

Series **SRH** Clean regulator

How to Order



SRH 3 0 0 0 02 R

Body size

3	1/4
4	3/8

Washing grade

0	Grade A
1	Grade B

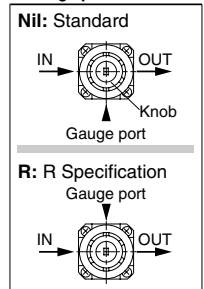
Set pressure

0	0.02 to 0.2 MPa
1	0.05 to 0.7 MPa

Relief mechanism

0	Non-relief
1	Relief

Gauge port orientation



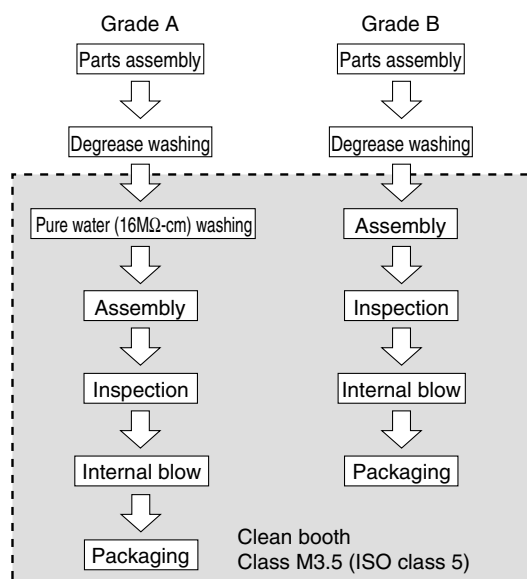
* There is only one gauge port.

Port size

Symbol	Port size	SRH3000	SRH4000
01	Rc1/8	●	—
02	Rc1/4	●	●
03	Rc3/8	—	●
04	Rc1/2	—	●
A2	With metal gasket seal fitting	URJF1/4	—
A3	With metal gasket seal fitting	—	URJF3/8

Note) Please refer to option specifications for pressure gauges.

Production process

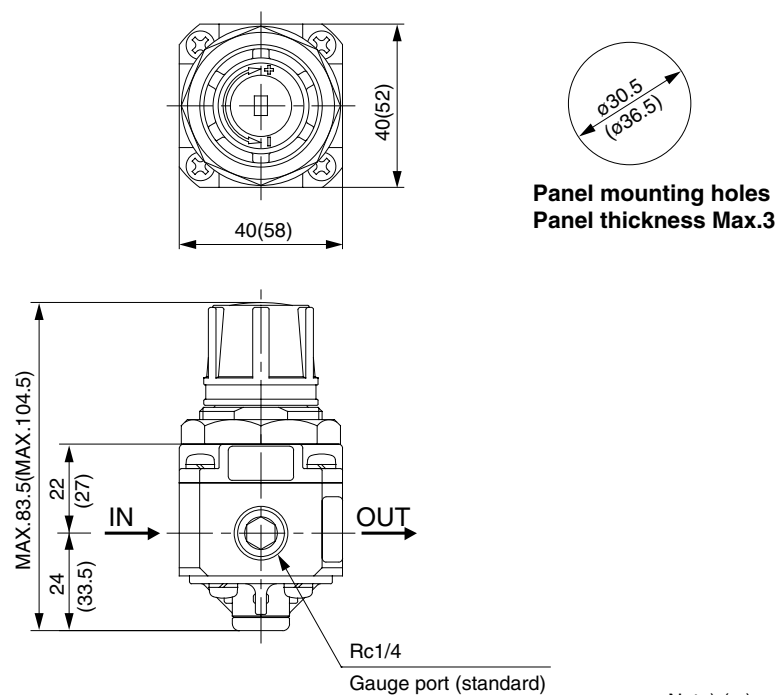


Specifications

Model		SRH3□□0	SRH4□□0	SRH3□□1	SRH4□□1
Relief mechanism		Non-relief		Relief	
Port size		Rc1/8, 1/4 URJF1/4	Rc1/4, 3/8, 1/2 URJF3/8	Rc1/8, 1/4	Rc1/4, 3/8, 1/2
Fluid	Grade A	Clean air, N ₂ , Ar, CO ₂ , pure water		Clean air, N ₂	
	Grade B	Air, N ₂ , Ar, CO ₂ , water		Air, N ₂	
Proof pressure		1.5MPa			
Max. operating pressure		1MPa			
Set pressure	Low pressure type	0.02 to 0.2MPa			
	High pressure type	0.05 to 0.7MPa			
Ambient & fluid temperatures		0 to 60°C (with no freezing)			
Wetted part material (metal)		Stainless steel SUS316 (body is stainless steel SUS316L)			
Diaphragm material	Grade A	PTFE			
	Grade B	Fluororubber			
Weight		360g	730g	360g	730g
Particle generation grade (Refer to front matters 13 to 22 for details.)		Grade 1			

