









Precision Pressure Regulators

Precision Fluidics





Innovative solutions for health care success



ENGINEERING YOUR SUCCESS.

When you partner with the global leader in motion and control technologies, expect to move your business and the world forward. From miniature solenoid valves to highly integrated automation systems, our innovations are critical to life-saving medical devices and scientific instruments used for drug discovery and pathogen detection. Not to mention, critical to decreasing time to market and lowering your overall cost of ownership. So partner with Parker, and get ready to move, well, anything.



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Forward Pressure Regulators



Typical Applications

- Environmental Analyzers Helium or Hydrogen Carrier Gas
- Precision Nitrogen Control for Chemical Analysis
- Laboratory and Process Gas Chromatography applications

Parker Precision Fluidics Model 8310/8311 Regulators incorporate a threadless valve seat assembly with a precision glass ball. It is ideal for very low flow carrier gas applications and provides bubble tight shut-off. The 8310/8311 is a direct-acting, non-relieving pressure regulator supplied with a replaceable sintered stainless steel cartridge filter on the inlet. It can be configured with a stainless steel diaphragm to reduce permeability. Each regulator is performance tested and ideally suited for manufacturers of analytical equipment.

Features

- Direct-acting and non-relieving
- Compact design enables panel mounting
- All bar stock construction reduces production variation
- Bubble tight shut-off
- Cleaned for Analytical Service Use
- Pressure gauge port included
- RoHS and REACH compliant



Product Specifications

Physical Properties

Valve Technology:

Quad Ring Poppet

Media:

Air, Nitrogen, Helium, Argon, Hydrogen, Oxygen, Krypton, Neon, Xenon, and other noncorrosive gases

Width: 1.875" (47.63 mm)

Height:

Model 8310 – 3.06" (77.72 mm) without compression fittings
Model 8311 – 3.81" (96.77 mm) with compression fittings

Weight: 0.5 lbs (0.23 kg) (typical)

Porting:

1/8" FNPT, Side Ports (8310 Model) 5/16-24 UNF-2-A, Bottom Ports, Supplied with 1/8" Compression Fittings (8311 Model)

¹ Performance characteristics are based on 60 psig (4.14 barg) helium supply pressure at 50 psig (3.45 barg) outlet pressure.

² Available in Music Wire (ASTM A228) only.

Performance Ratings

Ratings:

Max inlet pressure: 250 psig (17.3 barg) Max working temperature: 160°F (71°C)

Pressure Drop:

Minimum: 10 psid (0.7 barg) Maximum: 250 psid (17.3 barg)

Wetted Materials

Body:

Aluminum or 303 Stainless Steel

Diaphragm:

Fairprene BN-5029 (Buna-N on Nylon), 300 Series Stainless Steel, or FKM on Nomex®

O-Rings: Buna-N or FKM

Filter Element:

Sintered Stainless Steel (100 micron)

Internal Ball Seat Valve: Glass

Non-Wetted Materials

Bonnet: Aluminum

Range Spring:

Music Wire (ASTM A228) or Nickel Iron Alloy (AMS 5221)

Performance Characteristics¹

Supply Pressure Effect:

10 psi change < 0.07 psi (0.69 barg change ≤ 0.005 barg)

Ambient Temperature Effect:

(Temperature coefficient)

Music Wire (ASTM A228) –
(60 psig (4.14 bar) range)
0.008 psig/°F (0.99 mbarg/°C)

Nickel Iron Alloy (AMS 5221) –
(60 psig (4.14 bar) range)
0.004 psig/°F (0.50 mbarg/°C)

Long-Term Drift:

Fairprene diaphragm: 0.2% Stainless steel diaphragm: 0.8%

Flow Regulation:

From 2 sccm to 250 sccm Helium, outlet pressure will not decrease more than 0.17 psig (0.01 barg) for unit with elastomer diaphragm, 0.3 psig (0.02 barg) for unit with stainless steel diaphragm

Regulating Range:

0 - 2.5 psig (0 - 0.17 barg)²

0 - 5 psig (0 - 0.35 barg)²

0 - 10 psig (0 - 0.69 barg)

0 - 30 psig (0 - 2.07 barg)

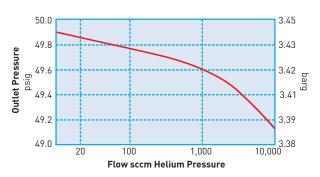
0 - 60 psig (0 - 4.14 barg)

0 - 100 psig (0 - 6.89 barg)

