VBFI Series
Digital locking
balance valve

Digital Locking Balance Valve

Factory direct sales Select the best products Fine workmanship   Selection at various levels
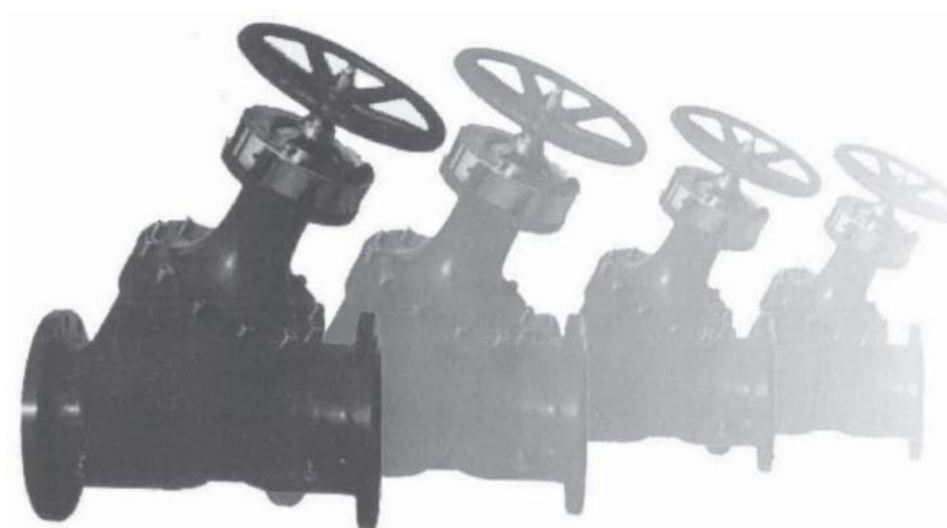
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VBFI Series Digital locking balance valve

Instruction manual

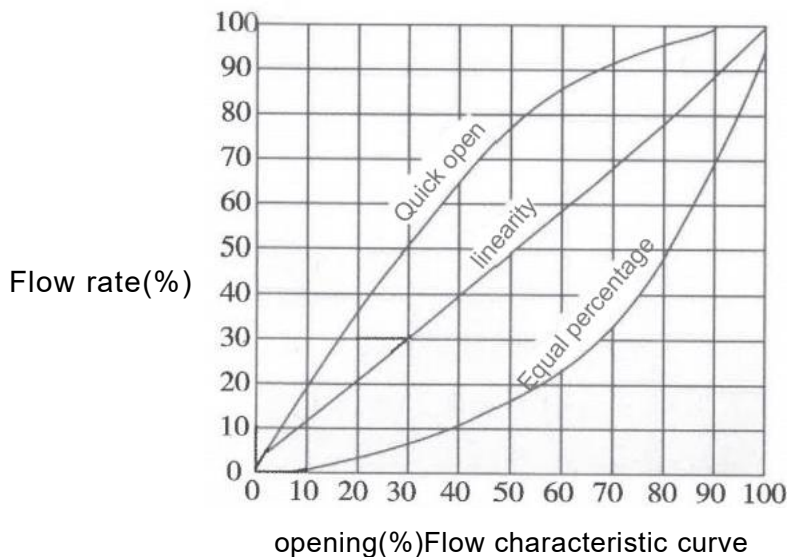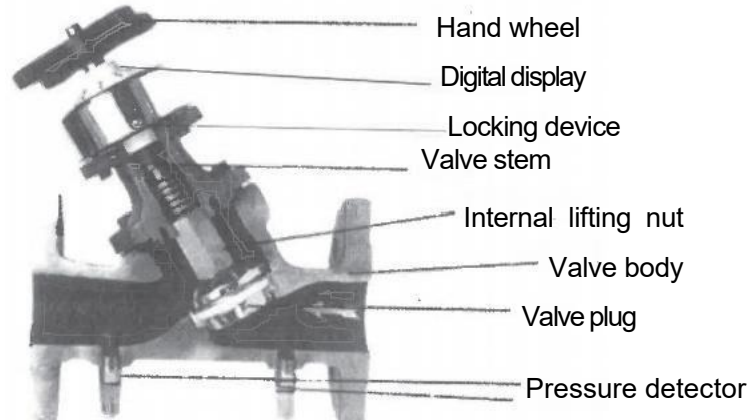## VBFI series digital locking balance valv

