

Swagelok Point-of-Use (SPU)

Swagelok's point-of-use system (SPU) is the last point of control prior to the gas being used. Used at the end of a gas distribution system, point-of-use systems supply gas to lab benches, vent hoods, and single or small collections of equipment. Gas is fed to point-of-use systems either from a site supply header or from individual gas bottles after having the pressure reduced through a Swagelok gas panel (SGP). Swagelok's SPU systems are available with several bracket options to enable wall, benchtop, or underdesk mounting. They also can be ordered with top-to-bottom or bottom-to-top flow path configurations to accommodate installations that can vary widely between sites, buildings, or even within the same system.

SPU features include:

- Compact mounting brackets to ensure easy installation even within laboratories where wall space can be at a premium
- Easy serviceability, minimizing downtime if maintenance is needed

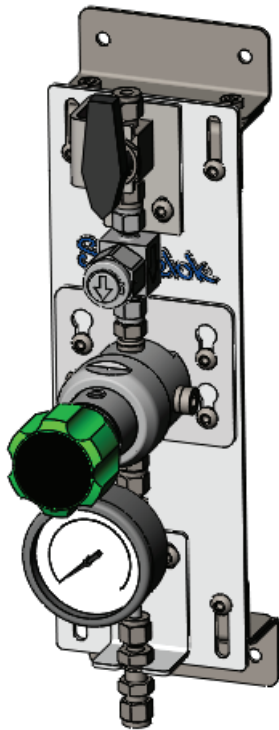


Fig. 13 SPU with Top-to-Bottom Flow

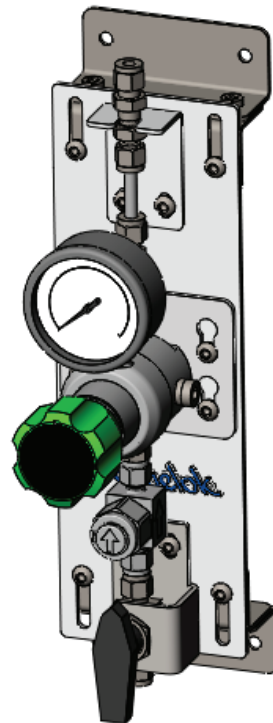


Fig. 14 SPU with Bottom-to-Top Flow

System may include:

- KPR series pressure regulator
- 40G series ball valve
- Swagelok tube fittings
- Seamless tubing
- PGI series gauges (63C)
- TF series filter
- Panel
- Bracket/misc hardware

SPU continued

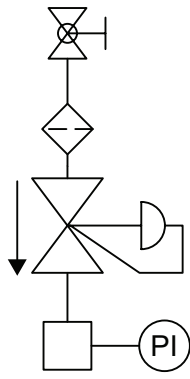


Fig. 15 Standard SPU P&ID

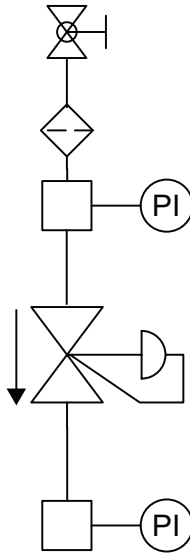


Fig. 16 SPU with Inlet Pressure Gauge P&ID

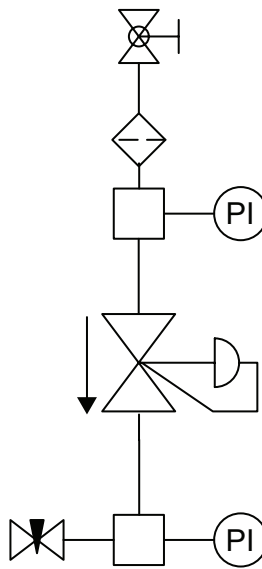


Fig. 17 SPU with Inlet Pressure Gauge and Low-Pressure Vent P&ID

SPU continued**Ordering Information**

Build an ordering number by combining the designators in the sequence shown below.

SPU **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12**
N T O E S4 S4 4 0 X 0 5 E

1 Gas Type

- N** = Inert
- O** = Oxygen^①

① A gas type of oxygen may limit selections available for other components.

2 Flow Direction

- T** = Top-to-Bottom
- B** = Bottom-to-Top

3 Gauges

- O** = Outlet only
- B** = Inlet and Outlet

4 Pressure Control Range

- D** = 0 to 25 psig (0 to 1.7 bar)
- E** = 0 to 50 psig (0 to 3.4 bar)
- F** = 0 to 100 psig (0 to 6.8 bar)
- G** = 0 to 250 psig (0 to 17.2 bar)

5 Inlet Connection

- S4** = 1/4 in. Swagelok tube fitting
- S6** = 3/8 in. Swagelok tube fitting
- S8** = 1/2 in. Swagelok tube fitting
- M6** = 6 mm Swagelok tube fitting
- M1** = 10 mm Swagelok tube fitting
- M2** = 12 mm Swagelok tube fitting
- N4** = 1/4 in. Male NPT
- F4** = 1/4 in. Female NPT

