

**“ADCATROL” PNEUMATIC CONTROL VALVES
PWV 40I
(WV40I globe valves series with linear actuators PA series)**

DESCRIPTION

The PWV40I control valves are single seated, two-way body constructed with in-line straight connections. The PA pneumatic actuator is rubber diaphragm and multi-springs. Its action can be DA -direct action (air to close) or RA-reverse action (air to open). The PWV40I valves have been designed to assure an accurate control in any process condition. Their wide application ranges allows to use this valve with the most common process fluids such as water, superheated water, steam, air, gas and other non corrosive fluids.

MAIN FEATURES

Single seated, two ways, direct or reverse action valve.
Valve top flange permanently attached to the body, removal is unnecessary for replacing the actuator.
Stainless steel construction and soft sealing as standard.

OPTIONS: Air filter regulator
Top-work manual handwheel

USE: Saturated and superheated steam.
Hot and superheated water.
Air, gases and other noncorrosive fluids.

AVAILABLE MODELS: PWV40I

VALVE SIZES: DN15 to DN25

CONNECTIONS: Sandwhished between flanges as per EN 1092-1 PN16/40

ACTUATORS: PA-205; PA-280; PA-340.

ACTUATOR CONN: 1/4" NPT-F

CONTROL SIGNAL: 0,2 - 1 bar ; 0,4 - 1,2 bar ; 0,4 - 2 bar .

HOW TO SELECT: Never size the valve according to the pipe diameter in which it has to be fitted but according to the required actual flow of steam or water. Refer to valve calculation data sheet or consult the factory.



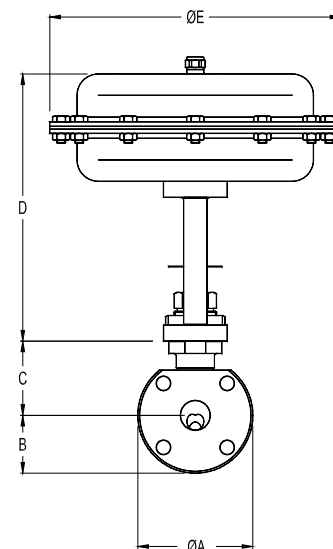
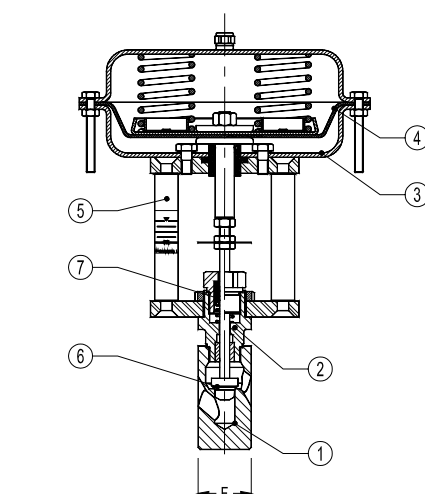
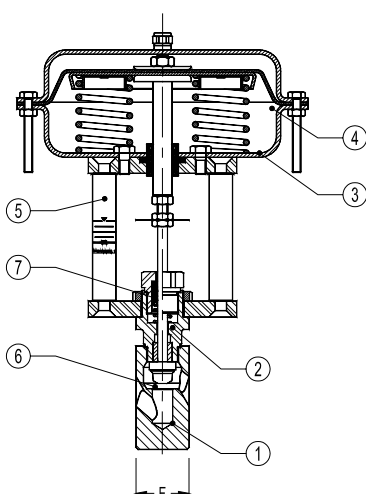
VALVE LIMITING CONDITIONS: Body design conditions: PN40
40 bar at 100°C
31,8 bar at 250°C
29,7 bar at 300°C
Min.working temperature: -10°C

MAX. AIR SUPPLY PRESSURE: 3,5 bar
AMBIENT TEMPERATURE: -20°C ...+70°C
BONNET : From -5°C to +200°C (standard)
Finned for temperature >200°C

STEM SEALING: PTFE/GR V-Rings - up to 220°C (Standard bonnet)
Graphite - up to 300°C (Finned bonnet)

PLUG TYPES: Parabolic equal percentage (EQP)
On-Off (PT)

PORT: Reduced bore.



PWV40I DA - Direct action

PWV40I RA - Reverse action

PWV40I - Direct and reverse action from DN15 to DN25

DIMENSIONS - VALVE BODY					
DN	A (mm)	B (mm)	F (mm)	C (mm) BONNET	
				STANDARD	EXTENDED
15	99	45	38	70	140
20	99	45	38	70	140
25	109	55	50	70	140

DIMENSIONS - ACTUATOR		
Type	ø E (mm)	D (mm)
		DN15-DN25 DA/RA
PA-205	210	235
PA-280	275	240
PA-340	335	265

MATERIALS		
POS.	DESIGNATION	MATERIAL
1	Valve Body	CF8M / 1.4408
2	Bonnet	AISI316 / 1.4401
3	* Actuator (Steel)	S235JRG2 / 1.0038
	* Actuator (St. steel)	AISI304 / 1.4301
4	Diaphragm	NBR70
5	Yoke (steel)	C45E / 1.1191
	Yoke (st. steel)	AISI304 / 1.4301
6	Valve plug	St. Steel - PTFE/GR
7	Standard packing	PTFE/GR

* Electric actuator : see IS EL20.00 E

ACTUATOR STROKE IN mm			
	SIZES		
	DN15	DN20	DN25
Stroke	15	15	15

FLOW RATE COEFFICIENTS			
	SIZES		
	DN15	DN20	DN25
Kvs	1,7	2,2	5,5

Kvs in m³/h , see data sheet IS PV10.00 E ;
For conversion Kvs = Cv(US) x 0,855

MAXI.PRESSURE DROPS IN BAR (Fluid Open)				
ACTUATOR	CONTROL SIGNAL	SIZES		
		DN15	DN20	DN25
PA-205	0,2 ÷ 1 bar	8	8	7,5
	0,4 ÷ 1,2 bar	12	12	9
	0,4 ÷ 2 bar	14	14	11
PA-280	0,2 ÷ 1 bar	32	27	18
	0,4 ÷ 1,2 bar	41	40	22
	0,4 ÷ 2 bar	52	47	27
PA-340	0,2 ÷ 1 bar	60	60	50
	0,4 ÷ 1,2 bar	80	80	60
	0,4 ÷ 2 bar	100	100	80