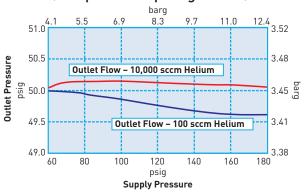


Typical Flow Curves

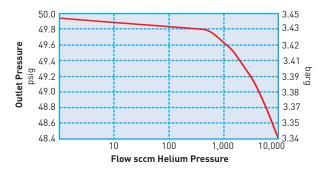
Typical Droop (Flow Sensitivity) Curve (Fairprene Diaphragm Unit)



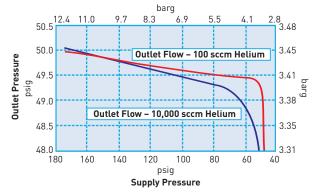
Typical Regulator Output vs.
Change in Supply Pressure
(Supply Pressure Effect)
(Fairprene Diaphragm Unit)



Typical Droop (Flow Sensitivity) Curve (Stainless Steel Diaphragm)



Typical Regulator Output vs. Change in Supply Pressure (Supply Pressure Effect) (Stainless Steel Diaphragm)



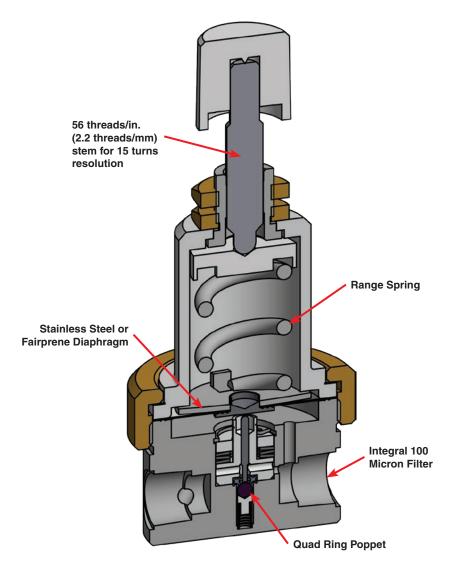
Principle of Operation

As gas enters the regulator body from the inlet (left), the pressure rises which pushes the diaphragm, closing the control inlet valve and preventing any more gas from entering the regulator.

When gas is drawn from the outlet (right) side, the pressure inside the regulator body falls. As a result, the diaphragm is pushed back by the spring and the valve opens, allowing more gas in from the supply until equilibrium is reached between the outlet pressure and the spring.

The outlet pressure is a function of the spring force which may be modified by the adjustment knob.

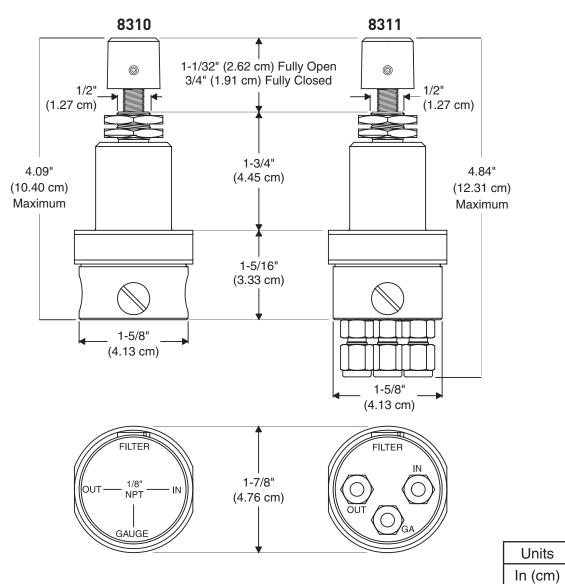
The outlet pressure and the inlet pressure hold the quad ring poppet assembly in the closed position against the force of the spring.





Mechanical Integration Dimensions

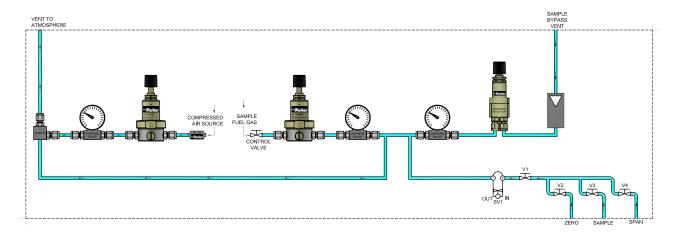
Basic Dimensions





Typical Flow Diagram

VOC Emissions Monitoring Analyzer





Ordering Information

Part #	3310	Α	М	В	F	10
Description Mo	lodel	Body Material	Spring Material	O-Ring Material	Diaphragm Material	Pressure Range
		S: Stainless Steel	M: Music Wire (ASTM A228) N: Nickel Iron Alloy (AMS 5221)		F: Fairprene BN-5029 S: Stainless Steel V: FKM and Nomex	2.5**: 2.5 psig (0.17 barg) 5**: 5 psig (0.34 barg) 10: 10 psig (0.69 barg) 30: 30 psig (2.07 barg) 60: 60 psig (4.14 barg) 100: 100 psig (6.89 barg)

^{*} Supplied with Brass Fittings

NOTE: In order to provide the best possible solution for your application, please provide the following requirements when contacting Applications Engineering:

- Media, Inlet & Outlet Pressures
- Mimimum Required Flow Rate.

