



# IntelliFlow Electronic Flow Controllers

## Increasing profits without increasing 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 utilisation and system pressure. This results in more compressors running longer at higher pressures, increasing operating costs and reducing system reliability.

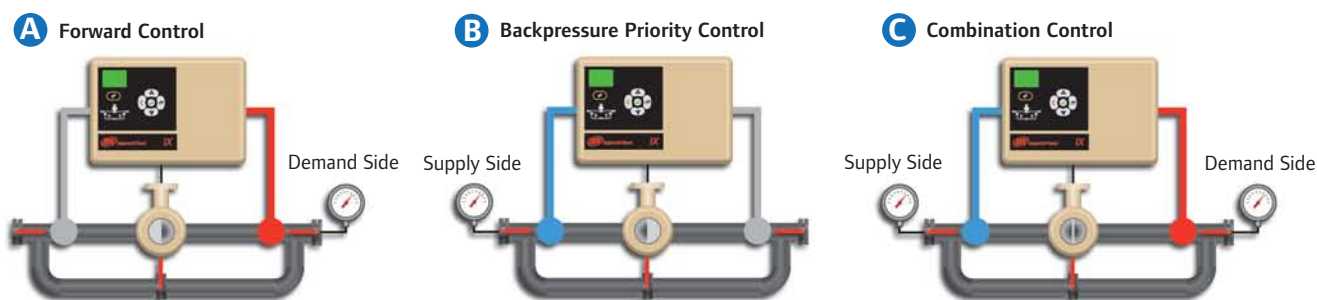
IntelliFlow, Ingersoll Rand's line of electronic flow controllers, creates a buffer between air supply and air demand. This allows for more effective use of air storage and a continuous dynamic response to demand fluctuations to actively stabilise system pressure, thereby eliminating the requirement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

## Benefits

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



# IntelliFlow - Air System Flow Control



## Balancing Pressure Supply and Demand

Pressure instability, even a one-time pressure drop, frequently causes operators to elevate air pressure. However this fix also increases the air consumption of any poorly regulated processes...including the leak rate!

For example, in a nominal 6.9 bar g air system, a 1 bar g 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 correct 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, thereby adding profit to the bottom line!

The IntelliFlow constantly monitors the demand of air pressure and dynamically adjusts to utilise storage, increase volume flow and stabilise pressure as needed **A**. IntelliFlow can also prioritise 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 prioritisation 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 CE IP54 panel
- Multiple pressure set points
- Auxiliary contacts
- Mounted dual pressure sensors
- Network communication ready
- X-Series visualisation ready
- Complete mounted & wired assembly

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IntelliFlow Specifications									
Model	Connection Size		Flow (m <sup>3</sup> /min)		Dimensions				
	In	Out	6.9 bar g-in	> 5.7 bar g-out	Length mm	Width mm	Height mm	Weight kg	CPN Number
IX-050	50		5.6	23	959	387	860	82	23473242
IX-080	80		15.7	73	1,075	427	980	118	23473259
IX-100	100		29.2	132	1,438	459	1,003	200	23473267
IX-150	150		63.0	290	1,572	522	1,303	295	23473275
IX-200	200		112.5	522	1,716	586	1,347	390	23473283

Maximum Pressure: 14 bar g, Maximum Temperature: 66°C, Maximum Pressure Turndown: 30%.  
Control air pressure to filter/regulator must be from 5.5 - 10 bar g. Appropriate storage is critical for proper IntelliFlow operation.

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### Ingersoll Rand Industrial Technologies

Swan Lane, Hindley Green,  
Wigan WN2 4EZ, UK  
Tel: +44 (0) 1942 257171  
Fax: +44 (0) 1942 254162  
Email: asgesawebleads@irco.com

