



# Specialty Regulator Selection Chart

Regulator Family	Model Series	Gas Service	Stages	Max. Inlet (psig)	Outlet Range (psig) <sup>1</sup>	Design Features	Applications	Page No.
<b>High Pressure</b>	3020 Brass	Non-corrosive	1	3000	20-500	<ul style="list-style-type: none"> <li>• Brass or stainless steel barstock bodies</li> <li>• 316 stainless steel diaphragm (3020) or piston (all other models)</li> </ul>	<ul style="list-style-type: none"> <li>• Applications requiring up to 6000 psig delivery pressure</li> <li>• Manufacturing processes, charging of systems, purging</li> </ul>	297
	3030 Brass	Non-corrosive	1	3000	100-1500			297
	3040 Brass	Non-corrosive	1	3000	100-2500			297
	3060 Brass	Non-corrosive	1	6000	200-6000			298
	3060S Stainless Steel	Non-corrosive	1	10,000	200-6000			298
<b>Standard Corrosive Service</b>	3900	Corrosives: HBr, HF, Cl <sub>2</sub>	1	3000	2-200	<ul style="list-style-type: none"> <li>• Economical nickel plated forged brass body</li> <li>• Monel, Kel-F, and Teflon internals for corrosion resistance</li> </ul>	<ul style="list-style-type: none"> <li>• Use with acid forming halogen compounds (HBr, HF, Cl<sub>2</sub>)</li> <li>• Use with low vapor pressure gases</li> </ul>	319
<b>Deluxe Corrosive Service</b>	3210	Corrosives: HCl, HF, HBr, Cl <sub>2</sub>	1	3000	1-200	<ul style="list-style-type: none"> <li>• Monel construction and Monel/Kel-F internals for superior corrosion resistance</li> </ul>	<ul style="list-style-type: none"> <li>• Applications requiring extended regulator lifespan in severe conditions</li> </ul>	301
<b>Fluorine Corrosive Service</b>	3225A	Corrosives: F <sub>2</sub> and F <sub>2</sub> mixtures	1	1000	1-50	<ul style="list-style-type: none"> <li>• Monel construction with bronze filled Teflon seat and Kel-F seals</li> </ul>	<ul style="list-style-type: none"> <li>• Use with fluorine and fluorine mixtures</li> </ul>	301
<b>High Flow</b>	3200	Non-corrosive	1	3000	0-250	<ul style="list-style-type: none"> <li>• Brass (3240) or stainless steel (3200) barstock bodies</li> <li>• 1/2" NPTF inlet and outlet ports</li> </ul>	<ul style="list-style-type: none"> <li>• Applications requiring a high flow rate, such as purging of large reactor or storage vessels</li> </ul>	300
	3240	Non-corrosive	1	3000	0-250			300
<b>Low Pressure</b>	81-2 General Purpose	Non-corrosive	2	3000	0.1-2	<ul style="list-style-type: none"> <li>• Economical forged brass (8-2) or high purity brass barstock (3396) bodies</li> <li>• Economical Viton (8-2) or 316 stainless steel (3396) diaphragms</li> </ul>	<ul style="list-style-type: none"> <li>• 8-2: Applications requiring a reduction of full cylinder pressure down to a low working pressure, such as fuel supply to burners or purging low pressure environmental chambers</li> <li>• 3396: Applications requiring subatmospheric pressure control</li> </ul>	294
	3396 Absolute Pressure	Non-corrosive	1	3000	28" Hg- 15 psig			306
<b>Back Pressure</b>	6342A	Corrosive & non-corrosive	1	100	0-100	<ul style="list-style-type: none"> <li>• 316L stainless steel body</li> <li>• 316 stainless steel diaphragm</li> </ul>	<ul style="list-style-type: none"> <li>• Used to relieve system overpressure, like a relief valve</li> </ul>	320
<b>Low Dead Volume</b>	3590A	Non-corrosive	1	3000	2-100	<ul style="list-style-type: none"> <li>• 7 cc internal volume minimizes contamination and adsorption</li> <li>• 316 stainless steel body &amp; diaphragm</li> </ul>	<ul style="list-style-type: none"> <li>• Use with mixtures containing trace quantities of reactive and/or adsorptive gases or vapors</li> <li>• 3590-TO specially cleaned for use with TO-14 calibration standards</li> </ul>	315
	3590-TO	High purity TO-14 calibration standards	1	3000	2-100			315
<b>Lecture Bottle<sup>2</sup></b>	3320	Non-corrosive	1	3000	2-60	<ul style="list-style-type: none"> <li>• Forged brass (3230) or PVC (3330) bodies</li> <li>• Neoprene (3230) or Teflon (3330) diaphragm</li> </ul>	<ul style="list-style-type: none"> <li>• Use with lecture bottles. 3330 designed for use with low pressure applications (1-6 psig); if higher pressures are required, use 3570 Series Mini Regulators</li> </ul>	302
	3330	Corrosive	1	3000	1-6			302