◆Intro

VBFI series digital locking balance valve is a liquid pipeline flow control valve, mainly used in industrial and civil building heating pipe network system. It can also be used for other liquid pipeline systems that need to adjust flow in industrial and mining institutions. Its function is convenient, effective and accurate flow regulation. Solve the problem of high and low, cold and hot uneven, hydraulic imbalance in the pipe network system. Because the valve has the opening display and locking function, as long as the branch and the user entrance are installed with the appropriate specifications of the digital lock balance valve, and the special intelligent instrument is locked after one-time debugging, the total water volume of the system is controlled within a reasonable range, thus overcoming the unreasonable appearance of "large flow rate and small temperature difference".

◆ Structure

Inclined rod, internal lifting, valve core for the park table shape, with the opening of the number of turns and equal percentage display, on both sides of the small pressure valve, with the smart instrument with a hose connection can be easily displayed before and after the valve pressure difference and valve flow.

The valve stem is stainless steel, the valve core, the valve seat and other internal components are brass, the sealing parts are made of PTFE, good corrosion resistance, leak proof, long service life, and good cutoff function when fully closed.

Hand wheel
Digital display
Locking device
Valve stem
Internal lifting nut
Valve body
Valve plug
Pressure detector

Flow rate(%)

Quick open
linearity
Equal percentage

opening(%)Flow characteristic curve

The figure above is the flow characteristic curve of this kind of valve, and the factory produces valves with equal percentage characteristics. It can be seen from the graph that if the opening is given an equal rate of change, the rate of change of the flow is equal, which is characterized by large flow rate when the opening is large, and small flow rate when the opening is small. While most projects are applied when the flow is large, the equal percentage valve is precisely suitable for this requirement. According to this feature, you can freely set a certain flow rate (fast opening valves and linear valves do not have this function) and when you need to change, you can also know the amount of change to achieve the ideal state.

VBFI series digital locking balance valve

◆ Main technical parameters

Model number	VBFI-10	VBFI-16	Remark
Test pressure	1.5MPa	2.4MPa	Need corrosion resistant, high pressure, high temperature valves, can be booked.
Working pressure	1.0MPa	1.6MPa	
Operatingtemperature	≤120°C		
Applicable medium	Water, steam, oil and other liquids		

◆Installation dimension drawing
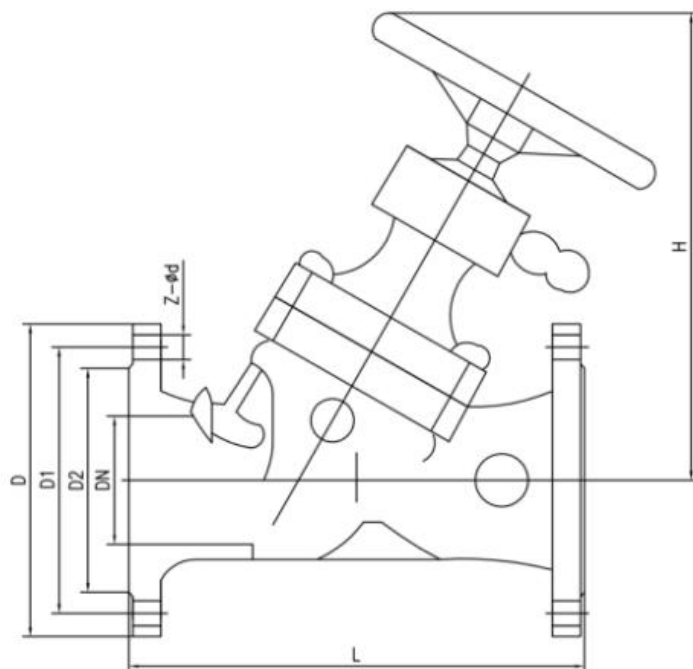
◆VBFI-10/16. main appearanceand connection size