Please click on the ORDER ON-LINE button (or go to www.parker.com/prescision fluidics/regulators) to configure your Precision Pressure Regulator. For more detailed information, visit us on the web or call Applications Engineering.



Installation Guide

- For NPT connections, a high quality sealant compatible with the customer's process gas must be used.
- May be installed in any orientation.
- Support inlet and outlet piping to reduce strain on regulator body.

Key Things to Remember:

- To minimize your Helium gas costs, consider using 2.5 or 5 psig Pressure Range (0.17 or 0.34 barg) only available from Parker.
- Choice of Diaphragm Materials Stainless Steel Diaphragms provide extremely low permeability. Coated Fabric Diaphragms, available in Buna or FKM, offer unmatched sensitivity.
- Fine Pitch Adjusting Stem 56 threads/in. (2.2 threads/mm) stem for 15 turns resolution pitch on all regulator adjusting stems gives precise control over incremental pressure adjustments.
- Bar Stock Construction and Analytical Service Cleaning Machined from bar stock in your choice of aluminum or stainless steel. All parts are cleaned to procedures developed specifically for analytical service use, minimizing contaminant generation in low-level analyzer applications.
- Extensive Choice of Pressure Range This ensures maximum resolution at specific pressure and temperature requirements.



^{**} Available in Music Wire (ASTM A228) only

Balanced Poppet Regulator



Typical Applications

- Environmental Analyzers Helium or Hydrogen Carrier Gas
- Precision Nitrogen Control for Chemical Analysis
- Laboratory and Process Gas Chromatography applications

The Parker Precision Fluidics Model 8286 Regulator utilizes a pneumatically balanced poppet valve to ensure maximum stability over wide variations in supply pressure. Based on Parker's popular 8310 model, the 8286 offers higher flow capability combined with precision pressure control. It can be equipped with a stainless diaphragm for reduced permeability. The Model 8286 is performance tested under simulated operating conditions and is cleaned for analytical instrument service.

Features

- · Direct-acting and non-relieving
- Compact design enables panel mounting
- All bar stock construction reduces production variation
- Bubble tight shut-off
- Cleaned for Analytical Service Use
- · Pressure gauge port included
- RoHS and REACH compliant



Product Specifications

Physical Properties

Valve Technology:

Quad Ring Poppet

Media:

Air, Nitrogen, Helium, Argon, Hydrogen, Oxygen, Krypton, Neon, Xenon, and other non-corrosive gases

Width: 1.875" (47.63 mm)

Height: 3.06" (77.72 mm)

Weight: 0.5 lb (0.23 kg) (typical)

Porting:

1/8" FNPT side ports, inlet, outlet and gauge

Performance Ratings

Ratings:

Max inlet pressure: 250 psig (17.3 barg) Max working temperature: 160°F (71°C)

Pressure Drop:

Minimum: 10 psig (0.7 barg) Maximum: 250 psig (17.3 barg)

Wetted Materials

Body:

Aluminum or 303 Stainless Steel

Diaphragm:

Fairprene BN-5029 (Buna-N on Nylon), 300 Series Stainless Steel, or FKM on Nomex®

O-Rings: Buna-N or FKM

Filter Element:

Sintered Stainless Steel (100 micron)

Internal Ball Seat Valve: Glass

Non-Wetted Materials

Bonnet: Aluminum

Range Spring:

Music Wire (ASTM A228) or Nickel Iron Alloy (AMS 5221)

Performance Characteristics¹

Supply Pressure Effect:

10 psi change < 0.07 psi (0.69 barg change ≤ 0.005 barg)

Ambient Temperature Effect:

(Temperature coefficient)

Music Wire (ASTM A228) –

(60 psig (4.14 barg) range)
0.008 psig/°F (0.99 mbarg/°C)

Nickel Iron Alloy (AMS 5221) –

(60 psig (4.14 barg) range)
0.004 psig/°F (0.50 mbarg/°C)

Long-Term Drift:

Fairprene diaphragm: 0.2% Stainless steel diaphragm: 0.8%

Flow Regulation:

From 1 slpm to 20 slpm helium, outlet pressure will not decrease more than 1 psig (0.069 barg) for unit with elastomer diaphragm

