



## HIGH FLOW DOME LOAD WITH SPRING BIAS *Pressure Reducing Regulators*



### PREMIER INDUSTRIES

1590 99th Ln NE,  
Minneapolis, MN 55449  
763-786-4020



**MADE IN THE USA**  
*Minneapolis, MN*

### DESCRIPTION

Premier 5050DLB Series dome loaded / bias spring, single stage, high flow, piston sensed, pressure reducing regulators. Premier 5050DLB Series regulator feature inlet pressures up to 1000 PSIG (68.95 bar), Cv 5.0, maximum dome load of 100 PSIG (6.89 bar) and a preset bias pressure. 5050DLB Series regulators are designed for tracking applications, where a constant differential pressure is desired.

### FEATURES

- Flow capacity (Cv): 5.0
- 1000 PSIG (68.95 bar) max inlet pressure
- Adjustable spring bias pressure
- Non-venting
- Compact size
- Machined bar stock body eliminates porosity found in castings

# 5050DLB SERIES

## HIGH FLOW DOME LOAD WITH SPRING BIAS *Pressure Reducing Regulators*



### SPECIFICATIONS

- **MAXIMUM INLET PRESSURE:** 1000 PSIG (68.95 bar)
- **MAX DOME LOAD:** 100 PSIG (6.89 bar)
- **MAX BIAS PRESSURE:** 200 PSIG (13.79 bar)
- **OUTLET PRESSURE:** dome load pressure + bias pressure
- **FLOW (Cv):** 5.0

### MATERIALS OF CONSTRUCTION

- **BODY, BONNET, BACK CAP:**
  - 316 Stainless Steel
  - 303 Stainless Steel
  - 6061-T6 Aluminum, Clear Anodize
- **PISTON:**
  - 316 Stainless Steel
  - 303 Stainless Steel
  - SAE 360 Brass
- **MAIN VALVE SEAT:**
  - Buna-N
- **MAIN VALVE:**
  - 316 Stainless Steel
- **O-RINGS:**
  - Buna-N
- **DOME LOAD BIAS SPRING:**
  - 302 Stainless Steel

### PORTING

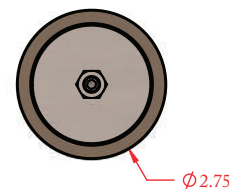
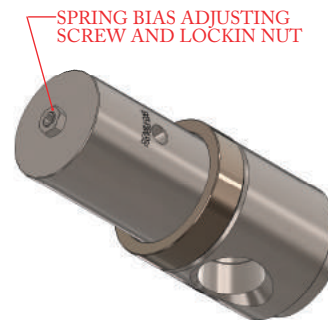
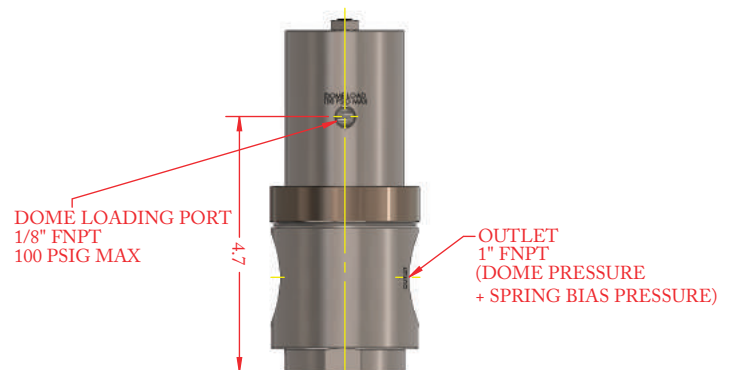
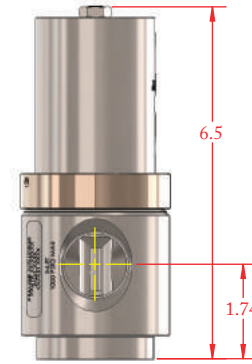
- **STANDARD INLET:**
  - 1" FNPT\*
- **STANDARD OUTLET:**
  - 1" FNPT\*

*\*See modifications list on page 3 for 1/2" in/out port mod.*

- **DOME LOAD PORT:**
  - 1/8" FNPT

### OPTIONS

- Private labeling



(Part number: 50-12510 shown above)



**HIGH FLOW  
DOME LOAD  
WITH SPRING BIAS**  
*Pressure Reducing Regulators*



PART #	-	1	-	2 3	-	MODS
50-12510	-		-		-	

1	BODY/BONNET/BACK CAP MATERIAL & FINISH
1	6061-T6 Aluminum, <i>Clear Anodize</i>
2	303 Stainless Steel, <i>Cleaned per spec #515</i>
3	316 Stainless Steel, <i>Cleaned per spec #515</i>

2 3	SPRING BIAS
	Specify spring bias pressure in "XX" psig (Examples, '05" is 5 psig spring bias, '12' is 12 psig spring bias. <i>Note: max bias pressure: 200 psig/13.79 bar)</i>
MODIFICATIONS	
BLANK	standard configuration
12	1/2" FNPT process ports
G	1/4" FNPT inlet/outlet gauges