

# P51 Stainless Steel

- Ideal for Sour Gas and Corrosive Applications or Environments
- Excellent Stability and Repeatability
- Built-in Filter Assemblies and Dripwells
- Filter Only Assemblies Available
- Soft Relief Seat for Low Gas Consumption
- Low droop
- Tapped Vent for Exhaust Gas Capture
- Manual or Automatic Drain Options
- Panel, Bracket or Pipe Mounting

The P51SS regulator product line is designed for service with a wide variety of corrosive gases and environments. Special construction features include 316 stainless steel for the housing and filter assemblies, with fluorocarbon elastomers used for the control diaphragm and the supply valve.

This ruggedly built regulator operates in pressure ranges up to 150 PSIG (10.3 BAR). The P51SSFR and P51SSAR Regulators and the P51SSF and P51SSAF filter assemblies have built-in dripwells which trap water, oil and other contaminants. The contaminants are easily flushed out of the dripwell via a convenient manual or automatic drain valve. The 40-48 Micron Filter is constructed of sintered 316 stainless steel, and is easily removed.

The P51SS products can be through-panel mounted with the mounting nut supplied (regulators only), bracket-mounted using the optional bracket (regulators only), or pipe mounted by its ports (regulators and filters).

The regulators and filter assemblies comply with NACE Standard MR0175 (Metals for Sulfide Stress Cracking and Stress Corrosion Cracking Resistance in Sour Oilfield Environments.)

## Applications

These corrosion resistant materials are compatible with sour gas and for use in off-shore environments. Typical applications include petrochemical processing, chemical plants, food processing and paper/pulp mills.

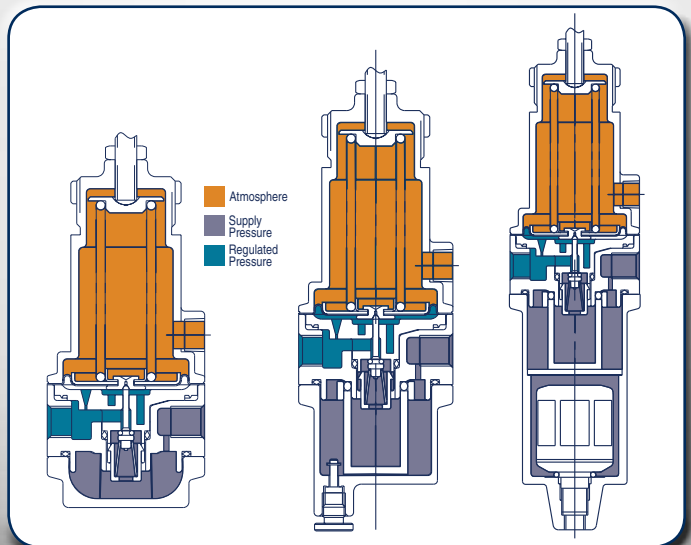
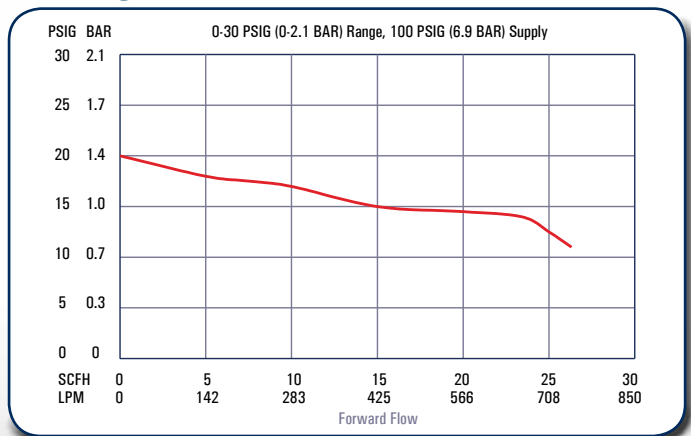
## P51 Part Matrix

P051SS		Style
<b>RX</b>		Regulator
<b>FR</b>		Filter Regulator
<b>FX</b>		Filter
<b>AR</b>		Filter Reg w/Autodrain
<b>AF</b>		Filter w/Autodrain
		Body Size
<b>02</b>		1/4 NPT
<b>03</b>		3/8 NPT
		Ranges*
<b>030</b>		0-30 PSIG
<b>060</b>		0-60 PSIG
<b>100</b>		0-100 PSIG
<b>150</b>		2-150 PSIG
		Options
<b>00</b>		Standard
<b>0B</b>		Non-relieving
<b>0F</b>		5 Micron Filter
<b>BF</b>		Non-relieving & 5 Micron Filter

\* For filters only (FX & AF) use 000 for range



## P51 Regulated Pressure vs. Flow



## Non-relieving

Used in applications where it is desirable to relieve pressure downstream and not at the regulator. Non-relieving regulators should not be used for low or no flow applications.

