

EXB

Back Pressure Regulator



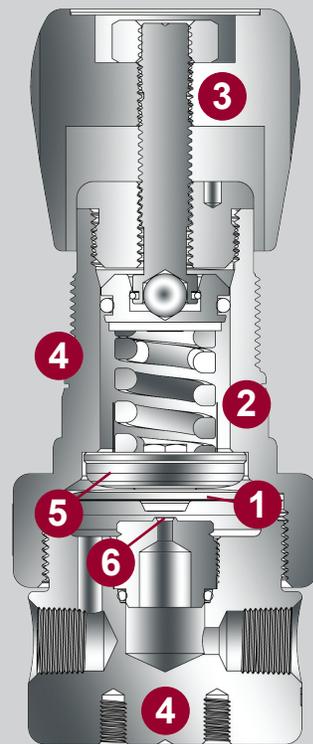
The AURA EXB back pressure regulator provides adjustable relief of excess pressure in closed loop systems caused by spikes in inlet pressure up to 500 psig. AURA's dual surface diaphragm or dynamic cartridge sensing elements increase the precision and flexibility of pressure control. This allows the end user to accurately throttle excess pressure from the system, whereas standard relief devices only provide open and close functions.

AURA's proprietary machining process yields surface finishes of 4-25 Ra designed to reduce corrosion. The AURA EXB is assembled in a Class 100 clean room as a complete assembly with all gauges, fittings, and valves attached. The complete assembly is cleaned for oxygen service and is 100% helium leak checked. Additionally, the EXB undergoes multiple flow and function tests to ensure the highest level of purity and durability.

Available with Dursan™ LS inert and anti-corrosive technology that provides superior corrosive resistance versus exotic metals in highly acidic or caustic applications, the AURA EXB back pressure regulator is the choice for accurate and reliable excess pressure control.

EXB Features

- 1. Dynamic cartridge or diaphragm sensing element**
 - Flexible solution for application
- 2. Field access to adjusting spring**
 - Change control range in field
- 3. Field access to adjusting screw**
 - Lock pressure setting
- 4. Threaded bonnets and rear mounting holes**
 - Able to panel or surface mount
- 5. Hi/Lo diaphragm stop**
 - Extends diaphragm life cycle
- 6. Multiple seat materials**
 - Ensures reliability by eliminating reaction with media



(Diaphragm model shown)



EXB Back Pressure Regulator

Technical Data and Product Specifications

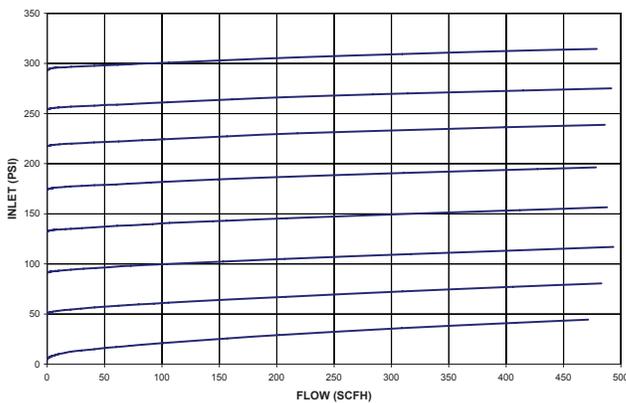
Materials of Construction

	EXBS	EXBN	EXBC	EXBG
Body	316L stainless steel	Nickel-plated brass	Chrome-plated brass	Dursan™ LS
Bonnet	304 stainless steel	Nickel-plated brass	Chrome-plated brass	Dursan LS
Sensing Element	316L stainless steel	316L stainless steel	316L stainless steel	Dursan LS
Seat	Viton, PTFE, PCTFE	Viton, PTFE, PCTFE	Viton, PTFE, PCTFE	Viton, PTFE, PCTFE
Nozzle	316L stainless steel	Brass	Brass	Dursan LS
O-Ring Seal (piston model)	PTFE	PTFE	PTFE	PTFE