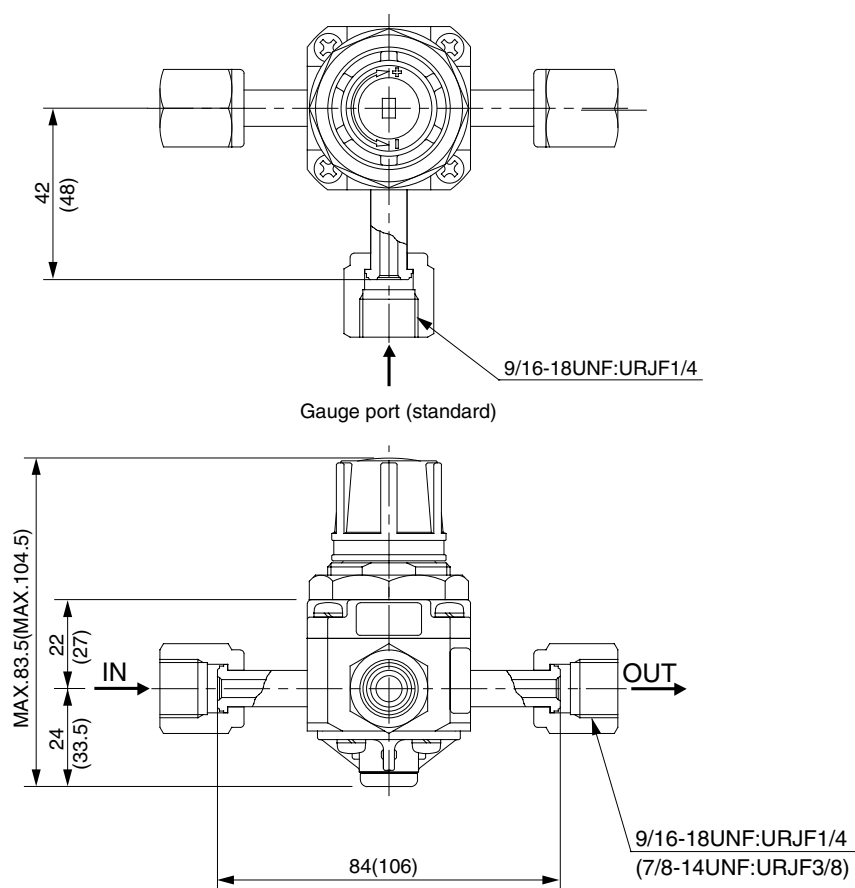
Dimensions

Rc thread type

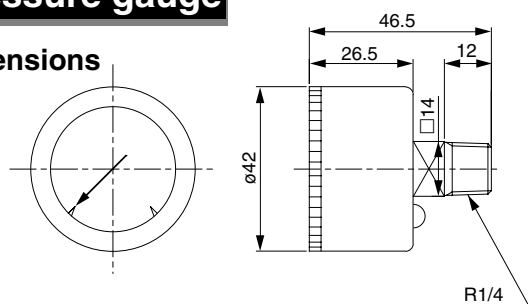


Note) () are the dimensions of SRH4000.

Metal gasket seal fitting type



Note) () are the dimensions of SRH4000.

Options**Pressure gauge****Dimensions****Specifications**

Item	Model	G46-□-02-SRA	G46-□-02-SRB
Port size		R1/4	
Operating temperature range		0 to 60°C (with no freezing)	
Accuracy		±3% F.S.	
Scale range		270°	
Parts washing (wetted parts)		Precision washing	General degreasing
Assembly & adjustment environment		Clean room	General production line
Oil free / Water free		Oil free / Water free	
Materials	Wetted parts	Stainless steel SUS316	
	Case	Stainless steel SUS304 (Black melamine coating)	
	Clear cover	Polycarbonate (Hard coated) Part No. G46-00-00-2	
	Internal parts	Brass	
Weight		80 g	

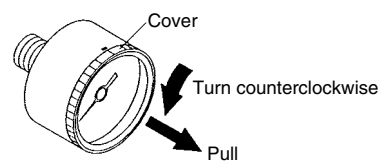
Note) Consult SMC for the supply of models with fitting of metal gasket seal.