## Specialty Regulator Selection Chart *(continued)*

Regulator Family	Model Series	Gas Service	Stages	Max. Inlet (psig)	Outlet Range (psig) <sup>1</sup>	Design Features	Applications	Page No.
<b>MicroMATE™ Preset Flow Rate</b>	3345 Brass	Non-corrosive	1	240-1000 depending on model	30 psig (fixed)	<ul style="list-style-type: none"> <li>• Brass or 316 stainless steel bodies</li> <li>• Fixed flow rate 0.3 slpm to 2.5 LPM</li> <li>• Push button (brass) or control knob (SS) on/off</li> <li>• Hose barb outlet</li> <li>• 3347: selectable flow rates from 0-3 slpm</li> </ul>	<ul style="list-style-type: none"> <li>• Used with MicroMAT™-14, -58, -105, -221 cylinders for delivery of calibration gases at a fixed flow rate</li> </ul>	303
	3359 Stainless Steel	Non-corrosive or Semi-corrosive	1	500 psig	30 psig (fixed)			305
	3347 Brass Variable Flow	Non-corrosive	1	3000 psig	50 psig (fixed)			304
<b>Specialty Line Regulators</b>	3450 High flow line regulator	Semi-corrosive: dichlorosilane, ammonia, amines	1	500	2-100	<ul style="list-style-type: none"> <li>• High purity stainless steel body and diaphragm</li> </ul>	<ul style="list-style-type: none"> <li>• High purity, high flow applications (up to 730 SCFH)</li> </ul>	309
	3491 Low delivery pressure line regulator	Non-corrosive	1	120	1 mm Hg - 1.8 psig	<ul style="list-style-type: none"> <li>• Economical brass body and butyl rubber diaphragm</li> </ul>	<ul style="list-style-type: none"> <li>• Non-corrosive, absolute pressure applications</li> </ul>	310
	3494 Absolute pressure line regulator	Corrosive/high purity gases	1	120	28" Hg - 15 psig	<ul style="list-style-type: none"> <li>• High purity stainless steel body and diaphragm</li> </ul>	<ul style="list-style-type: none"> <li>• Corrosive/high purity absolute pressure applications</li> </ul>	311
	3700 Low pressure line regulator	Non-corrosive	1	250	2" wc <sup>3</sup> - 10 psig	<ul style="list-style-type: none"> <li>• Cast zinc body and natural rubber diaphragm</li> <li>• "Pancake" design</li> </ul>	<ul style="list-style-type: none"> <li>• Non-corrosive, low inlet pressure/low delivery pressure applications</li> </ul>	317

<sup>1</sup>The outlet pressure ranges shown above include the minimum and maximum pressures available with respect to the entire model series. For delivery pressure ranges of individual regulator models, refer to appropriate catalog sections.

<sup>2</sup>Other regulators can be supplied with CGA 170/180 for use with lecture bottles. Consult Matheson technical support for more information.

<sup>3</sup>wc=water column