

EXC

Compact Single Stage Pressure Reducing Regulator



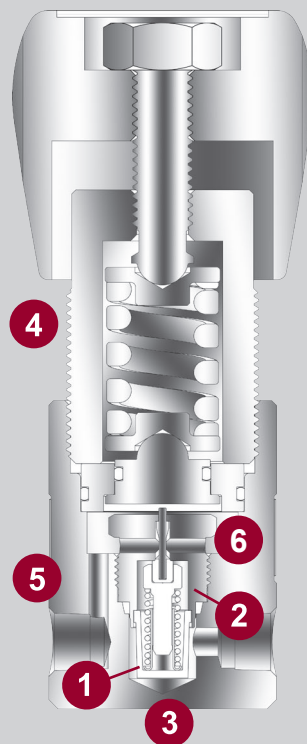
The AURA EXC is a general purpose regulator that provides accurate and reliable pressure control of gases and liquids up to inlets of 5500 psig where space is at a premium. AURA's encapsulated seat design consolidates the numerous moving internal components of a standard regulator into one single piece, allowing for ease of maintenance and minimizing potential failure points. Protected by a 10-micron 360° filter, the encapsulated seat provides significantly more filtration of impurities than the standard pressed-in disk. The encapsulated seat also filters damaging particles from all inlet ports rather than just the pipeline port. Available with multiple seat materials and orifice sizes, the EXC's capsule ensures optimum performance in any application worldwide.

The EXC's ultra-compact design minimizes weight and footprint to allow for easy integration into a system or cabinet. The all metal construction ensures long life cycle in harsh environments. The AURA EXC 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 EXC 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 EXC is an economical choice for applications requiring compact components.

EXC Features

- 1. 360° filter**
 - Significantly more filtration of impurities than disk
- 2. Encapsulated seat design**
 - Ease of maintenance
- 3. 1½" footprint**
 - Easily integrated into enclosure
- 4. 1⅜" threaded bonnet**
 - Panel mountable
- 5. All metal construction**
 - Rugged and durable
- 6. Low internal volume**
 - Minimizes corrosion sites



EXC Compact Single Stage Pressure Reducing Regulator

Technical Data and Product Specifications

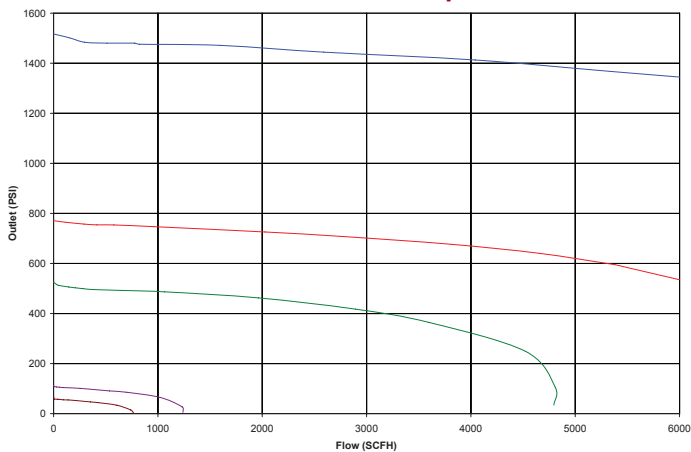
Materials of Construction

	EXCS	EXCN	EXCC	EXCG
Body	316L stainless steel	Nickel-plated brass	Chrome-plated brass	Dursan™ LS
Bonnet	304 stainless steel	Nickel-plated brass	Chrome-plated brass	Dursan LS
Piston	316L stainless steel	316L stainless steel	316L stainless steel	Dursan LS
Seat	PTFE, PCTFE	PTFE, PCTFE	PTFE, PCTFE	PTFE, PCTFE
360° filter	316L stainless steel (10 micron)	Copper nickel (20 micron)	Copper nickel (20 micron)	Dursan LS (10 micron)
Nozzle	316L stainless steel	Brass	Brass	Dursan LS
O-ring seals	Viton	Viton	Viton	Viton

