PN 16-25-40 globe valves and PN 40 extended neck valves

2F../3F..

CE In compliance with 97/23/CE PED

MOUNTING INSTRUCTIONS

INSTALLATION

Hydraulic connections

Follow the fluid directions as shown in the diagram below (see also DIM151).

Two-way valve

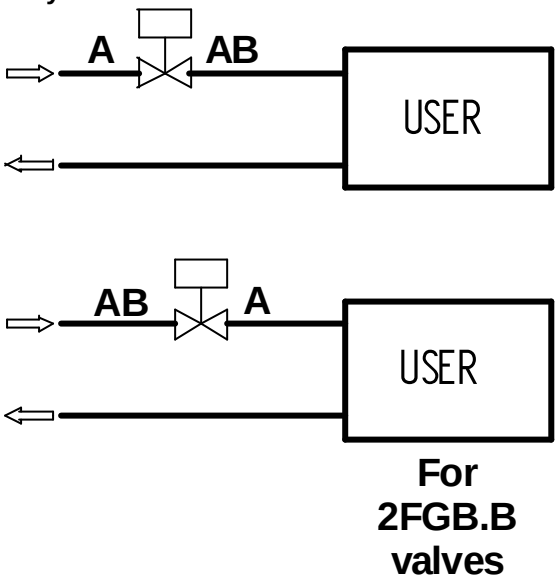


FIG. 1 Variable flow control to the user

It is advisable to install two-way valves on the return leg (excluding steam plants) since the lower temperature of the fluid allows a longer life of the gaskets.

Three-way valve

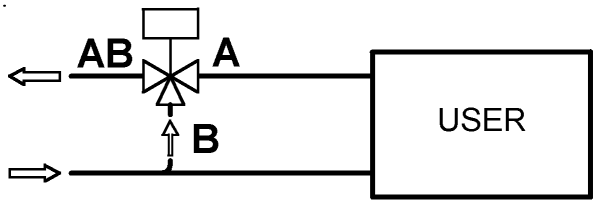


FIG. 2 Variable flow mixing to the user

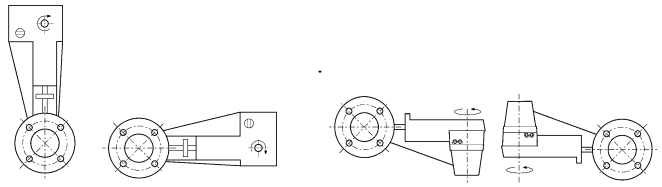
Three-way valves must be used as mixers, two inlets A and B and one outlet AB, and not as diverting valves with one inlet AB and two outlets A and B.
The use of diverting valves can be necessary only in open circuit plants. In such cases our mixing valves can be used taking into account that the maximum recommended differential pressure must be reduced to one third of the specified value, see relevant data sheet.

ASSEMBLING

Before installing the valve, make sure the pipes are clean and free from weld slag in order not to damage the internal parts of the valve itself. The pipes must be perfectly aligned with the valve body and not be subjected to vibrations.

For applications with fluids above 200°C (steam, overheated water, diathermic oil), install expansion joints to avoid the expansion of the pipes to cause undue stress on the valve body.

The valve can be mounted in any position within 180°. In case of MVH actuator, always mount it with the shaft in horizontal position (see fig. 3).
During the actuator position adjustment, **do not unscrew** the stroke adjustment nut.



YES **NO**

FIG. 3

The valve must be mounted horizontally in all applications where the high temperature of the fluid, contributes, together with room temperature, to create around the actuator an ambient at a temperature higher than 50 °C, the maximum allowable value for its regular operation.

The actuators must not be installed in explosive environments and must not be subjected to steam jets or dripping water.

Leave sufficient room over the actuator, at least 10-15 cm., to allow the actuator disassembling from the valve body for eventual maintenance.

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START-UP

Before the valve start-up, check:

- FLOW DIRECTION
  It must correspond to the indications printed on the valve body and shown in Fig. 1 and 2.

- VALVE OPENING AND CLOSING
  This must comply with the plant specification, keep in mind that:

Two-way valves (2FGA - 2FAA - 2FAA.P - 2FAA.T - 2FGA200B - 2FAA150B)

Stem down	=	fluid intercepted
Stem up	=	fluid passing

Two-way valves (All other models)

Stem down	=	fluid passing
Stem up	=	fluid intercepted

Three-way valve

Stem down	=	fluid flows through A-AB fluid intercepted through B-AB
Stem up	=	fluid intercepted through A-AB fluid flows through B-AB

- OPERATING CONDITIONS
  Temperature, nominal pressure and differential pressure on the valve must be within the values specified for each valve model on the relevant data sheets.

- PIPE FLUSHING
  An anomalous valve flow action is caused, in almost all cases, by weld slag or foreign bodies entrapped between the valve seat and the plug, often causing damages.
  To prevent such inconveniences, it is advisable to use filters upstream of the valve.
  Moreover, the pipelines must be thoroughly washed by positioning the valve stem at half stroke; this operation must be performed before start-up and after a prolonged shutdown of the system.

MAINTENANCE

1 Stem packing tight check

Mod. 2FSA - 2FSA.B - 2FAA - 2FAA.B - 2FAA.P - 2FAA.T - 2FGA - 3FSA - 3FAA - 3FSA.S - 3FAA.P - 3FAA.T

Following the hydraulic installation it is necessary to check the tight of the stem packing placed on the bonnet, both in cases of low and high temperatures. The valves require periodic maintenance.

Valves have a stem packing with Teflon rings or, in case of extended neck valves for high temperatures, with packing. In case of leakage, it is necessary to tighten the gland nut so until leakage ceases. Do not overtighten since this may cause the stem blocking.

Mod. 2FGB - 2FGB.B - 3FGB

Valves are equipped with a stuffing box sealed by a double O-ring and, therefore, they do not require any particular maintenance.
In case of irregular leakage, O-Rings and stem packing have to be replaced.

2 Valve stem lubrication

For extended neck valves equipped with a forced lubrication device (mod. 2FAA.P - 3FAA.P), periodically rotate the greaser nipples in order to grant an adequate stem lubrication.

Inject the grease with the pressure screw at its stroke end, by completely unscrewing the greaser nipple.

Fill with silicon grease, then re-tighten the screw a few turns. This operation must be carried out with the plant out-of-service and with the valve plug in closed position.