

445 Series

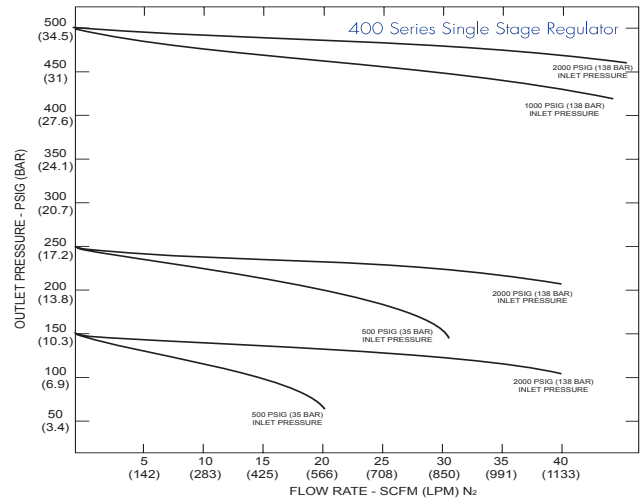
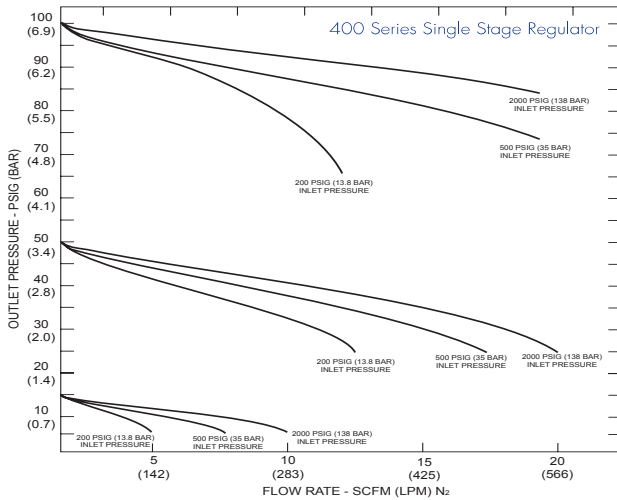
single stage, stainless steel barstock line regulator



Description	Advanced Features	Typical Applications
The 445 Series regulators are intended for secondary pressure control of ultra high purity and corrosive gases or as point-of-use pressure control in high purity gas distribution systems.	<ul style="list-style-type: none"> Stainless steel barstock body Smooth surface finish Front and rear panel mountable Versatile system configuration Pressure ranges 0-15 to 0-500 PSIG Broad range of applications 3000 PSIG inlet pressure rating Safe use with high pressure cylinders 	<ul style="list-style-type: none"> Bulk gas distribution systems Gas and liquid chromatography High purity carrier gases Zero, span and calibration gases High purity chamber pressurization Liquefied hydrocarbon gas control Control of cryogenic gases Corrosive service

400 Series Advantage	Materials	Specifications
<ul style="list-style-type: none"> <i>Metal-to-metal diaphragm seal</i> No possibility of gas contamination <i>Capsule® seat</i> Increased serviceability and life <i>316L stainless steel diaphragm</i> No inboard diffusion <i>Orientable captured vent capable</i> Safety in any installation <i>Low wetted surface area</i> Minimal purge requirements <i>Field-adjustable pressure limit</i> Safeguard downstream equipment <i>Pipe away relief valve</i> Safely vent exhaust gases <i>Delivery pressure range easily changed</i> Maximum flexibility 	<p><i>Body</i> 316L stainless steel barstock</p> <p><i>Bonnet</i> Chrome-plated brass barstock</p> <p><i>Seat</i> PTFE</p> <p><i>Filter</i> 10 micron stainless steel multi-layer mesh</p> <p><i>Diaphragm</i> 316L stainless steel</p> <p><i>Internal Seals</i> PTFE</p>	<p><i>Maximum Inlet Pressure</i> 3000 PSIG (210 BAR)</p> <p><i>Temperature Range</i> -40°F to 140°F (-40°C to 60°C)</p> <p><i>Gauge</i> 2" diameter stainless steel</p> <p><i>Ports</i> ¼" FPT</p> <p><i>Helium Leak Integrity</i> 1 x 10⁻⁹ scc/sec</p> <p><i>Cv</i> 0.1 (Max outlet 50 PSIG or below) 0.2 (Max outlet above 50 PSIG)</p> <p><i>Weight (445-2021-TF4)</i> 2.57 lbs. (1.17 kg)</p>

Flow Performance



Ordering Information and Configuration Options

445	A	B	C	D	-Inlet	Options	
Series 445	Outlet Pressure 1: 0-15 2: 0-50 3: 0-100 4: 0-250 5: 0-500 7: 0-150	Outlet Gauge 30"-0-30 PSIG 30"-0-100 PSIG 30"-0-200 PSIG 0-400 PSIG 0-1000 PSIG 30"-0-200 PSIG	Inlet Gauge 0: None	Outlet Assemblies 0: ¼" FPT Port 1: ¼" MPT 2: ¼" Tube Fitting 3: Diaphragm Valve ¼" Tube Fitting 4: Diaphragm Valve ¼" MPT 5: Needle Valve ¼" MPT 6: ⅛" Tube Fitting 7: ⅜" Tube Fitting 8: Diaphragm Valve ⅛" Tube Fitting 9: Diaphragm Valve ¼" FPT M: 6mm Tube Fitting S: Diaphragm Valve 6mm Tube Fitting	Assembly/ Gauges 0: Bare Body 1: Standard Assembly (PSIG/kPa Gauge) 2: Standard Assembly (BAR/PSIG Gauge) 4: Cleanroom Assembly (PSIG/kPa Gauge) 5: Cleanroom Assembly (BAR/PSIG Gauge)	Inlet Connections 000: ¼" FPT TF2: ⅛" Tube TF4: ¼" Tube TF6: ⅜" Tube M06: 6mm Tube	Installed Options S: Stainless Steel Bonnet
Related Options		• Panel Mount Kit (550-0002) • Captured Vent Kit (550-0001)		• Helium Leak Certification (476-0002) • Passivation for Fluorine Service			