

**Cole-Parmer
Analytical Gas Regulators**

Ideal for your noncorrosive analytical applications

- Won't contaminate high-purity gases



98200-02

Regulators feature 316 stainless steel diaphragms. O-rings of PTFE ensure leak-free operation. Bar stock brass bodies minimize dead space. Automatic reseating valve extends regulator service life. Dual sintered filters reduce gas velocity when opening high-pressure cylinders. Chrome-plated finish prevents tarnish.

Specifications

- | | |
|--|-------------------------------|
| Maximum inlet pressure: 3000 psig | Ports |
| Inlet gauge graduations: 50 psig | Inlet: CGA |
| Maximum leak rate:
2 x 10 ⁻⁸ ccs helium | Outlet: 1/4" NPT(M) |
| | Relief and Gauge: 1/4" NPT(F) |
| Operating temperature:
-40 to 165°F (-40 to 74°C) | |

Single-Stage Regulators (Cv = 0.24) reduce the tank pressure to your desired operating pressure. Decay rate is 0.35 psi per 100 psi inlet change.

Catalog number	Relief valve setting	Max delivery psig	Gauge range	Gauge graduations	CGA fitting	Capacity (scfh)	Price
SN-98200-02	85 psig	25	0-30 psi	1 psi	350	250	
SN-98200-12							
SN-98200-22							
SN-98200-32	150 psig	25	0-60 psi	2 psi	350	500	
SN-98200-42							
SN-98200-52							
SN-98200-62	150 psig	25	0-200 psi	5 psi	350	1000	
SN-98200-72							
SN-98200-82							

Two-Stage Regulators (Cv = 0.079) compensate for variations in supply pressure—only 0.026 psi outlet change per 100 psi inlet change!

Catalog number	Relief valve setting	Max delivery psig	Gauge range	Gauge graduations	CGA fitting	Capacity (scfh)	Price
SN-98201-02	85 psig	25	30" Hg to 30 psi	1 psi	350	250	
SN-98201-12							
SN-98201-22							
SN-98201-32	150 psig	25	0-60 psi	2 psi	350	450	
SN-98201-42							
SN-98201-52							
SN-98201-62	150 psig	25	0-200 psi	5 psi	350	900	
SN-98201-72							
SN-98201-82							

**Cole-Parmer
Smart Indicating Purifiers**

Safeguard your gas system from moisture, oxygen, and hydrocarbons



98220-00

- Provides visual indication of leaks or contamination
- Eliminates GC detector baseline issues

These mini purifiers maintain the purity of gases at 99.9999% or better, and can be installed as a stand-alone purifier, added to a point-of-use panel, or retrofitted into an existing regulator. The purifier cylinder changes color if there is a problem in the gas stream—simply replace the cartridge. These purifiers save money—you gain 42 more cubic feet of usable gas in a 300 cubic foot gas cylinder.

Specifications

- | | |
|---|--|
| Forward flow capacity: 12 LPM | Materials of construction |
| Maximum inlet pressure: 165 psi | Base plate: nickel-plated brass |
| Maximum outlet pressure: 160 psi | Cartridge: borosilicate glass/aluminum |
| Impurity filtration: <1 ppm† | Housing: polycarbonate sleeve |
| | Locking ring: chrome-plated aluminum |
| | O-ring: Viton® |

†at flow of 2 LPM

Catalog number	Type	Type of gas	Price
SN-98220-00	Triple cartridge	H ₂ O/O ₂ /HC-AT	
SN-98220-02	Dual cartridge	H ₂ O/O ₂	

- SN-98220-04 Replacement filter for moisture, oxygen, and hydrocarbon
- SN-98220-20 Replacement filter for moisture and oxygen

**Cole-Parmer
Smart Indicating Valves**

Brass packless design provides flow control and positive shutoff



98220-06

- Maintains gas purity to 99.9999% or better

Designed for gas handling systems where inboard diffusion of air or moisture must be kept at a minimum. As the purifier changes color, impurities have been removed from the gases. Multiple metal diaphragms provide a permanent seal capable of passing the helium leak test to 10⁻⁸ ccs. The valve safeguards gas stream and process if a lower grade was wrongly connected to the system, a leak has developed, or there is a purity issue with the gas.