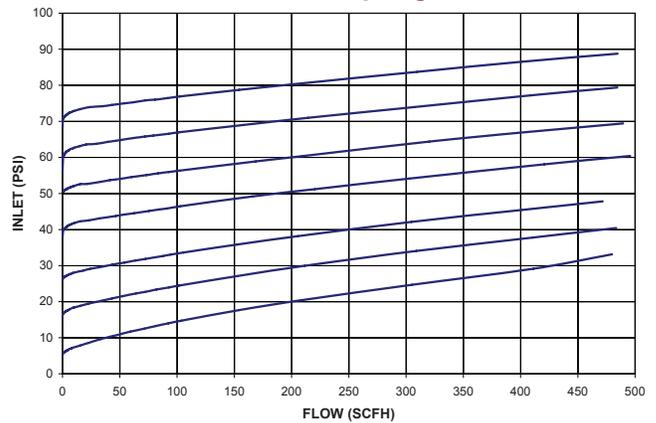
Functional Specifications

Design Pressure	<ul style="list-style-type: none"> Working pressure: 3000 psig PTFE/Viton® Working pressure: 5500 psig PCTFE Burst pressure: > 4x Working pressure 	Temperature	<ul style="list-style-type: none"> PTFE: -40°F to 140°F (-40°C to 60°C) PCTFE: -40°F to 150°F (-40°C to 66°C) Viton: -40°F to 140°F (-40°C to 60°C)
Maximum Inlet Pressure	<ul style="list-style-type: none"> Diaphragm (500 psig maximum inlet pressure) Dynamic Cartridge (650 psig maximum inlet pressure) 	Weight (bare body)	• 2 lbs. 5.5 oz. (1.06 kg)
Leak Rate	<ul style="list-style-type: none"> External: 1x10⁻⁹ He ccs (diaphragm model) External: 1x10⁻⁷ He ccs (piston model) Seat: 1x10⁻⁷ He ccs 	Gauges (optional)	• 2" manufactured to ANSI/ASME B40.1

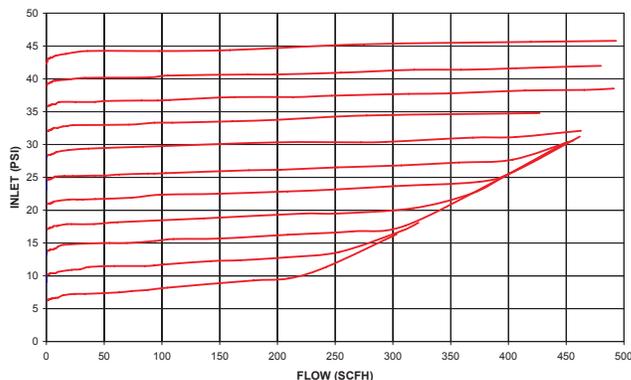
EXB Regulator, PCTFE diaphragm, 250 lb. spring



EXB Regulator, Viton diaphragm, 50 lb. spring



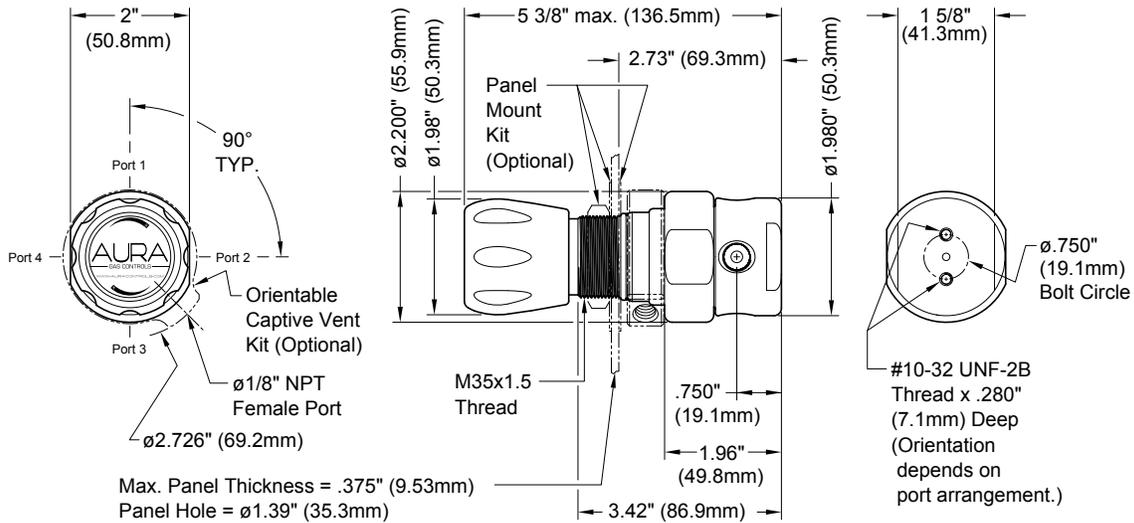
EXB Regulator, Viton dynamic cartridge, 15 lb. spring



Each EXB regulator assembly includes:

- Class 100 cleanroom assembly
- 100% helium leak check
- Cleaning for oxygen service
- 100% function test
- Silicone-free assembly
- Certificate of conformance
- Certificate of cleaning for oxygen service

Mounting and Installing Information



Ordering Information

EXB 4 5 6 7 8 -01- 13 14 15 - 16 17 0

Accessories:
 Panel mount kit
 EXPA0002-01-000-000

Digit 4 - Material of Construction

- S = 316L stainless steel
- N = Nickel-plated brass
- C = Chrome-plated brass
- G = Dursan LS inert and anti-corrosive technology

Digit 5 - Pressure Range

- 1 = 0-15 psig
- 2 = 0-50 psig
- 3 = 0-100 psig
- 4 = 0-250 psig
- 5 = 0-500 psig

Digit 6 - Gauges

- 0 = No Gauges
- 1 = Inlet Gauge (psig/kPa)
- 2 = Outlet Gauge (psig/kPa)
- 5 = Inlet Gauge (BAR/psig)
- 6 = Outlet Gauge (BAR/psig)

Digit 7 - Sensing Element/Seat

- 1 = Dynamic Cartridge/Viton
 - 2 = Dynamic Cartridge/PTFE*
 - 3 = Dynamic Cartridge/PCTFE
 - 4 = 316L Diaphragm/Viton*
 - 5 = 316L Diaphragm/PTFE*
 - 6 = 316L Diaphragm/PCTFE*
- * Not available for 500 psig pressure range

Digit 8 - Assembly

See the EX2 Port Configuration Table on the back of this brochure for choice of assembly.