Regulating Range:

0 - 2.5 psig (0 - 0.17 barg)²

 $0 - 5 psig (0 - 0.35 barg)^2$

0 - 10 psig (0 - 0.69 barg)

0 - 30 psig (0 - 2.07 barg)

0 - 60 psig (0 - 4.14 barg)

0 - 100 psig (0 - 6.89 barg)

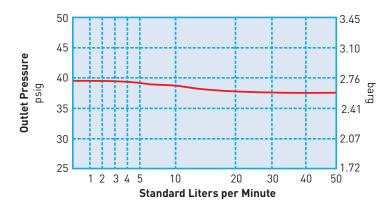


¹ Performance characteristics are based on 60 psig (4.14 barg) helium supply pressure at 50 psig (3.45 barg) outlet pressure.

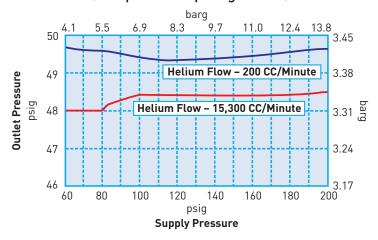
² Available in Music Wire (ASTM A228) only.

Typical Flow Curves

Typical Droop (Flow Sensitivity) Curve (Fairprene Diaphragm Unit)



Typical Regulator Output vs. Change in Supply Pressure (Supply Pressure Effect) (Fairprene Diaphragm Unit)





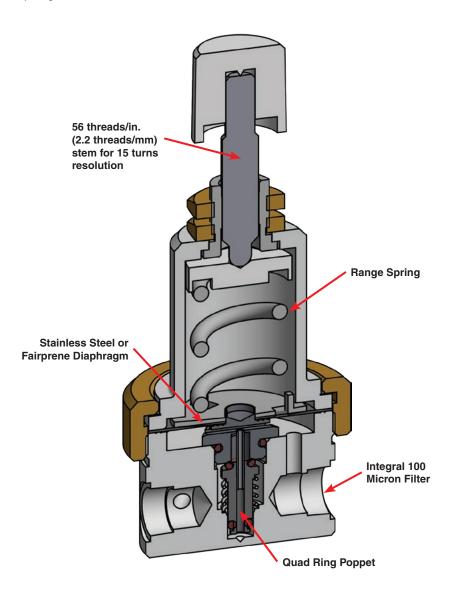
Principle of Operation

As gas enters the regulator body from the inlet (left), the pressure rises which pushes the diaphragm, closing the control inlet valve and preventing any more gas from entering the regulator.

When gas is drawn from the outlet (right) side, the pressure inside the regulator body falls. As a result, the diaphragm is pushed back by the spring and the valve opens, allowing more gas in from the supply until equilibrium is reached between the outlet pressure and the spring.

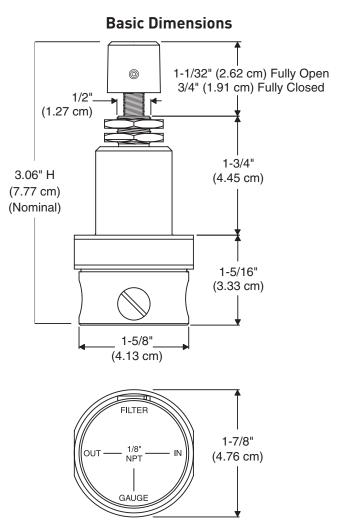
The outlet pressure is a function of the spring force which may be modified by the adjustment knob.

The outlet pressure and the inlet pressure hold the dual poppet assembly in the closed position against the force of the spring.





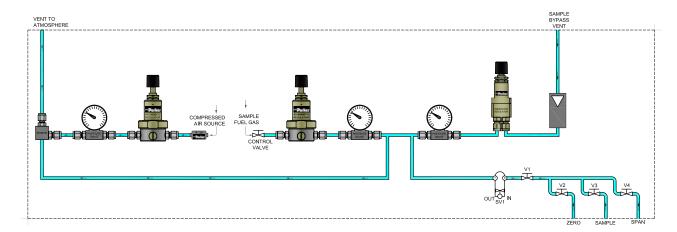
Mechanical Integration Dimensions



Units In (cm)

Typical Flow Diagram

VOC Emissions Monitoring Analyzer





Ordering Information

Sample Part #	8286	Α	М	В	F	10
Description	Model	Body Material	Spring Material	O-Ring Material	Diaphragm Material	Pressure Range
Options	8286	A: Aluminum*	M: Music Wire	B: Buna-N	F: Fairprene BN-5029	2.5*: 2.5 psig (0.17 barg)
		O. Otali licos Otoci	(ASTM A228)	V: FKM	S: Stainless Steel	5*: 5 psig (0.34 barg)
			N: Nickel Iron Alloy (AMS 5221)		V: FKM and Nomex	10: 10 psig (0.69 barg)
			(((10) 022 1)			30: 30 psig (2.07 barg)
						60: 60 psig (4.14 barg)
						100: 100 psig (6.89 barg)

^{*} Supplied with Brass Fittings

NOTE: In order to provide the best possible solution for your application, please provide the following requirements when contacting Applications Engineering:

- · Media, Inlet & Outlet Pressures
- Mimimum Required Flow Rate.

