

# SERIES SL 5500

## SPRINGLESS REGULATOR

Low Flow — High Pressure



- Single stage
- Hot DI cleaned and baked
- 10  $\mu$ in. surface finish (7 and 5  $\mu$ in. opt)
- Absolute to 100 psig delivery
- Vacuum to 3,500 psig (241 bar) inlet
- Low internal volume and surface area
- Flow rates to 30 slpm
- Cylinder and point of use applications
- Installation and operating instructions available at [www.aptech-online.com](http://www.aptech-online.com) in the Tech Briefs section

### Operating Parameters

|                   |                                                            |
|-------------------|------------------------------------------------------------|
| Source pressure   | vacuum to 3,500 psig (241 bar)                             |
| Delivery pressure | SL 5502 1 to 30 psig (0.07 to 2 bar)                       |
|                   | SL 5502A 100 mm Hg absolute to 30 psig (100 torr to 2 bar) |
|                   | SL 5506 1 to 60 psig (0.07 to 4 bar)                       |
|                   | SL 5510 2 to 100 psig (0.14 to 7 bar)                      |
| Proof pressure    | 5,000 psig (345 bar)                                       |
| Burst pressure    | 10,000 psig (690 bar)                                      |

### Other Parameters

|                          |                                                                                                               |
|--------------------------|---------------------------------------------------------------------------------------------------------------|
| Inlet /outlet connectors | 1/4 or 3/8 inch face seal or tube weld                                                                        |
| Bonnet port              | 1/8 inch NPT                                                                                                  |
| Flow coefficient (Cv)    | 0.09                                                                                                          |
| Internal volume          | 0.55 in <sup>3</sup> (9 cm <sup>3</sup> )                                                                     |
| Operating temperature    | -40° to +160°F (-40° to +71°C)                                                                                |
| Surface finish           | 10 $\mu$ in (0.25 $\mu$ m) Ra max standard; 7 $\mu$ in (0.18 $\mu$ m); and 5 $\mu$ in (0.13 $\mu$ m) optional |
| Inboard leakage          | 2 x 10 <sup>-10</sup> sccs                                                                                    |
| Outboard leakage         | 2 x 10 <sup>-9</sup> sccs He at 1,500 psig inlet pressure                                                     |
| Leakage across seat      | 4 x 10 <sup>-8</sup> sccs He at 1,000 psig inlet pressure                                                     |
| Installation             | surface or panel (optional)                                                                                   |
| Delivery pressure rise   | 0.25 psig per 100 psig source pressure drop                                                                   |

### Materials

| Type of Service   | Series SL 5500 S<br>Noncorrosive | Series SL 5500 SH<br>Corrosive |
|-------------------|----------------------------------|--------------------------------|
| Wetted Parts      |                                  |                                |
| Body              | SS 316L secondary remelt         | SS 316L secondary remelt       |
| Poppet, diaphragm | SS 316L                          | Hastelloy® alloy C-22®         |
| Finish            | electropolished and passivated   | electropolished and passivated |
| Seat              | PCTFE (Vespe® optional)          | PCTFE                          |

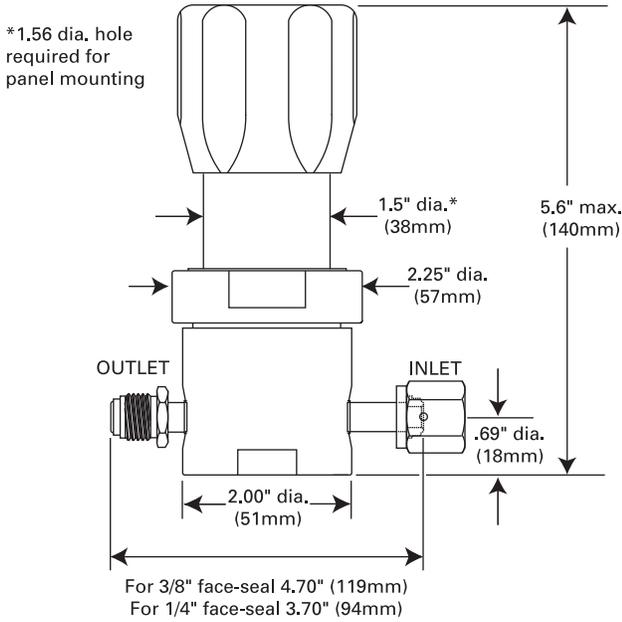
All specifications subject to change without notice.

Hastelloy® C-22® Haynes Corporation Vespe® DuPont

ENGINEERING DATA — SERIES SL 5500 SPRINGLESS REGULATOR

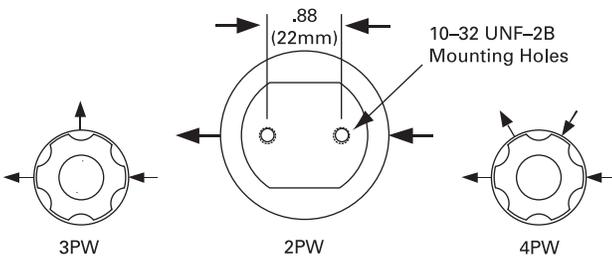
# UNCOMPROMISING QUALITY, PERFORMANCE AND RELIABILITY

## DIMENSIONAL INFORMATION



All dimensions in inches (mm). Metric dimensions are for reference only.

## PORTING CONFIGURATIONS



**CAUTION: Product selection is the sole responsibility of the user, regardless of any recommendations or suggestions made by the factory. The user shall make selections based upon their own analysis and testing with regard to function, material compatibility and product ratings. Proper installation, operation and maintenance are also required to assure safe, trouble free performance.**

## ORDERING INFORMATION

Sample Order Number

SL 5510SM 4PW FV4 FV4 40 1 P

### SL 5510 | Series

SL 5502 = 1-30 psig (.07-2 bar)  
SL 5506 = 1-60 psig (.07-4 bar)  
SL 5510 = 2-100 psig (.14-7 bar)

### S | Material

S = Stainless steel (SS)  
SH = SS with Hastelloy internals

### M | Surface Finish Options

M = 10  $\mu$ m Ra max (standard)  
V = 7  $\mu$  in. Ra max  
X = 5  $\mu$ m Ra max

### Range Option

A = 100mm Hg absolute to 30 psig (2 bar) (SL 5502 only)

### 4PW | Ports

2PW = 2 ports butt weld  
3PW = 3 ports butt weld  
4PW = 4 ports butt weld

### FV4 FV4 | Connections Inlet / Outlet

FV4 = 1/4 inch face seal female  
MV4 = 1/4 inch face seal male  
FV6 = 3/8 inch face seal female  
MV6 = 3/8 inch face seal male

Tube weld available

### 40 1 | Gauges\* Source / Delivery

0 = No gauge  
V3 = 30-0-30 psig/bar  
L = 30-0-60 psig/bar  
1 = 30-0-100 psig/bar  
2 = 0-200 psig/bar  
4 = 0-400 psig/bar  
10 = 0-1000 psig/bar  
40 = 0-4000 psig/bar

\* Standard gauge ports are 1/4 inch face seal male

### P | Options

P = Panel installation\*\*  
VS = Vespel seat

\*\* On panel mount option, bonnet port is not threaded. Panel hole 1.56" diameter.