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DN	L	D	D1	D2	b	f	Z−∅d
25	180	110	79.5	51	14	1.6	4−∅14
32	180	120	89	63.5	16	1.6	4−∅14
40	200	130	98.5	73	17	1.6	4−∅14
50	230	153	120.5	92	19	1.6	4−∅16
65	290	180	139.5	105	22	1.6	4−∅16
80	310	190	152.5	127	24	1.6	4−∅16
100	350	230	190.5	157.5	24	1.6	8−∅16
125	350	255	216	186	24	1.6	8−∅20
150	370	280	241.5	216	25	1.6	8−∅20
200	410	345	298.5	270	29	1.6	8−∅20
250	540	405	362	324	30	1.6	12−∅24

VBFI series digital locking balance valve

◆Application of balance valve in system

user	*user*	*user*	*user*

X0
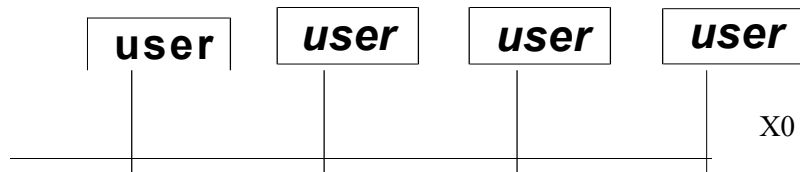
Balance the flow per user of the heating system
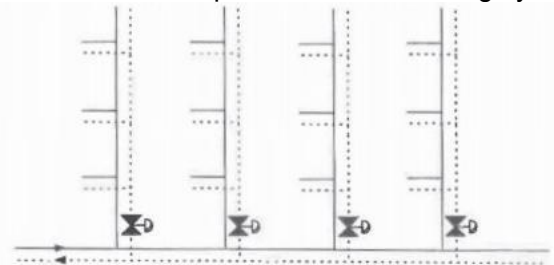
Balance the flow rate of each riser in the system

meter   X0
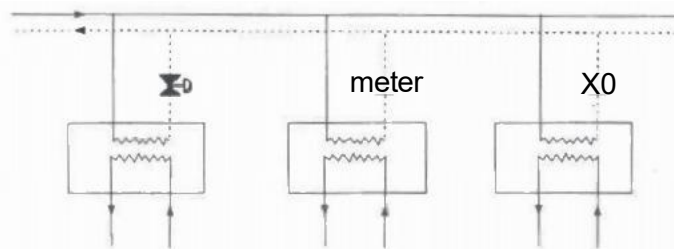
Balance the flow of each heat exchanger in the system

◆Matters needing attention

1. VBFI-10/16.balance valve has the function of flow regulation and measurement. In order to make the water flow before and after the valve stable and ensure the measurement accuracy, it is recommended to install it in the straight pipe section as far as possible.

2, the arrow direction on the valve body is the direction of water flow, do not install reverse.

3, because the valve plug is cone type, it is easy to squeeze the debris when the small opening, and the valve should be closed to 0 when installing, so as not to fall into the impurities. When flushing the pipe, open the valve to 100% to avoid clogging.

4, when the valve is turned off, the dial, the number of turns display window, the percentage display window are displayed as 0

5. When locking, gently turn the handle from left to right and turn the key clockwise until the handle cannot be turned.

6, need to change the opening, first use the key to unlock, then turn the handwheel, adjust to the required opening, lock with the key.