

## EQUIPMENT AND ACCESSORIES 402

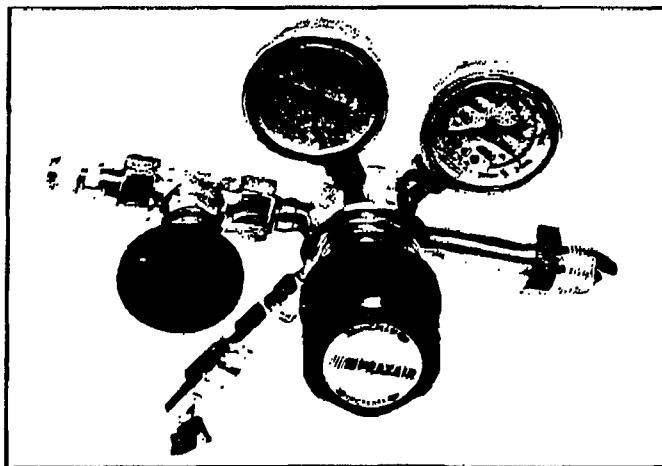
## CRITICAL PURITY REGULATORS FOR NON-CORROSIVE SERVICE

## Single Stage Brass Barstock Body Six-Port Configuration 316L Stainless Steel Diaphragm

The 402 Series regulators are intended for primary pressure control of non-corrosive, high purity or liquefied gases or for applications where minor fluctuations in outlet pressure due to diminishing inlet supply can be tolerated.

## Typical Applications

- Gas and liquid chromatography
- Critical purity carrier gases
- Zero, span, and calibration gases
- High purity chamber pressurization
- Liquefied hydrocarbon gas control
- Control of cryogenic gases



## Features and benefits of the 402 Series Regulators

- |   |  |   |   |
|---|--|---|---|
| ■ <b>Brass Barstock Body</b><br><b>CONTROLLED SURFACE INTEGRITY</b>               | ■ <b>Metal-to-Metal Diaphragm Seal</b><br><b>NO POSSIBILITY OF GAS</b><br><b>CONTAMINATION</b> | ■ <b>Orientable Captured Vent Capable</b><br><b>SAFE AND EASY INSTALLATION</b>              | ■ <b>Pipe Away Relief Valve</b><br><b>SAFELY VENT EXHAUSTED GASES</b>                   |
| ■ <b>Front and Rear Panel Mountable</b><br><b>VERSATILE SYSTEM CONFIGURATION</b>  | ■ <b>Capsule® Seat</b><br><b>INCREASED SERVICEABILITY AND LIFE</b>                             | ■ <b>Low Wetted Volume</b><br><b>MINIMAL PURGE REQUIREMENTS</b>                             | ■ <b>Delivery Pressure Range Easily</b><br><b>Changed</b><br><b>MAXIMUM FLEXIBILITY</b> |
| ■ <b>Pressure Ranges 0-15 to 0-500 PSIG</b><br><b>BROAD RANGE OF APPLICATIONS</b> | ■ <b>316L Stainless Steel Diaphragm</b><br><b>NO INWARD DIFFUSION</b>                          | ■ <b>Field-Adjustable Pressure Limit</b><br><b>SAFEGUARD DOWNSTREAM</b><br><b>EQUIPMENT</b> |   |

## Specifications

- **Maximum Inlet Pressure**  
3000 PSIG (210 BAR)  
5500 PSIG (380 BAR) OPTIONAL
- **Temperature Range**  
-40°F to 140°F (-40°C TO 60°C)
- **Gauges**  
2" DIAMETER BRASS
- **Ports**  
1/4" FPT
- **Helium Leak Integrity**  
1 X 10<sup>-9</sup> SCC/SEC
- **Cv**  
0.1
- **Weight**  
3.8 LBS. (1.71 KG)

## Materials

- *Body*  
**BRASS BARSTOCK**
- *Bonnet*  
**BRASS BARSTOCK**
- *Seat*  
**PTFE TEFLON®**  
(KEL-F® OPTIONAL)
- *Filter*  
**10 MICRON SINTERED BRONZE**
- *Diaphragm*  
**316L STAINLESS STEEL**
- *Internal Seals*  
**PTFE TEFLON®**