Digits 13-15 - Inlet Port

- 000 = None (1/4" female NPT)
- M06 = 6mm ss compression tube fitting
- TF4 = 1/4" ss compression tube fitting
- TF6 = 3/8" ss compression tube fitting
- TF8 = 1/2" ss compression tube fitting

Digit 16 - Valve Assembly

- 0 = No valve (ss, ni, cp, Dursan LS)
- 1 = Diaphragm valve (ss, cp, Dursan LS)

Digit 17 - Outlet Fitting

- 0 = None (1/4" female NPT)
- 1 = 1/4" male NPT fitting
- 2 = 1/8" ss compression tube fitting
- 3 = 1/4" ss compression tube fitting
- 4 = 3/8" ss compression tube fitting
- 5 = 1/2" ss compression tube fitting
- 6 = 6mm ss compression tube fitting
- 7 = 8mm ss compression tube fitting
- 8 = 10mm ss compression tube fitting
- 9 = 12mm ss compression tube fitting
- A = 3/8" BSP RH cp fitting
- B = 3/8" BSP LH cp fitting
- C = 1/8" cp compression tube fitting
- D = 1/4" cp compression tube fitting
- E = 3/8" cp compression tube fitting
- F = 1/2" cp compression tube fitting
- G = 6mm cp compression tube fitting
- H = 8mm cp compression tube fitting
- J = 10mm cp compression tube fitting
- K = 12mm cp compression tube fitting

Key:
 ss = Stainless steel
 ni = Nickel-plated brass
 cp = Chrome-plated brass
 RH = Right hand
 LH = Left hand
 CON = Cylinder Connection

NOTE: If you are unable to find a configuration specific to your application's needs, call AURA Gas Controls directly at 800.582.2565.



1501 Harpers Road, Virginia Beach, Virginia 23454

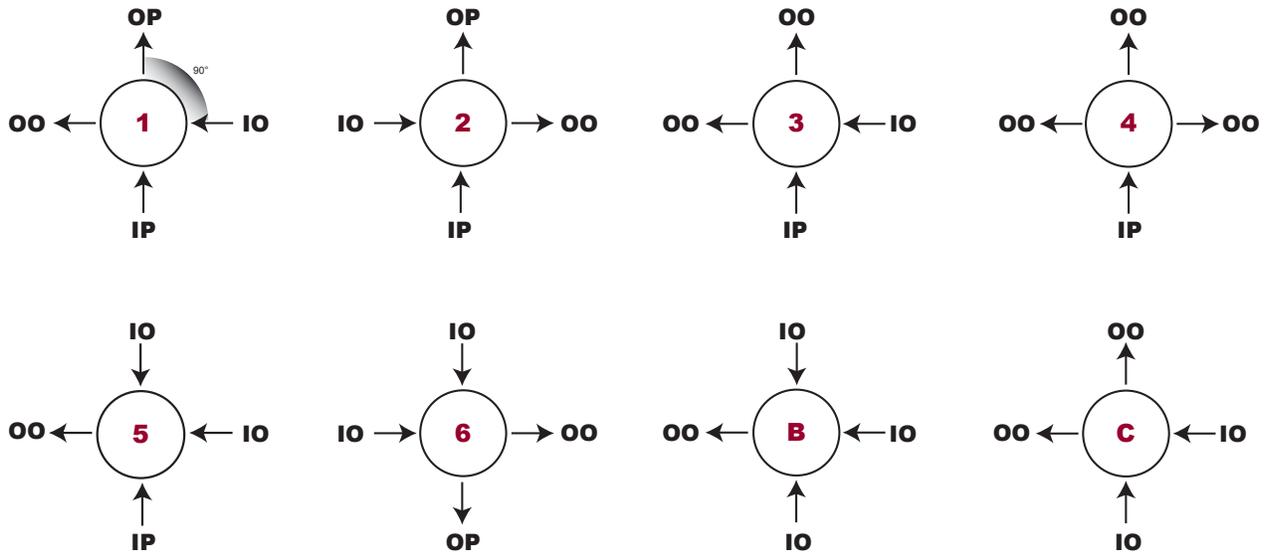
800.582.2565

www.AURACONTROLS.com

Registered ISO 9001



EXB Back Pressure Regulator Port Configuration Table



Key:

OO - Outlet Open
OP - Outlet Plugged
IO - Inlet Open
IP - Inlet Plugged



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LEX3179EXB-B