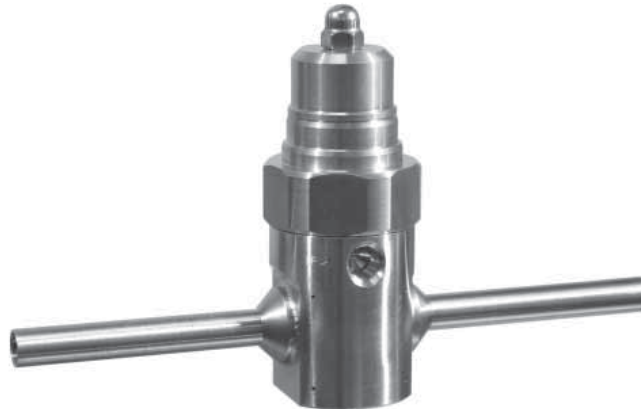


## 453 Series

steam heated, single stage, stainless steel barstock regulator

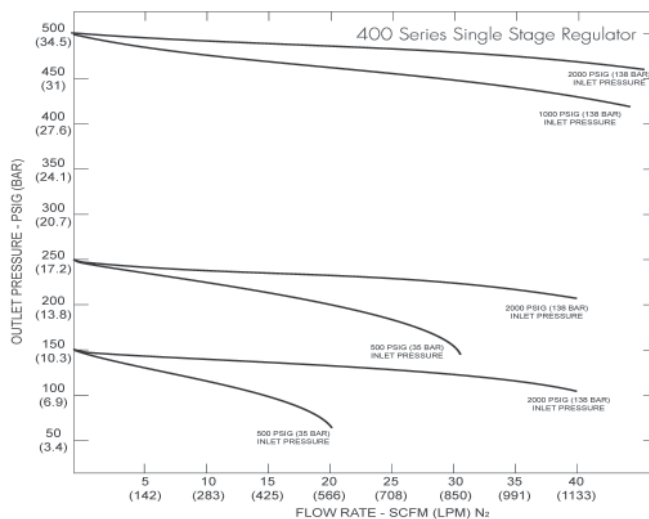
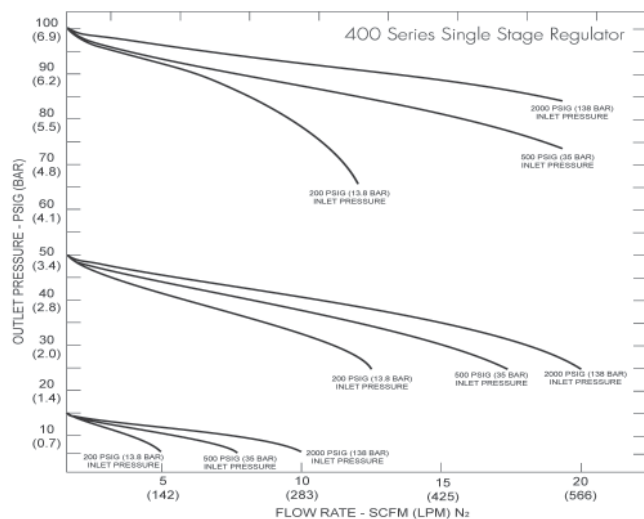


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Description	Advanced Features	Typical Applications
<p>The 453 Series Steam-heated vaporizing regulator is designed to heat and vaporize an inlet gas stream containing heavy hydrocarbons so that they will remain in the vapor state for chromatographic analysis. The unique heat exchanger portion of the regulator is designed to maximize contact with the media steam for highly efficient heat transfer.</p>	<ul style="list-style-type: none"> <li>• <i>316L stainless steel barstock body</i></li> <li>• <i>Pressure ranges available: 0-15 to 0-500 PSIG</i> Wide variety of applications</li> <li>• <i>Metal to metal seals</i> No possibility of gas contamination</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Capsule Seat</i> Increased serviceability and life</li> <li>• <i>Internal heat exchanger</i> Improved heat transfer</li> <li>• <i>Temperature rating to 550°F (288°C)</i> High level of heating capability</li> </ul>

400 Series Advantage	Materials	Specifications
<ul style="list-style-type: none"> <li>• <i>Metal-to-metal diaphragm seal</i> No possibility of gas contamination</li> <li>• <i>Capsule® seat</i> Increased serviceability and life</li> <li>• <i>316L stainless steel diaphragm</i> No inboard diffusion</li> <li>• <i>Orientable captured vent capable</i> Safety in any installation</li> <li>• <i>Low wetted surface area</i> Minimal purge requirements</li> <li>• <i>Field-adjustable pressure limit</i> Safeguard downstream equipment</li> <li>• <i>Pipe away relief valve</i> Safely vent exhaust gases</li> <li>• <i>Delivery pressure range easily changed</i> Maximum flexibility</li> </ul>	<p><i>Body</i> 316L stainless steel barstock</p> <p><i>Bonnet</i> 316L stainless steel barstock</p> <p><i>Seat</i> Arlon® (PEEK)</p> <p><i>Diaphragm</i> 316L stainless steel</p> <p><i>Heat Exchanger</i> 316L stainless steel barstock</p>	<p><i>Maximum Inlet Pressure</i> 3000 PSIG (210 BAR)</p> <p><i>Maximum Temperature</i> 550°F (288°C)</p> <p><i>Maximum Flow (100 PSIG)</i> 600 SCFH (283 LPM)</p> <p><i>Inlet Connection</i> 1/8" FPT</p> <p><i>Outlet Connection</i> 1/4" FPT</p> <p><i>Steam Tubing</i> 1/2" O.D. x .049 wall thickness</p> <p><i>Helium Leak Integrity</i> 1 x 10<sup>-8</sup> scc/sec</p> <p><i>Weight</i> 3.5 lbs. (1.59 kg)</p>

Flow Performance



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Ordering Information and Configuration Options

453	A	B	C	D	-Inlet
Series 453	<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: ¼" FPT 1: ⅛" Tube Fitting 2: ¼" Tube Fitting 3: ⅜" Tube Fitting M: 6mm Tube Fitting	0	<b>Connections</b> 000: ⅛" FPT TF2: ⅛" Tube TF4: ¼" Tube TF6: ⅜" Tube M06: 6mm Tube