Please click on the ORDER ON-LINE button (or go to www.parker.com/prescision fluidics/regulators) to configure your Precision Pressure Regulator. For more detailed information, visit us on the web or call Applications Engineering.



Installation Guide

- For NPT connections, a high quality sealant compatible with the customer's process gas must be used.
- May be installed in any orientation.
- Support inlet and outlet piping to reduce strain on regulator body.

Key Things to Remember:

- To minimize your Helium gas costs, consider using 2.5 or 5 psig Pressure Range (0.17 or 0.34 barg) only available from Parker.
- Choice of Diaphragm Materials Stainless Steel Diaphragms provide extremely low permeability. Coated Fabric Diaphragms, available in Buna or FKM, offer unmatched sensitivity.
- Fine Pitch Adjusting Stem 56 threads/in. (2.2 threads/mm) stem for 15 turns resolution pitch on all regulator adjusting stems gives precise control over incremental pressure adjustments.
- Bar Stock Construction and Analytical Service Cleaning Machined from bar stock in your choice of aluminum or stainless steel. All parts are cleaned to procedures developed specifically for analytical service use, minimizing contaminant generation in low-level analyzer applications.
- Extensive Choice of Pressure Range This ensures maximum resolution at specific pressure and temperature requirements.



^{**} Available in Music Wire (ASTM A228) only

High Performance Pressure Regulator



Typical Applications

- Environmental Analyzers Helium or Hydrogen Carrier Gas
- Precision Nitrogen Control for Chemical Analysis
- Laboratory and Process Gas Chromatography applications

The Parker Precision Fluidics Model 4000 Regulator is a high performance miniature size pressure regulator. With a compact diameter of only 1-1/8", it fits easily into small instruments, yet its performance surpasses that of many competitive large diaphragm regulators. Model 4000 is a direct-acting, non-relieving performance regulator tested under simulated operating conditions and is cleaned for analytical instrument service.

Features

- Direct-acting and non-relieving
- Compact design enables panel mounting
- All bar stock construction reduces production variation
- Bubble tight shut-off
- Cleaned for Analytical Service Use
- Pressure gauge port included
- RoHS and REACH compliant



Product Specifications

Physical Properties

Valve Technology:

Quad Ring Poppet

Media:

Air, Nitrogen, Helium, Argon, Hydrogen, Oxygen, Krypton, Neon, Xenon, and other noncorrosive gases

Width: 1.25" (31.75 mm)

Height:

4.47" (113.54 mm)

Weight:

0.31 lbs (0.14kg) (typical)

Porting:

1/8" compression fittings, inlet, outlet and gauge

* Performance characteristics are based on 60 psig (4.14 barg) helium supply pressure at 50 psig (3.45 barg) outlet pressure.

Performance Ratings

Ratings:

Max inlet pressure: 250 psig (17.3 barg) Max working temperature: 160°F (71°C)

Pressure Drop:

Minimum: 10 psig (0.7 barg) Maximum: 250 psig (17.3 barg)

Wetted Materials

Body: Aluminum

Diaphragm: 300 Stainless Steel

O-Rings: Buna-N or FKM

Internal Ball Seat Valve: Glass

Non-Wetted Materials

Bonnet: Aluminum

Range Spring:

Music Wire (ASTM A228)

Performance Characteristics*

Flow Capacity: 15 slpm (typical maximum flow with 60 psig (4.14 barg) helium supply pressure and 15 psig (1.03 barg) outlet)

Supply Rejection: 10 psig (0.69 barg) change in supply will not change outlet more than 0.05 psig (0.003 barg)

Ambient Temperature Effect:

(Temperature coefficient) Music Wire (ASTM A228) -(60 psig (4.14 barg) range) 0.008 psig/°F (0.99 mbarg/°C)

Long-Term Drift: Less than 0.2% in first 15 minutes to a total of 0.6% long term

Flow Regulation: From 2 sccm to 250 sccm helium outlet pressure will not change more than 0.2 psig (0.014 barg) for unit with elastomer diaphragm

