FJ400019I1
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Pressure Regulating Valve Model 6600

Large-flow Pressure Regulating Valve Model 6700

Instruction Manual

KOFLOC Corp.

Foreword

Thank you for your selection of Model 6600/6700.
Prior to using your pressure regulating valve, please read this manual thoroughly to ensure the valve will operate to its maximum performance.

- The contents of the manual are subject to change without prior notice.
- The manual has been carefully created and checked before shipment. If you notice any deficiencies, errors or omissions, however, please inform us.
- The warranty period of the pressure regulating valve is one year from the date of shipment from our plant.
- Any failures which may occur during this period and are attributable to our workmanship will be corrected free of charge.
- KOFLOC shall bear no responsibility whatsoever for breakage or troubles of equipment resulting from neglect of the precautions presented in this manual or use of the pressure regulating valve in manners not described herein.

■Model 6600

●Precautions for Handling

1) Installation

① Prior to connecting a pipe to the valve, be sure to flush the pipe. Dust/dirt, sand, scale, etc. remaining inside the pipe are causes of malfunction and failure.

② When processing piping materials for connection, exercise extreme care. Sealing material, produced chips, etc. remaining inside the pipe are causes of malfunction and failure. When applying sealing material to the pipe, be sure that it will not cover the first one turn of threads.

③ The "IN" marking indicates the inlet of fluid and the "OUT" marking the outlet. If the valve is installed in a wrong direction, it will not operate properly.

2) Pressure adjustment

① Low pressure to high pressure: While observing the secondary side pressure gauge, turn the adjust knob of the pressure reducing valve clockwise.

② High pressure to low pressure: Because this valve is of non-bleed type, turn the adjust knob counterclockwise, release the secondary side gas to the line with a stop valve, etc., decrease the secondary pressure to below the desired pressure and then turn the adjust knob clockwise to set the desired pressure.

3) Other precautions

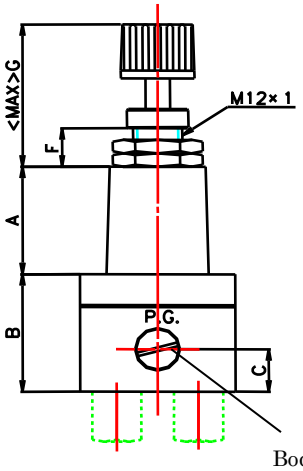
① Use the pressure reducing valve within the range of the specifications.

② Prior to introducing gas, turn the adjust knob of the pressure reducing valve counterclockwise to keep it loosened fully. Then introduce gas.

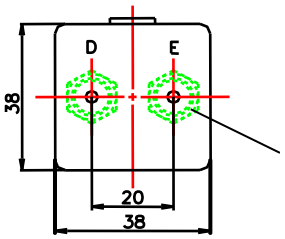
●Specifications

Primary side maximum pressure	0.8 MPa(G)
Secondary side control pressure	Type A : 0.01 － 0.3 MPa(G) Type B : 0.03 － 0.6 MPa(G)
Minimum operating pressure difference	0.05 MPa
Pressure resistance	0.8 MPa(G)
Reproducibility	Max. ±1% of rated pressure
Temperature characteristic	Max. ±1%/10℃ of rated pressure
Environmental temp	5℃－60℃
Connecting port	Rc 1/4 (standard), Rc 1/8 (Optional)
Fluid contact materials	(A) Al, Brass, NBR, POM,SUS316 (Hard glass) (SS) SUS316, SUS303, FKM, PCTFE (Hard glass)

● Construction and External Dimensions



Body side M8×1



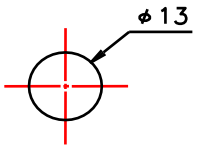
Body side M8×1

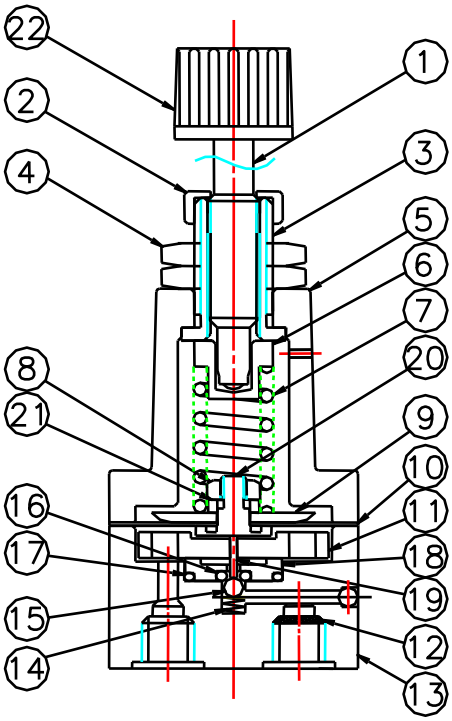
(2 places)

