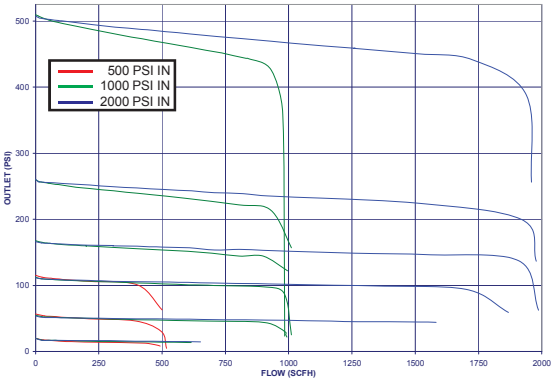
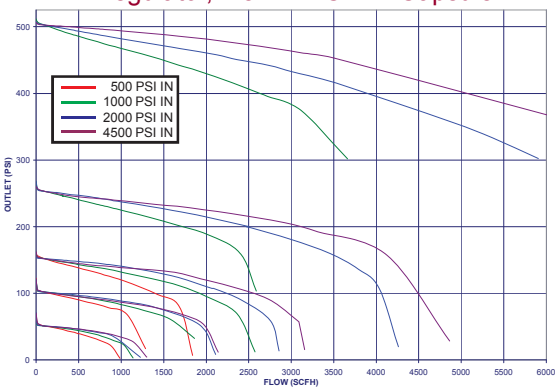
EX1

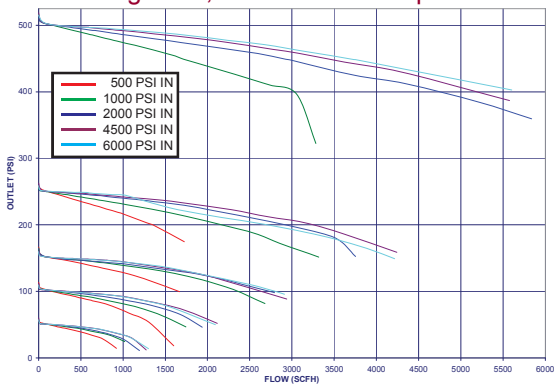
EX1 Regulator, 1.1mm PTFE Capsule®



EX1 Regulator, 1.8mm PCTFE Capsule®



EX1 Regulator, 1.8mm PEEK Capsule®



EX1 Series
Single Stage Pressure Reducing Regulator

The AURA EX1 series is designed to regulate gas or liquid in one stage of pressure control for inlet pressures up to 6000 psi. Pressure control is optimized by selecting the appropriate seat size and material for sensitive instrumentation sampling and process control applications. All stainless construction enables the EX1 to endure corrosive environments. Additionally, the EX1's low internal volume and 14-25 Ra surface finishes minimize reactivity and facilitate efficient purging.

EX1's Capsule® seat design ensures reliability under harsh conditions. Seat failure due to repetitive loading is eliminated by the Capsule®'s positive stop design. Proprietary machining provides surface finishes that yield $1x10^{-9}$ He ccs leak integrity. AURA'S dual surface surface area diaphragm provides smooth sensitive pressure control, analogous to a multi-speed automotive transmission.

These features make the EX1 the right choice for critical applications.

EX1 Features

1. Metal To Metal Seals
-$1x10^{-9}$ He cc/sec leak rate

2. 10 Micron Encapsulated Seat
-800% More filtration than disk
-Long term performance

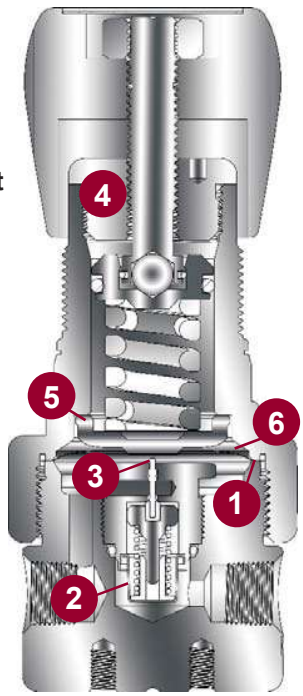
3. Positive Seat Stop
-Prevents seat deformation
-High cycle life

