

Frese YDF-2F/20F

Differential Pressure Control Valve

Features

- High-performing differential pressure control valve installed in the supply or return line.
- The valve construction integrated with the EQ% cone provides a wide range control of differential pressure.
- Diaphragm split-system, not influenced by media temperature.
- Strong construction guarantees high durability.
- Valve lift can be checked through the installed indicator.

How to Install Valve & Caution to Take

- When lifting and moving the valve, please use the eye bolt on the body of the valve. See below



- Vertical installation of the valve is recommended.
- Care must be taken when moving the valve to the installation point due to the possibility of bending at the connection points between the yoke and actuator/body. Especially heavy weight valves (DN200~DN300) must be handled very carefully.
- Installation of a strainer in front of differential pressure control valve is recommended, to prevent dirt and debris from getting into the valve.
- Install by-pass line for maintenance and management.
- Check the arrow direction on the valve body so that it is installed the same direction as water flow.
- Install the capillary tube with a distance of minimum 5 times of pipe diameter from the differential pressure control valve.
- Install a ball valve at the capillary tube connection point and lock it.
- Install capillary tube from the supply line at the top of diaphragm and capillary tube from the return line at the bottom of the diaphragm.
- Close the isolation valve before and after the differential pressure control valve and open the by-pass valve. Repeat this procedure several times.
- After flushing, close by-pass valve and slowly open the manual valve.
- Slowly open ball valve of supply and return capillary tube at the same time.
- Open drain valve attached to the top and the bottom of diaphragm case.
- Close the top valve first and then the bottom valve when water is drained out.
- Check operation and differential pressure.

Caution: Both isolation valves on capillary tubes must be open before water is applied to the system. Opening one valve only will impose heavy load on the diaphragm and other parts.

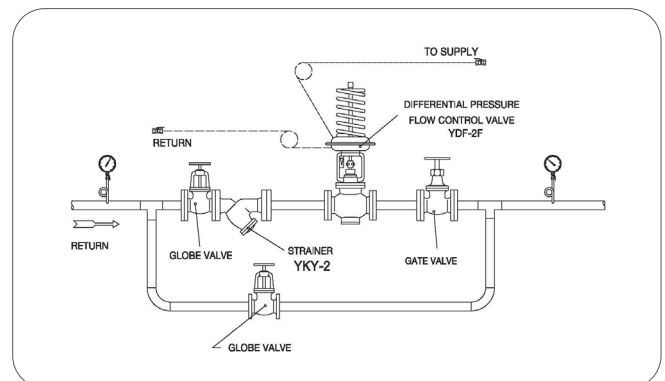
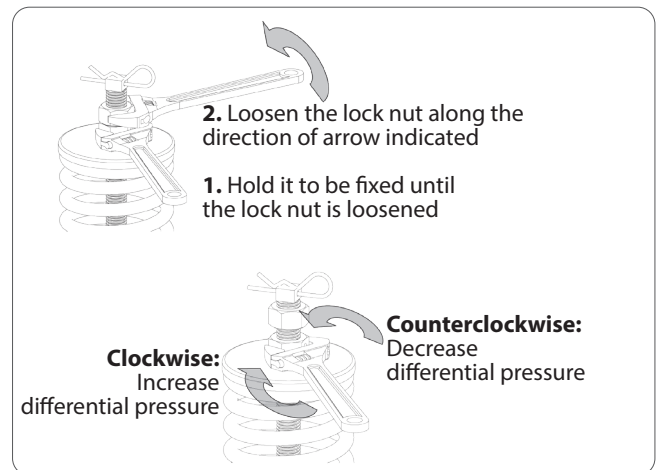
Cautions in Handling the Product

Follow the following guidelines when handling the product to secure its proper performance.

- Do not make any impact to the product.
- Avoid to store the product in places with dust or high humidity.
- Special attention should be made to avoid dirt and debris getting into the product.
- When attaching the valve onto the pipe, the location should be free of sand or debris and the strainer must be cleaned.
- The valve shall be installed in a way where easy access for repair is made possible.

How to Adjust Differential Pressure

- If not requested otherwise, the differential pressure setting from factory is 0.7 Bar.
- If the differential pressure setting must be changed the below procedure must be followed:
 1. All the valves in the circuit should be opened and the pump must be turned on. The differential pressure in the supply and the return lines must be checked.
 2. Loosen the nut on top of the actuator.
 3. Spin the bottom nut on the top of the actuator while controlling the manometers on the flow and the return to adjust the required differential pressure.
 4. Lock the lower nut with the upper nut after setting the differential pressure to prevent the unauthorised access.



Installed Piping Diagram