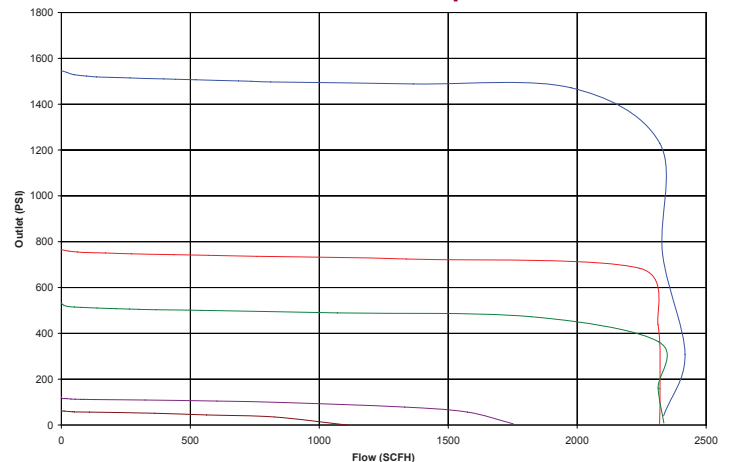
Functional Specifications

Design Pressure	<ul style="list-style-type: none"> Working pressure: 3000 psig PTFE 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)
Maximum Inlet Pressure	<ul style="list-style-type: none"> PTFE (3000 psig maximum inlet pressure) PCTFE (4500 psig maximum inlet pressure) 	Weight (bare body)	<ul style="list-style-type: none"> 1 lb. 9.2 oz. (.71 kg)
Leak Rate	<ul style="list-style-type: none"> External: 1×10^{-7} He ccs Seat: 1×10^{-7} He ccs 	Gauges (optional)	<ul style="list-style-type: none"> 1.5" manufactured to ANSI/ASME B40.1

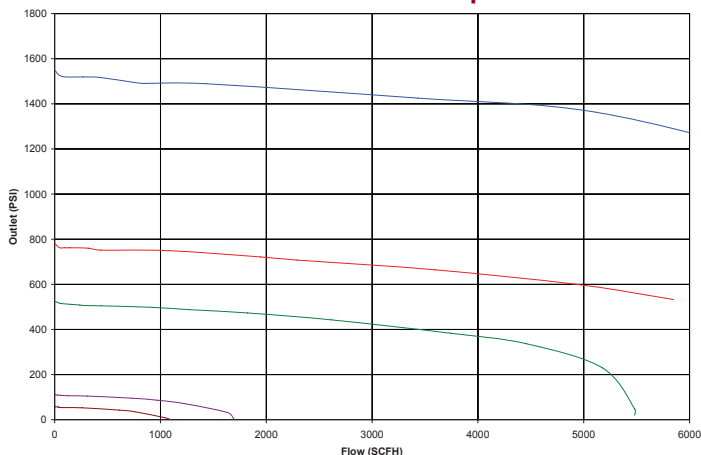
**EXC Regulator, 2100 psig Inlet Pressure
2.4mm PTFE Capsule®**



**EXC Regulator, 2100 psig Inlet Pressure
1.1mm PTFE Capsule®**



**EXC Regulator, 2100 psig Inlet Pressure
1.8 mm PTFE Capsule®**

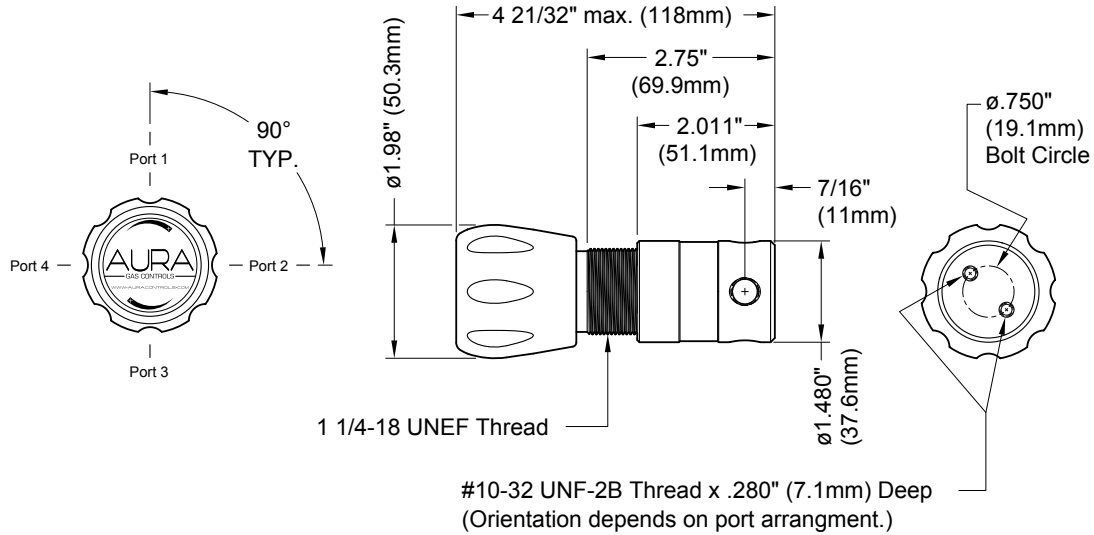


Each EXC regulator assembly includes:

- 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

AURA Products are Manufactured and Assembled in the U.S.A.

