

# 2/2-WAY PRESSURE ACTUATED ANGLE SEAT VALVES

## SERIES: PVS200

- > EXCELLENT FLOW RATE
- > EXCELLENT EXTERNAL SEALING
- > EXTERNALLY PRESSURE ACTUATED
- > TIGHT SHUTOFF & LONG SERVICE LIFE
- > DAMPED CLOSING (ANTI WATER HAMMER)
- > UP TO 370 PSI (25 BAR) OPERATING PRESSURE
- > VISUAL POSITION INDICATOR & SWITCHES (OPTION)
- > DESIGNED TO INTERNATIONAL SAFETY REGULATIONS
- > SUITABLE FOR CONTAMINATED OR EXTREMELY VISCOUS FLUIDS

St. Steel  
or Brass



### DESCRIPTION

Indumart Series PVS200 Pressure Actuated Angle Seat Valves are ideal for on/off flow control of most fluids compatible with bronze or stainless steel. Tight shutoff is provided by PTFE seat seal. Normal flow direction is under the seat, which eliminates the danger of water hammering to the piping system.

Series PVS200 angle seat valves are more cost effective than equivalent actuated ball valves, while providing a significantly longer cycle life.

Electrical position indicator with two micro-switches, optical position indicator, standard or NAMUR pilot valve and stroke limiter are some of the options which may be ordered with these heavy-duty angle seat valves.

Typical applications of the PVS200 Series include air drying equipments, industrial compressors, pollution control equipments, sterilizers, autoclaves, bottling machines, CIP equipments, refrigeration, styrofoam machines, textile dyeing and drying, and in most oil and natural gas processes to safe-guard explosion hazard.

### SPECIFICATIONS

<b>Body</b>	St. steel; Gun metal* (CuSn & ZnPb)
<b>Valve Type</b>	Pressure actuated seat valve
<b>Seat Seal</b>	PTFE
<b>Seal Packing</b>	PTFE/FPM

#### Internal Parts

- Actuator Body**
- Actuator Bottom**
- Actuator Seal**
- Actuator internals**
- Process fluid**

St. st & brass for gun metal;  
St. st. for the st. steel body  
St. steel  
Aluminum, WEKA-Kor coated  
NBR  
Coated steel  
Liquid and gases compatible  
with the body material  
-10 to 180°C; 200°C (option)  
Up to 600 mm<sup>2</sup>/s  
Air up to +80°C  
N.C: 50 to 120 psi (3.5 to 8 bar)  
N.O: 15 to 90 psi (1 to 6 bar)

- Fluid Temperature**
- Viscosity**
- Pilot fluid**
- Pilot Pressure**

- Ambient Temperature**
- Switching Function**
- Process Connection**
- Pilot Connection**

-10 to +60°C  
N.C. (standard); N.O. (option)  
1", 1 1/2", 1", 1 1/2" & 2"  
1"

\*Gunmetal is similar to brass, but more resistant to mildly aggressive water, steam and seawater.

### FLOW CHARACTERISTIC DATA

Connection	Operating Pressure		K <sub>v</sub> (m <sup>3</sup> /h)	C <sub>v</sub> (gpm)
	min (psi)	max (psi)		
1/2"	0	240 (370)	4.8	5.6
3/4"	0	150 (240)	10.0	11.6
1"	0	150	14.0	16.2
1 1/2"	0	100	23.0	26.6
2"	0	60	30.0	34.7
2"	0	45	37.0	42.8
High Flow High Pressure	1 1/2"	0	240	31.2
	1"	0	150	42.8
	2"	0	150	53.0

## ORDERING

### Model: PVS2

#### BODY, THREAD & ACTION

Gun metal Body; G Port; N.C.  
 Gun metal Body; NPT Port; N.C.  
 Gun metal Body; G Port; N.O.  
 Gun metal Body; NPT Port; N.O.  
 S.S. Body; G Port; N.C.  
 S.S. Body; NPT Port; N.C.  
 S.S. Body; G Port; N.O.  
 S.S. Body; NPT Port; N.O.