4. Field Adjustable
-Bonnet cap access to spring

5. Hi/Lo Diaphragm Stop
-Minimizes diaphragm stroke

6. Dual-plane Diaphragm
-Sensitive at low pressures

• Cleanroom Assembled
-Cleaned for O_2 service
-No additional cost



AURA GAS CONTROLS
LIFETIME WARRANTY

Registered
ISO 9001:2008

AURA Gas Controls
1.800.582.2565 • www.auracontrols.com • ADC3179B

SINGLE STAGE PRESSURE REDUCING REGULATOR

EX1

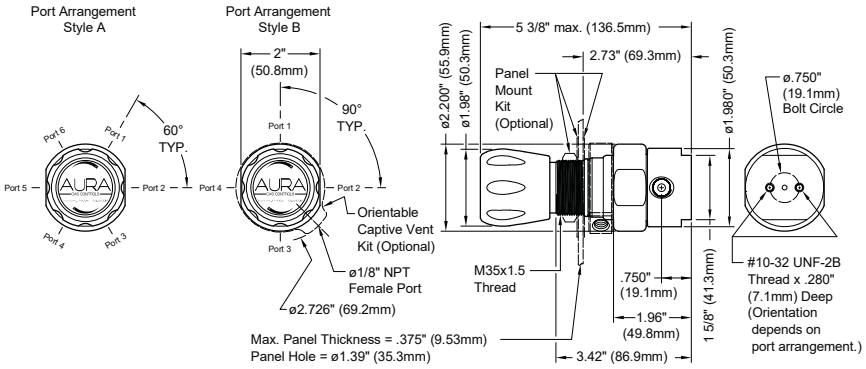
EX1 Series Technical Data Information

Materials of Construction

- Body and Bonnet
  - -Nickel-Plated brass
  - -316L Stainless steel body & 304 Bonnet
- Diaphragm
  - -316L Stainless steel
- Seat
  - -PTFE
  - -PCTFE
  - -PEEK
- 10 Micron Capsule® Filter
  - -316L Stainless steel
- Other Parts
  - -316L Stainless steel
  - -Nickel-plated brass
- Weight
  - -2 lbs. 5½ oz. (1.06 Kg)

Functional Specifications

- Design pressure
  - -Working pressure: 3000 PSIG PTFE
  - -Working pressure: 5500 PSIG PCTFE/PEEK
  - -Burst pressure: > 4x Working pressure
- Delivery options
  - -0 to15, 50, 100, 150, 250, 500 psig
- Flow Coefficient (Cv)
  - -.02, .06, .1
- Leak rate
  - -External: 1x10^{-9} He ccs
  - -Seat: Bubble tight
- Temperature
  - -PTFE: -40˚F to 140˚F (-40˚C to 60˚C)
  - -PCTFE: -40˚F to 150˚F (-40˚C to 66˚C)
  - -PEEK: -40˚F to 275˚F (-40˚C to 135˚C)
- Port Type
  - -Process and Gauge: ¼" FNPT



EX1 XXXXX-01-XXX

Regulator Type
Single Stage Pressure Reducing

Material of Construction
S = 316L
N = Nickel-Plated Brass

Pressure Range
1 = 0-15 PSI
2 = 0-50 PSI
3 = 0-100 PSI
4 = 0-250 PSI
5 = 0-500 PSI
7 = 0-150 PSI

Gauges
0 = None
1 = Inlet (PSI/kPA)
2 = Outlet (PSI/kPA)
3 = Both Inlet & Outlet (PSI/kPA)
5 = Inlet (BAR/PSI)
6 = Outlet (BAR/PSI)
7 = Both Inlet & Outlet (BAR/PSI)

Capsule® Material
1 = Cv .02 (1.1mm) PTFE
2 = Cv .06 (1.8mm) PTFE
3 = Cv .1 (3.2mm) PTFE
6 = Cv .06 (1.8mm) PCTFE
7 = Cv .1 (3.2mm) PCTFE
B = Cv .06 (1.8mm) PEEK

Inlet Port
000 = ¼" FNPT
CGA = Nut and Gland
M06 = 6mm Tube Fitting
M12 = 12mm Tube Fitting
TF2 = ⅛" Tube Fitting
TF4 = ¼" Tube Fitting
TF6 = ⅜" Tube Fitting
TF8 = ½" Tube Fitting

Code
01 = AURA

Assembly *(See Port Configuration Table Following Product Pages)*
1 = A
2 = B
3 = C
4 = D
5 = E
6 = F
7 = AA
8 = AB
9 = AF
A = AC
B = G
C = H
D = AD