## Ordering Information — Series CON 402

A	B	C	D	CGA	
<b>Outlet Pressure</b>	<b>Outlet Gauge</b>	<b>Inlet Gauge</b>	<b>Outlet Assemblies</b>	<b>Assembly/Gauges</b>	<b>Connections</b>
1: 0-15"	30" 0-30 PSIG	0: None	0: 1/4" FPT Port	0: Bare Body	CGA
2: 0-50	30" 0-100 PSIG	3: 0-4000 PSIG	1: 1/4" MPT	1: Standard Assembly (PSI/kPa Gauges)	DIN477
3: 0-100	30" 0-200 PSIG	5: 0-1000 PSIG	2: 1/4" Tube Fitting	2: Standard Assembly (BAR/PSI Gauges)	BS341
4: 0-250	0-400 PSIG	6: 0-300 PSIG	3: Diaphragm Valve 1/4" Tube Fitting	4: Cleanroom Assembly (PSI/kPa Gauges)	and others
5: 0-500	0-1000 PSIG	7: 0-400 PSIG	4: Diaphragm Valve 1/4" MPT	5: Cleanroom Assembly (BAR/PSI Gauges)	available
7: 0-150	30" 0-200 PSIG	8: 0-6000 PSIG*	5: Needle Valve 1/4" MPT		
		*Maximum inlet pressure 5500 PSIG (380 BAR) with Kal-F <sup>®</sup> Seal Capsule.	6: 1/8" Tube Fitting		
			7: 3/8" Tube Fitting		
			8: Diaphragm Valve 1/8" Tube Fitting		
			9: Diaphragm Valve 1/4" FPT		

Option	Order No.	Description
PANEL MOUNT KIT	CON 550-0002	To mount the regulator using threads on the bonnet. Material: Nickel-plated brass
CAPTURED VENT KIT	CON 550-0001	Orientable 360° for easy piping of vented gases to a safe location in the event of diaphragm failure. Material: Nickel-plated Brass
HELIUM LEAK CERTIFICATION	CON 476-0002	Inboard Helium leak certification to less than $1 \times 10^{-8}$ scc/sec
PROTOCOL STATION	Add Letter "M" after CGA	Convenient wall mount for a regulator, including tee, bracket, and flexible stainless steel pigtail with check valve in the inlet gland
DEEP PURGE	CON 502-3007	For installation between the regulator and cylinder to assure purging of dead volume and all exposed cavities

## EQUIPMENT AND ACCESSORIES

432

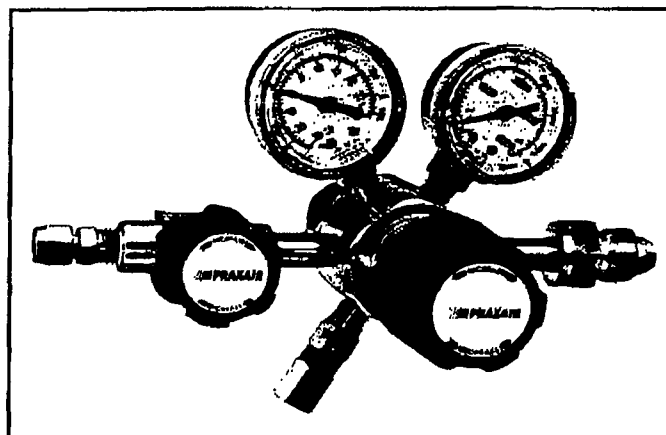
## CRITICAL PURITY REGULATORS FOR CORROSIVE SERVICE

## Dual Stage Stainless Steel Barstock Body Six-Port Configuration 316L Stainless Steel Diaphragm

The 432 Series regulators are intended for primary pressure control of ultra-high purity or corrosive gases for applications requiring constant pressure control and delivery regardless of supply pressure.