Specifications

- | | |
|---|---|
| Forward flow capacity: 12 LPM | Materials of construction |
| Maximum inlet pressure: 165 psi | Valve |
| Maximum outlet pressure: 160 psi | Body: nickel-plated brass |
| Impurity filtration: <1 ppm at 2 LPM flow | Seat: PCTFE |
| Process connections: 1/4" NPT(F) | Diaphragm: 316 stainless steel |
| Operating temperature:
-40 to 165°F (-40 to 74°C) | Purifier |
| | Base plate: nickel-plated brass |
| | Cartridge internal: borosilicate glass and aluminum |
| | Housing: polycarbonate sleeve |
| | Locking ring: chrome-plated aluminum |
| | O-ring: Viton® |

Type of gas	Multi-turn valves		Quarter-turn valves	
	Catalog number	Price	Catalog number	Price
H ₂ O/O ₂ /HC-AT	SN-98220-06		SN-98220-10	
H ₂ O/O ₂	SN-98220-08		SN-98220-12	

- SN-98220-14 Replacement filter for moisture
- SN-98220-16 Replacement filter for oxygen
- SN-98220-18 Replacement filter for hydrocarbon
- SN-98220-20 Replacement filter for moisture and oxygen



Type M1 and M2 Miniature Air Regulators

Modular design offers service and interchangeability

- Small size and lightweight construction
- Nonrising adjustment knob with push-pull lock ring feature
- Rolling seal diaphragm for superior precision and repeatability

Analytical and control instrumentation require precise regulation of air pressure. These regulators control changes in supply pressure, flow, and ambient temperature that tend to upset prevailing conditions.

Type M1 Miniature Air Regulators are compact, low-cost regulators operating in output pressure ranges up to 120 psi, with a maximum supply pressure of 145 psi. Regulators provide flow up to 40 scfm, a low droop, and choice of 1/8" and 1/4" NPT connection—all the great features of a larger-sized regulator in a convenient compact unit.

Type M2 Air Regulators are the mid-sized version of the M1 miniature air regulators above. Like the M1 series, this is a low-cost regulator with output ranges up to 120 psig with a maximum supply pressure of 145 psig. The Type M2 can provide flow rates to 90 scfm and is available in 1/4", 3/8", or 1/2" NPT port size.

Typical applications include the paper and pulp, automotive, and medical industries, or anywhere a diaphragm-operated regulator is required for precision valve control of supply pressure.

What's included: one bracket for panel mounting.



68826-52



68826-64

Specifications

Forward flow capacity

Type M1: 40 scfm (1133 LPM) at 100 psig supply and 20 psig outlet
Type M2: 90 scfm (2549 LPM) at 100 psig supply and 20 psig outlet

Bleed rate: 0.3 scfh

Supply pressure effect: <0.2 psig at 25 psi

Maximum supply pressure: 145 psi

Exhaust flow rate: 0.25 scfm (7 LPM)

Operating temperature: 41 to 140°F (5 to 60°C)

Wetted materials: inert gases

Catalog number	Process connection	Control range	Price
Type M1 miniature air regulators			
SN-68826-46	1/8" NPT(F)	0 to 10 psi	
SN-68826-48		0 to 30 psi	
SN-68826-50		0 to 60 psi	
SN-68826-52		0 to 120 psi	
SN-68826-54	1/4" NPT(F)	0 to 10 psi	
SN-68826-56		0 to 30 psi	
SN-68826-58		0 to 60 psi	
SN-68826-60		0 to 120 psi	
Type M2 mid-sized air regulators			
SN-68826-62	1/4" NPT(F)	0 to 10 psi	
SN-68826-64		0 to 30 psi	
SN-68826-66		0 to 60 psi	
SN-68826-68		0 to 120 psi	
SN-68826-70	3/8" NPT(F)	0 to 10 psi	
SN-68826-72		0 to 30 psi	
SN-68826-74		0 to 60 psi	
SN-68826-76		0 to 120 psi	
SN-68826-78	1/2" NPT(F)	0 to 10 psi	
SN-68826-80		0 to 30 psi	
SN-68826-82		0 to 60 psi	
SN-68826-84		0 to 120 psi	

Type 91 Miniature Air Regulators

Low-cost, self-relieving valves offer excellent stability and repeatability

- Designed for applications with limited space
- Compact size and lightweight construction
- Corrosion-resistant anodized aluminum exterior

These subminiature regulators operate in pressure ranges up to 100 psi, with a maximum supply pressure of 250 psi. They provide dependable reliability and accuracy for low-flow or dead-end applications, but are not designed for critical flow applications. Regulators feature a corrosion-resistant anodized aluminum body and bonnet, and a fluorocarbon diaphragm. Can be pipe or panel mounted.

