

High Temperature Single Stage Pressure Reducing Regulator



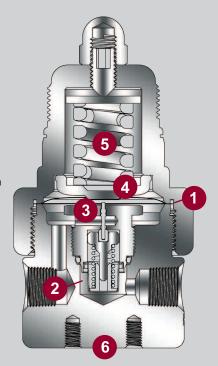
The AURA EXT series is designed to control the pressure of gases and liquids at elevated temperatures and ambient process environments as high as 500°F (260°C). AURA's encapsulated seat design consolidates the numerous moving internal components of a standard regulator into one single piece, allowing 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.

AURA's proprietary machining process yields surface finishes of 4-25 Ra designed to reduce corrosion. With its minimal internal volume, the EXT also allows less gas to be used while purging. Each EXT regulator is completely assembled with all fittings attached and is 100% helium leak checked. Additionally, the EXT undergoes multiple flow and function tests to meet the harsh demands and rugged environment of any application worldwide.

The EXT is available with Dursan® LS inert and anticorrosive technology that provides superior corrosive resistance versus exotic metals in highly acidic or caustic applications. Combined with AURA's heat resistant design, the EXT is the flexible and reliable choice in high temperature applications.

EXT Features

- 1. Metal to metal seals
 - 1x10⁻⁹ He ccs leak rate
- 2. 10-micron 360° filter
 - Significantly more filtration of impurities
- 3. Encapsulated seat design
 - Ease of maintenance
- 4. Dual surface diaphragm
 - Extremely sensitive even at lower pressures
- 5. Field access to adjusting spring
 - Change delivery pressure ranges in the field
- 6. Threaded bonnet and rear mounting holes
 - Panel or surface mount





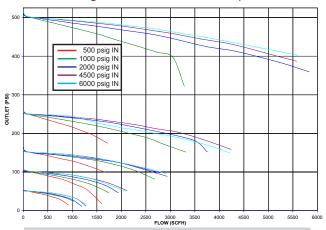
Materials of Construction

| | EXTS | EXTG |
|-----------------------|----------------------|------------|
| Body | 316L stainless steel | Dursan® LS |
| Bonnet | 304 stainless steel | Dursan LS |
| Diaphragm | 316L stainless steel | Dursan LS |
| Seat | PEEK | PEEK |
| 10-micron 360° filter | 316L stainless steel | Dursan LS |
| Nozzle | 316L stainless steel | Dursan LS |

Functional Specifications

| Design Pressure | Working pressure: 3000 psig PEEKBurst pressure >4x working pressure | Temperature | • EXTS: -40°F to 500°F (-40°C to 260°C) • EXTG: -40°F to 450°F (-40°C to 232°C) |
|------------------------|---|-----------------------|--|
| Maximum Inlet Pressure | PEEK (3000 psig maximum inlet pressure) | Weight (bare body) | • 4 lbs 10 oz. (2.10 kg) |
| Leak Rate | External: 1x10 ⁻⁹ He ccs Seat: Bubble tight | Porting | • 3 Low pressure • 1 High pressure |

EXT Regulator, 1.8mm PEEK Capsule®



Each EXT regulator assembly includes:

- 100% helium leak check
- 100% function test
- Silicone-free assembly
- Certificate of conformance

Ordering Information

EXT 4 5 0 7 1-01-13 14 15-0 17 0

Digit 4 - Material of Construction

S = 316L stainless steel

G = Dursan LS inert and anticorrosive technology

Digit 5 - Pressure Range

1 = 0-15 psig

2 = 0.50 psig3 = 0.100 psig

4 = 0-250 psig

5 = 0.500 psig

7 = 0.150 psig

Digit 7 - Orifice Size and Seat

B = Cv .06 (1.8mm) PEEK

Digits 13-15 - Inlet Fitting

Cylinder Connection

 $000 = \text{None} (\frac{1}{4}\text{" Female NPT})$

M06 = 6mm ss compression tube fitting

TF2 = $\frac{1}{8}$ " ss compression tube fitting

TF4 = 1/4" ss compression tube fitting

TF6 = 3/8" ss compression tube fitting

Digit 17- Outlet Fitting

0 = None (1/4" female NPT)

2 = 1/8" ss compression tube fitting

 $3 = \frac{1}{4}$ " ss compression tube fitting

4 = 3/8" ss compression tube fitting

 $5 = \frac{1}{2}$ " 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

Key:

ss = Stainless steel

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

Mounting and Installing Information M35x1.5 2.73" (69.3mm) #10-32 UNF-2B Thread Panel Mount Thread x .280" (7.1mm) Deep Kit (Optional) 33/64 (13mm) Hex. ø 750" (50 (19.1mm) Bolt Circle .750 Max. Panel Thickness = .375" (9.53mm) (19.1mm) ø2.200" Panel Hole = ø1.39" (35.3mm) -1.96" (49.8mm) - 3.47" (88.1mm) -.59" (15mm) -



