YDF-2F
- Differential pressure control valve

Application

YDF-2F is used in central heating-, ventilation-, and district heating systems.

This model is a high-performing differential pressure control valve installed in the supply or return piping line of loaded equipment and regulates the differential pressure.

Benefits

Design

- The valve construction integrated with the Equal % Cone provides additional wide range of control of differential pressure and flow.
- Being diaphragm split-system, there is no influence by temperature and being perfect balance type, solid set pressure-differential value is ensured.
- Strong construction guarantees high durability.
- Being diaphragm type, installation in the horizontal and the vertical position is possible.

Operation

- High comfort for the end-users due to no noise problems from control valves
- Easy adjustment of the pressure by Equal % Cone.

Features

- Easy to install and adjust according to selection diagram.
- Maintenance time will be referred in acc. with whether leaking water visually.
- Valve lifting can be checked thru the installed indicator.
- Sizes from DN25 to DN150

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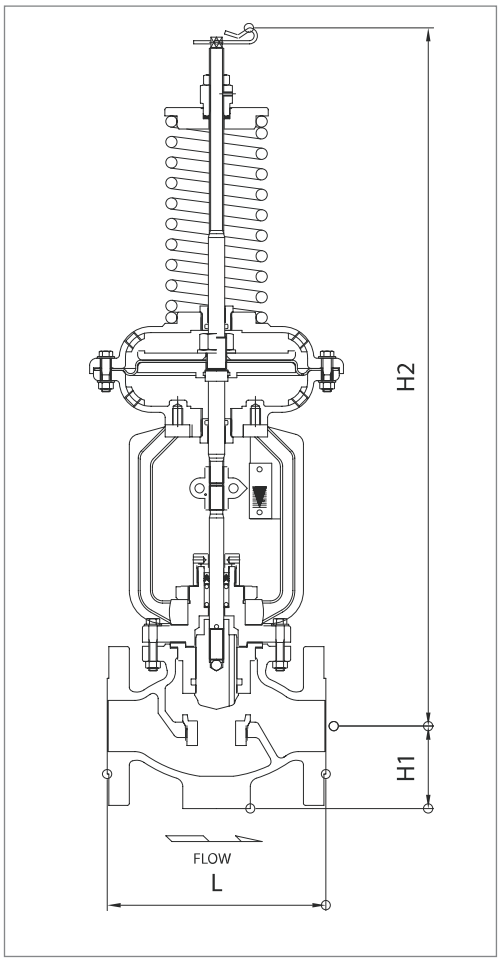
Specifications

Items		**YDF-2F**
Applicable pressure		PN16
Applicable fluid		Hot & cold water
Flow temperature		Max 170^{0}C
Construction		Diaphragm
Differential pressure adjustment range (kPa)		50-200
End connection		EN 1092-2 PN16
Materials	Body	Ductile Iron
	Diaphram	EPDM
Valve body pressure test		Water 24 Bar
Capillary tube		Standard 2m

Technical data



	Dimension			
Model	**YDF-2F**			
Size	L	H1	H2	Weight (kg)
DN25 (1″)	184	62.5	640	20
DN32 (11/4″)	180	70	650	26
DN40 (11/2″)	222	80	658	28
DN50 (2″)	254	95	670	41
DN65 (21/2″)	276	115	720	48
DN80 (3″)	298	120	720	56
DN100 (4″)	352	130	735	72
DN125 (5″)	400	150	775	130
DN150 (6″)	451	180	800	162