What's included: one bracket for panel mounting.



68826-40

Specifications

Forward flow capacity: 2.5 scfm (7 LPM) at 100 psi supply

Bleed rate: 3 scfh

Supply pressure effect: <0.25 psig at 25 psi

Maximum supply pressure: 250 psi

Exhaust flow rate: 0.1 to 0.3 scfm

Operating temperature: 0 to 150°F (-18 to 66°C)

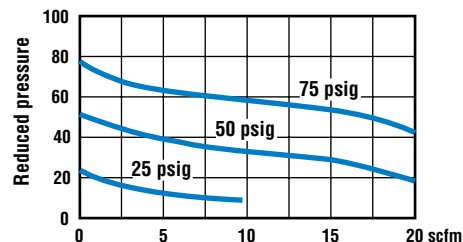
Media compatibility: inert gases

Catalog number	Process connection	Control range	Price
SN-68826-36	1/16" NPT(F)	0 to 5 psi	
SN-68826-38		0 to 15 psi	
SN-68826-40		0 to 30 psi	
SN-68826-42		0 to 60 psi	
SN-68826-44		0 to 100 psi	

Mini Filter/Regulator for Gases

Combines filter and regulator in one compact unit. Precision diaphragm gives you high accuracy regulation from 2 to 125 psig (150 psig max). Rated for 20 scfm; operates from 40 to 125°F (4 to 52°C). Detachable, 20 µm porous bronze filter provides 98% moisture removal. Overnight drain requires minimal maintenance—automatically releases accumulated condensate when pressure falls below 3 psig. Filter/regulator has 1/4" NPT(F) ports and 1/8" NPT(F) gauge connections. Use with air.

Flow Characteristics (at 100 psig inlet)



98252-00

Catalog number	Description	Price
SN-98252-00	Mini filter/regulator	

Type 51SSR Gas Pressure Regulators

Ideal for sour gas and corrosive environments

- Tapped vent allows exhaust gas capture
- Features built-in filter assembly and dripwell

Constructed of 316 stainless steel housing and fluorocarbon elastomer control diaphragm and supply valve. Typical applications include petrochemical processing, chemical plants, food processing, paper/pulp mills, and off-shore environments. Regulators comply with NACE material requirement #MR-01-75 for sulfide stress cracking resistant metallic material for oil field equipment.



68825-28

Specifications

ISO 9001:2000
CERTIFIED SUPPLIER

Forward flow capacity: 20 scfm (566 LPM)	Max supply pressure: 250 psi
Bleed rate: 6 scfh (2.8 LPM)	Exhaust flow rate: 0.1 scfm (2.8 LPM)
Sensitivity: 1" water column	Operating temperature: -20 to 180°F (-29 to 82°C)
Supply pressure effect: 0.45 psi per 25 psi change	Wetted materials: sour and corrosive gases

Catalog number	Process connection	Control range	Price
SN-68825-28	¼" NPT(F)	0 to 30 psi	
SN-68825-30		0 to 60 psi	

Type 70 High-Flow Regulators

Flow capacity to 80 scfm!

- Respond to minute changes in pressure
- Diaphragm constructed of Buna N and polyester—designed for millions of cycles

These Type 70 regulators are specifically designed for applications that require substantial flow capacity and accurate pressure controls. Downstream pressure can be set within 0.25" of water column and is accurately maintained under varying flow conditions with the help of an aspirator tube, which adjusts the air supply in accordance with the flow velocity. A balanced supply valve, using a rolling diaphragm, makes the regulator virtually immune to changes in supply pressure.



68825-56

Specifications

ISO 9001:2000
CERTIFIED SUPPLIER

Forward flow capacity: up to 80 scfm (2265 LPM)	Max supply pressure: 250 psi
Bleed rate: 12.5 scfh (6 LPM)	Exhaust flow rate: 4 scfm (113 LPM)
Sensitivity: ¼" H ₂ O	Operating temperature: -20 to 160°F (-28 to 71°C)
Supply pressure effect: 0.025 psi per 25 psi	Wetted materials: inert gases

