-Series can be used for closed loop flow control. The FQB3 compares the command signal from the customer's controller with feedback from the F-Series flow transducer for active closed loop control. This series offers a flow monitor and control valve assembly with a <10ms response time.

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.

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.



Optional Digital Display Available
Oxygen Service Available

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

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.

PRESSURE TRANSDUCERS

DS SERIES

PRESSURE RANGE	Full Vacuum to 7,000 psig *(483 Bar)*
DSB & DSW ACCURACY | REPEATABILITY	±0.2% F.S. | *up to* ±0.02% F.S.
DST ACCURACY | REPEATABILITY	±0.5% F.S. | *up to* ±0.25% F.S.
PORTS	¼ and ⅛" NPT and BSPT

For air, gases and liquids (stainless steel optional)

The DS Series pressure transducers offer high accuracy, cost effective pressure transducers for vacuum only, vacuum through positive pressure or positive pressure only. The lowest calibrated positive pressure range is 0-12 inches of water column.

The DS Series provides wide pressure ranges from vacuum through 7,000 psig (483 bar) and field adjustable zero and span potentiometers. Available for either voltage or current outputs.

Oxygen Service Available

DSL

PRESSURE RANGE	Full Vacuum to 30 psig *(2 Bar)*
DSL ACCURACY | REPEATABILITY	±0.2% F.S. | *up to* ±0.02% F.S.
PORTS	10-32 Pnuematic Connection

For air and inert gases

The DSL is a transducer which senses gauge vacuum and positive pressure and converts this to a 0-10 VDC analog electrical output signal. The 0-10 VDC output signal is a linear ratio to the sensed pressure. The device output signal is independent of the supply voltage. It can be calibrated any range of pressure from full vacuum up to 30 psig (2 bar).

The DSL utilizes piezo-resistive strain gauge sensor housed in a miniature rugged anodized aluminum canister. A strain relief protects the wiring from excessive pulling force. Multiple cable lengths available.

Oxygen Service Available

Why DUAL-LOOP Technology?

ANY FLOW & ANY MEDIA

• QB2T with R000C

• QB2T with PSR-B

QB2X with R000C •

QB2T with Steam Regulator

QB2T with Ratio Regulator •

Dual loop technology: This provides us the capability to control *virtually* any media at any flow rate and any pressure without sacrificing accuracy and repeatability. It also allows us to take feedback from more than just a pressure transducer. With a properly configured dual loop unit we can take feedback from a vacuum transducer, force transducer, torque, flow or position transducer.

PID loops no longer need tuned in your controller. Proportion-Air's dual loop technology makes proportional control easy. It is already done within the unique Proportion-Air analog circuit. You may need to ramp pressure (or vacuum, or force, or torque, or flow, or position) up and down – the QB2 will track the ramped signal from the PLC or computer and achieve the control setting required.

Accuracy: The downstream pressure transducer senses pressure on the work port of the pressure regulator and allows the QB2 to compensate for inaccuracy brought about by the mechanical properties of the regulator.

Repeatability: High flow capability, hydraulic or pneumatic media capability, more simple-to-use control and extremely repeatable: the same conditions with the same command signal from the same direction can have repeatability as high as 0.02% of full scale calibration.

High flow: Pressure reducing or back pressure regulators are available as large as 6 inch flange mount.

Data Acquisition: Just like other Proportion-Air electronic pressure regulators, the QB2 has an analog output that comes from the controlling transducer. This signal in a dual loop device comes from the downstream transducer.

ProAirMizer

Energy Savings for Compressed Air Systems

THE PROBLEMS

- Long term compressor cost is electricity
- Every 10 psig increase in pressure *(generally)* requires about 5% more power to produce
- Plant & header pressure can experience a 15 psig swing
- Compressors often struggle to maintain a buffer in reservoir

THE Pro-Air Mizer SOLUTION

- Header pressure maintains a buffer and remains stable and consistent, providing optimal capacitance
- Average amp draw is greatly decreased
- When plant pressure is set at 85 psig *(example pressure),* the Pro-Air Mizer manages and delivers 85 psig to all drops with *virtually* zero variance
- Artificial demand is eliminated and capacity is stored as reserve energy
- Thousands of dollars less than the competition and just as accurate
- Very simple to install