Baseline Oscillation:

0.0012 psig (0.083 mbarg)

Regulating Range:

0 - 10 psig (0 - 0.69 barg)

0 - 30 psig (0 - 2.07 barg)

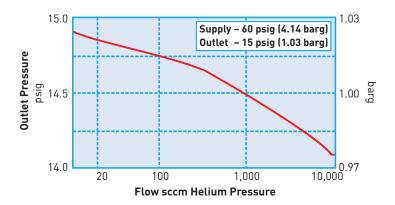
0 - 60 psig (0 - 4.14 barg)

0 - 100 psig (0 - 6.89 barg)

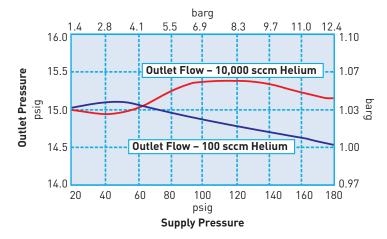


Typical Flow Curves

Typical Droop (Flow Sensitivity) Curve (Fairprene Diaphragm Unit)



Typical Regulator Output vs. Change in Supply Pressure (Supply Pressure Effect) (Fairprene Diaphragm Unit)



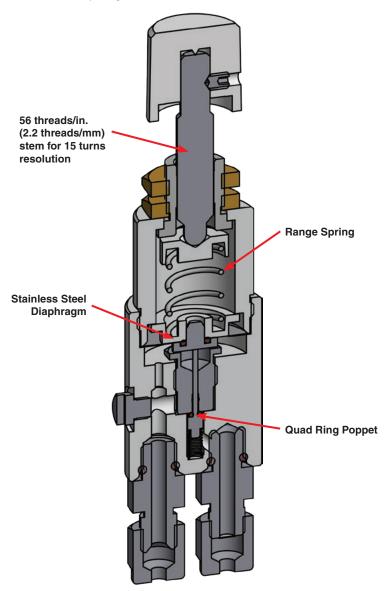
Principle of Operation

As gas enters the regulator body from the inlet (left), the pressure rises which pushes the diaphragm, closing the control inlet valve and preventing any more gas from entering the regulator.

When gas is drawn from the outlet (right) side, the pressure inside the regulator body falls. As a result, the diaphragm is pushed back by the spring and the valve opens, allowing more gas in from the supply until equilibrium is reached between the outlet pressure and the spring.

The outlet pressure is a function of the spring force which may be modified by the adjustment knob.

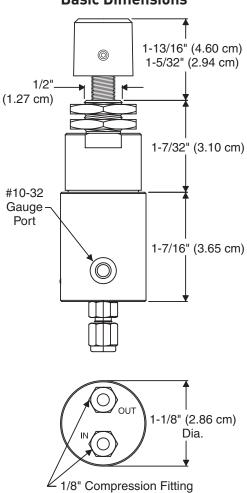
The outlet pressure and the inlet pressure hold the quad ring poppet assembly in the closed position against the force of the spring.





Mechanical Integration Dimensions

Basic Dimensions

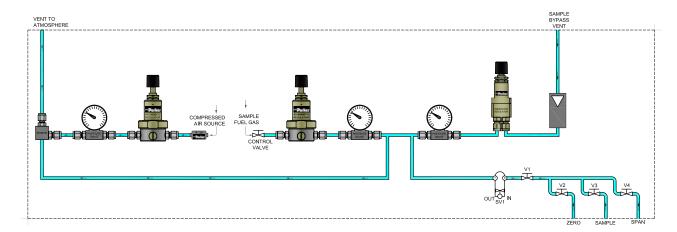


Units In (cm)



Typical Flow Diagram

VOC Emissions Monitoring Analyzer





Ordering Information

Sample Part #	4000	Α	М	В	S	30
Description	Model	Body Material	Spring Material	O-Ring Material	Diaphragm Material	Pressure Range
Options	4000	A: Aluminum*	M: Music Wire (ASTM A228)	B: Buna-N V: FKM	S: Stainless Steel	10: 10 psig (0.69 barg) 30: 30 psig (2.07 barg) 60: 60 psig (4.14 barg) 100: 100 psig (6.89 barg)

^{*} Supplied with Brass Fittings

NOTE: In order to provide the best possible solution for your application, please provide the following requirements when contacting Applications Engineering:

- Media, Inlet & Outlet Pressures
- Mimimum Required Flow Rate.

Please click on the ORDER ON-LINE button (or go to www.parker.com/prescision fluidics/regulators) to configure your Precision Pressure Regulator. For more detailed information, visit us on the web or call Applications Engineering.



