

## APPLICATION AND USE

2F.A.B series double seat valves are used to control fluids belonging to group 2 according to the article 13 of 2014/68/UE (PED) directive in air-conditioning, thermoventilation and heating plants and in industrial process thermal machines; therefore, they cannot be used as safety valves.

Group 2 regards water, overheated water, glycol added water (50% max), steam.

For different fluids belonging to group 2, please contact our Sales Support.

## MANUFACTURING CHARACTERISTICS

They consist in a two-way double seat valve body to be assembled on bidirectional electrical actuator.

## TECHNICAL CHARACTERISTICS

MODEL	2FAA150B	2FGA200B
Construction	PN25	PN16
Body	Steel	Cast iron
Seat	Stainless steel	Stainless steel
Plug	Stainless steel	Stainless steel
Stem (Ø 9 mm)	Stainless steel	Stainless steel
Control characteristic	Equal percentage	Equal percentage
Stem packing	Teflon V-ring	Teflon V-ring
Max. fluid temp. °C	230	200
Min. fluid temp °C	-10 <sup>(1)</sup>	-10 <sup>(1)</sup>
Storage temp.	-20/60°C	
Connections	Flanged PN25	Flanged PN16
Max. Kvs leakage % Kvs (2)	0,12	0,02

(1) For applications with possible ice formations on stem and gasket, see accessory 248.

(2) Leakage is measured according to the EN1349 standard.

## ACTUATORS TECHNICAL CHARACTERISTICS, WIRING DIAGRAMS AND INSTALLATION

See MVH-MVE actuators data sheets and mounting instructions.

## INSTALLATION

## Hydraulic connections

Respect the fluid directions indicated by the arrow on the valve body.

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## Valve mounting

Before mounting the valve, make sure pipes are clean, free from welding slags. The pipes must be perfectly aligned with the valve body and not subjected to vibrations.

For installations on plants with high temperature fluids (steam, overheated water, diathermic oil) use expansion joints to avoid the dilatation of pipes to stress the valve body.

Install the valves with the actuator in vertical position for fluid temperature up to 120°C, with higher temperatures they must be mounted horizontally.

NOTE: 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.

Avoid the valve installation in plants which are considered aggressive and/or corrosive for valve materials.

Please contact our Sales Support in order to determine which potentially aggressive or polluting substances can be used.

We disclaim all responsibility in case of valve failure due to external fortuitous events (fire, earthquakes etc.).

NOTE: The actuator can be rotated with respect to the valve body by the blocking ring nut; after such operation re-tighten the ring nut.

## OPERATION

With stem down the valve is in closed position, with stem up the valve is open.

## MOTORIZED VALVES OPTIONS

**A150-2** flanges with ANSI 150 bolt holes

## ACCESSORIES

**248** stem heater for applications with -10 °C low temperature fluid with MVH and MVE actuators.

## MAX DIFFERENTIAL CLOSE-OFF PRESSURE [kPa]

			MVH	MVHA/C*	MVE.10	MVE.15	MVE.22
U-Bolt Connection	DN	Kvs	A-AB	A-AB	A-AB	A-AB	A-AB
2FAA150B	150	300	1710	290	950	2030	3540
2FGA200B	200	500	1600	370	1200	1600	1600

100kPa = 1bar = 10m<sub>H<sub>2</sub>O</sub>

Kvs is the flow rate expressed in m<sup>3</sup>/h of water at a temperature between 5°C and 40°C passing through a valve open at the nominal stroke with 100kPa (1bar) differential pressure.

\* MVH.A in emergency opens the valve; MVH.C in emergency closes the valve

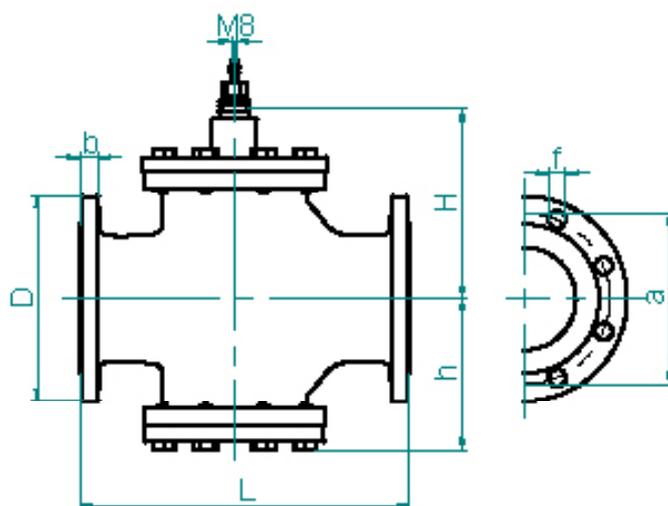
## MAX REGULATION DIFFERENTIAL PRESSURE [kPa]

The max regulation differential pressure, it means the pressure which can be used during the stroke, is conditioned by wear between seat and plug and by the performance guaranteed by the actuator for the evaluated valve. So we recommend not to overcome the differential pressure whose value corresponds to the minimum between the one here following (maximum admitted value not to cause wear) and the one shown in the previous table (max close-off differential pressure).

2FGA = 600kPa  
2FAA = 1200kPa

**Note:** The max operating pressures at different temperatures for various PN classes must correspond to the following standards: UNI 1092-02 and UNI 12516-1.

## DIMENSIONS [mm]



Model	DN	L	H	h	D	b	a	f	Holes n.	Weight [kg]	Stroke [mm]
2FAA.B PN25	150	480	280	224	300	28	250	25	8	83	45
2FGA.B PN16	200	600	334	275	340	30	295	22	12	160	45

The performances stated in this sheet can be modified without any prior notice