## Mounting Bracket

P/N 607-000-128

## 5 Micron Filter

Replaces the 40 micron filter for more complete air filtration. (Except P51SSR)

## P51 Stainless Steel Regulators Specifications

	P51SSR Regulator	P51SSFR Filter Regulator	P51SSAR Auto Filter Regulator	P51SSF	P51SSAF
Filter	n/a	Built in 40 micron filter with manual drain	Built in 40 micron filter with automatic drain	40 micron filter with manual drain	40 micron filter with automatic drain
Maximum Supply Pressure	250 PSIG (17.3 BAR)	250 PSIG (17.3 BAR)	250 PSIG (17.3 BAR)	250 PSIG (17.3 BAR)	250 PSIG (17.3 BAR)
Output Pressure Range	0-30 PSIG (0-2.1 BAR) 0-60 PSIG (0-4.1 BAR) 0-100 PSIG (0-6.9 BAR) 2-150 PSIG (0.1-10.3 BAR)	0-30 PSIG (0-2.1 BAR) 0-60 PSIG (0-4.1 BAR) 0-100 PSIG (0-6.9 BAR) 2-150 PSIG (0.1-10.3 BAR)	0-30 PSIG (0-2.1 BAR) 0-60 PSIG (0-4.1 BAR) 0-100 PSIG (0-6.9 BAR) 2-150 PSIG (0.1-10.3 BAR)	n/a	n/a
Supply Pressure Sensitivity @ 25 PSIG / 1.7 BAR change in supply	0.45 PSIG (0.03 BAR) output change	0.45 PSIG (0.03 BAR) output change	0.45 PSIG (0.03 BAR) output change	n/a	n/a
Sensitivity	1" water column	1" water column	1" water column	n/a	n/a
Repeatability	0.1 PSIG (0.01 BAR)	0.1 PSIG (0.01 BAR)	0.1 PSIG (0.01 BAR)	n/a	n/a
Flow @ 100 PSIG (6.9 BAR) Supply & 20 PSIG (1.4 BAR) outlet	20 SCFM (566 LPM)	20 SCFM (566 LPM)	20 SCFM (566 LPM)	n/a	n/a
Exhaust Capacity @ 5 PSIG (0.3 BAR) above setpoint	0.1 SCFM (2.8 LPM)	0.1 SCFM (2.8 LPM)	0.1 SCFM (2.8 LPM)	n/a	n/a
Temperature Limits	-20° to 180°F (-29° to 82°C)	-20° to 180°F (-29° to 82°C)	-20° to 180°F (-29° to 82°C)	-20° to 180°F (-29° to 82°C)	-20° to 180°F (-29° to 82°C)
Air Consumption	0.1 SCFH (0.05 LPM) Maximum	0.1 SCFH (0.05 LPM) Maximum	0.1 SCFH (0.05 LPM) Maximum	n/a	n/a
Port Size	1/4 NPT or 3/8 NPT	1/4 NPT or 3/8 NPT	1/4 NPT or 3/8 NPT	1/4 NPT or 3/8 NPT	1/4 NPT or 3/8 NPT
Materials of Construction	316 Stainless Steel housing & filter assemblies fluorocarbon elastomers	316 Stainless Steel housing & filter assemblies fluorocarbon elastomers	316 Stainless Steel housing & filter assemblies fluorocarbon elastomers	316 Stainless Steel housing & filter assemblies fluorocarbon elastomers	316 Stainless Steel housing & filter assemblies fluorocarbon elastomers
Approximate Weight	2.6 lbs, 1.18 kg	3.0 lbs, 1.36 kg	3.4 lbs, 1.55 kg	2.1 lbs, 0.95 kg	2.9 lbs, 1.32 kg

## P51 Stainless Steel Dimensions

