

Ingersoll Rand

IntelliFlow Electronic Flow Controllers

Increasing Your Profits by Not Increasing Your Pressure

Most compressed air systems experience fluctuating demand, which can cause unstable system pressure as well as compressors to cycle on and off and, in some cases, even effect production quality. The typical response to unstable systems is to overcompensate in terms of compressor utilization and system pressure. This results in more compressors running longer at higher pressures...increasing operating costs and reducing system reliability.

IntelliFlow, Ingersoll Rand's line of electronic flow controllers, creates a buffer between air supply and air demand. This allows for more effective use of air storage and a continuous dynamic response to demand fluctuations to actively stabilize system pressure... thereby eliminating the requirement to turn on extra compressors or to elevate pressures.



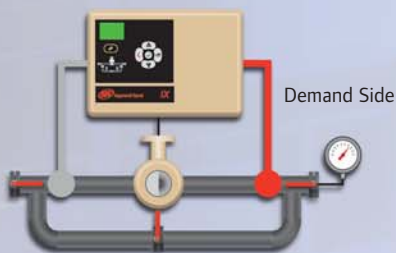
Benefits

- Stable air supply at constant pressure
- System overpressure avoidance
- Increased system reliability
- Critical process pressure protection
- Reduced air consumption
- Reduced system operating costs
- System pressure balancing
- Reduced compressor utilization and cycling

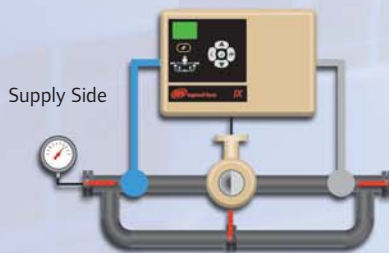
IntelliFlow

Air System Flow Control

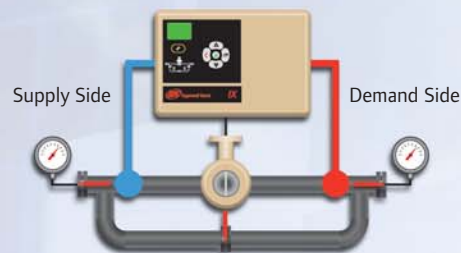
A Forward Control



B Backpressure Priority Control



C Combination Control



Balancing Pressure Supply and Demand

Pressure instability, even a one-time pressure drop, frequently causes operators to elevate air pressure. But this fix also increases the air consumption of all poorly regulated processes...including the leak rate! For example, in a nominal 100 psig air system, a 15 psig increase in pressure will use approximately 10-12% more compressed air, PLUS use 7.5% more energy to compress. Installing an IntelliFlow controller, combined with proper storage and control, will provide a capacitance (stored energy) effect for sudden high volume system demands, eliminating the energy and maintenance costs associated with elevating the pressure... and adding profit to the bottom line!

The IntelliFlow constantly monitors the demand of air pressure and dynamically adjusts to utilize storage, increase volume flow and stabilize pressure as needed **A**.

IntelliFlow can also prioritize and protect critical processes or zones in the air system. Many systems have pressure critical processes, which can stop working or create waste if the pressure drops below a minimum level. IntelliFlow's backpressure control **B** ensures the proper pressure prioritization to prevent this problem.

In addition, IntelliFlow's "Combination Control" automatically switches control between forward system control and backpressure priority control **C** based on user defined set points.

Features

- High capacity, low pressure drop
- 3-valve manual bypass with fittings
- Forward, backpressure and combination control
- Electronic control (standard)
- Mounted c-UL NEMA 12 panel
- Multiple pressure set points
- Auxiliary contacts
- Mounted dual pressure sensors
- Network communication ready
- X-Series visualization ready
- Complete mounted & wired assembly

IntelliFlow Specifications								
Model	Connection Size	Flow scfm		Length in	Dimensions			CCN Number
	In/Out in	110 psig-in min	> 95 psig-out max		Width in	Height in	Weight lb	
IX-02	2	207	835	39.25	15.00	33.87	180	23473192
IX-03	3	580	2,664	43.87	16.62	38.50	260	23473200
IX-04	4	1,077	4,868	58.50	18.06	44.25	440	23473218
IX-06	6	2,320	10,700	64.50	20.43	51.25	650	23473226
IX-08	8	4,144	19,200	70.68	70.68	53.06	860	23473234
IX-08CDN*	8	4,144	19,200	70.68	70.68	53.06	860	23485980

Maximum Pressure: 200 psig, Maximum Temperature: 150°F, Maximum Pressure Turndown: 30%.
Control air pressure to filter/regulator must be from 80 - 150 psig. Appropriate storage is critical for proper IntelliFlow operation.
*IX-08CDN: Canadian Registration Number (CRN) is available on this 8" IntelliFlow only. IX-02 thru 06 have CRN standard.

Progress is greener with Ingersoll Rand



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