

SQ2MICRO Series

Miniature Pressure Regulator

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

Save Space, Increase Performance:

The SQ2Micro and SQ2Micro130E are miniature, high performance, point-of-use regulators with a small foot-print. The SQ2Micro provides excellent repeatability, stability, sensitivity and has extraordinary response to step function changes. The space savings allows a closer spacing of components and process lines while providing excellent regulation control.



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:

- Standard Hastelloy C-22® Poppet and Diaphragm.
- Miniature footprint, internal volume, and surface area.
- Small footprint allows for same spacing as Quantum Veriflo valves
- No springs or threads are exposed to the wetted area.
- Standard full internal electropolish.
- Extremely low particle counts.
- Both a 0.06 and 0.15 Cv are available.



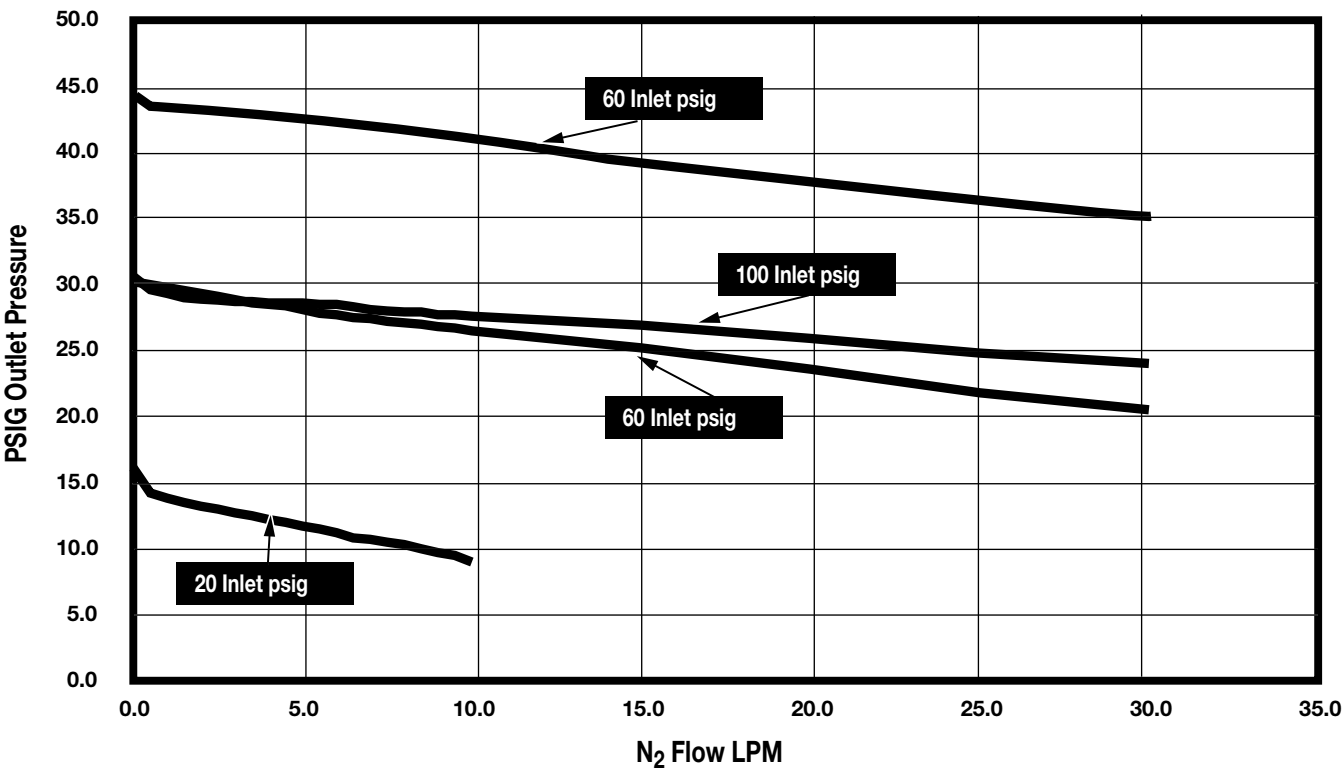
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SQ2MICRO