Catalog number	Process connection	Flow capacity	Control range	Price
SN-68825-36	¼" NPT(F)	40 scfm	0 to 2 psi	
SN-68825-38			0 to 10 psi	
SN-68825-40			0 to 30 psi	
SN-68825-46			3 to 200 psi	
SN-68825-48	¾" NPT(F)	50 scfm	0 to 2 psi	
SN-68825-50			0 to 10 psi	
SN-68825-52			0 to 30 psi	
SN-68825-56			2 to 150 psi	
SN-68825-60	½" NPT(F)	80 scfm	0 to 2 psi	
SN-68825-62			0 to 10 psi	
SN-68825-64			0 to 30 psi	
SN-68825-68			2 to 150 psi	
SN-68825-70			3 to 200 psi	

Type 10 Air Pressure Regulators

Provide precision control in adverse conditions

- Use with clean, dry air
- Ideal for gas mixing, valve operations, and calibration stands

Designed for precise regulation of air pressure in pipes, vessels, and process lines, regulators feature high-accuracy pressure regulation up to ±0.1%, a servo-operated control mechanism for pressure stability, and start-up stability that returns to output setting after a long down-time. Locking nut prevents inadvertent adjustment of pressure. Unit can be in-line or panel mounted.



68825-00

Specifications

ISO 9001:2000
CERTIFIED SUPPLIER

Forward flow capacity: 14 scfm (396 LPM)	Max supply pressure: 150 psi
Bleed rate: 4.8 scfh (2.3 LPM)	Exhaust flow rate: 2 scfm (56 LPM)
Sensitivity: ⅛" H ₂ O	Operating temperature: -20 to 160°F (-28 to 71°C)
Supply pressure effect: 0.005 psi per 25 psi change	Wetted materials: clean, dry air

Catalog number	Process connection	Control range	Price
SN-68825-00	⅛" NPT(F)	2 to 25 psi	
SN-68825-02		2 to 60 psi	
SN-68825-04		2 to 120 psi	
SN-68825-06	¼" NPT(F)	2 to 25 psi	
SN-68825-08		2 to 60 psi	
SN-68825-10		2 to 120 psi	
SN-68825-12	¾" NPT(F)	2 to 25 psi	
SN-68825-14		2 to 60 psi	
SN-68825-16		2 to 120 psi	

Type 41 Air Pressure Regulators

Designed for applications requiring high flow capacity

- Rugged, corrosion-resistant construction
- Excellent stability and repeatability

Rolling diaphragm provides greater sensitivity and improved accuracy from a constant effective area. Regulators feature precision-cast aluminum housing. Rubberized, soft-seat valve stem provides stability and "forgives" dirt and other foreign matter. An aspirator maintains downstream pressure and compensates for droop when high flow occurs.



68825-22

Specifications

ISO 9001:2000
CERTIFIED SUPPLIER

Forward flow capacity: 25 scfm (708 LPM)	Max supply pressure: 250 psi
Bleed rate: 6 scfh (2.8 LPM)	Exhaust flow rate: 0.1 to 0.45 scfm (2.8 to 12.75 LPM)
Sensitivity: 1" water column	Operating temperature: -20 to 160°F (-29 to 71°C)
Supply pressure effect: ±0.35 psig per 25 psi	Wetted materials: inert gases

Catalog number	Process connection	Control range	Price
SN-68825-18	¼" NPT(F)	0 to 2 psi	
SN-68825-20		0 to 10 psi	
SN-68825-22		0 to 30 psi	
SN-68825-24		0 to 60 psi	
SN-68825-26		0 to 100 psi	



Type 1000 I/P Transducers

High-flow capacity up to 12 scfm

- Mounts at any angle
- External zero and span adjustments
- Lightweight

These electro-pneumatic transducers reduce supply pressure to a regulated output pressure directly proportional to an electrical input signal. They are also field-reversible by reversing the polarity of the signal leads and recalibrating. After calibration, the transducer will then provide a minimum of its full rated output pressure upon input signal failure. These units are typically used in HVAC-R systems, petrochemical processing, and slurry processing.

Specifications



Accuracy: ±1.0% of full reading

Forward flow capacity:
24 scfm (677 sL/min)

Sensitivity: ±0.15% of span

Max supply pressure: 150 psig

Exhaust flow rate: 2 scfm (56.5 sL/min)

Operating temperature: -20 to 160°F (-28 to 71°C)

Wetted materials: clean, dry air

Process connection: ¼" NPT(F)

Catalog number	Control range	Price
SN-68826-00	3 to 15 psi	
SN-68826-02	3 to 27 psi	
SN-68826-04	6 to 30 psi	

SN-17090-29 NIST-traceable calibration
with data.....



