



## Introducing the **BFC-1000 FLOW CONTROL VALVE**

The BFC-1000 Flow Control Valve delivers constant air Pressure to the plant, reduces compressed air Energy/KW, reduces compressed air Flow/consumption.



The BFC-1000 will support your plant's goals of maintaining the plant air at the lowest possible pressure, satisfying intermittent demand events with stored air, and prolonging the need to re-pressurize the storage tank. This control strategy results in the lowest possible energy consumption and maximum pressure control.

### PressureFlowEnergy (PFE) Controller Benefits

#### Supply Side Benefits

- Ensures highest possible air quality and constant pressure.
- Allows compressors to operate at their most efficient pressure ranges.
- Reduces compressor maintenance costs.
- Facilitates more precise compressor control and sequencing.
- Delays or prevents unnecessary compressor starts.

#### Demand Side Benefits

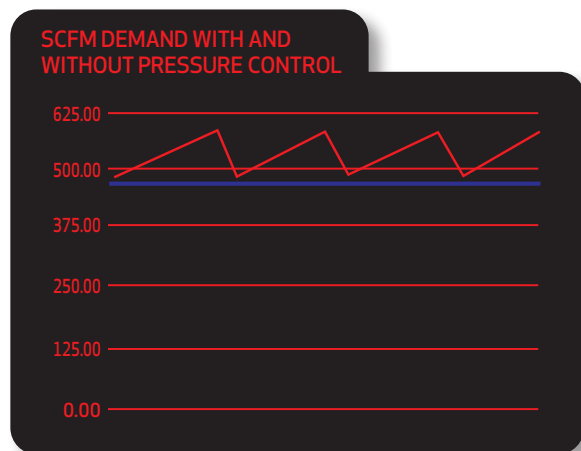
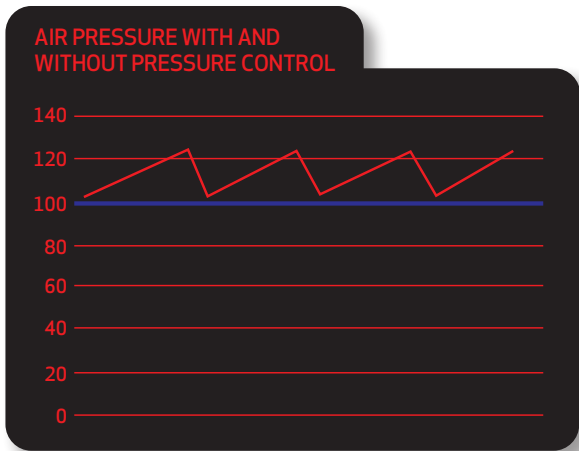
- Lower plant pressure reduces compressed air waste due to leaks and unregulated users.
- Reduces product defects caused by poor air quality and pressure fluctuations.
- Eliminates artificial demand by satisfying peak demand events with stored compressed air.
- Improves plant air dew point when air is expanded downstream of dryers.

The combination of supply and demand side benefits typically result in energy savings of 20% - 40%!

BFC-1000 Flow Control Valve for flows up to 1,000 CFM

**NET PRICE: \$1495.00**

**Typical ROI for installation of a BFC-1000 Flow Control Valve is 18 months!**



## Optimize Air Storage

- Ideal operating pressure > 90 psi
- Compressor operating pressure 105-125 psi
- Ideal receiver capacity 4 gal. / scfm or  $479 \times 4 = 1916$  gallons (2,000)
- Usable storage 430.0 cubic feet

## Operating Cost Reduction

With compressor delivering compressed air at only 15 cents per 1000 cubic feet a demand reduction of 91 scfm equals  $91 \times 60 \times 8760 / 1000 \times .15 = \$7,174.00$  annually.

## Compressed Air Demand Reduction

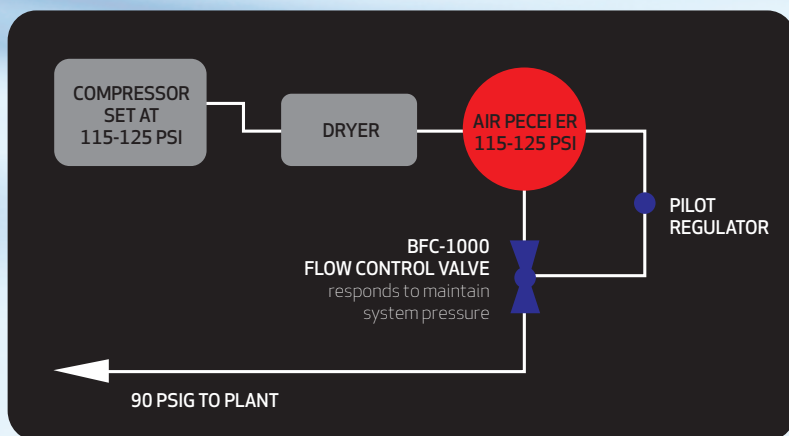
With compressed air pressure set at 100 PSI the compressed air demand is held constant at 479 scfm. This represents a compressed air demand reduction of 91 scfm from the previous average compressed air demand of 570 scfm

## Compressor Controls

- Air storage allows for multiple compressor installation with a workable operating dead-band.
- Demand expansion systems provide a stable operating pressure for base loaded compressors.

## BFC-1000 Flow Control Valve Installation Instructions

1. Install main /2" Flow Control Valve in compressed air pipeline after air storage receiver tank (downstream of air storage receiver tank).
2. Install small pilot regulator in storage tank. (Pilot regulator is on high pressure side upstream in storage tank).
3. Output of pilot regulator installed in receiver tank is connected to 2" main regulator downstream of the receiver tank via 1/4" port and small pilot control line.
4. Adjust small pilot regulator to set desired air pressure for plant.



Example: Set pressure of pilot regulator at 90 psig. As pressure exceeds 90 psig at output of large 2" flow control valve, the 2" flow control valve begins to close to reduce flow resulting in constant pressure. As pressure decays below 90 psig at output of large 2" flow control valve, the 2" flow control valve begins to open allowing more flow through the 2" flow control valve to hold constant 90 psig.



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