

# 455 Series Regulator

*Single Stage  
Electroless  
Nickel-plated  
Forged Brass Body  
Corrosive Service*



455-2332 shown

The 455 Series regulators are intended for primary pressure control of highly corrosive gases such as chlorides, sulfides and other acid-forming gases.

## Deep Purge

For safety and corrosion prevention, CONCOA highly recommends the addition of a Deep Purge assembly to the 455 Series regulator. Completely purging a system avoids the release of hazardous gases into the work place. In addition, the Deep Purge prevents the introduction of moisture to the regulator which forms acids in the body and results in corrosion.

## Typical Applications

- *Hydrogen chloride*
- *Chlorine*
- *Boron trichloride*
- *Hydrogen bromide*
- *Hydrogen sulfide*
- *Dichlorosilane*

## 400 Advantage

- *Nickel-plated forged brass body*  
Durable, long-lasting construction
- *Convolute 316L stainless steel diaphragm*  
Sensitive to downstream changes
- *Capsule® seat*  
Serviceability and long life
- *Captured vent capable*  
Safely vent exhaust gases
- *Hastelloy® seat assembly*  
Superior corrosion resistance
- *High-load marginal spring*  
Positive seat closure
- *Pipe away relief valve*  
Safely vent exhaust gases

## Materials

*Body*  
Electroless nickel-plated forged brass

*Bonnet*  
Electroless nickel-plated forged brass

*Seat*  
PTFE

*Nozzle*  
Hastelloy®

*Diaphragm*  
316L stainless steel

*Diaphragm Seal*  
PTFE

## Specifications

*Maximum Inlet Pressure*  
3000 PSIG (210 BAR)

*Temperature Range*  
-40°F to 140°F (-40°C to 60°C)

*Gauges*  
2½" diameter Monel®

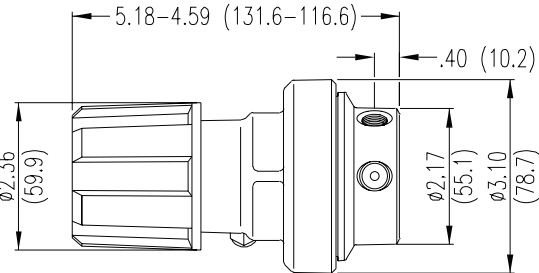
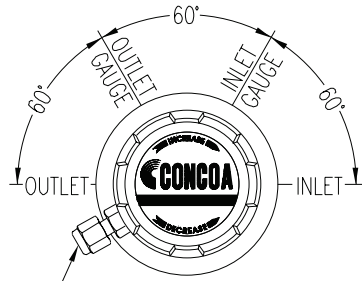
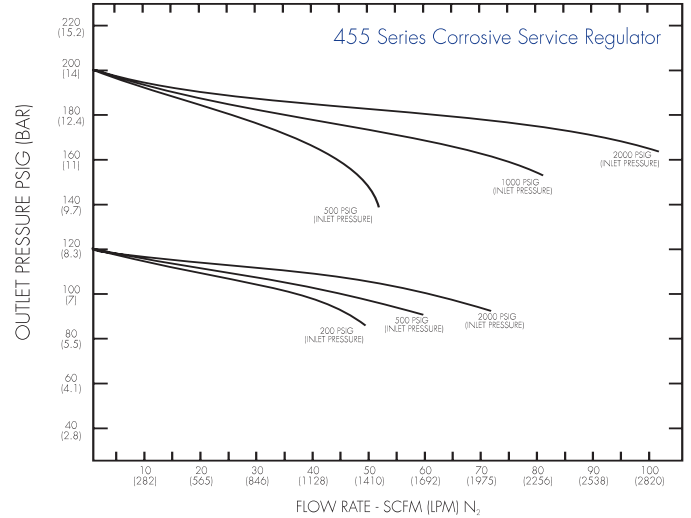
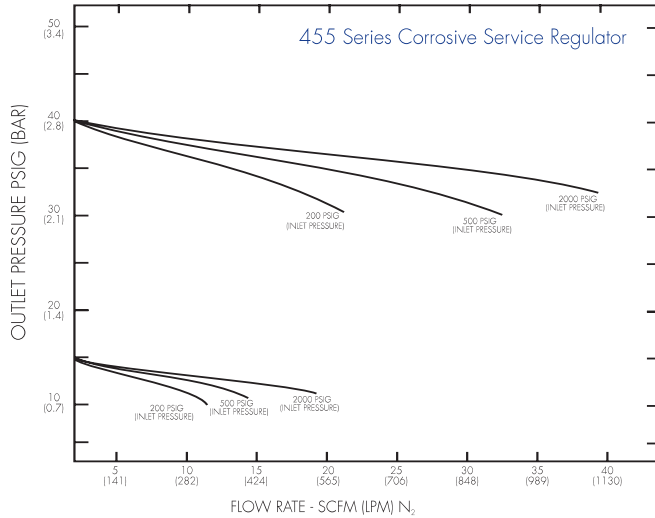
*Ports*  
¼" FPT

*Helium Leak Integrity*  
1 x 10<sup>-8</sup> scc/sec

*Cv*  
0.2

*Weight (455-2332-660)*  
7.23 lbs. (3.28 kg)

# Flow Performance Curves



1/8" TUBE FITTING FOR VENTING OF GASES IN CASE OF OVERPRESSURE

## Ordering Information *(For information about how to use this table please see page 4.)*

455-	A		B	C	D	-Inlet	Options
Series 455	<b>Outlet Pressure</b> 1: 0-15 2: 0-40 3: 0-120 4: 0-200 5: 0-250	<b>Outlet Gauge</b> 30"-0-30 PSIG 0-60 PSIG 0-200 PSIG 0-400 PSIG 0-400 PSIG	<b>Inlet Gauge</b> 0: None 3: 0-4000 PSIG 5: 0-1000 PSIG 6: 0-300 PSIG 7: 0-400 PSIG 8: 0-200 PSIG	<b>Outlet Assemblies</b> 0: 1/4" FPT Port 1: 1/4" MPT 2: 1/4" Tube Fitting 3: Diaphragm Valve 1/4" Tube Fitting 4: Diaphragm Valve 1/4" MPT 5: Needle Valve 1/4" MPT 6: 1/8" Tube Fitting 7: 3/8" Tube Fitting 8: Diaphragm Valve 1/8" Tube Fitting 9: Diaphragm Valve 1/4" FPT A: 3/8" BSP Right Hand Fitting M: 6mm Tube Fitting S: Diaphragm Valve 6mm Tube Fitting	<b>Assembly/ Gauges</b> 0: Bare Body 1: Standard Assembly (PSIG/kPa Gauge) without Deep Purge 2: Standard Assembly (PSIG/kPa Gauge) with Deep Purge 4: Standard Assembly (PSIG/BAR Gauge) without Deep Purge 5: Standard Assembly (PSIG/BAR Gauge) with Deep Purge	<b>Inlet Connections</b> 000: 1/4" FPT TF2: 1/8" Tube TF4: 1/4" Tube TF6: 3/8" Tube M06: 6mm Tube  CGA DIN 477 BS 341 and others available	<b>Installed Options</b> A: Protocol Alarm Station (110V)* B: Protocol Alarm Station (220V)* C: Protocol Switchover Station* G: Protocol Switchover Station with Alarm (110V)* H: Protocol Switchover Station with Alarm (220V)* M: Protocol Station*  <i>*Not available with deep purge</i>
<b>Related Options</b>			• Passivation for Fluorine Service (550-0003)				