# **R25 Series**

## **Point-of-Use Pressure Regulator**

Inlet Pressure Max.6 MPaG (Max.870 PSIG) Outlet Pressure

Max.0.99 MPaG (Max.144 PSIG)

(Pressure Range: 0~0.2 MPa, 0~0.4 MPa, 0~0.6 MPa,

0~0.99 MPa)

Supply Pressure Effect 0.00178 MPaG (0.27 PSIG) per 0.1 MPaG (14.5 PSIG)

31.5 MPa (4,567 PSI), 1.5 MPa (Outlet Side) Proof Pressure

0.12

Temperature -10°C to +40°C

Screw (P); 1×10<sup>-9</sup> Pa • m<sup>3</sup>/sec • He (1×10<sup>-8</sup> atm • cc/sec • He) Outboard Leakage

Welding (W);  $1 \times 10^{-11}$  Pa • m<sup>3</sup>/sec • He ( $1 \times 10^{-10}$  atm • cc/sec • He)

4.67 cc (0.28 in3) w/o fittings Internal Volume

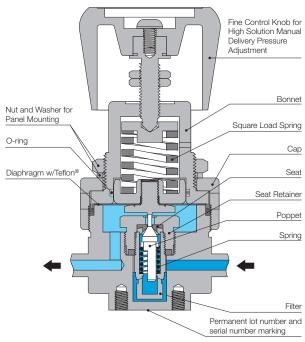
Approximate weight 0.96 kg (2 lbs. 2 oz.)

Threaded holes on the rear surface or Panel mounting Installation

 $1MPa = 10.2 \text{ kgf/cm}^2 = 145.04 \text{ PSI}$ 1MPa = 7504.36 mmHg = 295.4 inHg



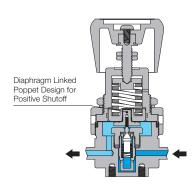
## **Cross sectional drawing**



#### [NOTE]

- · Avoid turning the control knob excessively.
- $\cdot$  For purging at 870 PSIG (6 MPaG) and higher, operate the unit in consideration of changing the outlet pressure by the supply pressure effect.

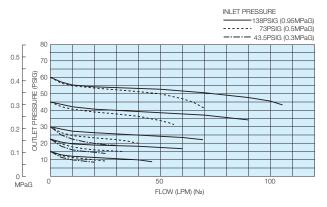
## **Tied Diaphragm (Optional)**



#### [NOTE]

Operating the Tied Diaphragm Type: In order to minimize premature wear of regulator's internal parts. Be sure not to close regulator while under pressure.

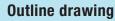
## Flow characteristics

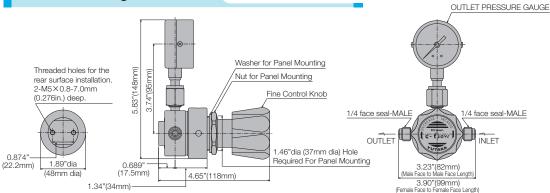


#### [NOTE]

· These tests were performed at ambient conditions.







#### [NOTE]

- Dimensions are in inches and (mm) for reference only.
- Subject to change without notice.

### **Materials of construction**

MODEL & TYPE	R25SS	R25SH	R25SH-CL2	R25SS-N20	R25SS-CO	
Wetted Parts						
Body	SUS316L					
Poppet & Seat Retainer	SUS316L	Hastelloy® C-22		SUS316L		
Diaphragm	SUS316L	Hastelloy® C-22		SUS316L		
Seat	PC <sup>-</sup>	TFE	Special Fluoroplastics	Vespel <sup>®</sup>	PCTFE	
Spring	SUS316					
Gasket	PCTFE and PTFE					
Gasket to seal for gauge	Ni			SUS316		
Non-wetted Parts						
Bonnet	Nickel Plated Brass					
Cap	Nickel Plated Brass					
Control Knob	ABS Resin					
O-ring	NBR					

## Wetted surface finishes

Standard Ra (GRADE "B"&"C")	32µin. (0.80µm) or less		
Optional Ra (GRADE "A")	7μin. (0.18μm) or less		

## **Standard connections**

1/4" NPT body length 1.93in. (48mm)
1/4" face to face length of the male and female
are the same. (Male) 3.23in. (82mm)
1/4" face to face length of the male and female
are the same. (Female) 3.90in. (99mm)
1/4" sus tube fitting length 4.37in. (111mm)

#### NOTE]

- Any combination of Face Seal male and/or female fittings are available for inlet and outlet.
- · Size and configuration of pressure gauge port is 1/4" Face Seal male.

