

# SPR860 Series

## Precision High Flow Regulator

aerospace  
climate control  
electromechanical  
filtration  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding

### Customer Value Proposition:

The SPR860 regulator is designed with an internal servo that monitors upstream and downstream pressures. The internal servo compensates for fluctuations in delivery pressure and flow demand to maintain a constant pressure delivery. The outlet pressure can be maintained within 2 psig of its original setting as flow demand increases from zero to more than 500 slpm. The internal servo does not require an external pressure source nor bleeds to atmosphere.



### Contact Information:

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### Product Features:

- External CDA source or a continuous bleed to atmosphere is not required to operate.
- 100% Helium Leak and functional tested.
- Minimal change in delivery pressure over large flow range.
- Cleaned and assembled to UHP standards.
- Electropolished and passivated post welding.

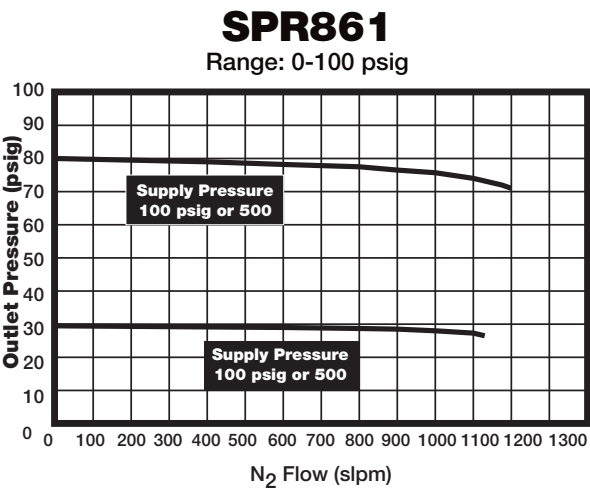
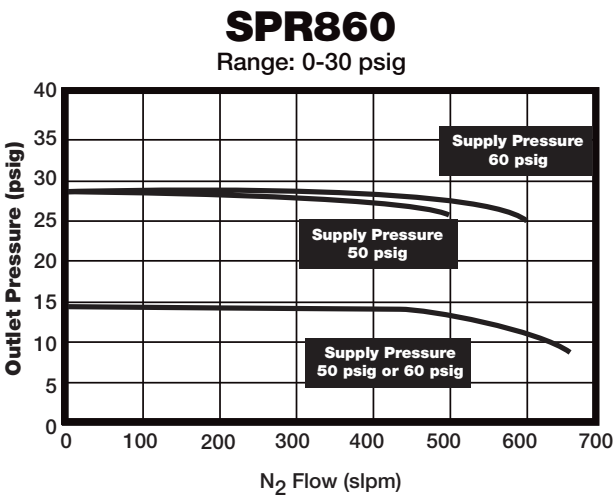


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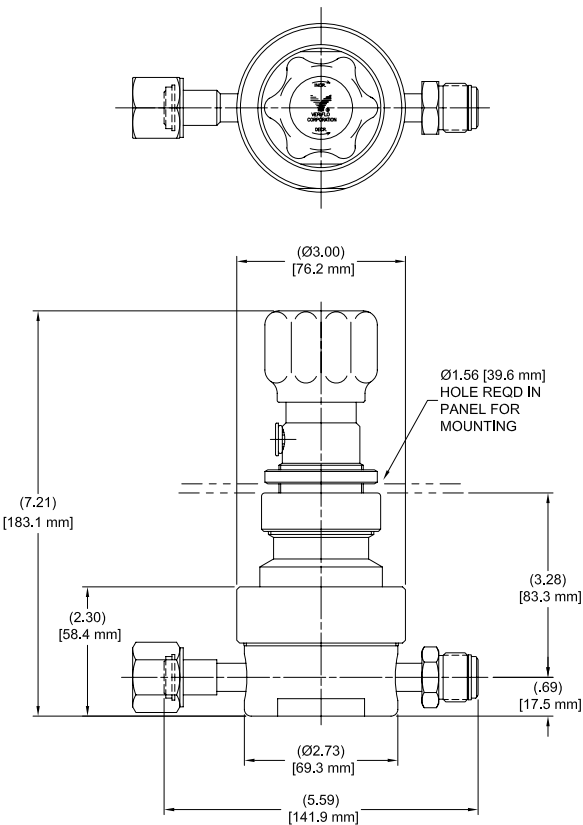
# SPR860 Series

