FJ400055D1
Created on 2021/12/20

Bellows needle valve
Model 2450
Instruction Manual

Thank you for your selection of the “KOFLOC Flow Controller.”
Prior to using your new product, please read this manual thoroughly to ensure that your new product will deliver its full performance.

CAUTION

This product is designed to control flows and its maximum operating pressure and maximum operating temperature is limited to:

Max. operating pressure : 1.0MPa(G)

Max. operating temperature : 120℃

The use of the needle valve with gases or toxic gases other than those specified on the valve body or at a pressure exceeding the maximum allowable pressure may cause serious injury. Such a way of use is strictly prohibited.

Foreword

Thank you for your selection of Model 2450.

- 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 needle 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 needle valve in manners not described herein.

1. Features

Model 2450 is a bellows seal type needle valve developed to satisfy requirements in areas where leak is a concern of vital importance. All products have been tested with a helium leak detector and have passed the standard of 2×10^{-8} Pam^3/sec. A non-rotary type needle is capable of precise and smooth control of minute flows.

2. Installation and Piping

For installation on a panel, remove one mounting nut and insert the needle valve through the mounting hole (ϕ25) from the backside of the panel to the face and then secure the valve with the nut from the face of the panel.

3. Control of Flow

Turn the knob of the bellows needle valve to control the flow. Turning it counterclockwise (OPEN) will increase the flow and clockwise (CLOSE) will decrease the flow.

4. Precautions

1) When storing the needle valve at your premises, installing it in a line, removing it from a line or test running it for adjustment after installing it in a line, exercise care to protect its IN and OUT from oily substances and contaminants. They are a cause of performance degradation or control failure.

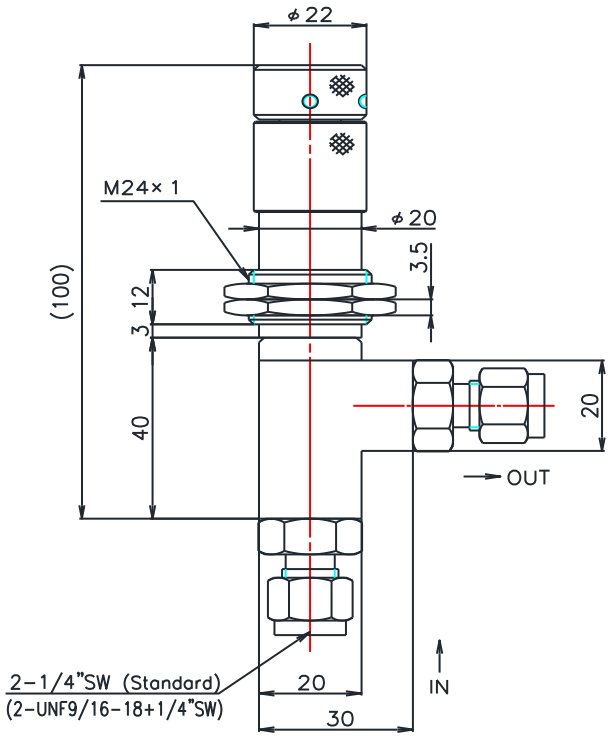
2) Model 2450 are capable of zero stop, but zero stop is not a function guaranteed. Never turn the knob by undue force to effect zero stop.
Otherwise, the needle part will be broken to disable flow control. If zero stop is required, be sure to install a stop valve before the needle valve.

【Specifications】

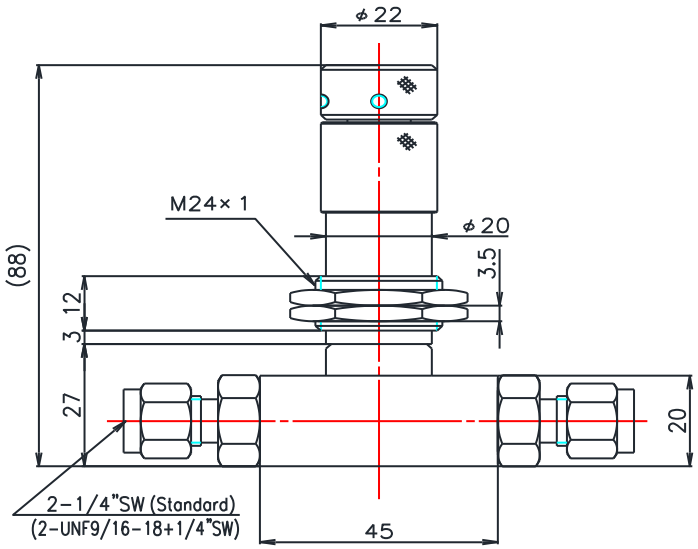
Adjust screw rotation	Approx. 13 － 16 turns
Max. operating pressure	1.0MPa(G)
Max. operating temperature	120℃
Materials of areas in contact with fluid	SUS316, PCTFE, FKM, (Joint : FKM)
Connecting port	1/4”SW Swagelok joint (Standard) 1/8” SW Swagelok joint (Optional)
Applicable fluid types	Gas, Liquid

【Dimeasions (mm)】

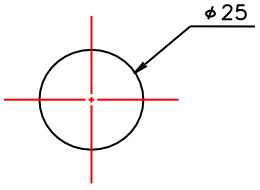
<MODEL2450L>



<MODEL2450T>



Cut out dimensions



【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:

① Failure due to misuse or improper repair or modification. (Failures resulting from use under conditions different from the manufacturing specifications are included.)
② Damage and failure due to dropping of the product after purchase.
③ Failure due to fire, earthquake, flood, lightning or other natural disaster; or riot, war or the like.
④ Failure due to intrusion of foreign matter from piping.
⑤ Failure caused by a specific problem due to combination with other incorporated equipment.
⑥ 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.

KOFLOC Corp. URL : http://www.kofloc.co.jp