Model	A	B	C	D	E	F	G
6600A	28	30.5	11	OUT	IN	10	37
6600B	31	30.5	11	OUT	IN	13	40
6600AL	28	33.5	14	IN	OUT	10	37
6600BL	31	33.5	14	IN	OUT	13	40

(mm)

Cut out dimensions





1/ Pressure regulating shaft
2/ Cap nut
3/ Bonnet bearing
4/ Panel mounting nut
5/ Bonnet
6/ Bearing
7/ Pressure regulating spring
8/ M4 nut
9/ Diaphragm disc
10/ Diaphragm
11/ Retaining plate
12/ Filter
13/ Body
14/ Spring
15/ Ball
16/ O-ring
17/ O-ring
18/ Precision nozzle
19/ Stem
20/ Caulking
21/ Disc (small)
22/ Knob

■Model 6700

●Precautions for Handling

1) Installation

① Prior to connecting a pipe to the valve, be sure to flush the pipe. Dust/dirt, sand, scale, etc. remaining inside the pipe are causes of malfunction and failure.

② When processing piping materials for connection, exercise extreme care. Sealing material, produced chips, etc. remaining inside the pipe are causes of malfunction and failure. When applying sealing material to the pipe, be sure that it will not cover the first one turn of threads.

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2) Pressure adjustment

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3) Other precautions

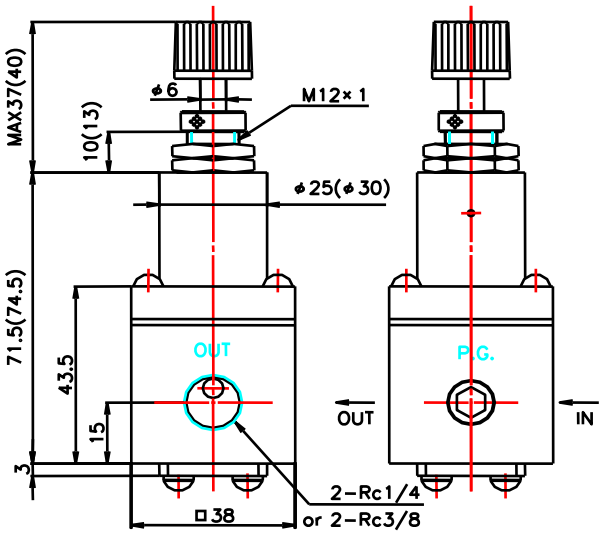
① Use the pressure reducing valve within the range of the specifications.

② Prior to introducing gas, turn the adjust knob of the pressure reducing valve counterclockwise to keep it loosened fully. Then introduce gas.

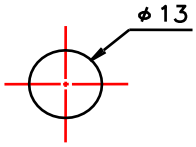
●Specifications

Primary side maximum pressure	0.9 MPa(G)
Secondary side control pressure	Type A： 0.01 － 0.3 MPa(G) Type B： 0.05 － 0.6 MPa(G)
Minimum operating pressure difference	0.05 MPa
Pressure resistance	1.0 MPa(G)
Reproducibility	±1% of rated pressure
Environmental temperature	5℃－60℃
Connecting port	Rc 3/8 (standard)、Rc1/4 (Optional)
Fluid contact materials	(A) Al, Brass, SUS316, NBR, POM, FKM (SUS304) (SS) SUS316, FKM, PCTFE (SUS304)

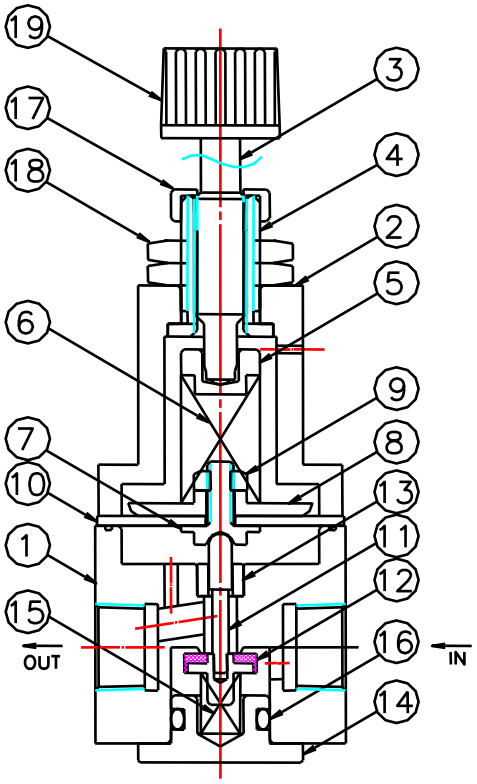
●Construction and External Dimensions



Cut out dimensions



The dimensions in parentheses are for Type B.



