



400 Series Regulators

453 Series Regulator

316L Stainless Steel Steam-Heated Vaporizing Regulator

The 453 Series Steam-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 unique heat exchanger portion of the regulator is designed to maximize contact with the media steam for highly efficient heat transfer. The durable design, Capsule® seat, and six outlet pressure ranges allow the 453 Series regulators to meet the needs of diverse applications.



453-0000 shown

Features

- 316L stainless steel barstock body
- Pressure ranges available:
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
- Temperature rating to 550°F (288°C)
High level of heating capability

400 Series Advantage

- 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
Safety in any installation
- Low wetted surface area
Minimal purge requirements
- 10-micron sintered wire mesh inlet filter
Protects seat from being damaged by particulate

Materials

- Body
316L stainless steel barstock
- Bonnet
316L stainless steel barstock
- Seat
Arlon® (PEEK)
- Diaphragm
316L stainless steel
- Heat Exchanger
316L stainless steel barstock

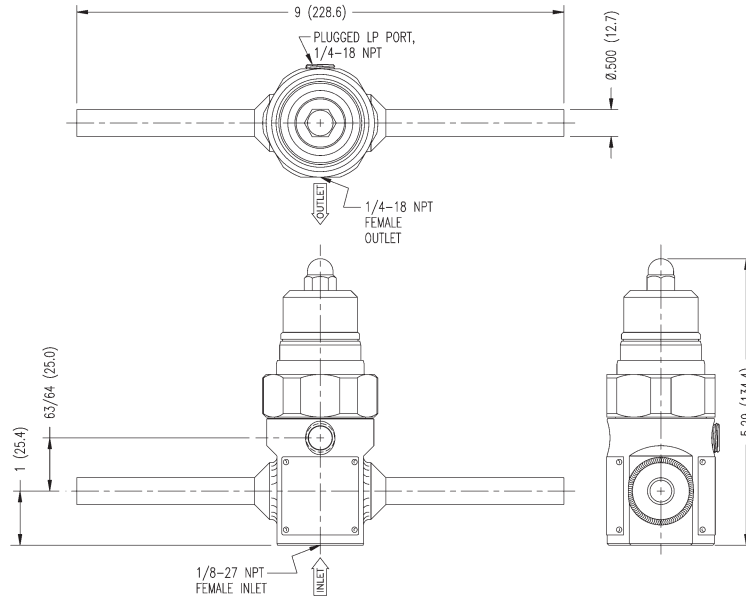
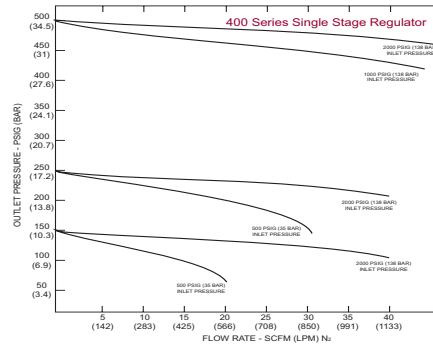
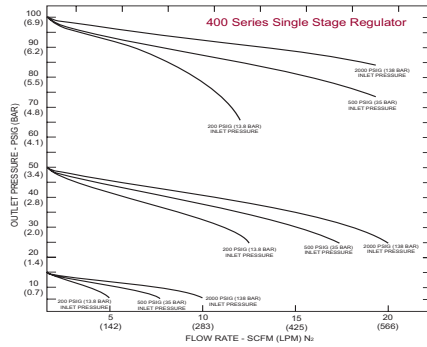
Specifications

- Maximum Inlet Pressure
3000 PSIG (210 BAR)
- Maximum Temperature
550°F (288°C)
- Maximum Flow (100 PSIG)
600 SCFH (283 LPM)
- Inlet Connection
1/8" FPT
- Outlet Connection
1/4" FPT
- Steam Tubing
1/2" O.D. x .049 wall thickness
- Helium Leak Integrity
1 x 10⁻⁹ scc/sec
- Weight
3.5 lbs. (1.59 kg)

400 Series Regulators



Technical Information



Ordering Information

453	A	B	C	D	-Inlet
Series 453	Max Delivery Pressure	0	Outlet Connection	0	Connections
	1: 15 PSIG		0: 1/4" FPT		000: 1/4" FPT
	2: 50 PSIG		1: 1/8" Tube Fitting		TF2: 1/8" Tube
	3: 100 PSIG		2: 1/4" Tube Fitting		TF4: 1/4" Tube
	4: 250 PSIG		3: 3/8" Tube		TF6: 3/8" Tube
	5: 500 PSIG		M: 6mm Tube Fitting		M06: 6mm Tube
	7: 150 PSIG				