

# Series W-PICVXXX-16/25Q (DN200-DN250)

## Pressure Independent Control Valve

### ◆ Application

The Series W-DPA942 Pressure Independent Control Valves designed for terminal equipment in AHU, PAU or MAU systems and for terminal equipment such as plate heat exchanger in heating systems. It is used to regulate the flow and simultaneously keep the differential pressure at both ends of the valve constant. Since the valve avoids flow fluctuation caused by the opening or closing of other equipment, the system is able to be stable, efficient and energy-saving.

### ◆ Features

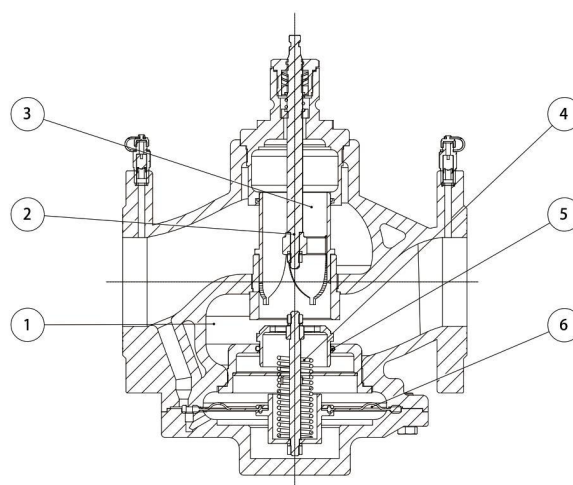
- Equal percentage flow characteristic
- Constant differential pressure is achieved
- Self-balancing valve core realizes easy shutoff
- V-ring sealing and self-compensating spring result in higher abrasion resistance and longer service life
- Electronic preset of maximum flow facilitates on-site commissioning
- Fault auto-detection and alarm function
- Overload protection for power supply
- Stroke auto-detection
- Manual lever for convenient on-siting commissioning and troubleshooting

### ◆ Operating Principles

The Series W-DPA942 Pressure Independent Control Valves a two-in-one valve that plays the roles of both a differential pressure balancing valve and an electric control valve. No matter how the system's differential pressure changes, the valve will keep the differential pressure at both ends of it constant. In other words, the flow goes through the valve will not change with the pressure fluctuation of the system. This enables the valve to have an accurate equal percentage control characteristic. Consequently, the whole system remains stable when the valve is regulating the flow.

### ◆ Technical Specification

Dimensions:	DN200-DN250
Working Temperature:	-10~130°C
Working Pressure:	PN16、PN25
Fluid Medium:	Water / Ethylene Glycol
Connection:	Flange Connection
Connection Standard:	ISO7005,GB/T 17241.6
Flow Deviation:	± 5%
Working ΔP:	35KPa-400KPa
IP Grade:	IP54
Control Characteristic:	Equal Percentage
Materials:	
① Valve Body:	Ductile Iron QT450-10
② Valve seat:	Stainless Steel SS304
③ DP Valve Core:	Stainless Steel SS304
④ Control Valve Core:	Stainless Steel SS304
⑤ Membrane:	PTFE
⑥ Spring:	EPDM



### ◆ Technical Parameters

#### Product Type:

#### Valve Body:

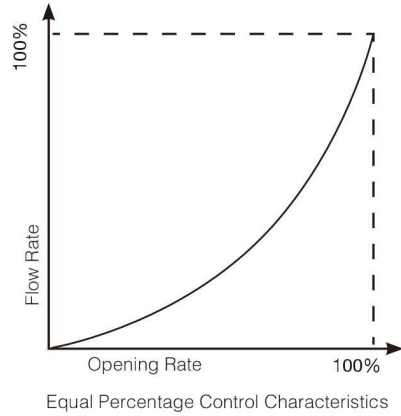
Type	Size	EDP Code	Rated Flow (m³/h)	Stroke (mm)	Actuator
W-PICV200-16Q	DN200	61816047	208	40	W-A11D1X
W-PICV250-16Q	DN250	61816048	240		
W-PICV200-25Q	DN200	616P2211	208		
W-PICV250-25Q	DN250	616P2212	240		

#### Actuator:

Type	EDP Code	Related Output Force(N)	Actual Output Force (N)	Working Voltage	Control Signal	Actuating Time (s/mm)
W-A11D1X	616P2244	3000	3000-3500	24VAC	0(2)-10V, 0(4)-20mA	3.2

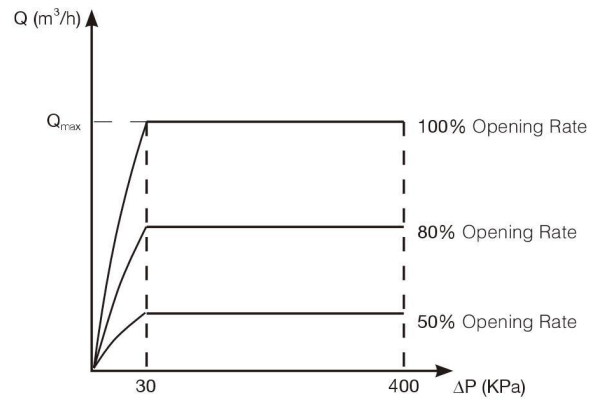
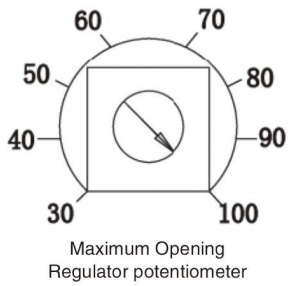
**Coding Rules:**

