

# PRESSURE INDEPENDENT CONTROL VALVES FOR FAN AIR HANDLER UNIT - BRASS - TP200/201



#### **SPECIFICATIONS**

DN mm	DN25 - DN50
DN inch	1" - 2"
Temperature	-10°C to 120°C
Type of body	F/F
Application	Cold/hot water, Glycol solution concentration < 50%
Connection	Threaded ISO 7-1 BSP
Test	EN 12266-2 (Test body safety and tightness, Test seat tightness)
Options	Other specifications on request

#### **ADVANTAGES**

## High Control Precision

Both the electric valve core and balancing valve core adopt straight travel design. Compared with rotary design, straight travel has higher control precision.

#### Low Leakage Rate

The leakage rate is no more than 0.02% of Kvs.

## Build-in Diaphragm Capsule and Connecting Pipe

The valve adopts the build-in diaphragm capsule and connecting pipe. It can avoid damaging during installation compared with external connecting pipe.

#### Anti-blocking Design

The balance structure of spring diaphragm significantly reduces the probability of valve body blocking. Because of the lower requirement for water quality, it can also used for water in heating pipeline.

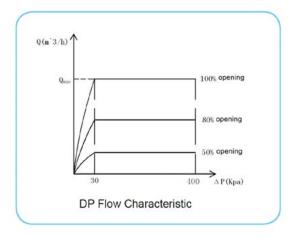
## High-quality Material

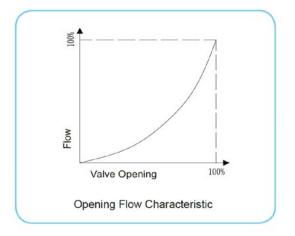
The valve body is made of high-quality brass Hpb59-1, valve stem and valve core are made of high-quality stainless steel.



			Series			TW500	
			Actuator Rated	Stroke		30mm	
		1	Nominal Output	Force		500N	
	PICV for AHU		con				
		F	Proportional type (	0(2)~10VDC,0(	TW500-XD24-S.12		
		3	3-position type(on/	off)		TW500-XD24-S.12	
		Туре	DN	Stroke	Qmax	△Ps	
			[mm]	[mm]	[m <sup>3</sup> /h]	[Bar]	
PN1		TPL25-2VTC-S.10	DN25	20	2	0.35-4	
6,-10	-	TPL32-2VTC-S.10	DN32	20	4	0.35-4	
PN16, -10 °C ~ 120°C	Female threaded	TPL40-2VTC-S.10	DN40	20	6	0.35-4	
120°C		TPL50-2VTC-S.10	DN50	20	8	0.35-4	
PN25		TPL25-2VTD-S.10	DN25	20	2	0.35-4	
-10	Female	TPL32-2VTD-S.10	DN32	20	4	0.35-4	
°C ~	threaded	TPL40-2VTD-S.10	DN40	20	6	0.35-4	
120°C		TPL50-2VTD-S.10	DN50	20	8	0.35-4	

# FLOW CHARACTERISTIC





DN	Opening (%)-Flow (m³/h)														
(mm)	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
25	0.38	0.44	0.49	0.55	0.60	0.67	0.73	0.85	0.97	1.10	1.20	1.41	1.62	1.86	2.00
32	1.25	1.63	1.71	1.85	2.10	2.21	2.35	2.50	2.66	2.79	2.90	3.04	3.20	3.36	4.00
40	1.29	1.74	1.83	2.24	3.04	3.61	3.85	4.16	4.41	4.66	4.90	5.16	5.40	5.75	6.00
50	1.35	1.81	1.92	2.45	3.12	3.77	4.07	4.42	5.03	5.40	6.10	6.50	7.20	7.50	8.00

 When the valve is connected with pipeline, if the medium is chilled/hot water, downward installation is forbidden.



#### Note:

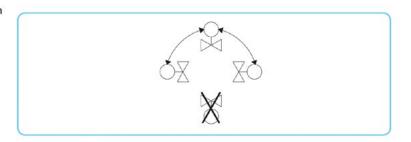
The medium flow direction in valve should be consistent with the medium of pipeline!

 Valve and actuator can be assembled easily.
Neither need any special tools, nor need to do any adjustment.

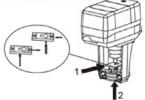


#### Note:

When we do the pipe water pressure testing, the valve body shoule be in the state of full open! If not, the internal diaphragm of valve body will be damaged and lose the balancing function!

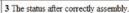


1 Press and hold the card along the arrow 1 direction, main shaft through the card from the arrow 2 direction, once the main shaft extended to the appropriate position, loosen the card and fixed the main shaft.



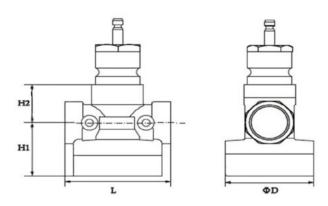
2 Put the slider into the actuator groove and 3 The status lock it with two screws







## **DIMENSION FIGURE**



DN	H1 mm	H2 mm	L mm	D mm	Weight Kg (without test plugs)	Weight Kg (with test plugs)
25	44.5	37	92	72.5	1.5	1.6
32	59	48	104	92	2.6	2.7
40	63	51	115	105	3.2	3.3
50	70.5	50.5	130	120	4.3	4.4

Caliber Range	DN25~DN50
Permissible Pressure	PN16, PN25 are optional
Connection Standard	Female threaded connection ISO7-1
Close-off DP	400Kpa
Medium Temperature	-10~120°C
Permissible Medium	Chilled/hot water, glycol under 50%

Valve Body	Brass Hpb59-1
Valve Core	Stainless steel
Valve Stem	Stainless steel
Sealing Ring	PTFE
Diaphragm	EPDM
Cover	PC
Bracket	Stainless steel
Base	Aluminum die casting