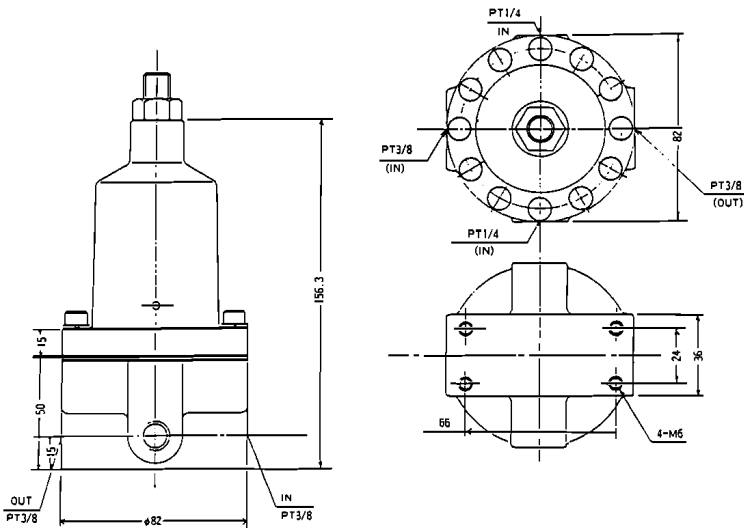


# Operation and Maintenance Manual

## High Pressure Back Pressure Valve

# HRV-4

# HRV-4S



Specifications	
Max. back pressure	5MPa
Max. flow rate	5L / min (20sec / FC#4) 2.5L / min (50mPa·s)
Liquid temperature	5~60°C
Weight	2.2kg



This manual contains important information on warnings and cautions.

Read the manual thoroughly before starting to operate the equipment, and follow the instructions.

Always keep the manual handy until such time as the equipment is no longer being used, and if your manual is lost or worn badly, do not hesitate to contact our agency, which is closest to you, or Asahi Sunac Corporation, directly, and ask us to send you a new one.

Thank you for buying our product, High Pressure Back Pressure valve, Model HRV-4 (S).

Before you use the equipment, carefully read this manual.

This high pressure back pressure valve is designed for high accuracy and high stability by low viscosity and low discharge volume. Since the performance cannot be demonstrated with the wrong operation, please understand warning and notes in this manual and use with correct operation.

Should you have any questions about the manual, please contact us, Asahi Sunac, at the addresses, phone and fax numbers as shown on the back of this manual.

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For high-performance airless, we have the following 4 products. Using in combination with customer's specifications, it exhibits high pulsation absorption and pressure stability.

#### ■ Specifications

##### ● High pressure regulator HMR-4(S)

Max. primary pressure ..... 10MPa

Discharge pressure adjustment range (Paint secondary pressure) ..... 0~5MPa

Max. flow rate ..... 5L/min (20sec/FC#4)

Liquid temperature ..... 5~60°C

##### ● Back pressure valve HRV-4(S)

Max. back pressure ..... 5MPa

Max. flow rate ..... 5L/min (20sec/FC#4)

