Ductile Iron Self-operated Bypass Valve

(W-800X-16Q/25C)

Application:

The Watts W-800X Ductile Iron Self-operated Bypass Valve is designed to improve the utilization rate of system and maintain a constant and accurate value of differential pressure, besides, it can minimize the system noise, and decrease the damage caused by the too large differential pressure on the equipment. It's generally used in building services, water treatment, etc.

Features:

1. Opening and closing without friction;
2. Modularization structure;
3. Reliable sealing performance;
4. Easy to operate;
5. Wide application scope.

Operating Principles:

When differential pressure of the main valve changes between inlet and outlet, differential pressure changes at the both ends of the pilot valve, the opening degree of pilot valve changes, the opening degree is large when the differential pressure is large, the water discharge of control room increases, the pressure of main valve control room drops, the opening degree of main valve increases, the differential pressure of main valve between inlet and outlet decreases. On the other hand, the differential pressure of main valve between inlet and outlet decreases, the opening degree of pilot valve decreases, the pressure of main valve control room increases, making the differential pressure of main valve increases with the decrease of the opening degree. This kind of negative feedback effect makes the differential pressure of main valve between inlet and outlet stable on the set value. Setting the opening degree of needle valve and the pressure of pilot valve spring can decide the differential pressure of main valve between inlet and outlet.

Technical Specification:

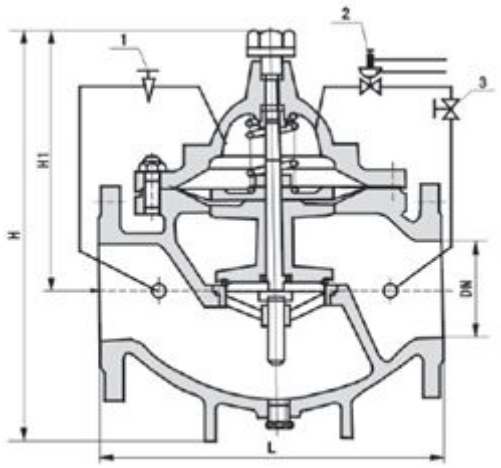
Nominal Diameter:	DN50～DN450
Nominal Pressure:	PN16/25
Working Temperature:	0℃～80℃
Fluid Medium:	Water
Pressure Regulating Range:	0.1MPa～0.4MPa
Design Standard:	JB/T 10674-2006
Test Standard:	GB/T 13927-2008

Material:

Part	Body		Bonnet		Pilot Valve	Connecting Pipe
Material	Ductile Iron Coated with Epoxy (PN16)	Carbon Steel Coated with Epoxy (PN25)	Ductile Iron Coated with Epoxy (PN16)	Carbon Steel Coated with Epoxy (PN25)	Copper	Copper / Stainless Steel

Installation Dimensions:

Connection Dimension: GB/T 17241.6, GB/T 9113;



1.Needle Valve 2.Pilot Valve 3.Ball Valve

DN	50	65	80	100	125	150	200	250	300	350	400	450
L	203	216	241	292	330	356	495	622	698	787	914	978
H1	160	180	200	270	310	320	370	430	480	525	580	635
H	610	625	642	750	808	864	1135	1185	1325	1385	1445	1445

*Please contact the local salesmen if the size ≥DN450 are needed.

Typical Application:

1. Water plant and water source project;
2. Environmental protection;
3. Municipal facilities;
4. Electric power and utilities;
5. Construction industry.

Installation Instructions:

(1) The valve's rated parameters should match the equipment's. Make sure that the valve's rated flow satisfies the actual demand;

(2) The installer must be trained or experienced so as to operate the installation correctly;

(3) A thorough check after installation is needed to ensure no errors;

(4) A thorough cleaning before installation is needed (chemical reagent can be applied if it is necessary) to ensure that there is not any rusting or dirt in the pipe. All the filters must be removed before washing to keep the pipe smoothly open;

(5) When beginning to wash the system, it is suggested to install the valve on a temporary pipe. After finishing system cleaning, move the valve back and install it on the system's pipe;

(6) This product should not be used when the fluid medium has high viscosity (contains much grease or mineral oil), or under corrosive circumstances;

(7) Use flange and the corresponding bolts that meet the standard to connect the valve;

(8) The direction of flow must accord with the direction of the arrow head on the valve body;

(9) For the size below DN200, the main valve can be installed horizontally or vertically, but horizontal installation is better. The size above DN200 only can be installed horizontally.