

# SERIES SL 5500 SPRINGLESS REGULATOR Low Flow — High Pressure



- Single stage
- Hot DI cleaned and baked
- 10 μin. surface finish
   (7 and 5 μin. 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
- Knob LOTO (refer to AP KL data sheet)
- Installation and operating instructions available at 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 550	)2A	100 mm Hg absolute to 30 psig (100 torr to 2 bar)	
SL 550	)6	1 to 60 psig (0.07 to 4 bar)	
SL 551	0	2 to 100 psig (0.14 to 7 bar)	
Proof pressure		150% of operating pressures	
Burst pressure		300% of operating pressures	

#### **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 μin (0.25 μm) Ra max standard;
	7 μin (0.18 μm); and 5 μin (0.13 μm) 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 10-8 sccs He at 1,000 psig inlet pressure
Installation	surface or panel (optional)
Supply pressure effect	0.25 psig per 100 psig source pressure change

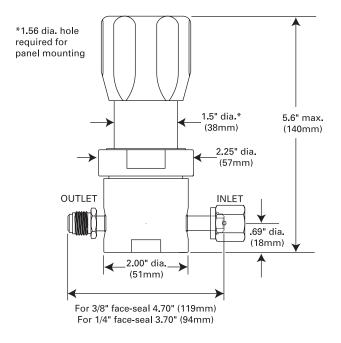
<sup>\*</sup>VS option 14° to 194°F (-10° to + 90°C).

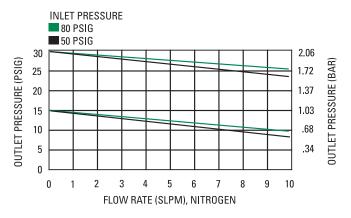
#### **Materials**

Type of Service	Series SL 5500 S Noncorrosive	Series SL 5500 SH Corrosive
Wetted Parts		
Body	SS 316L secondary remelt	SS 316L secondary remelt
Poppet, diaphragm	SS 316L	Ni-Cr-Mo alloy / UNS N06022
Finish	electropolished and passivated	electropolished and passivated
Seat	PCTFE (Polyimide optional)	PCTFE

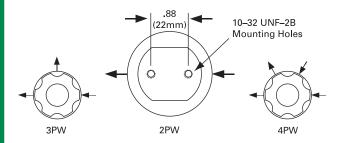
All specifications subject to change without notice.

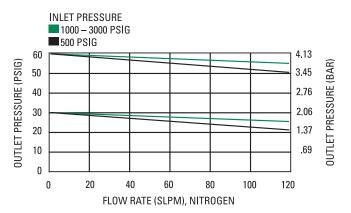
## UNCOMPROMISING QUALITY, PERFORMANCE AND RELIABILITY





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





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.

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)	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
S   Material	S = Stainless steel (SS) SH = SS with Ni-Cr-Mo alloy internals	40 1   Gauges*	Tube weld available  0 = No gauge
M   Surface Finish Options	M = 10 μin. Ra max (standard) V = 7μ in. Ra max X = 5 μin. Ra max	Source / Delivery	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
Range Option	A = 100mm Hg absolute to 30 psig (2 bar) (SL 5502 only)		10 = 0-1000 psig/bar 40 = 0-4000 psig/bar * Standard gauge ports are 1/4 inch face seal male
4PW   Ports	2PW = 2 ports butt weld 3PW = 3 ports butt weld 4PW = 4 ports butt weld	P Options	P = Panel installation** VS = Polyimide seat KL = Knob LOTO (refer to AP KL data sheet)

AP Tech has product options and variations which are not documented in data sheets. If you have a model number that is not defined by the ordering information, please consult the factory or your local representative.

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