1/ Body
2/ Bonnet
3/ Pressure regulating shaft
4/ Bonnet bearing
5/ Bearing
6/ Pressure regulating spring
7/ Diaphragm caulking
8/ Diaphragm retaining plate
9/ M4 nut
10/ Diaphragm
11/ Stem
12/ Stem guide
13/ Nozzle
14/ Spring receiver
15/ Spring
16/ O-ring
17/ Cap nut
18/ Panel mounting nut
19/ Knob

●Troubleshooting (Model 6600)

Trouble	Cause	Corrective Action
The pressure cannot be adjusted.	1. The direction of flow is reversed or the valve installation is reversed. 2. The pressure regulating spring has been broken. 3. The stem spring has been broken. 4. Dust is adhering to the stem O-ring. 5. The stem O-ring has been damaged.	1. Check the direction of flow. If it is reversed, reinstall the valve correctly. 2. Please return it to us. We'll check it and repair it. 3. Please return it to us. We'll check it and repair it. 4. Please return it to us. We'll check it and repair it. 5. Please return it to us. We'll check it and repair it.
The set pressure will not become zero when the pressure regulating handle is loosened.	1. Dust is adhering to the stem O-ring. 2. The stem O-ring has been damaged. 3. The stem spring has been broken.	1. Please return it to us. We'll check it and repair it. 2. Please return it to us. We'll check it and repair it. 3. Please return it to us. We'll check it and repair it.
Gas is leaking from the small hole of the bonnet.	1. The diaphragm has been torn.	1. Please return it to us. We'll check it and repair it.
Gas is leaking from around the bonnet.	1. The bonnet is loose. 2. The diaphragm has been torn.	1. Retighten the bonnet. 2. Please return it to us. We'll check it and repair it.

●Troubleshooting (Model 6700)

Trouble	Cause	Corrective Action
The pressure cannot be adjusted.	1. The direction of flow is reversed or the valve installation is reversed. 2. The pressure regulating spring has been broken. 3. The stem spring has been broken. 4. Dust is adhering to the stem packing. 5. The stem packing has been damaged.	1. Check the direction of flow. If it is reversed, reinstall the valve correctly. 2. Please return it to us. We'll check it and repair it. 3. Please return it to us. We'll check it and repair it. 4. Please return it to us. We'll check it and repair it. 5. Please return it to us. We'll check it and repair it.
The set pressure will not become zero when the pressure regulating handle is loosened.	1. Dust is adhering to the stem packing. 2. The stem packing has been damaged. 3. The stem spring has been broken.	1. Please return it to us. We'll check it and repair it. 2. Please return it to us. We'll check it and repair it. 3. Please return it to us. We'll check it and repair it.
Gas is leaking from the small hole of the bonnet.	1. The diaphragm has been torn.	1. Please return it to us. We'll check it and repair it.
Gas is leaking from around the bonnet.	1. The bonnet is loose. 2. The diaphragm has been torn.	1. Retighten the bonnet. 2. Please return it to us. We'll check it and repair it.

●Product Warranty Policy

Thank you for your continued support of KOFLOC products.

Unless specified otherwise in quotations, contracts or specifications when you place orders for KOFLOC products, the following warranty policy will apply.

Warranty Policy:

① Warranty period

The warranty period is one (1) year from shipment, provided that the product is used within the KOFLOC specification.

② Scope of warranty

If the KOFLOC product fails during the warranty period due to a cause attributable to KOFLOC, KOFLOC shall, at its option and expense, provide a replacement product or repair the failed product at the KOFLOC factory. This warranty, however, shall not cover damages due to a cause not attributable to KOFLOC; opportunity loss, lost profit, secondary disaster, accident compensation suffered by the customer and damage to other equipment and any other damages due to a failure of the KOFLOC product.

③ Non-warranty

The warranty shall not apply to the following failures and damages even if they occur during the warranty period:

a) Failure due to misuse or improper repair or modification. (Failures resulting from use under conditions different from the manufacturing specifications are included.)
b) Damage and failure due to dropping of the product after purchase.
c) Failure due to fire, earthquake, flood, lightning or other natural disaster; or riot, war or the like.
d) Failure due to intrusion of foreign matter from piping.
e) Failure caused by a specific problem due to combination with other incorporated equipment.
f) Other failures and damages which are considered not attributable to KOFLOC.

Please be aware that the warranty shall not cover opportunity loss suffered by you or your customer or damage to other equipment or any other damages due to a failure of the KOFLOC product.