TYPICAL CONTROL PACKAGE COMPONENTS & POTENTIAL RANGES

Electro-Pneumatic Pressure Regulator *(QBX shown)*

Up to 1000 psig *(69 bar)* direct control available

DS Pressure Transducer

Accuracy up to ±0.2% *(DSY Shown)*

Volume Booster *(R -Series Shown)*

Flows up to 10,000 SCFM *(4,720 lit/sec)*

Control Box

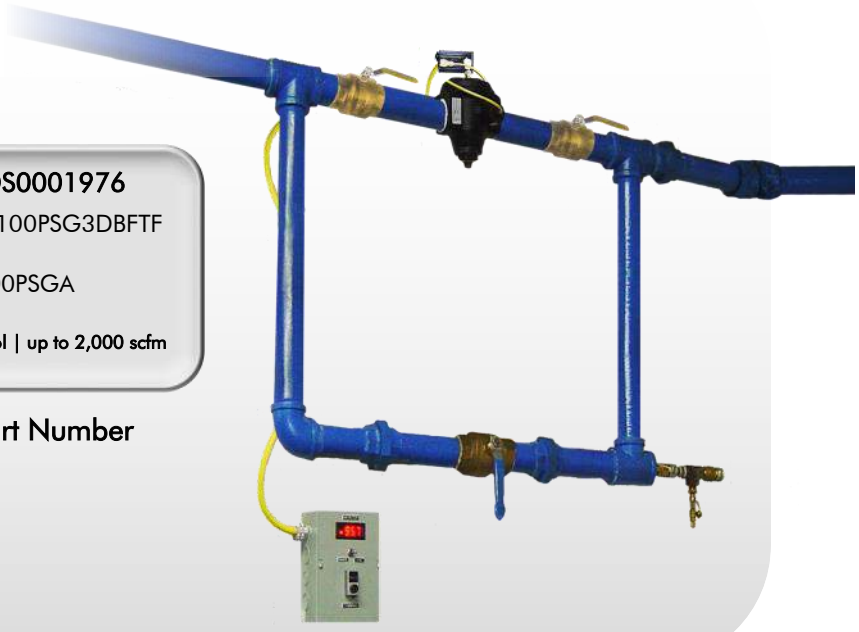
(box is optional) - Provides switching capability between remote and local control of the regulator assembly

- **ASSMQBXRDS0001976**

⇒ QB2XANEEZP100PSG3DBFTF
⇒ R000CN
⇒ DSBEY00ZP100PSGA

0-100 pressure control | up to 2,000 scfm

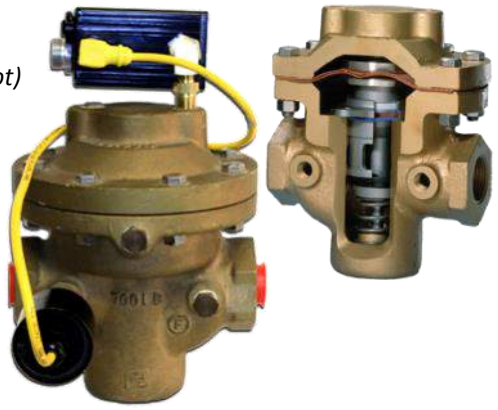
Example Part Number



SATURATED STEAM CONTROL

BD-SERIES

- Closed loop device with 4-20 mA command *(Electronic Pilot)*
- Works with standard industrial air, no instrument air required *(Electronic Pilot)*
- Available in single or dual loop configuration *(Electronic Pilot)*
- Fails closed at loss of power to maintain pressure *(Electronic Pilot)*
- No dithering of the command is required
- Automatically maintains correct pressure *(temperature)* at all times
- No dithering extends diaphragm life even further
- Carbon steel, flange mount body

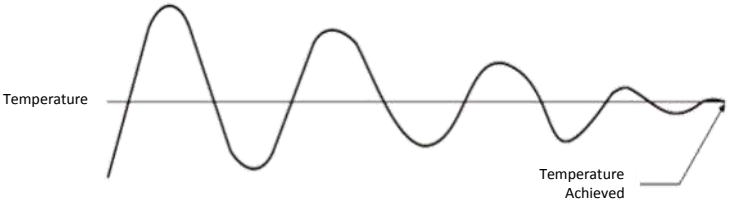


THE TEMPERATURE OF SATURATED STEAM IS DIRECTLY PROPORTIONAL TO THE PRESSURE

Why replace your process valve with the BD-Series?

