

SQ Series

UHP High Performance, Point-Of-Use Regulators
Welded, Stainless Steel

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

Value Proposition:

The SQ Series of regulators are high flow, high performance point-of-use regulators designed to be used in process gas cabinets for gas companies, equipment manufacturers and end users.

The SQ Series of regulators provide precise control of the process gas pressure at or near the tool. The results are stable flow and pressure to the mass flow controller.

The SQ60SA provides precise pressure control for point-of-use in the sub-atmospheric range.



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
Mobile App: m.parker.com/veriflo

Product Features:

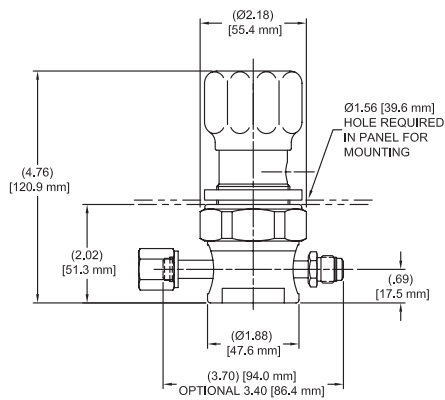
- Standard Hastelloy C-22® poppet and diaphragm
- Metal-to-metal, diaphragm-to-body seal
- Tied-diaphragm for added safety
- Standard full internal electropolish
- Capable of operating at a wide range of flows - see flow range table for details
- Design and materials of construction ensure compatibility with the high flow of corrosive gases
- No springs or threads are exposed to the wetted area
- Sub-atmospheric available (SQ60SA)



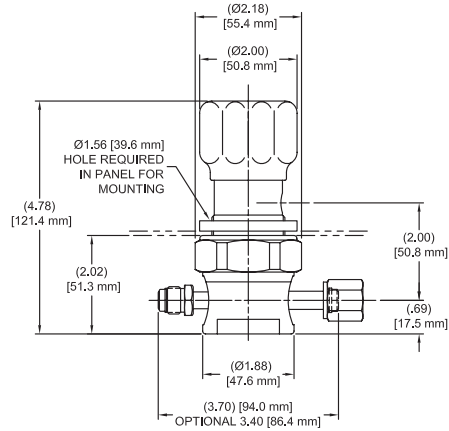
ENGINEERING YOUR SUCCESS.