Installation Guide

• May be installed in any orientation.

Key Things to Remember:

- Fine Pitch Adjusting Stem 56 threads/in. (2.2 threads/mm) stem for 15 turns resolution pitch on all regulator adjusting stems gives precise control over incremental pressure adjustments.
- Bar Stock Construction and Analytical Service Cleaning Machined from bar stock in your choice of aluminum or stainless steel. All parts are cleaned to procedures developed specifically for analytical service use, minimizing contaminant generation in low-level analyzer applications.
- Extensive Choice of Pressure Range This ensures maximum resolution at specific pressure and temperature requirements.



Back Pressure Regulator



Typical Applications

- Environmental Analyzers Helium or Hydrogen Carrier Gas
- Precision Nitrogen Control for Chemical Analysis
- Laboratory and Process Gas Chromatography applications
- Argon Gas Regulation for BioReagent Manufacturing

The Parker Precision Fluidics Model 9000 Regulator is a compact, spring-loaded, diaphragm operated back pressure regulator. Designed specifically for precision regulation in low-flow gas applications, it controls upstream pressure rather than downstream pressure and is similar to a relief valve in operation. Model 9000 is performance tested under simulated operating conditions and is cleaned for analytical instrument service.

Features

- Direct-acting and non-relieving
- Compact design enables panel mounting
- All bar stock construction reduces production variation
- Bubble tight shut-off
- Panel mount applications
- Cleaned for Analytical Service Use
- Pressure gauge port included
- RoHS and REACH compliant



Product Specifications

Physical Properties

Valve Technology:

Quad Ring Poppet

Media:

Air, Nitrogen, Helium, Argon, Hydrogen, Oxygen, Krypton, Neon, Xenon, and other noncorrosive gases

Width: 1.25" (31.75 mm)

Height: 4.5" (114.3 mm)

Weight:

0.375 lbs (0.17kg) (typical)

Porting:

1/8" compression fittings, inlet, outlet and gauge

* Performance characteristics are based on 60 psig (4.14 barg) helium supply pressure at 50 psig (3.45 barg) outlet pressure.

Performance Ratings

Flow Capacity: 0 - 1000 sccm

Ratings:

Max. operating temperature: 160°F (71°C)

Wetted Materials

Body:

Aluminum or 303 Stainless Steel

Diaphragm:

Fairprene BN-5029 (Buna-N on nylon) or 300 Stainless Steel

O-Rings: Buna N or FKM

Filter Element:

Sintered Stainless Steel (100 micron)

Internal Ball Seat Valve: Glass

Non-Wetted Materials

Bonnet: Aluminum

Range Spring:

Music Wire (ASTM A228)

Performance Characteristics*

Ambient Temperature Effect:

(Temperature coefficient) 60 psig (4.14 barg) range 0.008 psig/°F (0.99 mbarg/°C)

Long-Term Drift:

Fairprene diaphragm: 0.2% Stainless steel diaphragm: 0.8%

Flow Regulation:

From 10 sccm to 1 sccm Helium, outlet pressure will not decrease more than 1 psig (0.069 barg) for unit with elastomer diaphragm

Baseline Oscillation:

0.0012 psig (0.083 mbarg)

Regulating Range:

0 - 15 psig (0 - 1.03 barg)

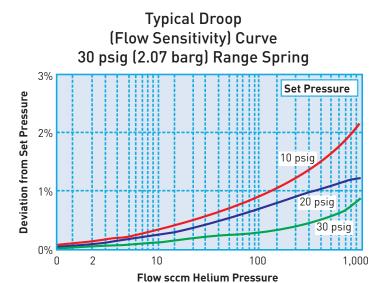
0 - 30 psig (0 - 2.07 barg)

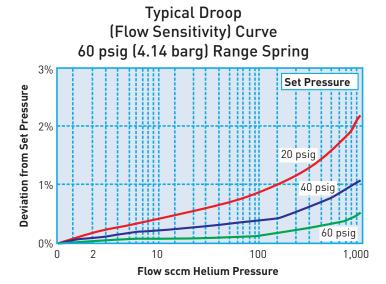
0 - 60 psig (0 - 4.14 barg)

0 - 100 psig (0 - 6.89 barg)



