

## 400 Series Regulators

452 Series Regulator

## Vaporizing Regulator

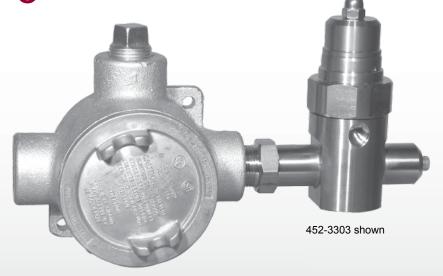
#### 316L Stainless Steel

### Single Stage

The 452 Series electrically-heated vaporizing regulator is designed to heat and vaporize an inlet gas stream containing heavy hydrocarbons so that they will remain in the vapor state for chromatographic analysis. The entire system is explosion-proof for safety. Three temperature ranges, three heater wattages, and six outlet pressure ranges allow the 452 Series regulators to meet the needs of diverse applications.



- 316L stainless steel barstock body Increased corrosion resistance
- Pressure ranges 0 15 to 0 500 PSIG Wide variety of applications
- Metal to metal seals
  No possibility of gas contamination



- Capsule® Seat Increased serviceability and life
- Internal heat exchanger Improved heat transfer
- Adjustable thermistor controller Close control of gas temperature

## 400 Series Advantage

- Metal-to-metal diaphragm seal
  No possibility of gas contamination
- Capsule® seat Increased serviceability and life
- Low wetted surface area Minimal purge requirements
- Thermistor controller
  Easily adjustable temperature limit
- Explosion-proof enclosure Class 1, Division 1, Group A, B, C & D
- Third-party conformity certification CAN/CSA E60079-0 and E60079-1, UL 1203, ATEX 13688

#### **Materials**

Body

316L stainless steel barstock

**Bonnet** 

Stainless steel barstock

Seat

Arlon® (PEEK)

Diaphragm

316L stainless steel

Heat Exchanger

316L stainless steel

Explosion-proof Enclosure Iron alloy/Aluminum

Heater Wattage 50, 100 or 150 watts

Filte

10 Micron patented multi layer stainless steel mesh

## **Specifications**

Maximum Inlet Pressure 3000 PSIG (210 BAR)

Temperature Range

77°F to 180°F (25°C to 82°C) 160°F to 280°F (71°C to 138°C) 250°F to 380°F (121°C to 193°C)

Maximum Flow (100 PSIG) 600 SCFH (283 LPM)

Inlet Connection 1/8" FPT

Outlet Connection 1/4" FPT

Helium Leak Integrity 1 x 10<sup>-9</sup> scc/sec

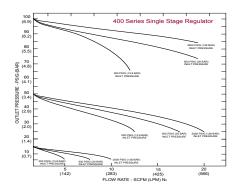
Weight (452-3301)

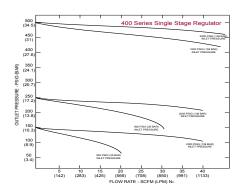
6 lbs. (2.7 kg)

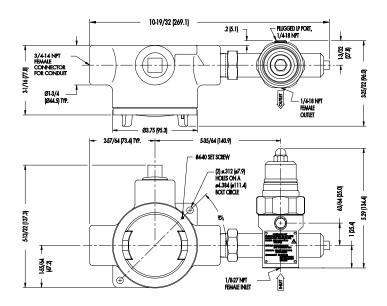
# 400 Series Regulators



## **Technical Information**







## **Ordering Information**

452	A	В	С	D	-Inlet
Series 452	Max Delivery Pressure	Heater Wattage	Outlet Connection	Temperature Range/ Voltage	Connections
	1: 15 PSIG	1: 50 Watts	0: 1/4" FPT	1: 77 ° - 180°F/120 VAC	000: ¼" FPT
	2: 50 PSIG	2: 100 Watts	1: 1/4" Tube Fitting	2: 160° - 280°F/120 VAC	TF2: 1/8" Tube
	3: 100 PSIG	3: 150 Watts	2: 1/4" Tube Fitting	3: 250° - 380°F/120 VAC*	TF4: 1/4" Tube
	4: 250 PSIG		3: %" Tube	4: 77° - 180°F/220 VAC	TF6: 3/8" Tube
	5: 500 PSIG		M: 6mm Tube Fitting	5: 160° - 280°F/220 VAC	M06: 6mm Tube
	7: 150 PSIG			6: 250° - 380°F/220 VAC*	

\*Not available with 50 Watt heater