68826-00

Type 1500 I/P Transducers

Install in limited-space locations or manifold

- Built-in volume booster
- External zero and span adjustments

Electro-pneumatic transducers reduce supply pressure to a regulated output pressure directly proportional to an electrical input signal. They provide precise control to actuators, valves, and positioners, and are ideally used for high-flow devices. Supply and output ports are located on front and back of units, enabling simple installation and connections.

Specifications



Accuracy: ±0.5% of full reading

Forward flow capacity: 24 scfm (677 sL/min)

Sensitivity: <2.5% of span for pressure
change of 15 psig

Max supply pressure: 120 psig

Exhaust flow rate: >1 scfm (24 sL/min)

Operating temperature: -20 to 160°F (-28 to 71°C)

Wetted materials: clean, dry air

Process connection: ¼" NPT(F)

Catalog number	Control range	Enclosure	Electrical connection	Price
SN-68826-06	3 to 15 psi	General purpose	½" conduit	
SN-68826-08	3 to 27 psi			
SN-68826-10	6 to 30 psi			
SN-68826-12	3 to 15 psi	General purpose	Terminal block	
SN-68826-14	3 to 27 psi			
SN-68826-16	6 to 30 psi			
SN-68826-18	3 to 15 psi	NEMA 4X	½" conduit	
SN-68826-20	3 to 27 psi			
SN-68826-22	6 to 30 psi			

SN-17090-29 NIST-traceable calibration
with data.....



68826-18

Type 2000 I/P Transducers

±0.25% full-scale accuracy

- Field-selectable features
- Direct and reverse acting input and output

Transducers are designed for valve actuating, air cylinders, and controllers. The input current signal is conditioned to provide a signal directly proportional to the desired pressure output. The piezo-ceramic actuator serves as a control link between electrical input and pressure output. As voltage increases, the force applied by the actuator increases, so as to restrict nozzle bleed and thus increase pilot pressure. The increased pilot pressure applied to the diaphragm causes opening of the supply valve increasing output pressure.

Specifications



Forward flow capacity: 24 scfm (677 sL/min)

Sensitivity: <2.5% of span for pressure
change of 15 psig

Max supply pressure: 140 psig

Exhaust flow rate: >1 scfm (24 sL/min)

Operating temperature: -20 to 160°F (-28 to 71°C)

Media compatibility: clean, dry air

Process connection: ¼" NPT(F)

Approval: Ex II 1G EEx ia IIC T4

Catalog number	Control range	Enclosure	Electrical connection	Price
SN-68826-24	3 to 15 psi	General purpose	½" conduit	
SN-68826-26	3 to 27 psi			
SN-68826-28	6 to 30 psi			
SN-68826-30	3 to 15 psi	EX	—	
SN-68826-32	3 to 27 psi			
SN-68826-34	6 to 30 psi			

SN-17090-29 NIST-traceable calibration
with data.....



68826-30

NEW Type 3510 Low-Flow I/P Pressure Regulators

For applications requiring up to 1.25 scfm forward flow capacity

- Single-loop control
- Weatherproof housing
- Digital display units available
- Programming and recalibration software included

Type 3510 electro-pneumatic servo pressure regulators combine the advantages of reliable solenoid valves with digital control. Units feature a serial interface, digital or analog inputs, analog monitor output, and are available with local keypad programming or RS-485 digital communications for PLC or PC control. The digital pressure controller is one of the most precise, accurate, and reliable devices available in the industry today, giving you the ability to set and extract data directly from the transducer with a PC or automation system.



68827-02



68827-04

Specifications

Accuracy: ±0.5% full-scale
Operating temperature: 32 to 141°F (0 to 60°C)
Forward flow capacity: 1.25 scfm (35 LPM)
Power: 15 to 24 VDC
Electrical connection: 6-pin microconnector
Input signal: 4 to 20 mA
Analog output: 0 to 10 or 0 to 5 VDC
Set point control: 0 to 100%
Serial communications: RS-485 (models 68827-04 to -07 only)
Display: 4-digit LED, 1.2"H
Mounting: pipe mount
Supply and output ports: ¼" NPT(F)
Wetted materials: aluminum, copper alloys, nickel, Buna N, silicon, 316 stainless steel

Catalog number	Control range	Max supply pressure	Price
Models with keypad and digital display			
SN-68827-00	0 to 15 psi	30 psi	
SN-68827-01	0 to 30 psi	60 psi	
SN-68827-02	0 to 100 psi	165 psi	
SN-68827-03	0 to 150 psi	200 psi	
Models with RS-485 and no display			
SN-68827-04	0 to 15 psi	30 psi	
SN-68827-05	0 to 30 psi	60 psi	
SN-68827-06	0 to 100 psi	165 psi	
SN-68827-07	0 to 150 psi	200 psi	

SN-17090-29 NIST-traceable calibration
with data.....

