

# 451 Series Regulator

*High Temperature  
Regulator*

*316L Stainless Steel*

*Single Stage*



451-0000 shown

The 451 Series high temperature is designed to withstand the rigorous demands of high temperature ambient or process applications to 550 °F (288 °C). The corrosion and heat resistant design make it ideal for pressure control in petrochemical process systems or high temperature furnace applications.

## Advanced 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
- *Temperature rating to 550 °F (288 °C)*  
High level of heat resistance

## 400 Advantage

## Materials

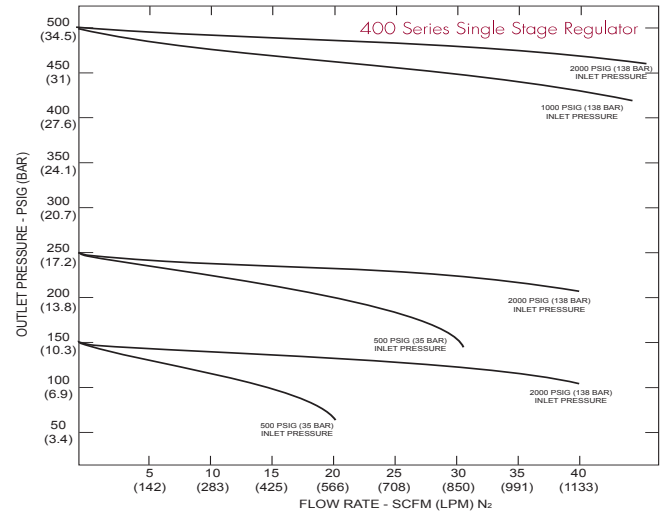
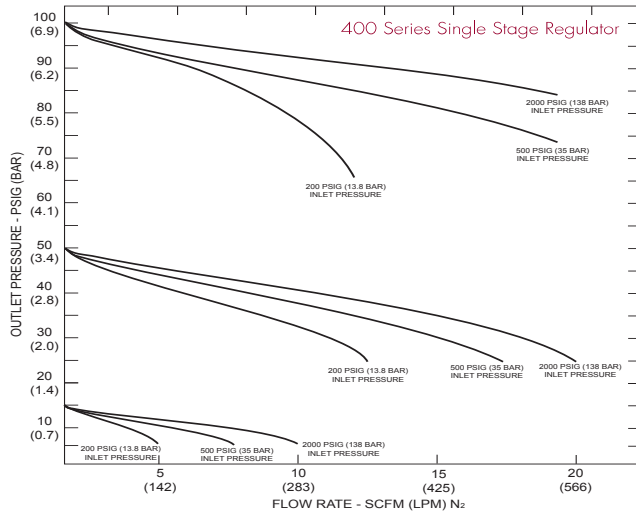
## Specifications

<ul style="list-style-type: none"> <li>• Metal-to-metal diaphragm seal <i>No possibility of gas contamination</i></li> <li>• Capsule seat <i>Increased serviceability and life</i></li> <li>• 316L stainless steel diaphragm <i>No inboard diffusion</i></li> <li>• Orientable captured vent capable up to 400 °F (200 °C) <i>Safety in any installation</i></li> <li>• Low wetted surface area <i>Minimal purge requirements</i></li> <li>• 10 micron sintered wire mesh inlet filter <i>Protects seat from being damaged by particulate</i></li> </ul>	<ul style="list-style-type: none"> <li>• Body <i>316L stainless steel barstock</i></li> <li>• Bonnet <i>Stainless steel barstock</i></li> <li>• Diaphragm <i>316L stainless steel</i></li> <li>• Capsule Seat® <i>Arlon (PEEK)</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Maximum Inlet Pressure</i> 3000 PSIG (210 BAR)</li> <li>• <i>Temperature Range</i> 550°F (288°C)</li> <li>• <i>Inlet Connection</i> 1/4" FPT</li> <li>• <i>Outlet Connection</i> 1/4" FPT</li> <li>• <i>Helium Leak Integrity</i> 1 x 10<sup>-9</sup> scc/sec</li> <li>• <i>Weight</i> 2.3 lbs. (1.04 kg)</li> </ul>
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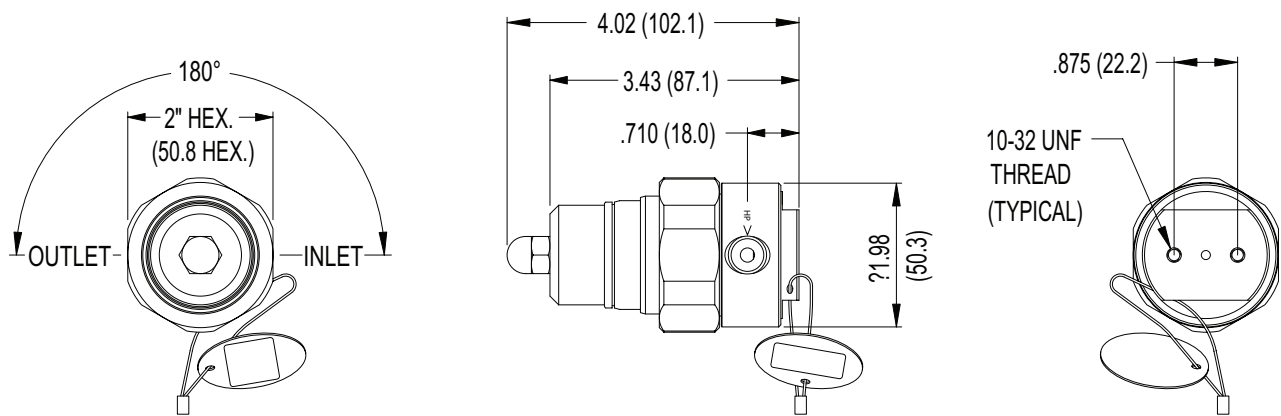
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# Flow Performance Curves



400 Series High Temp. & Vaporizing Regulators



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

451	A	B	C	D	-Inlet
<b>Series 451</b>	<b>Max Delivery Pressure</b> 1: 15 PSIG 2: 50 PSIG 3: 100 PSIG 4: 250 PSIG 5: 500 PSIG 7: 150 PSIG	0	<b>Outlet Connection</b> 0: 1/4" FPT 1: 1/8" Tube Fitting 2: 1/4" Tube Fitting 3: 3/8" Tube M: 6mm Tube Fitting	Assembly/Bare Body 1: Standard Assembly 4: Clean Room Install	<b>Connections</b> 000: 1/4" FPT TF2: 1/8" Tube TF4: 1/4" Tube TF6: 3/8" Tube M06: 6mm Tube