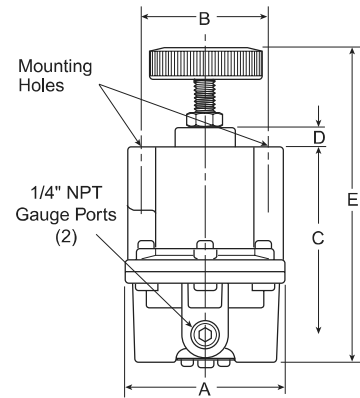


## R230 High Flow Precision Regulator



### Features

- Adjusting Knob.
- Diaphragm Design for Good Repeatability, Response and Sensitivity
- Balanced Poppet
- Two Full Flow Gauge Ports
- Precise Regulation. Will Sense a Decrease in Downstream Pressure as Small as 1/4" of Water Column (0.010 PSIG)
- High Flow Capacity. Flows of 80 SCFM Attainable with Minimal Drop
- Stable Output. Dampening Action of Aspiration Tube makes Regulator Insensitive to Changes in Flow
- On-line Maintenance. Can be Serviced Without Removal of Air Line



The R230 is designed for applications that require high flow capacity and accurate process control. A poppet valve which is balanced by utilizing a rolling diaphragm, insures a constant output pressure even during wide supply pressure variations. Stability of regulated pressure is maintained under varying flow conditions through the use of an aspirator tube which adjusts the air supply in accordance with the flow velocity.

### Applications

The R230 regulators are an ideal choice for any application that calls for accurately maintained output pressure under high flow conditions. This includes, but is not limited to such applications as:

- Test Equipment
- Gas Mixing
  - Valve Operators
  - Positioning Cylinders
  - Laboratory Equipment
  - Web Tensioning
  - Clutch & Brake Controls
  - Roll Loading
  - Test Panels
  - Actuators

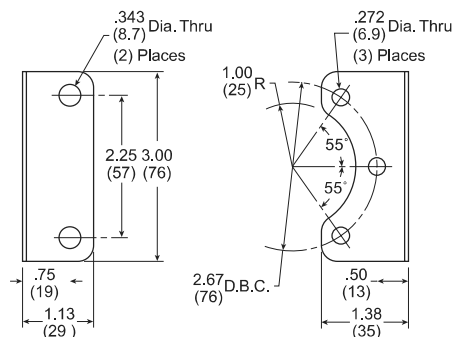
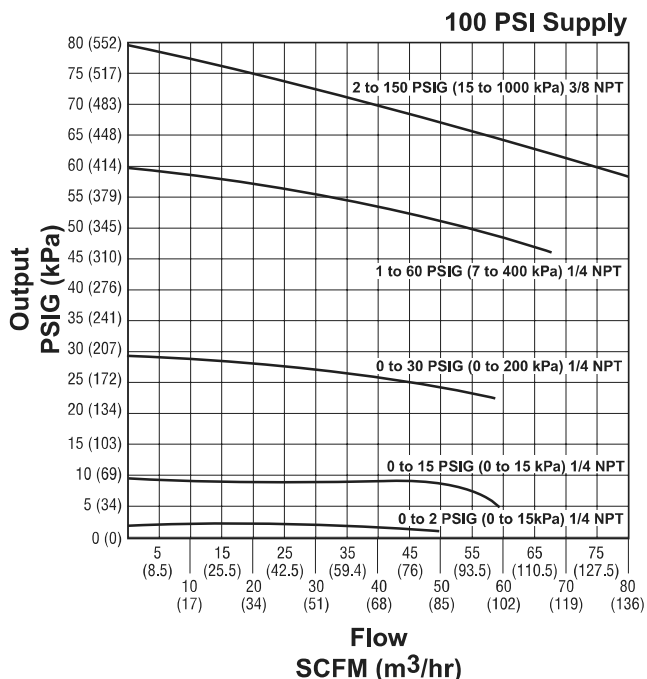
R230 Regulator Dimensions				
A	B	C	D	E
3.00 (76)	2.25 (57)	3.40 (86)	0.38 (10)	6.06 (154)

inches  
(mm)

### Ordering Information

Relieving	Port Size	Reduced Pressure Range (PSIG)			
		0 to 2	0 to 30	0 to 60	0 to 150
In / Out Ports	1/4"	R230-02E	R230-02B	R230-02C	R230-02D
	3/8"	N/A	R230-03B	R230-03C	R230-03D

**Technical Information**



**Mounting Bracket: 446-707-025**

**⚠ WARNING**  
**Product rupture can cause serious injury.**  
**Do not connect regulator to bottled gas.**  
**Do not exceed maximum primary pressure rating.**

**⚠ CAUTION:**  
**REGULATOR PRESSURE ADJUSTMENT** – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design. For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

**R230 Regulator Kits & Accessories**

- Mounting Bracket Kit ..... 446-707-025
  - Service Kits – Relieving
    - 0 to 2 PSIG ..... RKR230E\*
    - 0 to 30 PSIG ..... RKR230B\*
    - 0 to 60 PSIG ..... RKR230C\*
    - 0 to 150 PSIG ..... RKR230D\*
- \* Parts in Kit: Diaphragm, Poppet, O-ring

**Specifications**

- Constant Bleed Rate** ..... 1.0 to 12.5 SCFH  
(Depending upon output pressure)
- Gauge Ports** ..... Two Ports 1/4"  
(Can be used as additional Full Flow 1/4 Inch Outlet Ports)
- Effect of Supply Pressure Variation** –  
Less than 0.1 PSIG for 100 PSIG (6.89 bar) change
- Exhaust (Relief) Capacity** –  
4 SCFM with downstream pressure 5 PSIG above set pressure. ...  
Exhaust commences at 0.01 PSIG above set pressure.
- Flow Capacity** –  
At 100 PSIG (6.89 bar) Supply,  
80 PSIG (5.5 bar) Outlet.....80 SCFM (37.8 dm³/s)
- Operating Temperature Range** .....-40°C to 71°C  
(-40°F to 160°F)

- Operating Pressure Range – PRIMARY – Maximum** ..... **PSIG** 250 **bar** 17
- Port Threads** ..... 1/4"
- Exhaust (Relief) Capacity** .....4.0 SCFM  
(Downstream pressure 5 PSI above set pressure)
- Repeatability / Sensitivity** ..... ±0.010 PSIG (±0.00068 bar)  
Inches of Water Column = 1/4"
- Response** .....250 ms  
The valve will open to full flow and fill a volume of 1250 cm³
- Weight**.....1 lb. 10 oz. (0.74 kg)

**Materials of Construction**

- Adjusting Stem & Spring** ..... Steel
- Biased Spring** .....Stainless Steel
- Body, Bonnet** ..... Aluminum
- Control Knob** .....Plastic
- Diaphragm**..... Buna-N Elastomer and Polyester Fabric
- Seals** ..... Buna-N
- Valve Poppet** ..... Brass
- Valve Poppet Seat** ..... Buna-N