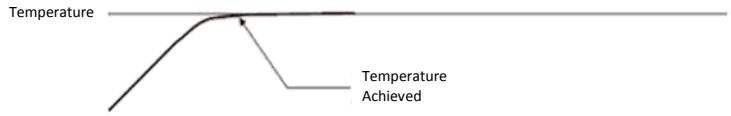
- Highly sophisticated
- Expensive package
- Many parts for total system
- Requires trained operator

Process Valve *(Old Way)*

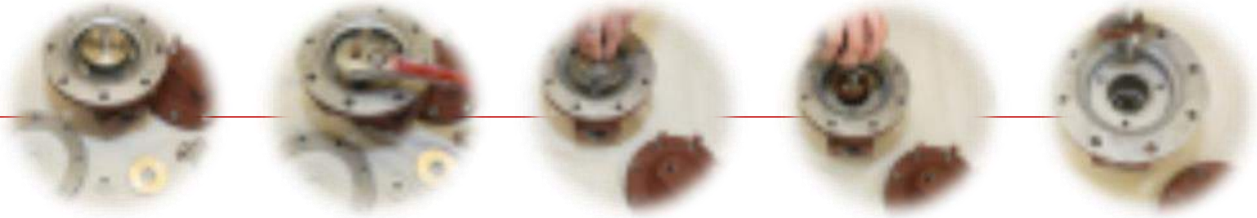


Mold temperature was achieved in 10 min vs. 45 min - *the old way*

Proportion-Air *(New Way)*



REPLACE & REPAIR INTERNAL COMPONENTS WITHOUT REMOVING FROM LINE



PRESSURE REGULATORS *(Volume Boosters)*

PSR

MAX OUTLET PRESSURE	up to 200 psig *(14 Bar)*
MAX FORWARD FLOW	700 SCFM *(19,822 slpm)*
MAX RELIEF FLOW	12 SCFM *(340 slpm)*
PORTS	¼ to 1½" NPT

R000B & R000C

MAX OUTLET PRESSURE	up to 300 psig *(21 Bar)*
MAX FORWARD FLOW	2,000 SCFM *(56,633 slpm)*
MAX RELIEF FLOW	200 SCFM *(5,663 slpm)*
PORTS	1½" and 2" NPT

RM SERIES

MAX OUTLET PRESSURE	up to 300 psig *(21 Bar)*
MAX FORWARD FLOW	550 SCFM *(15,574 slpm)*
MAX RELIEF FLOW	200 SCFM *(5,663 slpm)*
PORTS	¼ to 1½"NPT

RV SERIES *(Vacuum)*

MAX OUTLET PRESSURE	0 to 29.9 inches Hg Vacuum *(0-759 mmHg)*
MAX FORWARD FLOW	45 SCFM *(1,274 slpm)*
PORTS	¼ to 1½"NPT

RP SERIES

MAX OUTLET PRESSURE	up to 350 psig *(24 Bar)*
MAX FORWARD FLOW	250 SCFM *(7,079 slpm)*
PORTS	¼ to 1½"NPT

Oxygen Clean Available

PRESSURE REGULATORS *(Volume Boosters)*

RG2712 & RG2713

MAX OUTLET PRESSURE	up to 150 psig *(10 Bar)*
MAX FORWARD FLOW	45 SCFM *(1,274 slpm)*
MAX RELIEF FLOW	11 SCFM *(311 slpm)*
PORTS	¼" and ⅜" NPT

RG0003

MAX OUTLET PRESSURE	up to 100 psig *(6.9 Bar)*
MAX FORWARD FLOW	1 Gal/min *(3.7 lit/min)*
PORTS	¼" NPT

