FJ400051D1
Created on 2021/12/20

KOFLOC Kyoto

Back Pressure Regulating Valve Model 6800

Large - flow back Pressure Regulating Valve Model 6801

Instruction Manual

Thank you for your selection of "KOFLOC Back Pressure Regulating Valve."
Prior to use, read this manual thoroughly to ensure your new meter will work to its fullest capacity.

CAUTION

This is a relief valve designed to keep the pressure on the primary side of the valve constant and may be used for pressure up to:

Maximum working pressure: 0.8 MPa(G)

The use of fluids, such as toxic gas, other than those marked on the flow meter or the use of the product at a temperature or pressure above the maximum limits could result in personal injury. Such a way of use is strictly prohibited.

Foreword

Thank you for your selection of Model 6800/Model 6801.

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 (1) 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 6800

1) Features

Panel-mount type for easy installation.

Small and compact design capable of high-speed control of the primary side pressure.

This is a greaseless clean valve for pure gas control.

2) Installation and Piping

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.

3) Set pressure adjusting method

① From low pressure to high pressure: While checking the line pressure gage, turn the adjust knob of the back pressure control valve clockwise to set a desired pressure.

② From high pressure to low pressure: Turn the adjust knob counterclockwise to lower the pressure below the set pressure, and then turn the adjust knob clockwise to set a desired pressure.

4) Other precautions

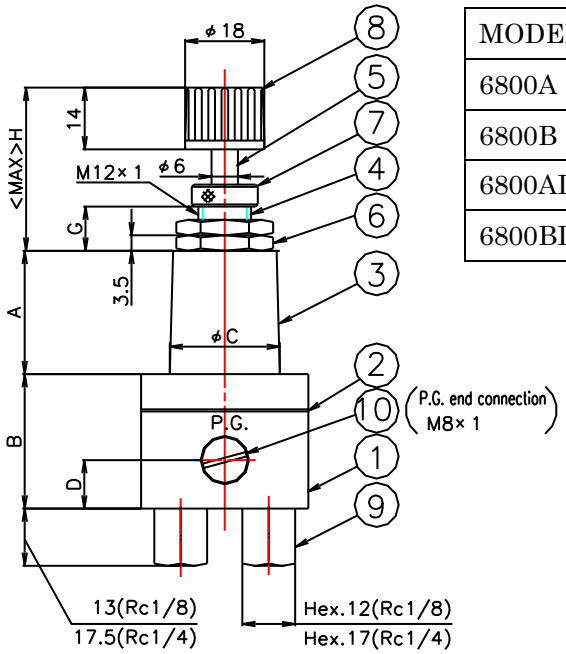
① Use this back pressure control valve within the specified range.

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

●Specifications

Type	6800A	6800B	6800AL	6800BL
Secondary side control pressure	0.01 - 0.3MPa(G)	0.01 - 0.6 MPa(G)	0.01 - 0.3 MPa(G)	0.01 - 0.6 MPa(G)
Max.exhaust flow	1 L/min	0.8 L/min	10 L/min	10 L/min
Pressure resistance	0.8MPa(G)			
Materials or areas in contact with fluid	(A) Al, Brass, NBR, SUS316 (SS) SUS316, FKM, SUS303			
Environmental temp.	5℃ - 60℃			
Connecting port	Rc1/4(Standard), Rc1/8(Optional)			

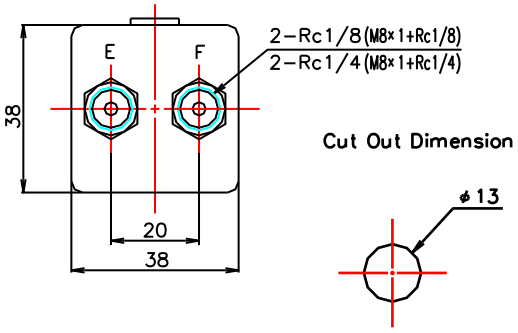
●Construction and External Dimensions



MODEL	A	B	C	D	E	F	G	H
6800A	28	30.5	25	11	IN	OUT	10	37
6800B	31	30.5	30	11	IN	OUT	13	40
6800AL	28	34.5	25	14	OUT	IN	10	37
6800BL	31	34.5	30	14	OUT	IN	13	40

(mm)

1/ Body
2/ Diaphragm
3/ Bonnet
4/ Bonnet bearing
5/ Pressure regulating shaft
6/ Mounting nut
7/ Cap nut
8/ Knob
9/ Adapter
10/ Gauge port plug



■Model 6801

1) Features

Panel-mount type for easy installation.