1
2
3
4
5
6
7
8

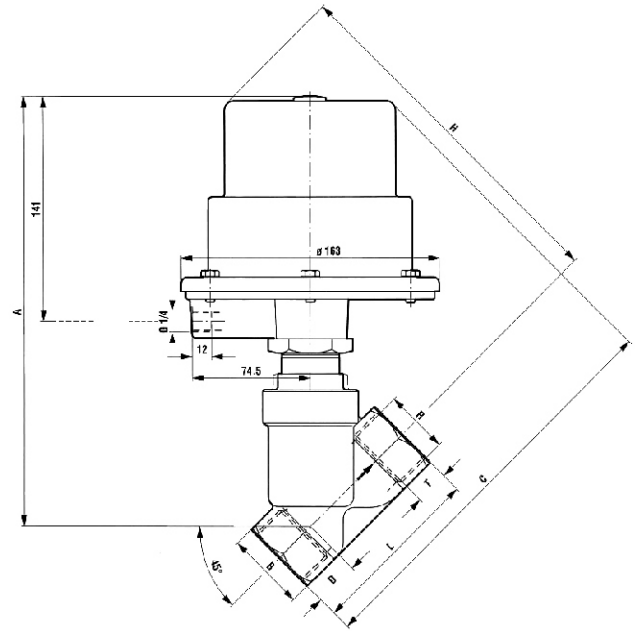
#### VALVE SIZE

1/8"  
 1/4"  
 1"  
 1 1/4"  
 1 1/2"  
 2"  
 1 1/2" (High Flow, High Pressure)  
 1 1/4" (High Flow, High Pressure)  
 2" (High Flow, High Pressure)

3
4
5
6
7
8
6H
7H
8H

#### OPTIONS:

- Higher Operating Pressure (370 psi for 1 1/2" valve, 240 psi for 2" valve)
- Electrical Position Indicator with Two Micro-switches
- Electrical Position Indicator with Two Micro-switches (EEX)
- Optical Position Indicator
- Maximum Temperature 200°C
- Actuator in Stainless Steel



## DIMENSIONS (mm)

	R	A	B	C	D	E	H	L	T
1/8" NPT	204.5	SW27	183.0	18.5	SW30	164.0	65	13.0	
G 1/8"	204.5	SW27	183.0	18.5	SW30	164.0	65	15.0	
1/4" NPT	213.5	SW32	189.0	21.0	SW36	168.0	75	14.0	
G 1/4"	213.5	SW32	189.0	21.0	SW36	168.0	75	16.5	
1" NPT	221.5	SW41	199.0	25.0	SW36	174.0	90	16.5	
G 1"	221.5	SW41	199.0	25.0	SW36	174.0	90	19.0	
1 1/4" NPT	236.5	SW50	221.5	28.5	SW41	184.5	110	17.0	
G 1 1/4"	236.5	SW50	221.5	28.5	SW41	184.5	110	21.5	
1 1/2" NPT	238.5	SW55	217.0	31.0	SW41	186.0	120	17.0	
G 1 1/2"	238.5	SW55	217.0	31.0	SW41	186.0	120	21.5	
2" NPT	250.5	SW70	234.5	40.0	SW41	194.5	150	17.5	
G 2"	250.5	SW70	234.5	40.0	SW41	194.5	150	26.0	
1 1/2" NPT	236.5	SW50	221.5	28.5	SW41	184.5	110	17.0	
G 1 1/2"	236.5	SW50	221.5	28.5	SW41	184.5	110	21.5	
1 1/4" NPT	238.5	SW55	217.0	31.0	SW41	186.0	120	17.0	
G 1 1/4"	238.5	SW55	217.0	31.0	SW41	186.0	120	21.5	
2" NPT	250.5	SW70	234.5	40.0	SW41	194.5	150	17.5	
G 2"	250.5	SW70	234.5	40.0	SW41	194.5	150	26.0	

## ELECTRICAL POSITION INDICATOR

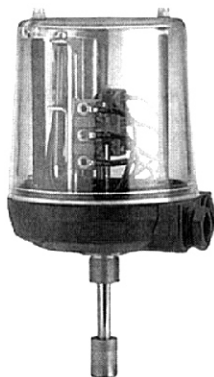
- Open and/or closed positions can be indicated by electrical position indicator.
- The micro-switches are already wired up with the terminal block.
- Both switches are fitted to a continuously adjustable holder and are independently adjustable via threaded spindles.
- Switches, switching rod and the terminal block are mounted on a 360° rotatable plastic socket, covered by a transparent cap.
- Two versions are available. They can be fitted without modifications to valves by means of a threaded plug underneath the indicator body. The switching rod is thereby connected to the valve spindle via a universal coupling, without play in the axial direction.

### Max. Operating Current for Version 1

Voltage (V)	Resistor Power (A)	Inductive Power (A)
250DC	10	10
380 DC	6	6
15 AC	15	15
30 AC	8	7.5
50 AC	3	2.5
75 AC	1	0.5
125 AC	0.5	0.07
250 AC	0.25	0.03



Version 2 (4A @ 24 VDC)



Version 1

The PVS200 Series pneumatic seat valves were developed and designed using the following harmonised standards:

EN 292

Machine Safety

EN983

Pneumatic Systems

EN60204-1

Electrical Equipment for Machinery