DN40-DN50

# Series W-PICV-25T/25Q

## **Pressure Independent Control Valve**

### Size: DN15-DN50

Series W-PICVXXX-25T/25Q 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 the constant differential pressure at both ends of the valve. It avoids the 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**

- Constant differential pressure between the two ends of the control Valve
- Equal percentage flow characteristics with actuator
- Preset maximum flow rate to facilitate on-site debugging
- Designed with front and rear differential pressure measuring nozzles
- Dust-proof O-ring design & O-ring on disc for zero leakage

#### **Pressure-Temperature**

- Temperature Range: -10°C~120°C
- Nominal Pressure: PN25
- Working Differential pressure: 30KPa-600KPa(DN15-DN25) 30KPa-400KPa(DN32-DN50)

**Specification** 

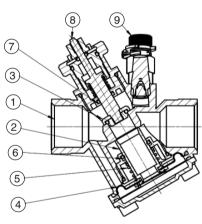


DN15-DN32

• Protection Level of Actuator: IP54

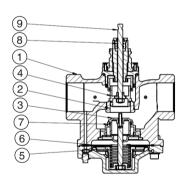
· Working Medium: Air conditioning hot and cold water, ethylene glycol solution

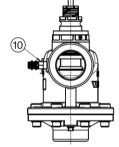
#### **Material**



DN15-DN32

No.	Component	Material
1	Valve Body	DZR Brass(DN15-DN25) Bronze(DN32)
2	Differential Pressure valve spool	Stainless Steel
3	Control Valve Spool	Brass
4	Diaphragm	HNBR
5	Spring	Stainless Steel
6	Seal Ring	HNBR
7	Valve Stem Seal	HNBR
8	Valve Stem	Stainless Steel
9	Measuring Nozzle	CW602N





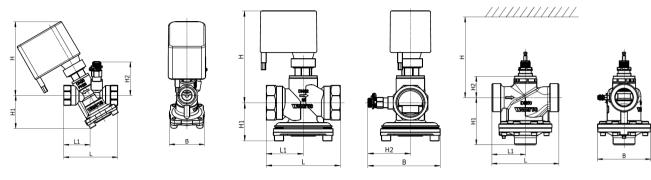
DN40-DN50

No.	Component	Material
1	Valve Body	Ductile Iron
2	Valve Seat	Stainless Steel
3	Differential Pressure valve spool	Stainless Steel
4	Control Valve Spool	Stainless Steel
5	Diaphragm	HNBR
6	Spring	Stainless Steel
7	Seal Ring	HNBR
8	Valve Stem Seal	HNBR
9	Valve Stem	Stainless Steel
10	Measuring Nozzle	DZR Brass

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#### **Installation Dimensions**

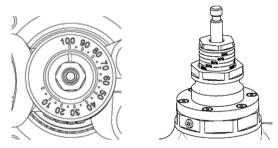


DN	Thread	L	L1	В	Н	H1	H2	Weight of valve body KG
15	Rp 1/2	82	39.9	55	117	53	53	0.67
20	Rp 3/4	85	41.4	55	117	53	53	0.69
25	Rp 1	96	44.6	60	116	63	58	0.95
32	Rp 1 1/4	107	53.5	105	132	55	62	1.47
40	Rp 1 1/2	214	107	170	403	151	68	11.9
50	Rp 2	214	107	170	403	151	68	12.1

DN15~DN32 actuator leaves ≥50mm operation space.

#### **Flow Setting**

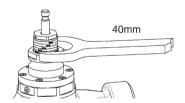
Through the hexagonal at the top of the valve, 30% to 100% of opening can be preset, with the factory default of 100%. This function can not only meet the needs of special users, but also improve the control accuracy.



Opening regulation







DN15-DN32

DN40-DN50 Loosen the lock nut before preset, and tighten it

#### **Flow Rate**

Table of Flow Rate with Preset Opening (m<sup>3</sup>/h)

Opening	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
DN15	0.11	0.21	0.31	0.42	0.53	0.63	0.74	0.84	0.95	1.05
DN20	0.11	0.21	0.31	0.42	0.53	0.63	0.74	0.84	0.95	1.05
DN25	0.11	0.21	0.31	0.6	0.9	1.2	1.5	1.7	2.1	2.5
DN32	0.3	0.5	0.9	1.3	1.7	2.1	2.5	2.8	3.1	3.3
DN40	0.7	2	2.8	3	3.7	4.3	5.9	8.2	10.7	13
DN50	0.7	2	2.8	3	3.7	4.3	5.9	8.2	10.7	13

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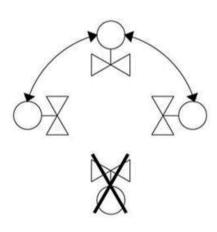
## **Product Type**

Model	Size	EDP	Max Flow Rate(m³/h)	Valve Stem Travel(mm)	Supporting Actuator
W-PICV015-25T	DN15	61984715	1.05	3.2	W-AR2M-16
W-PICV020-25T	DN20	61984716	1.05	3.2	W-AR2M-16
W-PICV025-25T	DN25	61984717	2.5	5.5	W-AR2M-25
W-PICV032-25T	DN32	61984718	3.3	5.5	W-AR2M-25
W-PICV040-25Q	DN40	61984719	13	15	W-A11A1X
W-PICV050-25Q	DN50	61984720	13	15	W-A11A1X

## **Actuator Type**

Model	EDP	Output Shut-Off Force(n)	Operating Voltage	Control Model	Running Speed(s/mm)
W-AR2M-16	61230019	>160	24VAC		5
W-AR2M-25	61230020	>250	24VAC	0(2)-10V, 0(4)-20mA	5
W-A11A1X	616P2241	500-700	24VAC		3.85

#### **Installation Instruction**



Prohibit downward installation of actuators

## **Model Description**

		W-	PICV	020	-25	Т
W	WATTS					
PICV	Pressure Independent	Control	Valve			
Size						
015-050	DN15-DN50					
Pressure						
25-PN25						
<b>Body Material</b>						
T: Copper Q	: Ductile Iron					