SQ Series

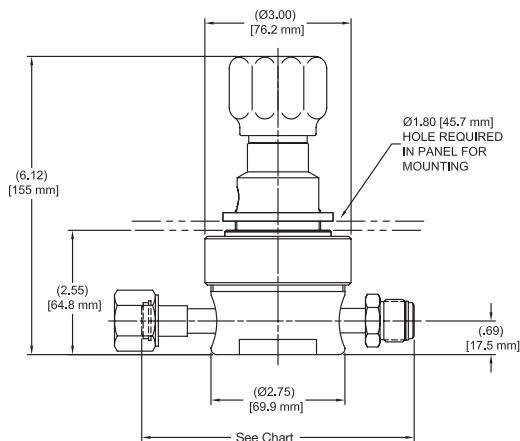
Dimensional Drawings



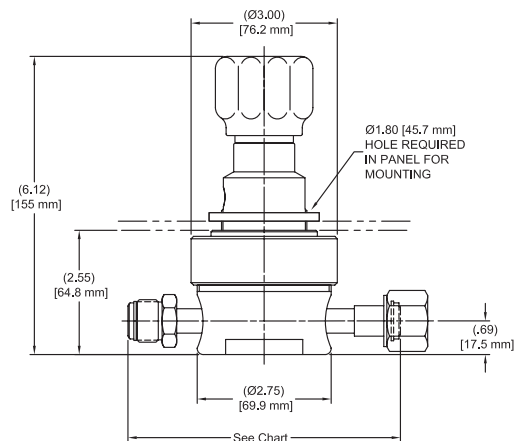
SQ60 & SQ60SA



SQ130E



SQ140E



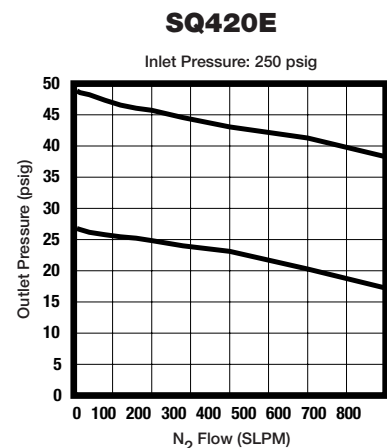
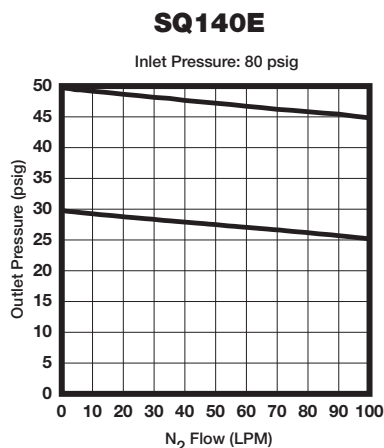
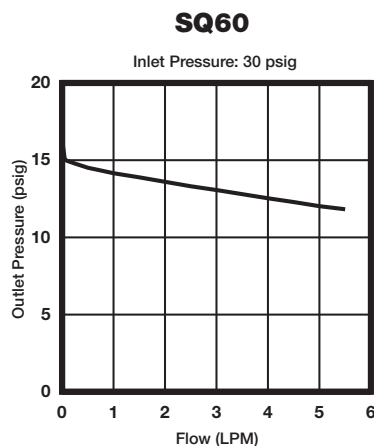
SQ420E

Flow Curves

Additional flow curves available upon request

DIMENSION TABLE (SQ140E & SQ420E Only)

Connection Type	End to End Dimension
1/4" Face Seal	4.64" (117.9 mm)
1/2" Face Seal	5.59" (142 mm)
1/2" Tube Stub	4.64" (117.9 mm)



Safety Guide and Installation and Operating Instructions available at

www.parker.com/veriflo

SQ Series

Ordering Information

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

Color Explanations: Black = Standard Lead Time Configurations
Blue = Extended Lead Time Configurations

For an explanation of Ordering options please reference literature 25000275 at www.parker.com/veriflo

Sample: **SQ** **60** **30** **2P** **FS** **MF** **EV**

Finished Order: **SQ60302PFSMFV**

1 Basic Series
60
60SA
130E
140E
420E

2 Pressure Range
- Omitted for SQ60SA.
30 = 30 psig
50 = 50 psig
100 = 100 psig

3 Body Material
= Vericlean™ 316L Stainless Steel

4 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

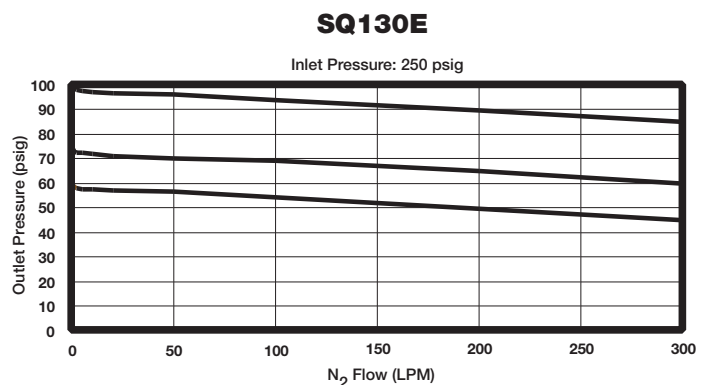
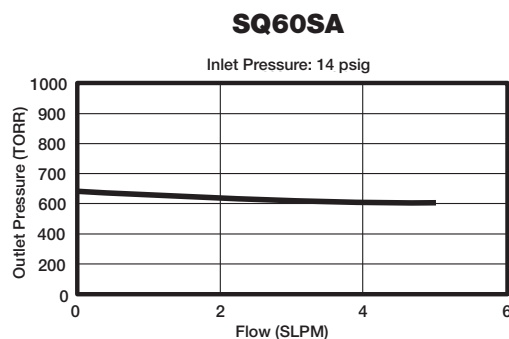
5 Outlet Gauge
VX = -30 in Hg 0 - 150 psig
V1 = -30 in Hg 0 - 100 psig
V2 = -30 in Hg 0 - 200 psig
V3 = -30 in Hg 0 - 30 psig
OL = 0 - 60 psig
L = -30 in Hg 0 - 60 psig
X = No Gauge
Additional ranges available upon request