Capable of high-speed control of the primary side pressure. This is a greaseless clean valve for pure gas control.

2) Installation and Piping

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.

3) Set pressure adjusting method

① From low pressure to high pressure: While checking the line pressure gage, turn the adjust knob of the back pressure control valve clockwise to set a desired pressure.

② From high pressure to low pressure: Turn the adjust knob counterclockwise to lower the pressure below the set pressure, and then turn the adjust knob clockwise to set a desired pressure.

4) Other precautions

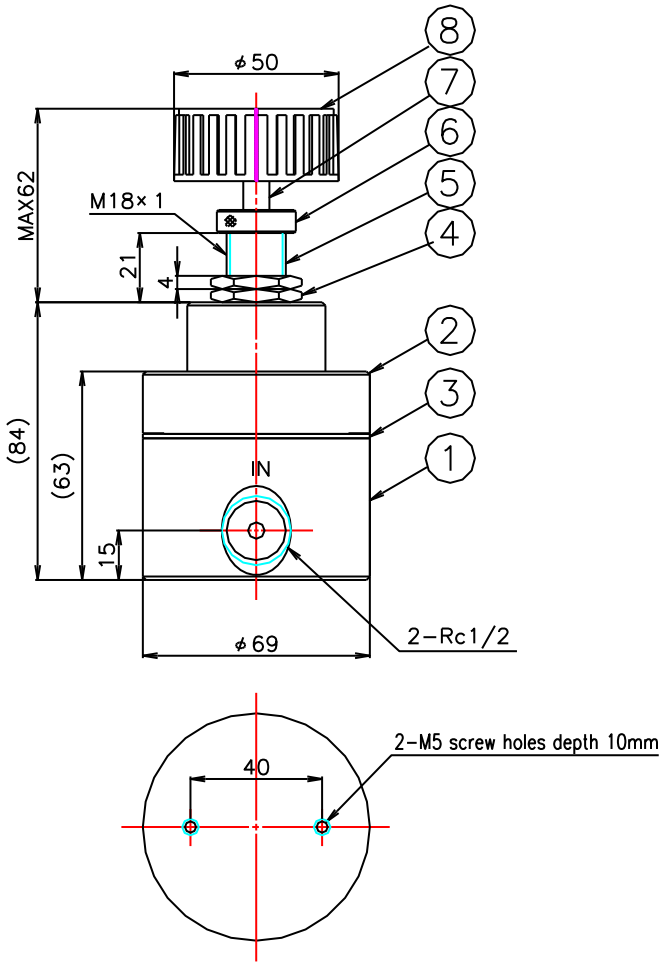
① Use this back pressure control valve within the specified range.

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

●Specifications

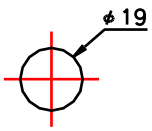
Type	6801A	6801B
Secondary side control pressure	0 - 0.3MPa(G)	0 - 0.6MPa(G)
Max.exhaust flow	300L/min	
Pressure resistance	0.8MPa(G)	
Repeatability	Within ±1% of rated pressure	
Environmental temp.	5℃ - 60℃	
Materials or areas in contact with fluid	SUS303, FKM, PTFE	
Connecting port	Rc1/2	

●Construction and External Dimensions



1/ Main unit
2/ Bonnet
3/ Diaphragm
4/ Mounting nut
5/ Bonnet bearing
6/ Cap nut
7/ Pressure regulating shaft
8/ Knob

Cut Out Dimension



●Troubleshooting (Model 6800)

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 nozzle spring has been broken. 4. Dust is sticking to the nozzle O-ring. 5. The nozzle 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 sticking to the nozzle O-ring. 2. The nozzle O-ring has been damaged. 3. The nozzle 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 6801)

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 valve spring has been broken. 4. Dust is sticking to the valve O-ring. 5. The valve 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 sticking to the valve O-ring. 2. The valve O-ring has been damaged. 3. The valve 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.