

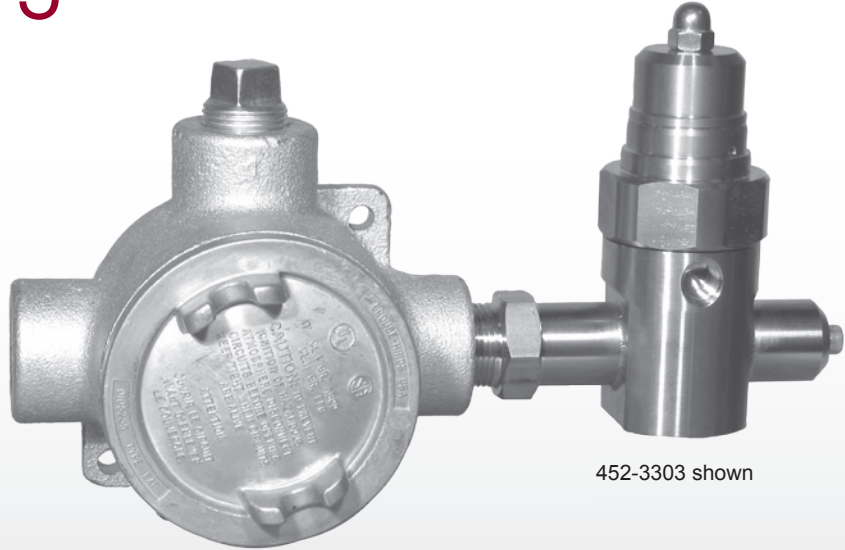
## 452 Series Regulator

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.



452-3303 shown

### Features

- 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
- Filter  
10 Micron patented multi layer  
stainless steel mesh

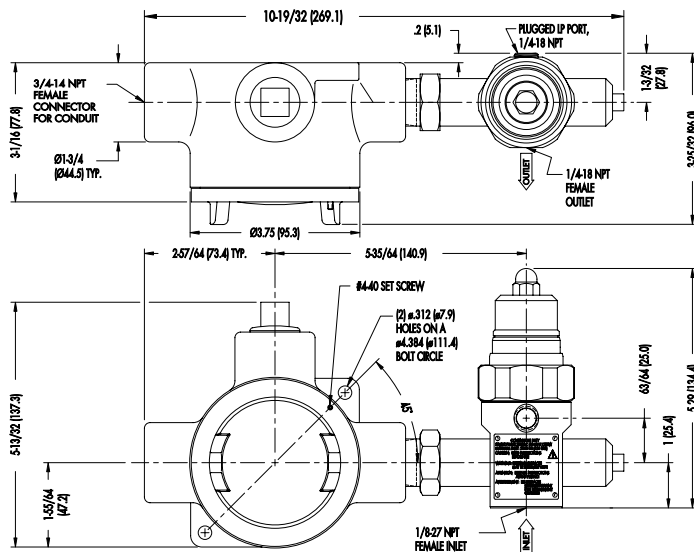
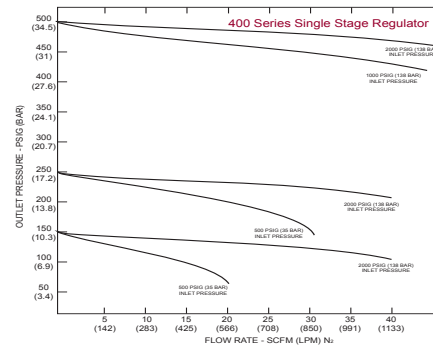
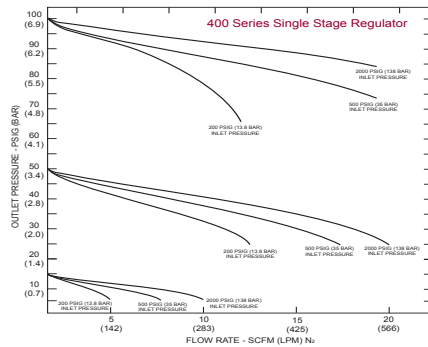
### Specifications

- 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	B	C	D	-Inlet
Series 452	Max Delivery Pressure	Heater Wattage	Outlet Connection	Temperature Range/ Voltage	Connections
	1: 15 PSIG	1: 50 Watts	0: ¼" FPT	1: 77° - 180° F/120 VAC	000: ⅛" FPT
	2: 50 PSIG	2: 100 Watts	1: ⅜" Tube Fitting	2: 160° - 280° F/120 VAC	TF2: ⅜" Tube
	3: 100 PSIG	3: 150 Watts	2: ¼" Tube Fitting	3: 250° - 380° F/120 VAC*	TF4: ¼" Tube
	4: 250 PSIG		3: ⅝" Tube	4: 77° - 180° F/220 VAC	TF6: ⅝" 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