Liquid temperature ..... 5~60°C

##### ● Pulsation absorbing damper DA-1 (S)

Pressure ratio ..... 16:1

Max. flow rate ..... 1.5L/min

Pressure range ..... 1.5~10MPa

Liquid temperature ..... 5~80°C

##### ● Pulsation absorbing damper DA-2 (S)

Pressure ratio ..... 20:1

Max. flow rate ..... 4.5L/min

Pressure range ..... 2~13MPa

Liquid temperature ..... 5~80°C

## Precautions

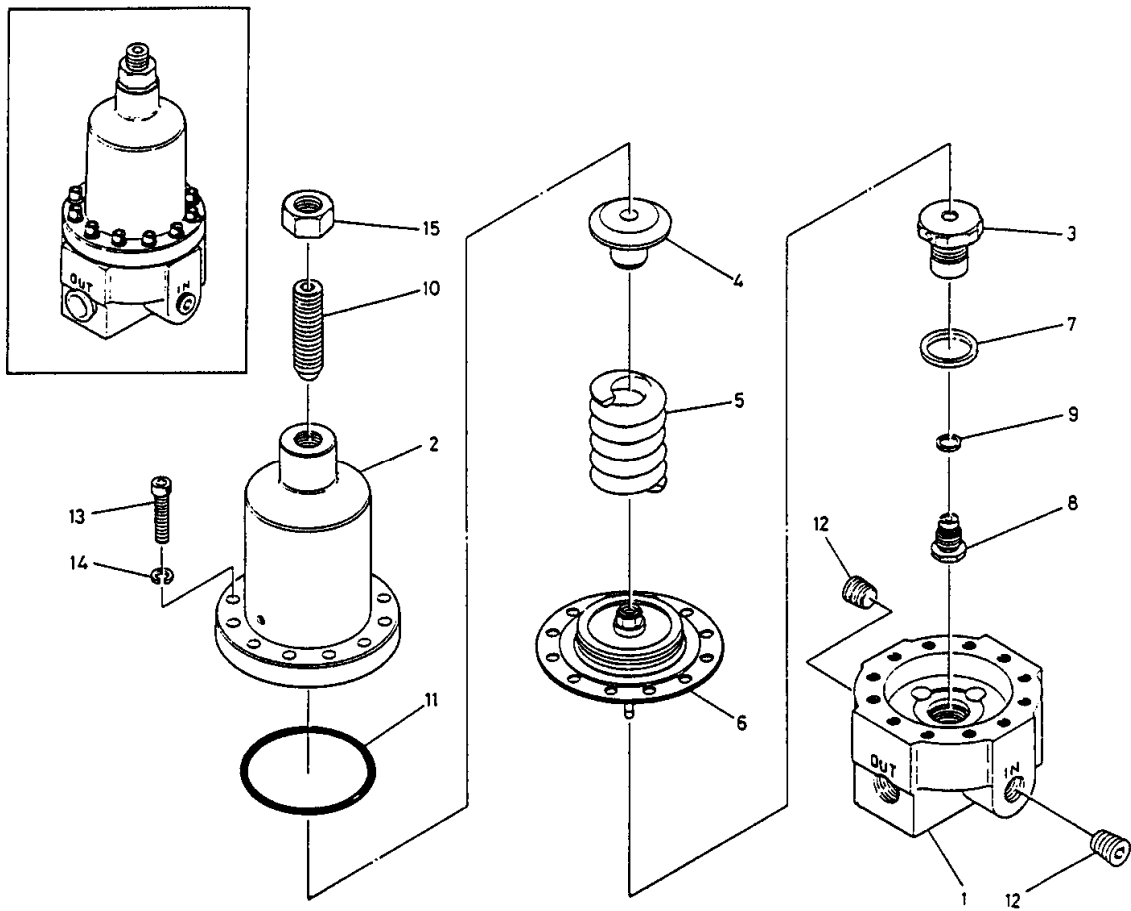
- (1) First, clean the inside of the device with thinner suitable for cleaning the paint to be used, and try all the operations.
- (2) Do not install the regulator in a place where thinner and paint splashes.
- (3) Do not use the primary pressure below 10MPa.
- (4) Clean well after each use.

Inadequate cleaning may cause failures such as regulator seat failure or uncontrollable pressure.

# Names of Parts

HRV-4  
5010

HRV-4S  
5010-1



## High Pressure Back Pressure Valve HRV-4 / HRV-4S

No.	Parts No.	Name	Qty.	Remarks
1	5010-001	Body	1	HRV-4
	5010-101			HRV-4S
2	5010-002	Cover	1	
3	5010-003	Valve housing	1	
4	5009-004	Spring retainer	1	
5	5009-005	Spring	1	
6	5010-006	Diaphragm	1 set	*
7	5009-008	Packing	1	*
8	5010-008	Seat	1 set	*

No.	Parts No.	Name	Qty.	Remarks
9	5010-009	Packing	1	*
10	5009-007	Hex. socket screw	1	
11	102-6055	O ring	1	
12	244-2002	Hex. socket plug	2	HRV-4
	244-4002			HRV-4S
13	03-80625	Hex. socket cap screw	12	
14	48-70600	Spring washer	12	
15	5009-009	Hex. nut	1	

\* Prepare the parts always as spare parts.

Notes: Shape and specification of this equipment can be changed due to some circumstances such as reform.

## Warranty

ASAHI SUNAC CORPORATION (the “Company”) shall provide the original purchaser (the “Purchaser”) with warranty service for a period of 6 months from the date of purchase of the product, as follows:

- Should you find defects in design or workmanship with regard to parts, ship them back to the Company, with freight prepaid. The Company shall repair or replace the parts free of charge and reimburse the freight charges, provided that, as a result of an inspection and investigation of the parts conducted by the Company, the defects are deemed to be attributable to the factors within the Company’s responsibility.
- In the following cases, free after-sales service is not provided.
  1. Failure resulting from an inappropriate method of installing this equipment.
  2. Failure resulting from a use method not conforming to this instruction manual or mishandling.
  3. Failure resulting from insufficient maintenance management of this equipment and incorrect handling such as non-conformance to the procedures specified in this instruction manual.
  4. Failure resulting from unauthorized alteration or structure change of this equipment without the Company’s consent.
  5. Failure due to force majeure such as earthquake, disaster, flood disaster or lightening.
  6. Warranty for consumables worn or deteriorated even in the case where this equipment is used correctly.
  7. Repair after the machine has been used outside Japan, and shipping cost.
  8. In addition to the above, failure due to circumstances beyond our control.
- As for items such as parts purchased by the Company from another manufacturer, the warranty of that manufacturer shall apply.
- As for any parts deemed to be defective, the Company shall not be held liable for any expenses beyond the provision of repair or replacement parts free of charge.
- The Company shall not be held liable for any damage to the Purchaser caused by factors not attributable to the Company, such as misuse of product, etc.

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- When a transfer of title of this equipment takes place, please see to it that this Operation and Maintenance Manual is handed over to the new owner.
  - This equipment is manufactured in compliance with the Laws and Regulations of Japan. In the rare eventuality of this equipment being used outside Japan, compliance with the safety standards of the relevant countries is of course mandatory.
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9th Edition: August 4, 2022



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9th Edition: August 4, 2022