

# PacE Pneumatic Flow Controller

Air Pressure Optimization

By effectively managing pressure, the PacE Flow Controller from Ingersoll Rand enables compressed air systems to operate at the lowest acceptable pressure level needed to maintain reliable operations.



## The Cost of Unmanaged Pressure

Most compressed air systems experience fluctuating demand. This can cause unstable system pressure, requiring compressors to cycle on and off. The typical solution is to overcompensate by using additional compressors and/or by increasing overall system pressure. However, these approaches increase overall operating costs and air loss due to leaks as well as damage to compressors and point-of-use tools.

## **PacE Flow Controller Benefits**

The PacE Pneumatic Flow Controller creates a buffer between air supply and demand. It enables more effective air storage, and continuously stabilizes system pressure by responding to demand fluctuations. When pressure is kept constant, the need to increase system pressure or add compressors can be eliminated...ultimately saving you money.

- Reduced energy consumption
- Improved compressor and production tool life
- Consistent pressure at point-of-use
- Less production waste; decreased downtime

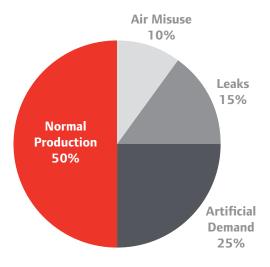
## **Unmanaged Air Costs More Than You Realize**

On average, an estimated 50% of compressed air in an unmanaged system is used for production. The other half is wasted due to leaks, misuse and artificial demand. Consider a 40 hp compressor that runs 3,500 hours at \$0.10 per kW. If the compressor creates 125 psig, but the tools only demand 90 psig, adding the PacE controller can save up to \$1,281 per year in energy costs.

#### That's more than a 2x return on the initial investment of the controller in just one year!

Unnecessary wear on the compressors is another cost of running an unmanaged system. The units must cycle more frequently than normal and can't reach a fully unloaded state, resulting in higher maintenance costs and shortened lifespan. Point-of-use tools are also at risk when subjected to higher pressures than they are designed to tolerate.

Why put your equipment at risk by leaving your system unregulated?



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## **Maximize Efficiency**

The PacE Pneumatic Flow Controller from Ingersoll Rand separates the demand and supply sides of your compressed air system and increases stored air energy. Effectively managing system air pressure minimizes the effects of demand spikes from point-of-use applications and reduces the amount of artificial demands placed on your system. Compressors can fully unload, which maximizes energy savings, and additional compressors previously needed to meet pressure requirements can typically be eliminated.

The PacE Controller gives you consistent pressure, reduces energy and maintenance costs while creating a more efficient air system.



## So Much More than a Standard Regulator

Unlike standard regulators, the PacE flow controller manages both pressure *and* flow. It can be used to manage unregulated demand across the entire system, not just at point-of-use.

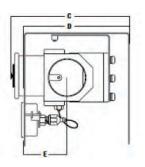
- **Accuracy.** The PacE Flow Controller has a sensitive dial for controlling set points to deliver precise pressure control (0.2% from set point within the full range).
- **Constant Pressure.** The flow controller valve responds immediately to changes in air demand, providing consistent pressure at point-of-use.
- **Reduced Cycling.** By separating the supply side from the demand side of your system, the controller creates additional stored capacity so your machines won't cycle as frequently to meet fluctuations in demand.
- **No Over-Pressurization.** The fixed pressure setting on the dial prevents users from exceeding the maximum desired pressure, protecting point-of-use tools from over-pressurization.

PacE Pneuma	atic Flow Controll	er Specifications							
			Dimensions (inches)					Weight	
Inlet Size	Max Flow s	scfm A		В	С		D	Е	(lb)
1/2″	75	8.11		7.28	8.57		7.36	1.89	8.4
1″	200 8.11			7.28	8.57		7.36	2.21	10.45
2″	1,000 8			7.28	7.28 8.57		7.36	2.78	14.65
Inlet Size	Part Number	Flow Direction	Thread Type	Max Flow scfm	Max Inlet Pressure psig	Control Range psig	Temperature Range °F	Sensitivity % of full span	Repeatability % of full span
1/2″	49124399	Right to Left	NPT	75	300	0-160	-4 to +176	0.2%	± 0.5%
	49124365	Left to Right	NPT	75	300	0-160	-4 to +176	0.2%	± 0.5%
	49124456	Right to Left	BSP	75	300	0-160	-4 to +176	0.2%	± 0.5%
	49124423	Left to Right	BSP	75	300	0-160	-4 to +176	0.2%	± 0.5%
1"	49124407	Right to Left	NPT	200	300	0-160	-4 to +176	0.2%	± 0.5%
	49124373	Left to Right	NPT	200	300	0-160	-4 to +176	0.2%	± 0.5%
	49124464	Right to Left	BSP	200	300	0-160	-4 to +176	0.2%	± 0.5%
	49124431	Left to Right	BSP	200	300	0-160	-4 to +176	0.2%	± 0.5%
2"	49124415	Right to Left	NPT	1,000	300	0-160	-4 to +176	0.2%	± 0.5%
	49124381	Left to Right	NPT	1,000	300	0-160	-4 to +176	0.2%	± 0.5%
	49124472	Right to Left	BSP	1,000	300	0-160	-4 to +176	0.2%	± 0.5%
	49124449	Left to Right	BSP	1,000	300	0-160	-4 to +176	0.2%	± 0.5%

### **Product Features**

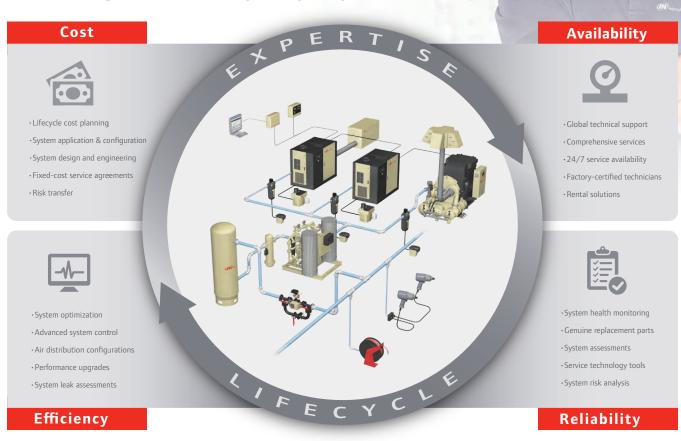
- **Nitrile seals** for high level of chemical resistance
- **NPT threads** for easy installation with existing delivery systems
- Glycerine-filled, stainless steel, dual gauge design for clear reference of pressure (both inlet and outlet)
- Powder-coated steel chassis for premium durability
- Versatile directional flow available
- **Compatible** with rotary and reciprocating technologies





# **Your Trusted Partner in Compressed Air**

Ingersoll Rand products and services optimize total **Cost** of ownership, while maximizing **Availability**, **Reliability** and **Efficiency** for the entire lifecycle of your system.



Design • Install • Commission • Operate • Maintain • Extend



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