## Typical Applications

- EPA Protocol gases
- Gas and liquid chromatography
- High purity carrier gases
- Zero, span, and calibration gases
- High purity chamber pressurization



## Features and benefits of the 432 Series Regulators

- 316L Stainless Steel Barstock Body  
ENHANCED CORROSION RESISTANCE
- Front Panel Mountable  
EASY INSTALLATION
- 10 Micron Filtration In Both Stages  
FAILSAFE SEAT PERFORMANCE
- Pressure Ranges 0-15 to 0-250 PSIG  
BROAD RANGE OF APPLICATIONS
- Metal-to-Metal Diaphragm Seal  
NO POSSIBILITY OF GAS CONTAMINATION
- Capsule® Seat  
INCREASED SERVICEABILITY AND LIFE
- 316L Stainless Steel Diaphragm  
NO INBOARD DIFFUSION
- Orientable Captured Vent Capable  
SAFE AND EASY INSTALLATION
- Low Wetted Volume  
MINIMAL PURGE REQUIREMENTS
- Field-Adjustable Pressure Limit  
SAFEGUARD DOWNSTREAM EQUIPMENT
- Pipe Away Relief Valve  
SAFELY VENT EXHAUSTED GASES
- Delivery Pressure Range Easily Changed  
MAXIMUM FLEXIBILITY

## Specifications

- Maximum Inlet Pressure  
3000 PSIG (210 BAR)  
5500 PSIG (380 BAR) OPTIONAL
- Temperature Range  
-40°F to 140°F (-40°C to 60°C)
- Gauges  
2" DIAMETER STAINLESS STEEL
- Ports  
1/4" FPT
- Helium Leak Integrity  
1 X 10<sup>-9</sup> SCC/SEC
- Cv  
0.1
- Weight  
5.4 LBS. (2.43 KG)

## Materials

- Body  
316L STAINLESS STEEL BARSTOCK
- Bonnet  
CHROME-PLATED BRASS BARSTOCK
- Seat  
PTFE TEFLON®  
KEL-F® WITH 5500 PSIG INLET OPTION
- Filter  
10 MICRON SINTERED 316L STAINLESS STEEL
- Diaphragm  
316L STAINLESS STEEL
- Internal Seals  
PTFE TEFLON®

## Ordering Information — Series CON 432

A	B	C	D	CGA
Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly/Gauges — Connections
1: 0-15	30°-0-30 PSIG	0: None	0: 1/4" FPT Port	0: Bare Body
2: 0-50	30°-0-100 PSIG	3: 0-4000 PSIG	1: 1/4" MPT	1: Standard Assembly (PSI/kPa Gauges)
3: 0-100	30°-0-200 PSIG	5: 0-1000 PSIG	2: 1/4" Tube Fitting	2: Standard Assembly (BAR/PSI Gauges)
4: 0-250	0-400 PSIG	6: 0-300 PSIG	3: Diaphragm Valve 1/4" Tube Fitting	4: Cleanroom Assembly (PSI/kPa Gauges)
7: 0-150	30°-0-200 PSIG	7: 0-400 PSIG	4: Diaphragm Valve 1/4" MPT	5: Cleanroom Assembly (BAR/PSI Gauges)
		8: 0-6000 PSIG	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	

\*Maximum inlet pressure  
5500 PSIG (380 BAR)  
with Kel-F® Seat Capsule.

Option	Order No.	Description
PANEL MOUNT KIT	CON 550-0002	To mount the regulator using threads on the bonnet. Material: Nickel-plated brass
CAPTURED VENT KIT	CON 550-0001	Orientable 360° for easy piping of vented gases to a safe location in the event of diaphragm failure. Material: Nickel-plated Brass
HELIUM LEAK CERTIFICATION	CON 476-0002	Inboard Helium leak certification to less than 1 x 10 <sup>-8</sup> scc/sec
PROTOCOL STATION	Add letter "M" after CGA	Convenient wall mount for a regulator, including tee, bracket, and flexible stainless steel pigtail with check valve in the inlet gland
DEEP PURGE	CON 502-3007	For installation between the regulator and cylinder to assure purging of dead volume and all exposed cavities