

precision pneumatic & motion control

High Technology & Process Control Solutions for the

Oil & Gas Industries



O Extraction

The Fairchild MP 2400, powered by 12-24 VDC battery or solar power, is a popular choice for valve control on wellheads located in remote areas. Its low power consumption and no yellow metals construction provides trouble free and dependable operation.



2 Raw Material Transportation

Fairchild regulators and explosion proof pressure transducers are used for control panels on compressor skids in conjunction with pipeline transportation of gas and oil. The lack of yellow metals permits direct flow of gases through the Fairchild products, which control and maintain extremely precise pressure flow to downstream operations.



6 Natural Gas Storage

Fairchild's manifold mounted pressure transducers are located in control panels throughout storage facilities to control material flow by maintaining precision pressure control of the various storage vessels and input and outlet piping from the vessels.



6 Natural Gas Storage / Distribution

As the processed product reaches its final stage, the caloric value of the Gas must be determined, particularly when the processed fuel originated from two or more different ground sources. Fairchild's volume booster products are utilized to maximize flow to the caloric measurement equipment for most efficient flow through this process.





Processing / Refinement

Fairchild regulators and pressure transducers are found throughout these facilities in applications where precision pressure control is required, such as valve locations and fan louvers, where operating pressures must be continuously monitored and maintained.



Processed Fuels Transportation

Fairchild is again the selection of choice for downstream equipment in the transportation of processed Natural Gas and refined Oil products. The high initial flow of its Model 100 regulator, for example, permits quick and efficient firing of starter motors on engines and compressors.



From Extraction Through Distribution

Fairchild products are used extensively throughout the operations of the Oil and Gas Industries, from initial raw material extraction out of the ground through the final distribution of the processed fuels and other products to industrial and residential consumers. Our dedicated technology base of products meets and exceeds the needs of even the toughest applications with:

- No yellow metal construction
- Explosion proof NEMA 4X, IP 65 enclosures available
- Vibration and moisture resistant designs
- Super High flow regulator and volume booster designs
- High inlet pressure (500 psig) regulators

You can rely on Fairchild to provide the highest quality products and innovative technology to handle your precision pressure control and flow applications.



Designed for

OIL & NATURAL GAS

25 (42.5 m³/HR) @ 100 psig, [7.0 BAR], (700 kPa) supply & 20 psig, [1.5 BAR], (150 kPa) setpoint

0.4 SCFM (0.68 m³/HR) (downstream pressure 5 psig, [.35 BAR]

(35 kPa) above 20 psig, [1.5 BAR], (150 kPa) setpoint

less than 1.25 psig, [.09 BAR], (9.0 kPa) per 100 psig,

[7.0 BAR], (700kPa) change in supply pressure

250 psig, [17.0 BAR], (1700 kPa)

-40°F to +160°F (-40°C to +71°C)

Model 100

High Flow Regulator



Specifications

Specifications

Flow Capacity

Exhaust Capacity

Supply Pressure

Ambient **Temperature** Limits

Supply Pressure Effect

Specifications

Flow Capacity	Forward flow in excess of 2300 SCFM (3900 m³/HR) (250 psig), [17.0 BAR], (1700 kPa) supply, I 1/2" NPT Conn.
Exhaust Capacity	44 SCFM (75 m ³ /HR) (downstream pressure 5 psig, [.35 BAR], (35 kPa) above set pressure)
Sensitivity	0.5" (1.27 cm) Water Column
Supply Pressure Effect	less than 0.1 psig, [.007 BAR], (.7kPa) per 100 psig, [7.0 BAR], (700 kPa) change
Maximum Supply Pressure	500 psig, [35.0 BAR], (3500kPa)
Ambient Temperature Limits	-40°F to +200°F (-40°C to +93.3°C)

Features

- Venturi-type aspirator tube to aid stability to minimize downstream pressure droop under flowing conditions.
- Balanced supply valve to minimize effect of supply pressure variation.



Features

- Standard 5-micron filter minimizes internal contamination.
- Stainless trim and epoxy paint for corrosive protection.
- Standard tapped exhaust.
- Soft Relief Seat minimizes air loss.

Features

- Explosion-proof NEMA 4X, IP65, Type 4 enclosure for indoor/outdoor installations.
- Piezoelectric actuator provides stability regardless of vibration or position.
- Optional tapped exhaust port vents exhaust gas.
- NO Yellow Metals and epoxy paint for corrosive protection.
- Approved for Natural Gas as a supply media.

Features

- Locks in last position in event of power failure maintaining setpoint until power is restored.
- Available in three precision regulator models with various AC and DC voltage inputs to allow precise selection of pressure ranges and flow capacities.
- Explosion-proof NEMA 4 Enclosure.



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Model 63 **Pneumatic Filter** Regulator



Model TXI7800 **Explosion-proof**

Model TXI7850 **Moisture Resistant Explosion-proof** Transducers



Specifications		3 psig	9 psig	15 psig	30 psig *	
Max. Air Consumption	SCFH	3.5	7.0	9.5	13.5	
All Ranges		(.10 m³/HR)	(.20 m ³ /HR)	(.27 m³/HR)	(.38 m³/HR)	
Flow Rate		2.5 (4.25 m ³ /HR) @		9.0 (15.3 m³/HR) @		
(SCFM)		25 psig, [1.7 BAR],		120 psig, [8.0 BAR],		
		(170 kPa) su	pply & OR	(800 kPa) supply &		
		9 psig, [0.6 BAR],		9 psig, [0.6 BAR],		
		(60 kPa) Output		(60 kPa) Output		
Temperature Range	Operating	-40°F to +	· 160°F (-4)°C to + 71.	.2°C)	
(ISA S51.1)	Storage	-40°F to +	· 180°F (-40)°C to + 82	.2°C)	
Span/Zero Adjustments		Screwdriver	Screwdriver adjustments located under cover			

* Extended Range to 100 psig also available

Specifications (varies with options)

Model 2400 Series Precision M/P Converter



50 (85 m³/HR) @100 psig, [7.0 BAR], (700 kPa) supply & 20 psig, [1.5 BAR], (150 kPa) setpoint Flow Capacity (Model 81) **Exhaust Capacity** 5.5 SCFM (9.4 m³/HR) (downstream pressure 5 psig, [.35 BAR] (Model 81) (35 kPa) above setpoint 150 psig, [10.0 BAR], (1000 kPa) Max. Supply Pressure (Model 81) -40°F to +200°F (-40°C to +93.3°C) Ambient **Temperature** Limits (Extended Operation Option)

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