

SQHP Series

High Pressure High Purity Regulator

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

Customer Value Proposition:

The SQHP regulator delivers high purity gas via an internally tied diaphragm design that is springless and has no threads in the wetted area. The SQHP allows for inlet pressures up to 3500 psig.



Contact Information:

Parker Hannifin Corporation
Veriflo Division
250 Canal Blvd
Richmond, California 94804

phone 510 235 9590
fax 510 232 7396
veriflo.sales@parker.com

www.parker.com/veriflo



Product Features:

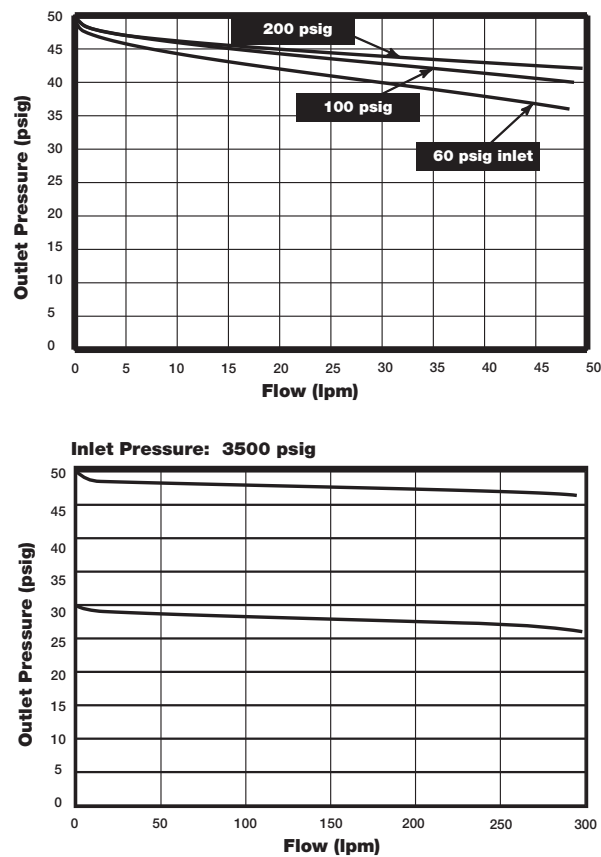
- “VeriClean”, Veriflo’s custom low sulfur high purity 316L Stainless Steel™ enhances electropolishing, welding and corrosion resistance.
- Provides precise pressure control of outlet pressure with an inlet pressure as high as 3,500 psig.
- No high pressure seals to atmosphere.
- 100% Helium leak tested.
- Unique compression member loads the seal to the body without requiring a threaded nozzle or additional seals to atmosphere.
- Tied diaphragm for added safety.
- Metal-to-metal diaphragm-to-body seal assures high leak integrity.

ENGINEERING YOUR SUCCESS.

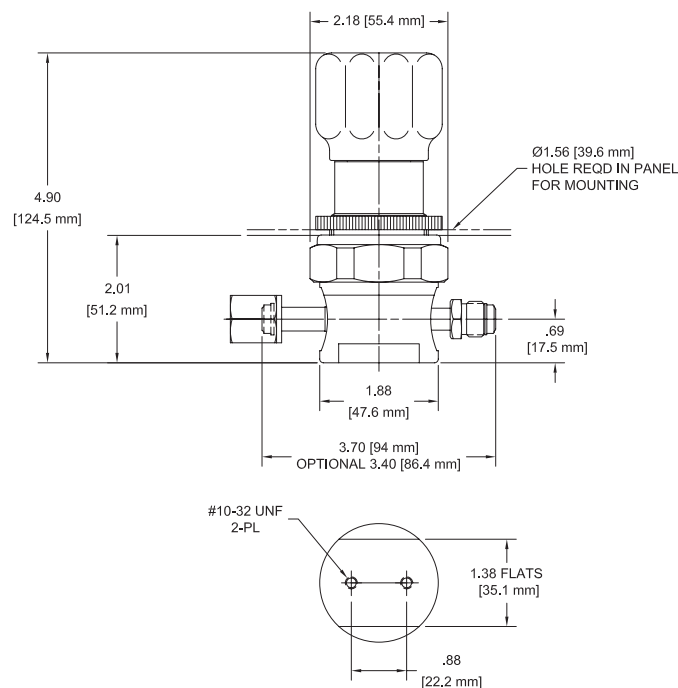
SQHP Series

Flow Curves

Additional flow curves available upon request



Dimensional Drawing



Safety Guide and Installation and Operating Instructions available at
www.parker.com/veriflo