6 Inlet Gauge
V1 = -30 in Hg 0 - 100 psig
2 = 0 - 200 psig
4 = 0 - 400 psig
10 = 0 - 1000 psig
X = No Gauge
Additional ranges available upon request

7 Port Style
FS = 1/4" Face Seal
FS8 = 1/2" Face Seal
TS = 1/4" Tube Stub
TS6 = 3/8" Tube Stub
TS8 = 1/2" Tube Stub

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

9 Optional Features
This section can have multiple options
DO = Dome Loaded - *SQ130E only.*
EV = 5 Ra micro inch surface finish
PM = Panel Mount
TH = Hastelloy C-22® Trim
Available on Stainless Steel body only. Includes Hastelloy C-22® diaphragm, compressor member and poppet.
VESP = Vespel® Seat *Recommended for Nitrous Oxide (N2O) service*
3.4 = 3.4" Optional End-to-End Dimension - *SQ60, SQ60SA & SQ130E only.*
750 = Max Inlet Pressure - *SQ140E only.*



SQ Series

Specifications

Materials of Construction	
Wetted	
Body	VeriClean™ 316L Stainless Steel
Compression Member Options	VeriClean™ 316L Stainless Steel (std) or Hastelloy C-22®
Diaphragm	Hastelloy C-22®
Poppet	Hastelloy C-22®
Seat Options	PCTFE (std) or Vespel®
Non-wetted	
Cap	Nickel Plated Brass
Nut	316L Stainless Steel
Knob	ABS
Operating Conditions	
Maximum Inlet	
SQ60, SQ60SA, SQ420E	250 psig (17 barg)
SQ130E	1000 psig (70 barg)
SQ140E	250 psig (17 barg) (std) or 750 psig (52 barg)
Outlet Options	
SQ60, SQ130E, SQ140E, SQ420E	0 - 30 psig (2 barg) 0 - 50 psig (3 barg) 0 - 100 psig (7 barg)
SQ60SA	-25 in Hg to 15 psig (1 barg)
Temperature	-40°F to 150°F (-40°C to 66°C)

Functional Performance	
Design	
Burst Pressure	
SQ60, SQ60SA, SQ140E, SQ420E	750 psig (52 barg)
SQ130E	3,000 psig (207 barg)
Proof Pressure	
SQ60, SQ60SA, SQ140E, SQ420E	375 psig (26 barg)
SQ130E	1,500 psig (103 barg)
Flow Capacity	
SQ60	C_v 0.054
SQ60SA	C_v 0.15
SQ130E	C_v 0.2
SQ140E	C_v 0.25
SQ420E	C_v 1.5
Leak Rate	
Inboard Test Method	
Internal	$< 5 \times 10^{-8}$ scc/sec He*
External	$< 2 \times 10^{-10}$ scc/sec He
Internal Volume	
SQ60, SQ60SA	6.35 cc
SQ130E	6.19 cc
SQ140E	19.02 cc
SQ420E	22.32 cc
Approx. Weight	
SQ60, SQ60SA, SQ130E	1.5 lbs. (0.7 kgs)
SQ140E, SQ420E	4.5 lbs. (2.1 kgs)

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

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.

* SQ420E: Design Internal Leak Rate shown.
Production Leak Test is Outboard sniffer probe at 50-70 psig, 20%-25% Helium.

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

WARNING USER RESPONSIBILITY

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.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing are subject to change by Parker Hannifin Corp and its subsidiaries at any time without notice.

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

© 2009 Parker Hannifin Corporation



Use mobile device to scan this QR Code.

LitPN: 25000057

Rev: E

Date of Issue 04/2013



ENGINEERING YOUR SUCCESS.