

Two-Way Double Seat Globe Valves

Specifications subject to change without notice. | 1st Issue rev. e 06/2016 DBL318e | USA 200204 | Page 1 of 2

INTEC
CONTROLS

2FAA150B/2FGA200B

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	ANSI 150	ANSI 125
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 (°F)	230 (446°F)	200 (392°F)
Min. fluid temp °C (°F)	-10 (14°F) ⁽¹⁾	-10 (14°F) ⁽¹⁾
Storage temp.	-20 to 60°C (-4 to 140°F)	
Connections	Flanged	Flanged
Max. Kvs leakage % Kvs (2)	0.12 (0.14 Cv)	0.02 (0.02 Cv)

(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.



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 (248°F), 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.

ACCESSORIES

248 stem heater for applications with -10°C (14°F) low temperature fluid with MVH and MVE actuators.

MAX DIFFERENTIAL CLOSE-OFF PRESSURE [kPa (PSI)]

			MVH	MVHA/C*	MVE.10	MVE.15	MVE.22
U-Bolt Connection	Size	Kvs (Cvs)	A-AB	A-AB	A-AB	A-AB	A-AB
2FAA150B	6"	300 (346.80)	1710 (248)	290 (42)	950 (138)	2030 (294)	3540 (513)
2FGA200B	8"	500 (578.00)	1600 (232)	370 (54)	1200 (174)	1600 (232)	1600 (232)

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

100 kPa = 1 bar = 14.5 PSI

Kv is the flow rate expressed in m³/h of water at a temperature between 5°C (41°F) and 40°C (104°F) passing through a valve open at the nominal stroke with 100 kPa (14.5 PSI) (1 bar) differential pressure.

Cv is the volume (in US gallons) of water at 60°F that will flow per minute across a valve with a pressure drop of 1 PSI.

MAX REGULATION DIFFERENTIAL PRESSURE [kPa (PSI)]

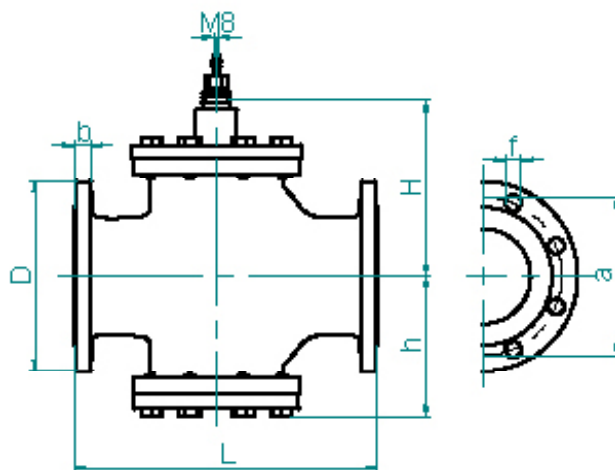
The max regulation differential pressure, it means the pressure which can be used during the stroke, is conditioned by wear between seat and plug and by the performance guaranteed by the actuator for the evaluated valve. So we recommend not to overcome the differential pressure whose value corresponds 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 = 600 kPa (87 PSI)

2FAA = 1200 kPa (174 PSI)

Note: The max operating pressures at different temperatures for various classes must correspond to the following standards.

DIMENSIONS [mm (inch)]



Model	Size	L	H	h	D	d	a	f	Holes n.	Weight [kg (lb)]	Stroke [mm (inch)]
2FAA.B ANSI 150	6"	480 (18.9")	280 (11")	224 (8.8")	300 (11.8")	28 (1.1")	241 (9.5")	22 (0.9")	8	83 (183.0 lb)	45 (1.77")
2FGA.B ANSI 125	8"	600 (23.6")	334 (13.1")	275 (10.8")	340 (13.4")	30 (1.2")	298 (11.8")	22 (0.9")	8	160 (352.7 lb)	45 (1.77")