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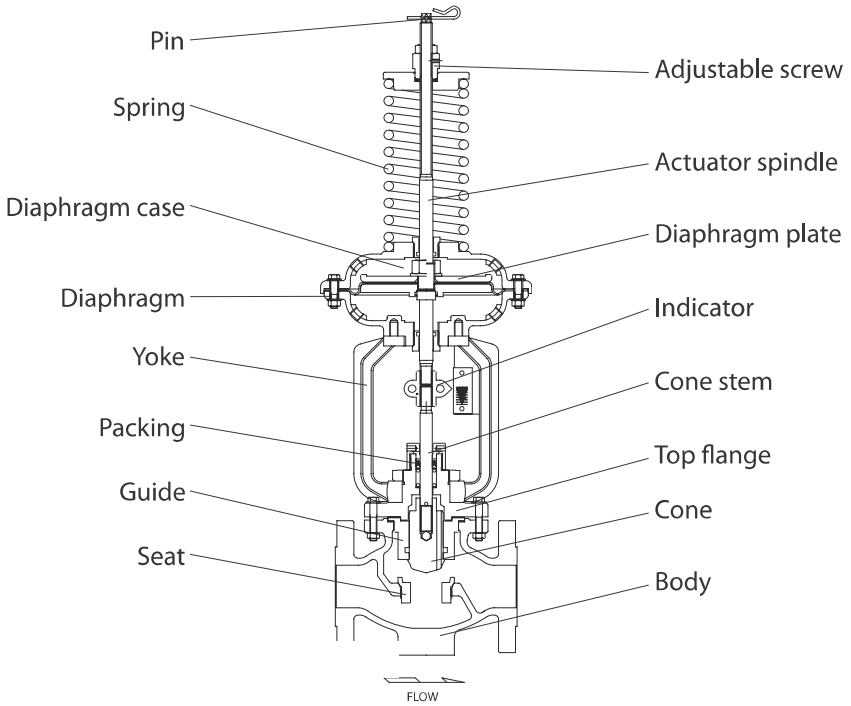
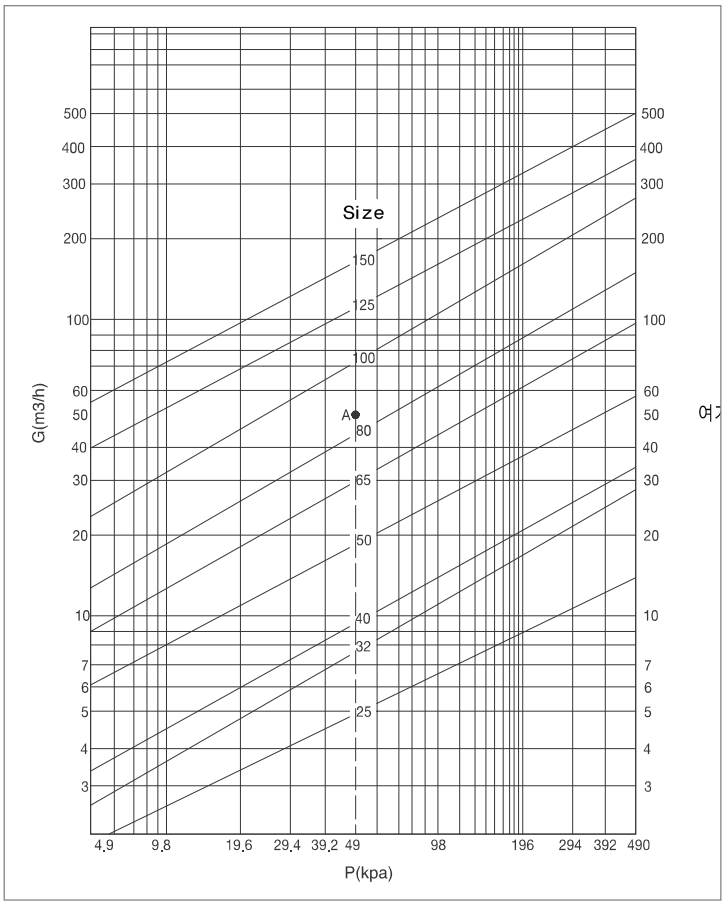
Construction Drawing



Selection of valve size



$$Cv = \frac{1.167 \times Q \times \sqrt{r}}{\sqrt{\Delta P}}$$

Cv:	Coeffience of valve
Q:	Flow (m^3/h)
r:	density (water = 1)
Δ:	differential pressure across valve ($kg\ f/cm^2$)

