

AIR TAK

Compressed Air System Products

Compressed Air Pressure Control System



**Compressed Air
System Products**

**That Save Energy &
Improve Operations**

Compressed Air Pressure Control System

▶ Meet fluctuating compressed air requirements and save energy costs with the Air/Tak Pressure Control System.

Improve operations by automatically meeting changes in compressed air usage.

The Air/Tak PCS responds to usage fluctuations by automatically increasing or decreasing the size of the flow control valve's orifice. It precisely regulates the low side compressed air system pressure to a field adjustable set pressure. This supplies a constant low side pressure within 1-2 PSIG of your set point.

The Air/Tak Pressure Control System (PCS) is an innovative solution that:

- Improves plant operations
- Increases compressed air system performance and efficiency
- Saves energy costs



▶ Simply set the desired downstream pressure at the Process Controller's easy-to-read display panel and the Air/Tak PCS adjusts the pressure automatically to within 1-2 PSIG.

► *Increasing system performance lowers the lifetime costs of your equipment.*

The *Air/Tak* PCS has another innovative feature engineered in its system: it automatically allows for periods of increased demand by increasing the flow of stored compressed air from the upstream receiver tank(s). This has the effect of averaging out compressed air usage.

More importantly, this enables the compressed air system to be operated with minimal compressor HP. The compressor no longer needs to provide maximum flow at peak usage periods – it only needs to maintain flow equal to average usage. This in turn places far less stress on the system, reducing downtime and maintenance costs.



Flow Control Valve and Positioner with Actuator

► *Greater efficiency saves energy costs.*

A compressor running idle during off-peak hours adds unnecessary costs. *Air/Tak*'s PCS saves money in three ways:

- Minimizes the need to keep compressors running unnecessarily
- Reduces the surge of power required to meet increased demands
- Reduces system air losses due to air leaks

In addition, the *Air/Tak* PCS offers these features for quick and easy installation:

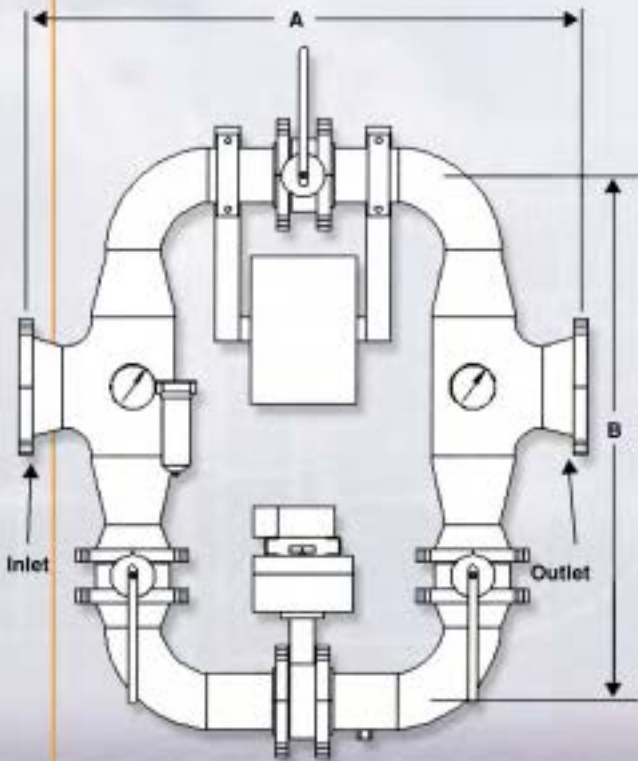
- Requires only a single control valve and single pressure input signal
- System complete with pilot air filter, pressure gauges, drain port, bypass piping and valves for installation in either new or existing systems
- Can be used alone or as an integral part of a comprehensive compressed air management system

The Air/Tak Pressure Control System is engineered to meet the most exacting requirements. Our standard system includes the following features to address most common plant requirements:

- Flow Control Valve and Positioner with Visual Indicator and Fail-to-Open Actuator
- 4-20 mA Pressure Transducer
- Process Controller with Visual Downline and Set Point Pressure Display
- Same Sized Inlet and Outlet Connections
- Three-Valve Bypass
- High and Low Side Air Pressure Gauges
- Pilot Air Filter with Automatic Drain Valve
- Condensate Drain Port
- NEMA 4 Enclosure
- Voltage: 115-60-1

Or you can enhance the system to meet your specific needs with a wide range of optional features:

- Full Flow Check Valve
- Remote Mount Control Box with 20' Sheathed Wire
- RS 232/485 Output
- 4-20 or 0-20 mA Output
- 0-5, 1-5, or 0-10 VDC Output
- Pressure Variance Alarm
- Fail-to-Close Actuator
- Zero Air Loss Drain Valve
- Backup Flow Control Valve with Bypass Valves



Pressure Control System Specifications

Model No.	Maximum SCFM	Minimum SCFM	Inlet & Outlet Connections	Width "A"	Height "B"	Approx. Weight (lbs.)
PCS-30	1,000 SCFM	200 SCFM	3" FLG.	33 1/8"	32 5/8"	175
PCS-40	2,000 SCFM	400 SCFM	4" FLG.	41 1/2"	36 3/4"	250
PCS-60	4,000 SCFM	800 SCFM	6" FLG.	45 1/2"	42 1/2"	400
PCS-80	8,000 SCFM	1,600 SCFM	8" FLG.	55 1/4"	50 1/8"	650
PCS-100	12,500 SCFM	2,500 SCFM	10" FLG.	64 5/8"	61 1/8"	1,150

Notes: 1) Maximum inlet pressure: 150 PSIG.
 2) Consult factory for higher pressure applications.
 3) Dimensions and specifications subject to change without notice.

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