SQHP Series

Ordering Information

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

Sample: **SQHP**

1

2

3

4

5

6

7

8

30 **4P** **V3** **40** **FS** **FMMM** **PM**

Finished Order: **SQHP304PV340FSFMMMPM**

1

Pressure Setting

30

= 30 psig

50

= 50 psig

100

= 100 psig

2

Body Material

= 316L Stainless Steel

H

= Hastelloy C-22®

3

Porting

2P

= 2 Ports

No X required for gauges, inlet & outlet ports only

3P

= 3 Ports

One X for gauge port

4P

= 4 Ports

Two X's for gauge ports

See Regulator Porting Guide for additional options and port layouts

4

Outlet Gauge

V3

= -30 in Hg 0 - 30 psig

L

= -30 in Hg 0 - 60 psig

V1

= -30 in Hg 0 - 100 psig

X

= No Gauge

Additional ranges available upon request

5

Inlet Gauge

10

= 0 - 1000 psig

30

= 0 - 3000 psig

40

= 0 - 4000 psig

X

= No Gauge

Additional ranges available upon request

6

Port Style

FS

= 1/4" Face Seal

TS

= 1/4" Tube Stub

TS6

= 3/8" Tube Stub

7

Port Configuration

M

= Male

F

= Female

I

= Internal Face Seal

1/4" FS-M Gauge Ports are Standard

8

Optional Features

This section can have multiple options

PM

= Panel Mount

SS

= Stainless Steel Internals

Includes diaphragm and poppet. Recommended for Carbon Monoxide (CO) or Nickel Carbonyl Ni(CO)₄ service

TH

= Hastelloy C-22® Trim

Available on Stainless Steel body, only. Includes Compression Member

VESP

= Vespel® Seat

Recommended for Nitrous Oxide (N₂O) service

3.4

= 3.4" Optional End-To-End Dimension

SQHP Series

Specifications

Materials of Construction	
Wetted	
Body Options	VeriClean™ 316L Stainless Steel (std) or Hastelloy C-22®
Compression Member Options	VeriClean™ 316L Stainless Steel (std) or Hastelloy C-22®
Diaphragm Options	Hastelloy C-22® (std) or 316L Stainless Steel
Poppet Options	Hastelloy C-22® (std) or 316L Stainless Steel
Seat Options	PCTFE (std) or Vespel®
Non-wetted	
Cap	Nickel Plated Brass
Nut	316L Stainless Steel
Knob	ABS (Red)
Operating Conditions	
Maximum Inlet	3500 psig (240 barg)
Outlet Options	0 to 30 psig (2 barg), 0 to 60 psig (4 barg), 0 to 100 psig (7 barg),
Temperature	-40°F to 150°F (-40°C to 66°C)

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

Functional Performance	
Design	
Burst Pressure	10,500 psig (724 barg)
Proof Pressure	5,250 psig (362 barg)
Flow Capacity	C _v 0.06
Leak Rate	Inboard Test Method
Internal	5 x 10 ⁻⁸ scc/sec He
External	2 x 10 ⁻¹⁰ scc/sec He
Supply Pressure Effect	<0.1 psig per 100 psig (<0.02 barg per 6.7 barg)
Internal Volume	6.35 cc
Approx. Weight	1.5 lbs. (7 kgs)

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

OFFER OF SALE:

The items described in this document are hereby offered for sale by Parker-Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the detailed "Offer of Sale" elsewhere in this document or available at www.parker.com/veriflo



FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE. THIS DOCUMENT IS FOR REFERENCE ONLY. PLEASE CONSULT FACTORY FOR LATEST PRODUCT DRAWINGS AND SPECIFICATIONS

This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Proposition 65 Warning: This product contains chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.



ENGINEERING YOUR SUCCESS.