6 Outlet Connection

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- F4** = 1/4 in. Female NPT

7 Inlet Isolation Valve

- 0** = No valve
- 4** = 1/4-turn ball valve
- L** = 1/4-turn ball valve - lockable
- X** = 3-way ball valve
- T** = 3-way ball valve - lockable
- D** = Multi-turn needle valve

8 Vent

- 0** = No vent
- D** = Multiturn downstream vent

9 Inlet Filter

- X** = None
- 1** = Filter - 60 micron (inert)/10 micron (Oxygen)

10 Mounting

- 0** = Flat plate
- W** = Wall-mount wings
- T** = Top (L plate)
- B** = Bottom (L plate)

11 C_v (Flow Coefficient)

- 1** = 0.02
- 2** = 0.06
- 5** = 0.2

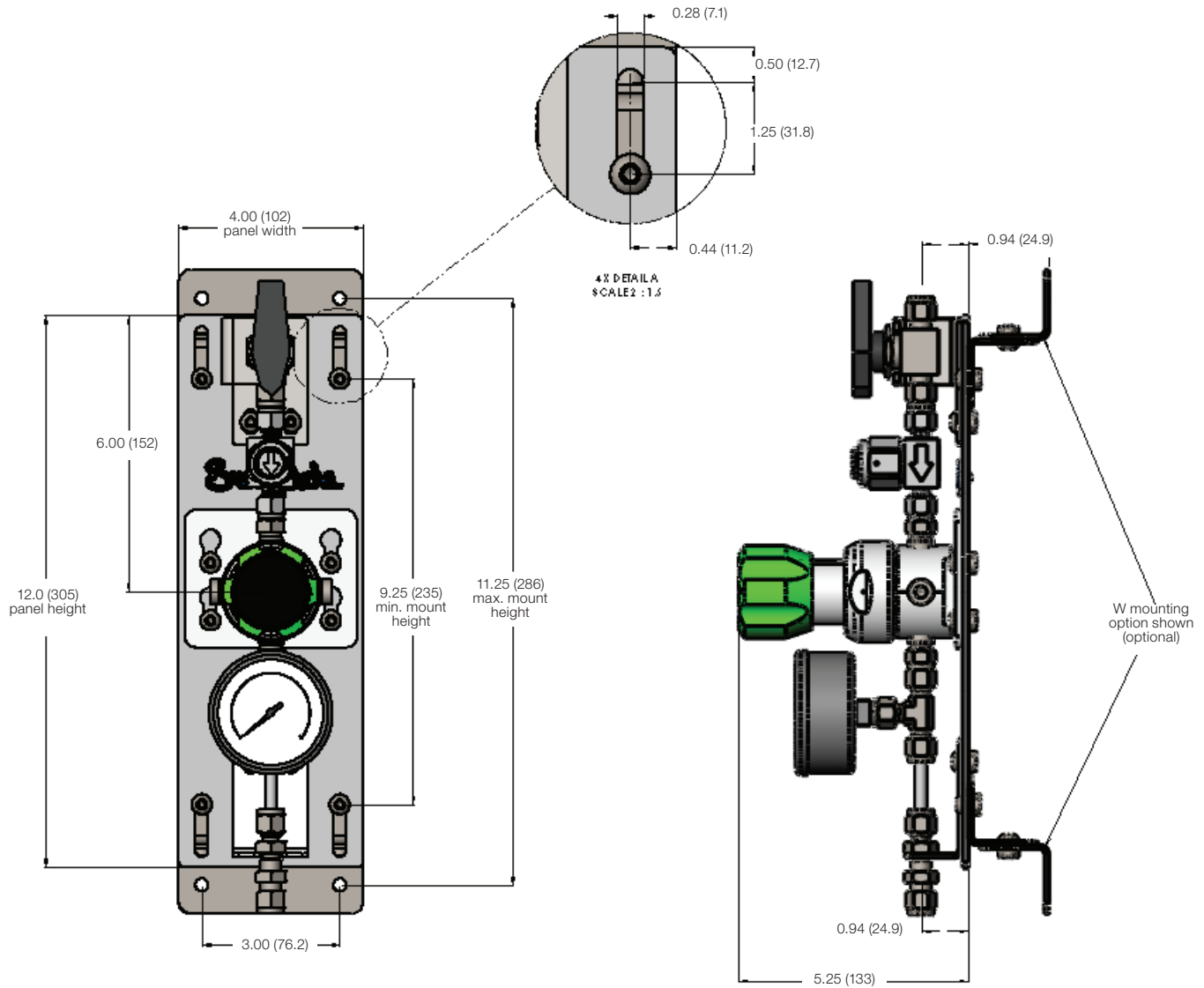
12 Options

- C** = Captured regulator vent
- H** = Helium leak test
- E** = ASME 3.1 material certification

Note: Multiple options can be added to the end of an ordering number.

SPU continued**Dimensions**

Dimensions, in inches (millimeters), are for reference only and are subject to change.



Swagelok

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