Model

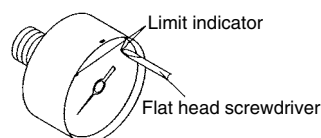
Model	Pressure range	Display unit
	MPa	
G46-2-02-SRA	0 to 0.2	MPa
G46-2-02-SRB		
G46-4-02-SRA	0 to 0.4	
G46-4-02-SRB		
G46-7-02-SRA	0 to 0.7	
G46-7-02-SRB		
G46-10-02-SRA	0 to 1.0	
G46-10-02-SRB		

Procedure for setting the limit gauge indicator

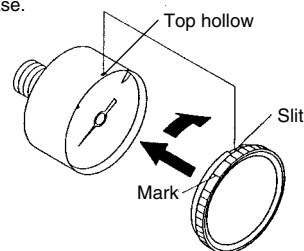
- 1) Before setting the limit indicator (green), turn the cover counterclockwise (approximately 6 to 7 mm) until it stops. Then, pull the cover and remove it.



- 2) Use a flat head screwdriver (with a 2.9 mm blade width) to set the limit indicator. Be careful not to bend other needle or damage the dial plate.



- 3) After completing the setting, fit the cover as before. Fit the cover by aligning the cutout in the cover to the groove on the top of the black case. Turn the cover clockwise (approximately 6 to 7 mm) and make sure that the matching mark on the cover is aligned with the groove on the top of the case.

**Brackets**

	For SRH3000	For SRH4000
Model	B21-1-T1	1350112-T1
Materials	Rolled steel plate (Electroless nickel plated)	
Dimensions		



Specific Product Precautions

Be sure to read before handling.

Design and Selection

Warning

1. Confirm the fluid.

Because the fluid to be used differs depending on the product, be certain to confirm the specifications. If an incompatible fluid is used, characteristics may change, which will cause malfunction.

2. Residual pressure relief is not possible without inlet side pressure.

For SRH series, if the inlet side pressure is cut off while pressure still remains on the outlet side, it is not possible to release the outlet side pressure (residual pressure relief). If pressure release from the outlet side is required, a circuit should be provided for residual pressure relief.

Caution

1. Vibrations (noise) may be generated due to the operating conditions, etc., even if the regulator is used within the catalog specification range. If noise is generated, please consult SMC.

Pressure gauge

1. Avoid use in locations subject to strong pulsation or vibration.
2. Consult SMC regarding the operation at high frequency.

Mounting

Caution

1. Open the sealed package in a clean room.

These products are packaged in airtight double packaging in a clean room. It is recommended that the inside packaging be opened in a clean room or other clean environment.

2. Flush the piping.

Connect these products to piping only after it has been flushed and cleaned properly. If debris or scale etc. remains in the piping, this can cause malfunction or failure.

3. Be certain that sealing material does not get inside the piping.

When screwing in pipes and joints etc., take care that cutting dust from the pipe threads, sealing material, and the like do not get inside the piping. If debris or scale etc. remains in the piping, this can cause malfunction or failure. Also, when thread tape is used, leave 1.5 or 2 threads exposed at the end of the pipe.

4. Confirm the mounting orientation of the product.

The side marked with an "IN" is the fluid supply port, and that marked with an "OUT" is the fluid exhaust port. If mounted backwards, the device will not operate properly.

Mounting

Caution

Pressure gauge

1. Do not apply impacts to the regulator by dropping or hitting it during transfer or installation.
It may cause inaccuracy in indication.
2. Do not install the regulator in an environment where it is exposed to high temperature or humidity.
It may cause malfunction or failure.
3. When screwing in the pressure gauge, be sure to apply the wrench to the square wrench flats. If it is applied to other parts, it may cause air leakage or damage.

Pressure adjustment

Warning

1. Do not use tools when handling the pressure adjustment knob.

The pressure adjustment knob may be damaged if handled with tools. Handle this knob only by hand.

Caution

1. Release the lock to adjust the pressure.

When the pressure adjustment knob will not turn, it is locked. Pull the pressure adjustment knob to release the lock. The knob may be damaged when it is turned by force.

Push the knob to lock again after adjusting the pressure.

2. Adjust the pressure in an upward direction.

A correct pressure setting cannot be achieved by adjusting the pressure downward. The outlet side pressure increases when turning the knob clockwise, and decreases when turning it counterclockwise.

3. In the case of non-relief type, the pressure cannot be reduced by turning the knob counterclockwise.

In the case of the non-relief type regulator, the outlet side pressure will not decrease even if the knob is turned counterclockwise unless outlet side fluid is consumed. The knob will be damaged if it is turned by force.

In case the pressure setting is too high, reduce the pressure on the outlet side to less than the desired setting pressure by consuming fluid on the outlet side, and then reset to the desired pressure.

4. Confirm the inlet side pressure.

Set the outlet side pressure to no more than 85% of the inlet side pressure. If the supply pressure is too low, a correct setting pressure cannot be obtained.

5. Do not use fluid containing solid matter.

This will cause malfunction.

Air cylinder

Rotary actuator

Air gripper

Directional control valve

Flow control equipment

Filter, Pressure control equipment

Fittings & Tubing

Air preparation equipment

Pressure switch

Clean gas filter