NEW Type 3511 High-Flow I/P Pressure Regulators

For applications requiring high forward flow capacity—up to 15 scfm

- Digital or analog inputs, and analog monitor output
- Single-loop control
- Weatherproof housing
- Programming and recalibration software included

Type 3511 regulators offer solenoid valve technology with forward flow equivalent to standard industrial electronic regulators or I/P transducers. Units are available with local keypad programming or RS-485 digital communications for PLC or PC control. Regulators feature a serial interface, dual solenoid valves with internal pressure sensor, and advanced microprocessor control. Built-in air volume booster provides forward flow up to 15 scfm and has proportional integral derivative (PID) control.



68827-10



68827-12

Specifications

Accuracy: ±0.5% full-scale
Operating temperature: 32 to 141°F (0 to 60°C)
Forward flow capacity: 15 scfm (425 LPM)
Power: 15 to 24 VDC
Electrical connection: 6-pin microconnector
Input signal: 4 to 20 mA
Analog output: 0 to 10 or 0 to 5 VDC
Set point control: 0 to 100%
Serial communications: RS-485 (models 68827-12 to -15 only)
Display: 4-digit LED, 1.2"H
Mounting: pipe mount
Supply and output ports: ¼" NPT(F)
Wetted materials: aluminum, copper alloys, nickel, Buna N, silicon, 316 stainless steel

Catalog number	Control range	Max supply pressure	Price
Models with keypad and digital display			
SN-68827-08	0 to 15 psi	30 psi	
SN-68827-09	0 to 30 psi	60 psi	
SN-68827-10	0 to 100 psi	165 psi	
SN-68827-11	0 to 150 psi	200 psi	
Models with RS-485 and no display			
SN-68827-12	0 to 15 psi	30 psi	
SN-68827-13	0 to 30 psi	60 psi	
SN-68827-14	0 to 100 psi	165 psi	
SN-68827-15	0 to 150 psi	200 psi	

SN-17090-29 NIST-traceable calibration
with data.....



NEMA 4X and Explosion-Proof I/P Transducers

Field-selectable direct and reverse modes

NEW

- Patented E-Pi technology is unaffected by vibration, shock, or mounting position
- Intrinsically safe input on all models
- Rugged NEMA 4X (IP65) enclosures on all models



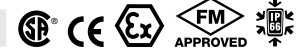
Immune to shock and vibration, the Brandt current-to-pressure (I/P) transducer is built for rugged, industrial environments. The patented, field-proven E-Pi transducer technology is a revolutionary breakthrough that provided the industry with its first "solid state" I/P transducer.

This advanced E-Pi technology uses a minimal amount of electrical energy and air consumption to convert a 4 to 20 input signal to a proportional pneumatic output signal. This pneumatic (backpressure) output is precisely modulated by a virtually weightless, low-mass membrane that is held in a continuously balanced position. The output of the E-Pi is fed into an integral volume booster to deliver a pneumatic output signal with an output capacity of 4.0 scfm.

What's included: mounting bracket and hardware.

Specifications

- Accuracy:** ±0.15% of span (3 to 15 psi output); ±0.25% of span (3 to 27 and 6 to 30 psi output)
- Repeatability:** ±0.05% of span
- Operating temperature:** -40 to 150°F (-40 to 66°C)
- Deadband:** ±0.02% of span
- Power:** 24 to 40 VDC
- Input signal:** 4 to 20 mA
- Output capacity:** 4 scfm
- Supply pressure standard:** minimum of 3 psig and maximum of 10 psig above the maximum calibrated output
- Air supply:** clean, dry, and oil-free instrument air
- Operational modes:** field-selectable direct or reverse
- Enclosure:** internally purged NEMA 4X/IP65; cast/machined aluminum with powder-coated epoxy
- Connections supply:** ¼" NPT(F)