Flow Curves

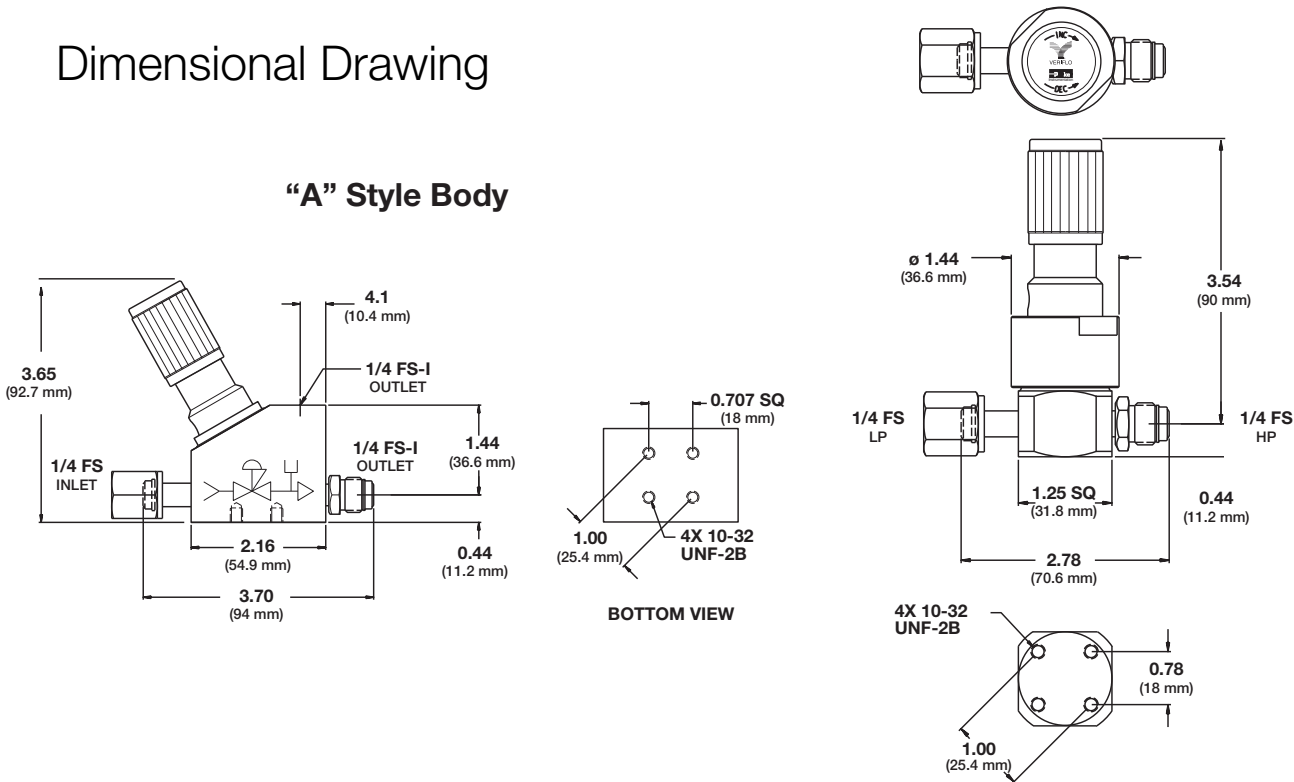
Additional flow curves available upon request

SQ2Micro Flow Curve



Dimensional Drawing

“A” Style Body



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

SQ2MICRO

Ordering Information

Build an SQ2MICRO Series regulator by replacing the numbered symbols with an option from the corresponding tables below.

	<div>1</div>	<div>2</div>	<div>3</div>	<div>4</div>	<div>5</div>	<div>6</div>	<div>7</div>	
Samples:	SQ2	MICRO	30		2P	FS	MF	TH
	SQ2MICRO130E	30	H	3P	FS	MIM	A	
Finished Orders:	SQ2MICRO302PFSMFTH							
	SQ2MICRO130E30H3PFSMIMA							

1

Basic Series
MICRO
MICRO130E

2

Range
30 = 30 psig
60 = 60 psig

3

Body Material
= 316L Stainless Steel
H = Hastelloy C-22®

4

Porting
2P = 2 Ports
3P = 3 Ports
See Regulator Porting Guide for additional options and port layouts

5

Port Style
FS = 1/4" Face Seal
TS = 1/4" Tube Stub *Not available with "A" Style body*

6

Connections
M = Male
F = Female
I = Internal Face Seal *Available for "A" style body only.*

7

Optional Features
This section can have multiple options

SS = **Stainless Steel Internals**
Includes 316L Stainless Steel diaphragm, compression member and poppet. Recommended for Carbon Monoxide CO or Nickel Carbonyl Ni(CO)₄ Service

A = **"A" Style Body** *FS Port Style Only*

TH = **Hastelloy C-22® Trim**
Available on Stainless Steel body only. Includes Hastelloy C-22® diaphragm, compression member and poppet.

VESP = **Vespel® Seat**
Recommended for Nitrous Oxide N₂O Service

SQ2MICRO

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	Stainless Steel
Knob	ABS (Blue) - <i>SQ2Micro Only</i>
	ABS (Black) - <i>SQ2Micro130E Only</i>
Operating Conditions	
Maximum Inlet	250 psig (17 barg)
Outlet	-10 psig to 60 psig (260 torr to 4.1 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	750 psig (52 barg)
Proof Pressure	375 psig (26 barg)
Flow Capacity	
C_v 0.06 - <i>SQ2Micro Only</i>	
C_v 0.15 - <i>SQ2Micro130E Only</i>	
Leak Rate	
Inboard Test Method	
Internal	5 x 10 ⁻⁸ scc/sec He
External	2 x 10 ⁻¹⁰ scc/sec He
Internal Volume	
2.56 cc - <i>SQ2Micro Only</i>	
4.21 cc - <i>SQ2Micro130E Only</i>	
Approx. Weight	
0.9lbs. (0.42 kgm)	
Standard Ra	5 micro inch

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

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