

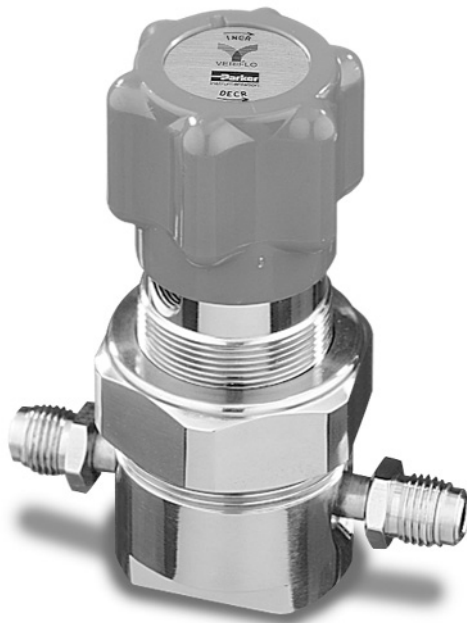
SQ130E

High Performance Point-Of-Use Regulator



Parker Hannifin Corporation's Veriflo Division presents the SQ130E. This regulator is a high flow, springless and threadless, point-of-use regulator designed to be used in process gas cabinets for gas companies, equipment manufacturers, and end users. The SQ130E has a C_v four times greater (.2 C_v) than the process proven SQ60, from which the SQ130E was developed.

The SQ130E provides precise control of process gas pressure at or near the tool for flow rates of up to 300 slpm at 200 psig inlet. The result is a stable flow and pressure to the mass flow controller.



features

- ▶ Increased flow capacity
- ▶ Standard Hastelloy C-22[®] Poppet and Diaphragm.
- ▶ Tied-diaphragm for added safety.
- ▶ Hurricane cleaning for "near-absolute" contamination control.
- ▶ Metal-to-metal, diaphragm-to-body seal.
- ▶ No springs or threads are exposed to the wetted area.

Catalog: 4508
LitPN: 25000182
Revision: A • 10/03



materials of construction

Wetted

Body "VeriClean", Veriflo's high purity type 316L Stainless Steel™, Hastelloy C-22[®]
 Seat PCTFE, optional Vespel[®]
 Diaphragm Hastelloy C-22[®]
 Poppet Hastelloy C-22[®]
 Compression Membrane "VeriClean", Veriflo's high purity type 316L Stainless Steel™, optional Hastelloy C-22[®]

Non-Wetted

Cap Brass, Nickel Plated
 Nut 316L Stainless Steel
 Knob (Blue) ABS Plastic

operating conditions

Maximum inlet pressure 1000 psig (70 barg)
 Outlet pressure 0-30 psig (2 barg)
 0-50 psig (3 barg), 0-100 psig (7 barg)
 Temperature -40°F to 150°F (-40°C to 66°C)

surface finishes

Standard Ra 10 micro inch (.25 micro meter) or less
 Optional Ra EV = 5 micro inch (.13 micro meter) or less

functional performance

Design proof pressure 1300 psig (89.7 barg)
 Design burst pressure 3000 psig (207 barg)
 Flow Capacity C_v 0.2
 (SEMI Flow Coefficient Test #F-32-0998)

Design Leak Rate:

Across Seat 5×10^{-8} scc/sec He
 Inboard 2×10^{-10} scc/sec He
 Outboard 2×10^{-9} scc/sec He

internal volume

6.19 cc

standard connections

Any combination of FS male and/or female fittings:
 1/4" Gland to gland length $3.7 \pm .02$ in.
 (94.0 \pm .5 mm)

1/4" tube stubs inlet and outlet available

End to end length $3.7 \pm .03$ (94.0 \pm .8 mm)

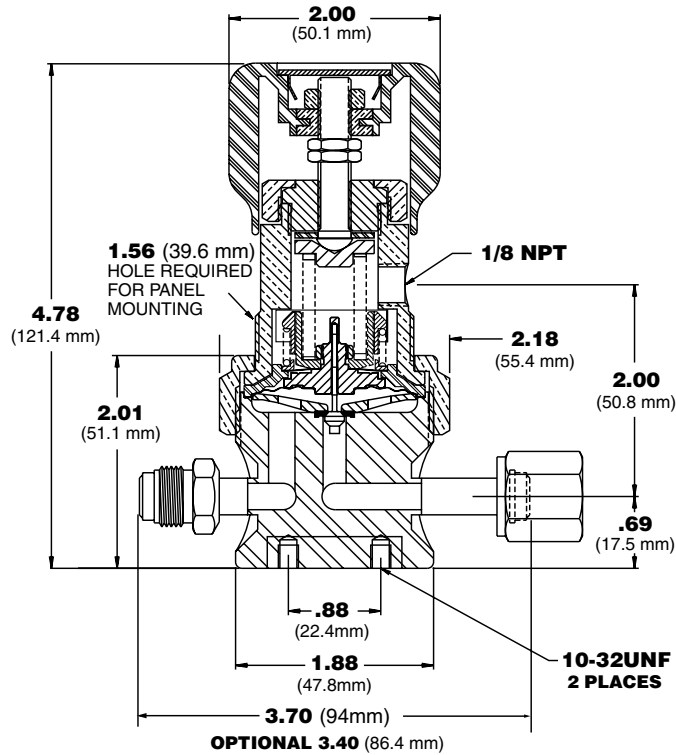
approximate weight

1.5 lbs. (.7 kg)