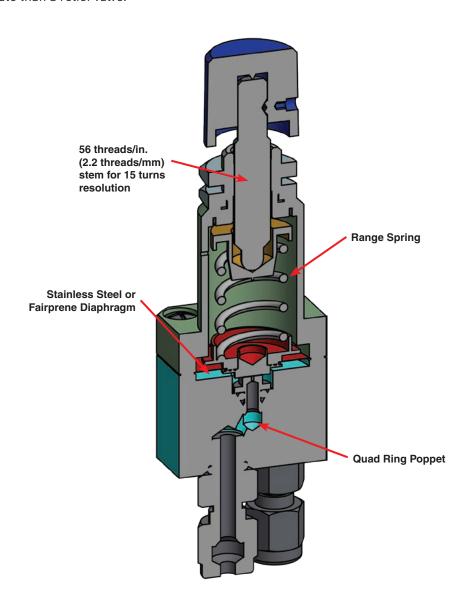
Typical Flow Curves





Principle of Operation

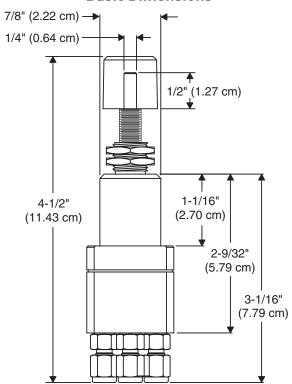
A backpressure regulator is designed to regulate inlet pressure. The force of the regulator spring holds the valve closed. When the inlet pressure of the process fluid overcomes the spring setting the valve begins to open. Using a backpressure regulator to precisely control upstream gas pressure is typically more accurate than a relief valve.

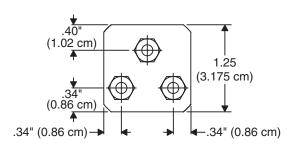




Mechanical Integration Dimensions

Basic Dimensions



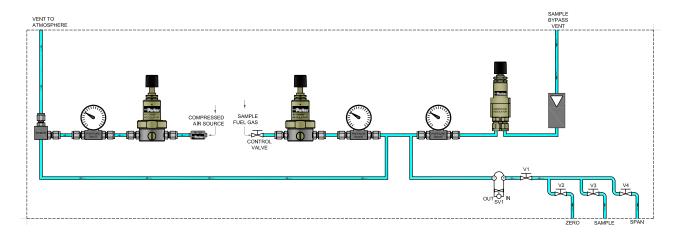


Units In (cm)



Typical Flow Diagram

VOC Emissions Monitoring Analyzer





Ordering Information

Sample Part #	9000	Α	М	В	s		30
Description	Model	Body Material	Spring Material	O-Ring Material	Diaphragm Material		Pressure Range
Options	9000	A: Aluminum*	M: Music Wire	B: Buna-N	F: Fairprene BN-5029	15:	15 psig (1.03 barg)
		S: Stainless Steel	(ASTM A228)	V: FKM	S: Stainless Steel	30:	30 psig (2.07 barg)
					V: FKM and Nomex	60:	60 psig (4.14 barg)
						100:	100 psig (6.89 barg)

^{*} Supplied with Brass Fittings

NOTE: In order to provide the best possible solution for your application, please provide the following requirements when contacting Applications Engineering:

- Media, Inlet & Outlet Pressures
- Mimimum Required Flow Rate.

Please click on the ORDER ON-LINE button (or go to www.parker.com/prescision fluidics/regulators) to configure your Precision Pressure Regulator. For more detailed information, visit us on the web or call Applications Engineering.



Installation Guide

- May be installed in any orientation.
- Support inlet and outlet piping to reduce strain on regulator body.

Key Things to Remember:

- Choice of Diaphragm Materials Stainless Steel Diaphragms provide extremely low permeability. Coated Fabric Diaphragms, available in Buna or FKM, offer unmatched sensitivity.
- Fine Pitch Adjusting Stem 56 threads/in. (2.2 threads/mm) stem for 15 turns resolution pitch on all regulator adjusting stems gives precise control over incremental pressure adjustments.
- Bar Stock Construction and Analytical Service Cleaning Machined from bar stock in your choice of aluminum or stainless steel. All parts are cleaned to procedures developed specifically for analytical service use, minimizing contaminant generation in low-level analyzer applications.
- Extensive Choice of Pressure Range This ensures maximum resolution at specific pressure and temperature requirements.



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Precision Pressure Regulators

Portfolio Review

Customization

Contact Division Applications at (603) 595 1500 or ppfinfo@parker.com.

Models 8310 & 8311



Flow control from 1 sccm to 3 slpm

Model 8286



Model 4000



Flow control from 0.5 slpm to 10 slpm Smaller Size

Model 9000



Flow control from 10 sccm to 1 slpm Back Pressure Regulator



↑ WARNING – USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY, AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or systems in the current product catalog.

Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selction of the products and systems, assuring that all performance, safety, and warning requirements of the application are met.

The products described herein, including without limitation product features, specifications, designs, availability, and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

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