Mounting and Installing Information



Ordering Information

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

Accessories:
Panel mount kit
EXPA0003-01-000-000

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 = 0-550 psig
- 5 = 0-750 psig
- 6 = 0-1500 psig

Digit 6 - Gauges (Major/Minor Scale)

- 0 = No Gauges
- 1 = Inlet Gauge (BAR/psig)
- 2 = Outlet Gauge (BAR/psig)
- 3 = Inlet and Outlet Gauge (BAR/psig)

Digit 7 - Orifice Size and Seat

- 1 = Cv .02 PTFE
- 2 = Cv .06 PTFE
- 3 = Cv .08 PTFE
- 4 = Cv .06 PCTFE
- 5 = Cv .08 PCTFE

Digit 8 - Assembly

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

Digits 13-15 - Inlet Port*

- 000 = None (1/8" female NPT)
- Cylinder connection
- TF2 = 1/8" ss compression tube fitting
- TF4 = 1/4" ss compression tube fitting

Digit 17 - Outlet Fitting

- 0 = None (1/8" 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

Key:
ss = Stainless steel
ni = Nickel-plated brass
cp = Chrome-plated brass

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

*AURA Supports all major international cylinder connections including: CGA, BS 341, DIN 477, JIS B 8246, and others available



1501 Harpers Road, Virginia Beach, Virginia 23454

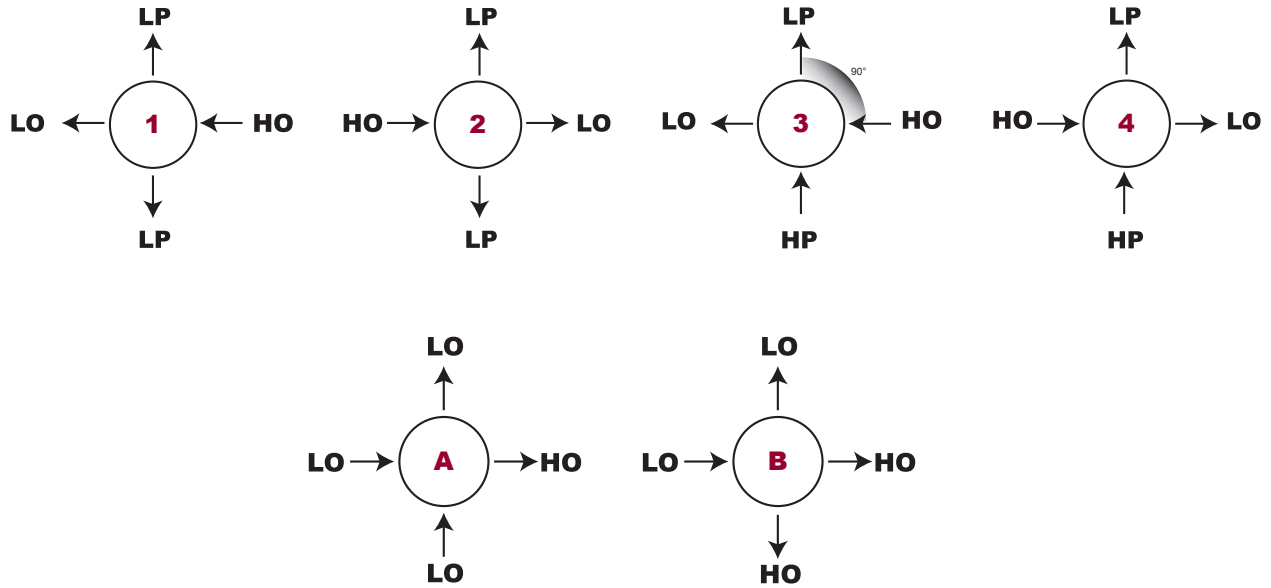
800.582.2565

www.AURACONTROLS.com

Registered ISO 9001



EXC Compact Single Stage Pressure Reducing Regulator Port Configuration Table



Key:

LO - Low Pressure Open
LP - Low Pressure Plugged
HO - High Pressure Open
HP - High Pressure Plugged



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