W	WATTS	W-	PICV	200	16	Q
PICV	Pressure Independent Control Valve					
Size	200-DN200 250-DN250					
Working Pressure	16-PN16 25-PN25					
Body Material	Ductile Cast Iron					



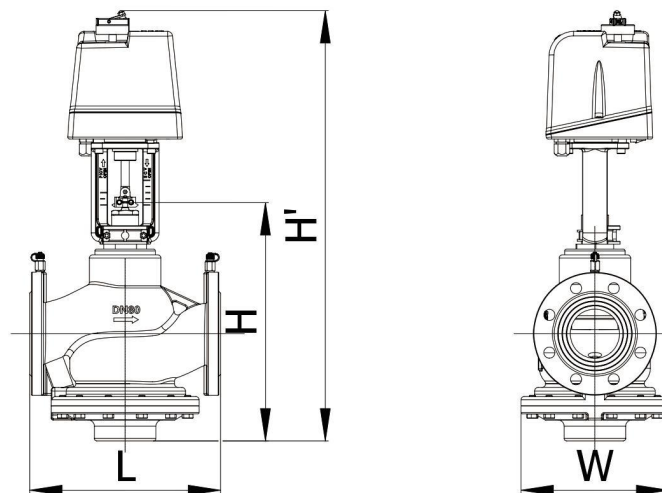
**Electronic Preset of Maximum Flow:**

Any opening rate ranging from 30% to 100% (maximum flow) can be preset by regulating the potentiometer in the actuator. The factory presetting value is 100%. This function satisfies the special demand of customers and increases the control precision.



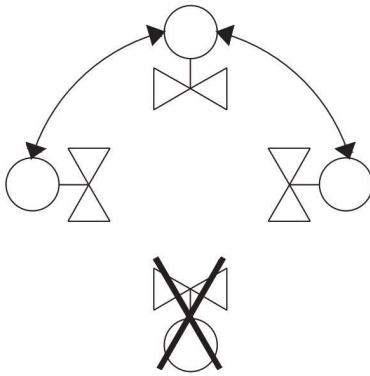
**Installation**

**Installation Dimensions:**

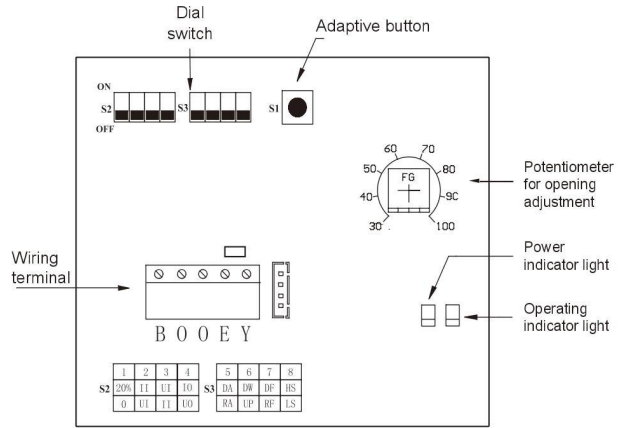


Size	L(mm)	H(mm)	H'(mm)	W(mm)	重量 (Kg)
DN200	500	502	801	400	140
DN250	600	564	863	445	207

**Installation Direction:**

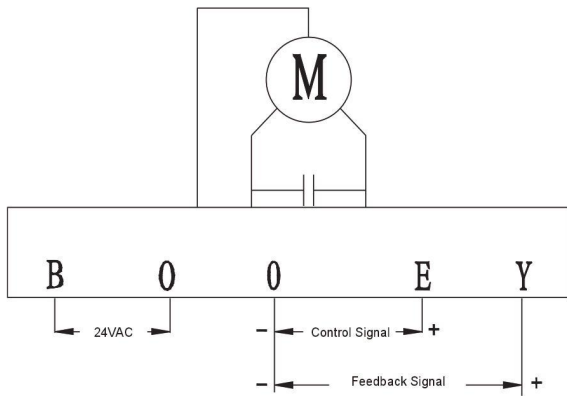


**Downward Installation Prohibited**

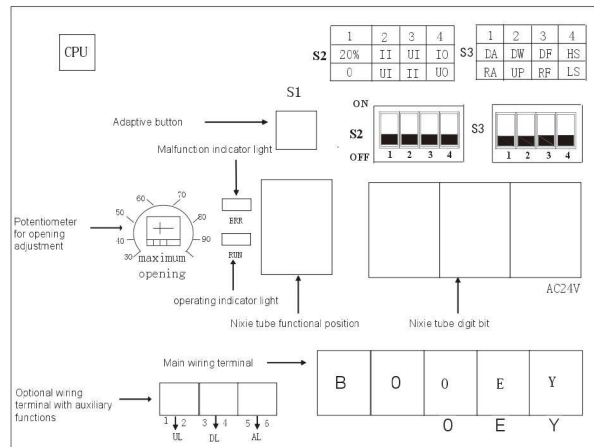


**W-A11A(B)1X (500/1000N)**

**Wiring and Panel Diagrams of Electric Actuator:**



**Wiring Terminal Diagram**



**W-A11C(D)1X (1800/3000N)**