SQ130E

Dimensional Drawing

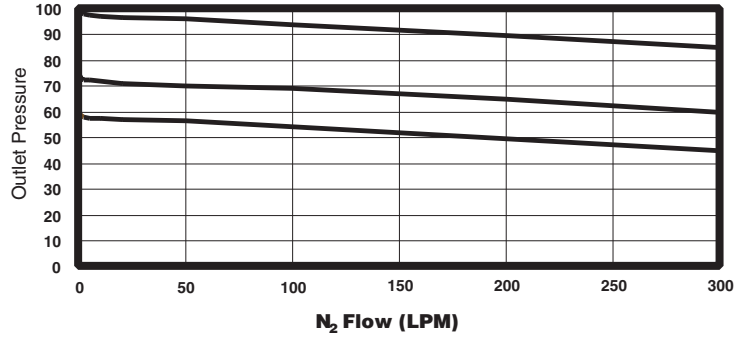
All dimensions are reference and nominal.



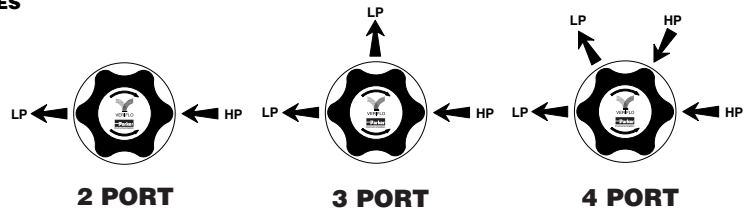
Flow Curves

SQ130E100

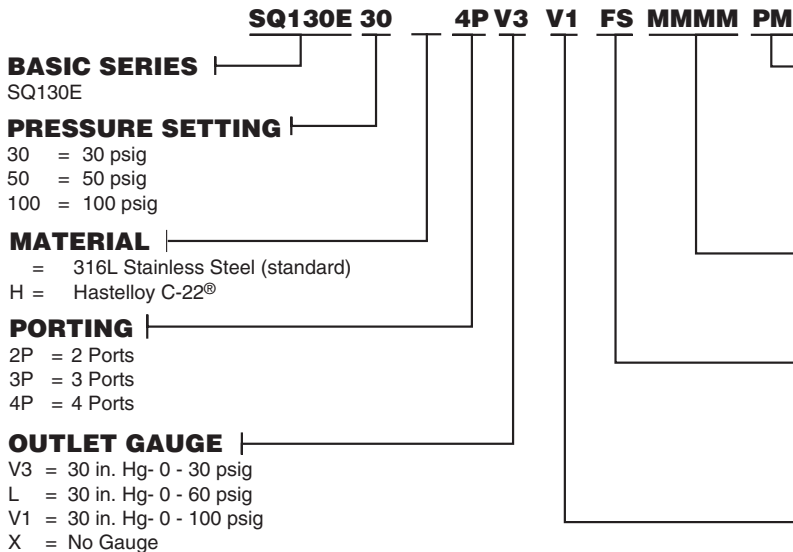
Inlet Pressure = 250 psig



Porting Configurations



Ordering Information



BASIC SERIES

SQ130E

PRESSURE SETTING

30 = 30 psig
50 = 50 psig
100 = 100 psig

MATERIAL

= 316L Stainless Steel (standard)
H = Hastelloy C-22®

PORTING

2P = 2 Ports
3P = 3 Ports
4P = 4 Ports

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

OPTIONAL FEATURES

DO = Dome Loaded
PM = Panel Mount
SS = Stainless Steel Internals †
TH = Hastelloy C-22® Trim (Compression Member)
VESP = Vespel® Seat*
3.4 = 3.4" Optional End-to-End Dimension

PORT CONFIGURATION

M = Male
F = Female
I = Internal Face Seal Female (1/4" Only)

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

INLET GAUGE

V1 = 30 in. Hg- 0 - 100 psig
2 = 0 - 200 psig
4 = 0 - 400 psig
X = No Gauge

* Recommended for Nitrous Oxide (N₂O) Service

† Recommended for Carbon Monoxide (CO) or Nickel Carbonyl Ni(CO)₄ Service

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Vespel® is a registered trademark of DuPont Company.