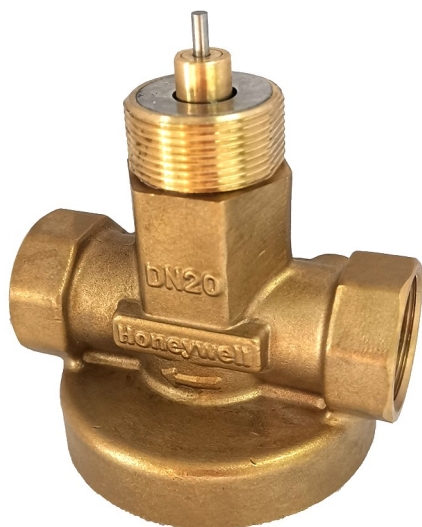


VAFC Series Pressure Independent Control Valve



Honeywell VAFC Series pressure independent control valve is mainly used in controlling small size air handling units, fresh air unit and fan coil unit. The product is built-in with an adjustable valve plug, a pressure independent kit and a maximum flow regulating assembly. The product has the three functions of modulating or on/off control, max flow setting and pressure independent balance.

The pressure independent kit will ensure a stable pressure difference before and after the valve plug, as such, water flow rate will be maintained constant within its flow and pressure difference range and not be affected by the pressure fluctuation of the hydraulic systems. This will improve the controllability of the chilled/hot water flow rate through the valve and thus the stability of the outlet air temperature of air handling equipment to achieve comfortability and energy saving.

The maximum flow regulating assembly allows setting of maximum flow through the valve per the flow requirement of the air handling equipment, eliminating overflow or underflow through the pipe at the branch end, to achieve a static pressure balance.

VAFC Series pressure independent control valve work with thermoelectric actuator will provide on/off control. The gradual closing of thermoelectric actuator can effectively prevent water hammer.

Features

- Built-in pressure independent kit
- High close-off pressure rating, low leakage rate
- Quick onsite manual setting of maximum flow
- Normally open valve when the actuator is not mounted for the convenience of pipeline washing during initial installation and the commissioning
- Noise-free operation, long life span
- Easy assembly of actuator and valve

Basic Parameters

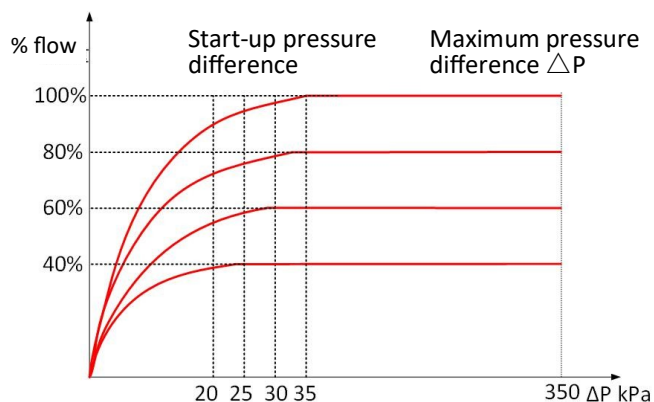
Diameter	DN15-DN25
Nominal pressure rating	PN16 & PN25
Leakage rate	0.01% Maximum flow @ 0.35MPa
Applicable medium	Chilled/hot water, up to 50% ethylene glycol solution
Medium Temperature	-10...120°C
Ambient Temperature	-0...60°C
Material of main parts	Valve body: Brass HPb59-1 Valve stem: SS304 stainless steel Valve plug: Brass HPb59-1 Membrane: EPDM Seal: PTFE
Pipeline connection	Threaded connection ISO7-1
Actuator connection	Threaded connection M30x1.5
Compatible actuator	M400-AG, M400-BG

VAFB Series Pressure Independent Control Valve

Product Technical Parameters

PN	DN	型号	Max flowrate m ³ /h	Stroke	Test ports	Work pressure range	Compatible actuator	Close off DP
PN16	15	VAFC16R-15	0.8	4mm	No	35~500kPa	M400-AG M400-BG	600kPa
PN16	20	VAFC16R-20	1.3	4mm	No	35~500kPa		600kPa
PN16	25	VAFC16R-25	2	4mm	No	35~500kPa		600kPa
PN16	15	VAFC16R-15P	0.8	4mm	Yes	35~500kPa		600kPa
PN16	20	VAFC16R-20P	1.3	4mm	Yes	35~500kPa		600kPa
PN16	25	VAFC16R-25P	2	4mm	Yes	35~500kPa		600kPa
PN25	15	VAFC25R-15	0.8	4mm	No	35~500kPa		600kPa
PN25	20	VAFC25R-20	1.3	4mm	No	35~500kPa		600kPa
PN25	25	VAFC25R-25	2	4mm	No	35~500kPa		600kPa
PN25	15	VAFC25R-15P	0.8	4mm	Yes	35~500kPa		600kPa
PN25	20	VAFC25R-20P	1.3	4mm	Yes	35~500kPa		600kPa
PN25	25	VAFC25R-25P	2	4mm	Yes	35~500kPa		600kPa

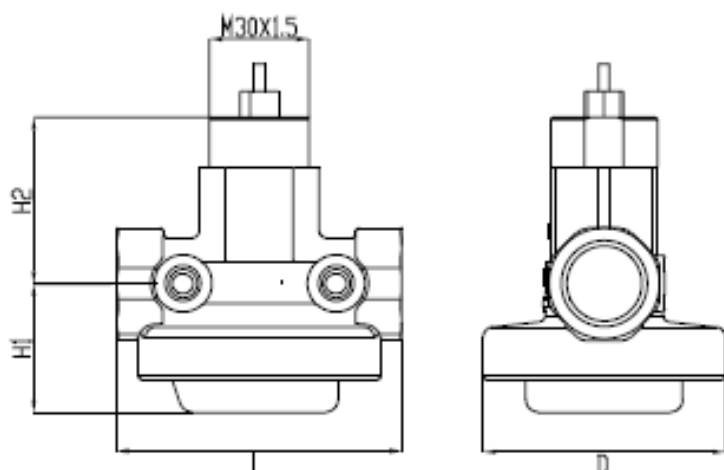
Flow characteristics



- VAFB Series pressure independent control valve can, by maintaining the working pressure difference, realize stable flow rate corresponding to any degree of openings in order to avoid air conditioning temperature fluctuations.
- A stable pressure difference before and after the valve plug means that the actuator is free from frequent movements resulting from the pressure difference, which can effectively prolong the actuator's running time.

VAFB Series Pressure Independent Control Valve

Dimensions and Weight



DN	Thread	L mm	D mm	H1 mm	H2 mm	Weight g
DN15	1/2"	74	62	34	46.5	634
DN20	3/4"	80	68	36	46.5	747
DN25	1"	85	69	42.5	46.5	873
DN32	1-1/4"	109	95	58.5	44.5	1614

Setting and Installation Instructions

1. Set the maximum flow
Maximum flow rate can be set with the on/off actuated VAFB per instruction and flow scale as shown on the right hand side.
2. Actuator and valve shall be manually assembled without using tools like pliers to prevent damage either to the actuator or valve.
3. There should be a space of 100mm around the actuator and valve assembly for installation and maintenance.
4. The actuator and valve assembly should be installed on a straight pipeline keeping distance from the pump, elbow and other pipe fittings and equipment to prevent turbulence which will affect the valve control performance. Installation guideline as followings:-

