Precision Clean Regulator

Series **SRP**

High precision, low flow consumption stainless steel regulator
High precision, low flow consumption stainless steel regulator

Achieves flow consumption "under a liter"
Bleed volume
0.5l/min (ANR) or less (downstream pressure at 0.2MPa)
* Approx. 1/4 of the ARP3000 direct operated precision regulator

Excellent corrosion resistance
SUS316 is used for all metal parts in contact with the fluid.

Precision
Setting sensitivity: 0.3% F.S.
Repeatability: 1% F.S.

Oil free
Parts composition with no use of oils.
HFC1416 ultrasonic cleaning of all fluid-contact parts.

Consistent clean room production
Cleaned, assembled, inspected, and sealed in double packaging in a Class 10,000 environment

Applications
Pressure feed of chemicals

Pressure clean regulator

Clean air
Super mist separator
Odor removal filter
Clean gas filter

N₂ blow

Precision clean regulator

N₂ gas

Clean gas filter

Manufacturing process
Parts assembly

Degrease cleaning
Assembly
Inspection
Interior purge
Packaging

Class 10,000
Precision Clean Regulator
Series **SRP**

**How to Order**

**SRP 1 1 0 1 01 R**

**Set pressure**

<table>
<thead>
<tr>
<th>0</th>
<th>0.005 to 0.2MPa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.01 to 0.4MPa</td>
</tr>
</tbody>
</table>

**Gauge port orientation**

- **Nil**: Standard
- **R**: R specifications

**Port size**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Piping port size</th>
</tr>
</thead>
<tbody>
<tr>
<td>M5</td>
<td>M5 x 0.8</td>
</tr>
<tr>
<td>01</td>
<td>Rc 1/8</td>
</tr>
</tbody>
</table>

**Options**

<table>
<thead>
<tr>
<th>Description</th>
<th>Model</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bracket</td>
<td>B21-1-T1</td>
<td>Rolled steel plate (electroless nickel plated)</td>
</tr>
</tbody>
</table>

**Specifications**

- **Connection port size**: M5, Rc 1/8
- **Fluid**: Air, N2, CO2, Ar
- **Proof pressure MPa**: 1.5
- **Maximum operating pressure MPa**: 1.0
- **Regulating pressure range MPa**
  - Low pressure type: 0.005 to 0.2
  - High pressure type: 0.01 to 0.4
- **Ambient and fluid temperature (°C)**: 0 to 60
- **Fluid consumption l/min (ANR) Note 1)**: 0.5 or less
- **Sensitivity**: 0.3% of full span
- **Repeatability**: ±1% of full span
- **Fluid-contact parts**
  - Metal: SUS316
  - Resin: Fluoreosin
  - Rubber: Fluoro rubber
  - Other: Ceramics
- **Assembly environment**: Clean room class 10000
- **Parts cleaning**: HCFC141b ultrasonic cleaning of all fluid-contact parts

**Note 1)** At set pressure of 0.2MPa
### Flow Characteristics

**Fluid: Air**

**SRP1101-M5**  
Conditions/Upstream pressure: 0.5MPa

**SRP1111-M5**  
Conditions/Upstream pressure: 0.7MPa

**SRP1101-01**  
Conditions/Upstream pressure: 0.5MPa

**SRP1111-01**  
Conditions/Upstream pressure: 0.7MPa

### Pressure Characteristics

**Fluid: Air**

**SRP1101**  
Initial setting/Upstream pressure: 0.7MPa  
Downstream pressure: 0.1MPa

**SRP1111**  
Initial setting/Upstream pressure: 0.7MPa  
Downstream pressure: 0.2MPa
Construction

Parts list

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Material</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Body</td>
<td>SUS316L</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Valve guide</td>
<td>SUS316</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Spacer</td>
<td>PPS</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Bonnet</td>
<td>PPS</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Knob</td>
<td>PBT</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Set nut</td>
<td>ZDC</td>
<td>Electroless nickel plated</td>
</tr>
<tr>
<td>7</td>
<td>Valve spring</td>
<td>SUS316</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Main valve</td>
<td>Ceramics</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Valve seat</td>
<td>PTFE</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>O-ring</td>
<td>Fluoro rubber</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Diaphragm</td>
<td>Fluoro rubber</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Gasket</td>
<td>Fluoro rubber</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Pressure regulator spring</td>
<td>Steel wire</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Pressure regulator screw assembly</td>
<td>——</td>
<td></td>
</tr>
</tbody>
</table>

Dimensions

Bracket

<table>
<thead>
<tr>
<th>Model</th>
<th>Port size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRP11□□ □-M5</td>
<td>M5 x 0.8</td>
<td>14</td>
<td>23.5</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>SRP1□□ □-01</td>
<td>Rc 1/8</td>
<td>15</td>
<td>22.5</td>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>