

## Series W-PICV-16/25Q

### Pressure Independent Control Valve

#### Size: DN65-DN150

The Series W-PICV pressure independent control valve is designed for terminal equipment in AHU, PAU or MAU system to regulate the flow through the valve as well as to keep a constant differential pressure at both ends of the valve. It avoids flow fluctuation caused by the opening or closing of other equipment in the system so as to keep the system 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
- Spring is cut off from the water, longer service life

#### Pressure-Temperature

- Maximum Pressure: PN16/PN25
- Working  $\Delta P$ : 30~400KPa
- Temperature Range: -10°C~130°C

#### Test Pressures

PN16 Hydraulic	PN25 Hydraulic
Shell: 24 bar	Shell: 37.5 bar

#### Material

No.	Component	Material	Standard
1	Body	Ductile Iron	QT450-10
2	Seat	Stainless Steel	304
3	Differential pressure Valve Core	Stainless Steel	304
4	Control Core	Stainless Steel	304
5	Membrane	HNBR	
6	Spring	Stainless Steel	304
7	Sealing	HNBR	
8	Membrane	HNBR&PTFE	
9	Stem	Stainless Steel	304
10	Measuring Points	Brass	CW602N

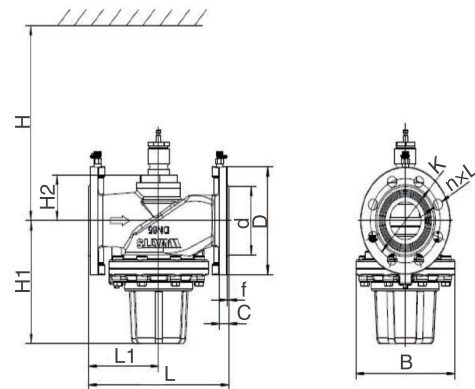
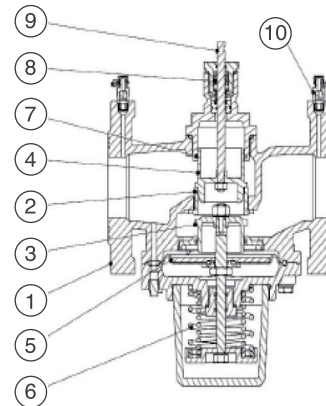
#### Installation Dimensions

DN	PN16			PN25			d	f	C	L	L1	B	H	H1	H2	Body Weight(kg)
	D	K	n×L	D	K	n×L										
65	185	145	4×19	185	145	8×19	118	3	19	290	145	204	415	212	80	25
80	200	160	8×19	200	160	8×19	132	3	19	310	155	224	419	215	84	29
100	220	180	8×19	235	180	8×23	156	3	19	350	175	255	672	231	127	41
125	250	210	8×19	270	220	8×28	184	3	19	400	200	293	673	290	128	60
150	285	240	8×23	300	250	8×28	211	3	20	480	240	371	690	320	145	86



#### Specification

- Connection Standard: GB/T 17241.6, GB/T9113.1-2000, ISO7005
- Flow Deviation:  $\pm 5\%$
- Protection Grade: IP54
- Control Characteristic: equal percentage
- Medium: water/ethylene glycol



## Models

### PN16 Body

Type	Size	EDP Code	Rated Flow(m³/h)	Stroke(mm)	Actuator
W-PICV065-16Q	DN65	61924771	24.2	20	W-A11A1X
W-PICV080-16Q	DN80	61924772	30.9		
W-PICV100-16Q	DN100	61924773	66.0		
W-PICV125-16Q	DN125	61924774	103.0	40	W-A11C1X
W-PICV150-16Q	DN150	61924775	145.0		

### PN25 Body

Type	Size	EDP Code	Rated Flow(m³/h)	Stroke(mm)	Actuator
W-PICV065-25Q	DN65	61924776	24.2	20	W-A11A1X
W-PICV080-25Q	DN80	61924777	30.9		
W-PICV100-25Q	DN100	61924778	66.0		
W-PICV125-25Q	DN125	61924779	103.0	40	W-A11C1X
W-PICV150-25Q	DN150	61924780	145.0		

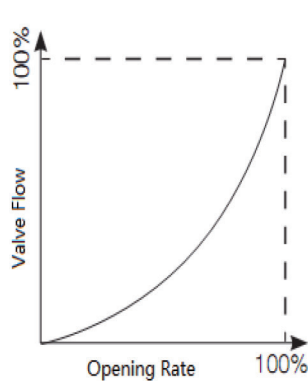
### Actuator Type

Type	EDP Code	Output Force (N)	Working Voltage	Control Signal	Actuating Time(s/mm)
W-A11A1X	616P2241	500-700	24VAC	0(2)~10V, 0(4)~20mA	3.85
W-A11C1X	616P2243	1800-2000			3.2

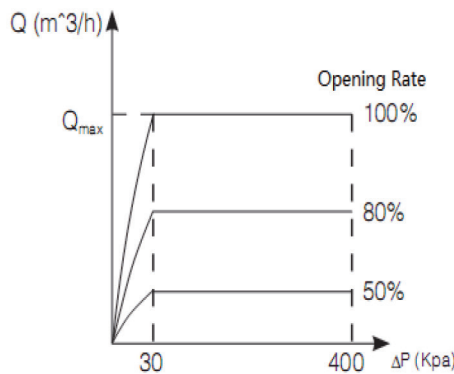
## Flow Setting

### Electric Preset of Maximum Flow:

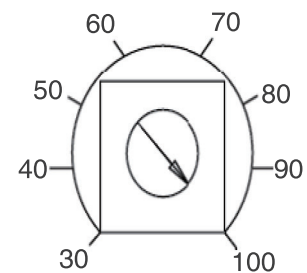
Any opening ranging from 30% to 100% (maximum flow) can be preset by regulating the potentiometer in the actuator. The factory default value is 100%. This function both satisfies the special demand of customers and increases the control precision.



Equal Percentage Control Characteristics



Differential Pressure-Flow Characteristics



maximum opening

Opening Rat	30%	40%	50%	60%	70%	80%	90%	100%
Size								
DN65	7.2	7.4	7.7	9.1	11.2	15.2	20.3	24.2
DN80	8.2	8.5	9.5	11.7	15.0	19.5	25.8	30.9
DN100	14.4	14.6	17.8	22.9	33.8	46.2	56.2	66.0
DN125	26.3	31.9	36.5	48.0	70.2	81.2	95.4	103.0
DN150	35.5	50.5	70.0	96.0	113.7	128.7	139.0	145.0

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