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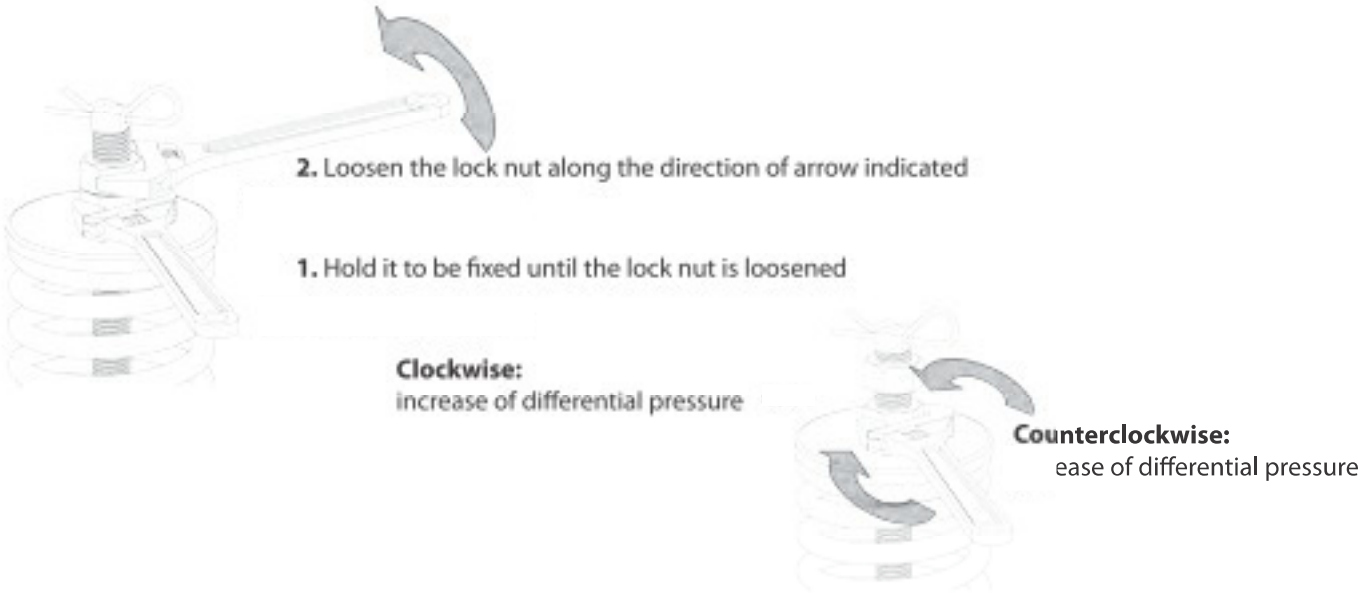
How to adjust differential pressure



How to adjust differential pressure

Make sure to fully comprehend the following cautions in handling the products so that the product may display it performance.

1. Do not apply any impact on it
2. Avoid any place with dust or humidity when storing it
3. A special attention should be paid so that any impurities are not inserted into the product
4. When attaching it onto a pipe, the location should be free of sand or debris while a point of gasket should be also cleaned up
5. It should be installed on a place easy to access for repair

* The structure, dimensions and materials may be changed without any prior notice for the improvement of performance.

Maintenance tips

Stuffing nut box packing leaking

1. Locking after checking gate valve - Main valve locking
2. Pressure pipe valve locking
3. Slowly loosening after checking the height of the spring speciefied
4. Seperating the pressure pipe
5. Loosening after checking the height of indicator ^{0}Øs stamp thread
6. Slowly loosening Stuffing nut box
   - Stop diassembly if water continuously flows
7. Checking and replacing the packing and reversely assembling it

O-ring leaking

1. Checking and locking gate valve
2. Pressure pipe valve locking
3. Checking and slowly loosening the height of spring specified
4. Separating the pressure pipe
5. Loosening after checking the height of ^{0}Øs stamp thread
6. Disassembling the actuator
7. If it's rusty excessively, it should be ground with soft sand paper
8. Replace O-ring and assembling it