## Flow Curves

Additional flow curves available upon request



## Dimensional Drawing



Safety Guide and Installation and Operating Instructions available at  
[www.parker.com/veriflo](http://www.parker.com/veriflo)

# SPR860 Series

## Ordering Information

Build an SPR860 Series regulator by replacing the numbered symbols with an option from the corresponding tables below.

1

2

3

4

5

6

7

8

Sample: **SPR860 W 3P V3 FS8 MMF V PM**

Finished Order: **SPR860W3PV3FS8MMFVPM**

1

**Basic Series**  
SPR860 = 0 - 30 psig  
SPR861 = 0 - 100 psig  
SPR862 = 0 - 150 psig

2

**Body Material**  
W = Welded 316L Stainless Steel

3

**Porting**  
2P = 2 Ports *No X required for gauges, Inlet & outlet ports only*  
3P = 3 Ports *One X for gauge port*  
*See Regulator Porting Guide for additional options and port layouts*

4

**Outlet Gauge**  
V3 = -30 in Hg 0 - 30 psig  
V1 = -30 in Hg 0 - 100 psig  
V2 = -30 in Hg 0 - 200 psig  
VX = -30 in Hg 0 - 150 psig  
2 = 0 - 200 psig  
X = No Gauge  
*Additional ranges available upon request*

5

**Port Style**  
FS = 1/4" Face Seal  
FS8 = 1/2" Face Seal  
FS12 = 3/4" Face Seal

6

**Port Configuration**  
M = Male  
F = Female  
I = Internal Face Seal  
*1/4" FS-M Gauge Ports are Standard*

7

**Seal Material**  
K = Perfluoroelastomer (FFKM)  
*200 psig max*  
V = Fluorocarbon (FKM)  
*500 psig max*

8

**Optional Features**  
PM = Panel Mount

# SPR860 Series

## Specifications

Materials of Construction		Functional Performance	
Wetted		Design	
Body	VeriClean™ 316L Stainless Steel	Burst Pressure	1500 psig (103 barg) - <i>SPR860V Only</i> 600 psig (41.38 barg) - <i>SPR860K Only</i>
Diaphragm	316L Stainless Steel and PTFE	Proof Pressure	750 psig (52 barg) - <i>SPR860V Only</i> 300 psig (20.7 barg) - <i>SPR860K Only</i>
Seat	316L Stainless Steel	Flow Capacity	C <sub>v</sub> 0.85
Seal	PCTFE	Leak Rate	
Poppet	316L Stainless Steel	Internal	Bubble Tight
Poppet Spring	Hastelloy C-22®	External	2 x 10 <sup>-9</sup> scc/sec He (Inboard Test Method)
Nozzle Assembly		Surface Finish	Standard Ra 15-20 micro inches
Nozzle Body	316L Stainless Steel	Supply Pressure Effect	0.8 psig/100 psig (0.05 barg/7barg)
Spring	316 Stainless Steel	Internal Volume	51cc
Seal Options	FFKM or FKM	Approx. Weight	2.5 lbs. (1.2 kg)
Screen	316L Stainless Steel		
Retaining Ring	15-7 PH		
Non-wetted			
Cap	Nickel Plated Brass		
Knob	ABS		
Operating Conditions			
Maximum Inlet	500 psig (30 barg) - <i>SPR860V Only</i> 200 psig (14 barg) - <i>SPR860K Only</i>		
Outlet	0-30 psig (2.07 barg) 0-100 psig (7 barg) 0-150 psig (10.35 barg)		
Temperature	-40°F to 150°F (-40°C to 66°C)		

Hastelloy C-22® is a registered trademark of Haynes International, Inc.  
VeriClean™ is a trademark of Parker Hannifin Corporation

For additional information on materials of construction, functional performance and operating conditions, please contact factory.

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