- Pneumatic output port connections:** two ¼" NPT(F)
- Electrical connections:** two ½" NPT(F) conduit terminals for 12-22 AWG wire
- ATEX certification**
STD5000: ATEX Intrinsically safe; II 1G EEx ia IIC T4; II 1D (T+158°F; T+70°C); Tamb = -4 to 140°F; (-20 to 60°C)
STD6000: Flameproof; II 2G EEx d IIC T6; II 2D (T+122°F; T+50°C)
- CSA/US certification**
STD 5000: Intrinsically safe: 4-20 mA models only; Class I, Groups A & B and Class II, Groups E, F & G and Class III; Temp Code T3C; Intrinsically safe: Class I, Groups C & D and Class II, Groups E, F & G, and Class III; Temp Code T3C; Class I, Div 2, Groups A, B, C & D without safety barriers
STD6000 I/P, all models; explosion proof for Class I, Groups B, C & D; Class II, Groups E, F & G; Class III and Class I, Div 2, Groups A, B, C & D hazardous locations outdoors

Catalog number	Output range	Max supply pressure	Price
Type STD5000 NEMA 4X enclosure			
SN-68827-16	3 to 15 psi	20 psi	
SN-68827-17	3 to 27 psi	35 psi	
SN-68827-18	6 to 30 psi	35 psi	
Type STD6000 explosion-proof enclosure			
SN-68827-19	3 to 15 psi	20 psi	
SN-68827-20	3 to 27 psi	35 psi	
SN-68827-21	6 to 30 psi	35 psi	

SN-17090-29 NIST-traceable calibration with data

Hazardous Environments I/P Transducers

Dual-compartment housing is ideal for hazardous environments

NEW

- Patented E-Pi technology is unaffected by vibration, shock, or mounting position
- Rugged, NEMA 7/NEMA 3R rated, explosion-proof enclosure
- Field-selectable direct, reverse, and split range modes
- Two gauge mounts for supply and output pressure measurement



Brandt current-to-pressure (I/P) transducers are built for rugged, industrial environments. This highly accurate pneumatic signal conversion device features a dual-compartment, epoxy-coated, cast-aluminum housing to ensure safe operation. In addition, the easy-to-access terminal compartment enables calibration without exposing the electronics to the surrounding atmosphere to further ensure safety as well as expedite servicing and maintenance.

The advanced E-Pi technology uses a minimal amount of electrical energy and air consumption to convert a 4 to 20 input signal to a proportional pneumatic output signal. This pneumatic (backpressure) output is precisely modulated by a virtually weightless, low-mass membrane that is held in a continuously balanced position. The output of the E-Pi is fed into an integral volume booster to deliver a pneumatic output signal with an output capacity of 4.0 scfm.

Specifications

- Accuracy:** ±0.15% of span (3 to 15 psi output); ±0.25% of span (3 to 27 and 6 to 30 psi output)
- Repeatability:** ±0.05% of span
- Operating temperature:** -40 to 150°F (-40 to 66°C)
- Deadband:** ±0.02% of span
- Power:** 24 to 40 VDC
- Input signal:** 4 to 20 mA
- Output capacity:** 4 scfm
- Supply pressure standard:** minimum of 3 psig and maximum of 10 psig above the maximum calibrated output
- Air supply:** clean, dry, and oil-free instrument air
- Operational modes:** field-selectable direct or reverse
- Enclosure:** NEMA 7/NEMA 3R; cast-machined aluminum with powder-coated epoxy



- Connections supply:** ¼" NPT(F)
- Pneumatic output port connections:** two ¼" NPT(F)
- Gauge mounts:** two 1.4" NPT(F) for supply and output
- Electrical connections:** two ¾" NPT(F) conduit terminals for 12-22 AWG wire
- CSA/US certification:**
Intrinsically safe Class I, Groups A & B and Class II, Groups E, F & G and Class III; Temp Code T3C; Intrinsically safe: Class I, Groups C & D and Class II, Groups E, F & G, and Class III; Temp Code T3C; Class I, Div 2, Groups A, B, C & D without safety barriers

Catalog number	Output range	Max supply pressure	Price
SN-68827-22	3 to 15 psi	20 psi	
SN-68827-23	3 to 27 psi	35 psi	
SN-68827-24	6 to 30 psi	35 psi	

SN-17090-29 NIST-traceable calibration with data