For Liquids | Stainless Steel Available

RG873V

MAX OUTLET PRESSURE	up to 6,000 psig *(414 Bar)*
MAX FORWARD FLOW	150 SCFM *(4,248 slpm)*
PORTS	¼" Inlet and ½" Outlet *(NPT)*

Self-Venting

RQ

MAX OUTLET PRESSURE	up to 250 psig *(17 Bar)*
MAX FORWARD FLOW	700 SCFM *(19,822 slpm)*
MAX RELIEF FLOW	120 SCFM *(4,000 slpm)*
PORTS	¼" to 1¼" NPT

RG1262 & RG1262-1500

MAX OUTLET PRESSURE	up to 6,000 psig *(414 Bar)*
FLOW COEFFICIENT (Cv)	0.05
RATIO REGULATORS	45:1 and 15:1
PORTS	¼" NPT

Self-Venting

ACCESSORIES

DC POTENTIOMETER

- Rotary potentiometer command signal generators
- Signal conditioned to provide a linear analog output signal
- Available as 0-10 VDC or 4-20 mA output signal
- Available in one-turn and ten-turn design
- Available with numeric indicator

FPP IN-LINE FILTER

- ⅛, ¼, ⅜ and ½ NPT
- 40 - 100 micron filtration
- Brass construction standard
- Stainless steel version available
- Compact size
- Low pressure drop

US1 & US2 ULTRASONIC SENSOR

US1

- Provides non-contact position sensing
- Variety of analog outputs
- Analog output is proportional to distance measured
- Range of operation is field scalable
- Detects objects from 6.5 inches *(0.17m)* to 37 feet *(11.3m)*
- Field adjustable distance settings
- Includes two field adjustable switch settings
- RS-232 compatible

US2

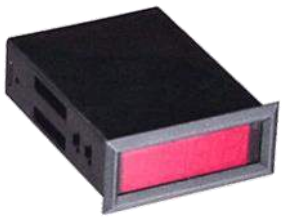
- Non-contact sensing - 1.7 inches *(0.04m)* to 14 feet *(4.2m)*
- Rugged stainless steel housing
- Analog output proportional to distance measured
- User adjustable settings for application flexibility
- LED indication of target status *(In range, no target, too close)*

PANEL METER

PM-1, 3 & 4

- 3-½ digit panel meter display
- LED is visible in almost any application environment
- 200 mA maximum power requirement
- 15 VDC power is standard
- Optional 12 to 24 VDC power

PM-1



- 3-½ digit panel meter display
- LCD display
- 100 mA maximum
- 12 to 15 VDC power standard
- Optional 24 VDC power

PM-3

- 4-½ digit LED panel meter display
- LED is visible in almost any application environment
- 225 mA maximum power
- 8 VDC to 18 VDC power

PM-4

POWER SUPPLY

PS4515, PS4524 PS300 & SELECT 6

- 15 VDC *(PS4515)* or 24 VDC *(PS4524)* output voltage
- 2.8 A *(PS4515)* or 2.0 A *(PS4524)* output current
- 110 to 240 VAC input power
- DIN rail mounted, high efficiency and low working temperature
- CE & UL approved with built in EMI filter and low ripple noise

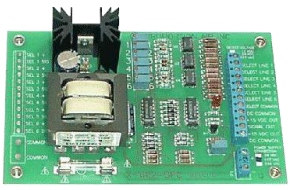
PS4515/24

- 15 VDC ouput voltage, 600 mA output current
- 110 or 220 VAC input power options
- Power indicator LED
- Safety fuse protected

PS300

- 15 VDC output voltage, 600 mA output current
- Allows up to six user adjustable voltage outputs
- Can be configured with remote potentiometers
- Wide range of select inputs & power voltage in both AC or DC

SELECT 6



NOTES

NOTES

PROPORTION-AIR
8250 N. 600 West
P.O. Box 218
McCordsville, Indiana 46055
877.331.1738

Authorized Local Distributor:

Handcrafted in the USA

ISO 9001-2015 Certified

WARNING: Installation and use of this product should be under the supervision and control of properly qualified personnel in order to avoid the risk of injury or death.