

2/2-WAY PRESSURE ACTUATED ANGLE SEAT VALVES

SERIES: PVS100

- > EXCELLENT FLOW RATE
- > EXCELLENT EXTERNAL SEALING
- > EXTERNALLY PRESSURE ACTUATED
- > TIGHT SHUTOFF & LONG SERVICE LIFE
- > DAMPED CLOSING (ANTI WATER HAMMER)
- > VISUAL POSITION INDICATOR & SWITCHES
- > UP TO 370 PSI (25 BAR) OPERATING PRESSURE
- > DESIGNED TO INTERNATIONAL SAFETY REGULATIONS
- > SUITABLE FOR CONTAMINATED OR EXTREMELY VISCOUS FLUIDS
- > CONVERSION TO NORMALLY OPEN & DOUBLE ACTING WITHOUT TOOLS

St. Steel
or Brass



DESCRIPTION

Indumart Series PVS100 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 PVS100 angle seat valves are more cost effective than equivalent actuated ball valves, while providing a significantly longer cycle life. The maintenance-free actuator with long lasting piston ring and the housing made of sturdy polyamide 66, which may rotate up to 360° can be supplied as either single or double acting piston.

Standard features include optical position indicator, and spring-loaded double PTFE/FPM seals that separate the process fluid from the pilot fluid. Electrical position indicator with two micro-switches, standard or NAMUR pilot valve and stroke limiter are some of the options which may be ordered with these heavy-duty valves.

Typical applications of the PVS100 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

Body	St. steel; Gun metal* (CuSn & ZnPb)
Valve Type	Pressure actuated seat valve
Seat Seal	PTFE
Seal Packing	PTFE/FPM
Internal Parts	St. st. & brass for gun metal; St. st. for the st. steel body
Actuator Material	Polyamide 66
Actuator Seal	NBR
Actuator Internals	Stainless steel, brass
Process Fluid	Liquid and gases compatible with the material
Fluid Temperature	-10 to +180°C
Viscosity	Up to 600 mm ² /s
Pilot Fluid	Air up to +60°C
Pilot Pressure	50 to 150 psi (3.5 to 10 bar)
Ambient Temperature	-10 to +60°C
Switching Function	N.C. (standard); N.O. (option)
Process Connection	1/2", 3/4", 1", 1 1/4", 1 1/2" & 2"
Pilot Connection	1/4"

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

FLOW CHARACTERISTIC DATA

Connection	Operating Pressure min (psi)	Operating Pressure max (psi)	K _v (m ³ /h)	C _v (gpm)
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 1/4"	0	100	23.0	26.6
1 1/2"	0	60	30.0	34.7
2"	0	45	37.0	42.8

ORDERING

Model: PVS1

BODY, THREAD & ACTION

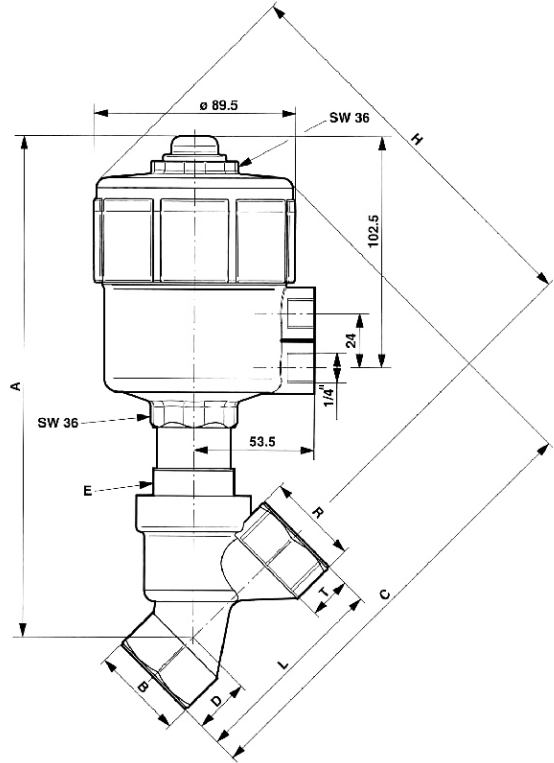
Gun metal Body; G Port; N.C.
 Gun metal Body; NPT Port; N.C.
 Gun metal Body; G Port; N.O.
 Gun metal Body; NPT Port; N.O.
 S.S. Body; G Port; N.C.
 S.S. Body; NPT Port; N.C.
 S.S. Body; G Port; N.O.
 S.S. Body; NPT Port; N.O.

VALVE SIZE

1/2"
 3/4"
 1"
 1 1/4"
 1 1/2"
 2"

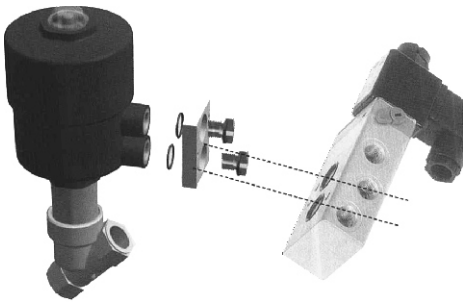
OPTIONS:

- Double Acting Actuation (requiring 4/2 or 5/2-way pilot valve)
- Higher Operating Pressure (370 psi for 1/2" valve, 240 psi for 3/4" valve)
- Electrical Position Indicator with Two Micro-switch
- NAMUR Interface Plate
- NAMUR Pilot Valve (AC or DC)
- Pilot Solenoid Valve (AC or DC)
- Stroke Limiter

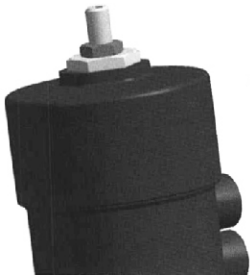


NAMUR ADAPTER PLATE & PILOT VALVE

An adapter can be used to mount pilot valves with NAMUR interface on the actuator of PVS100 series.



STROKE LIMITING SYSTEM



This system is available as an option for adjusting the minimum and maximum flow rates.

It can be retrofitted after removal of the standard position indicator.

DIMENSIONS (mm)

R	A	B	C	D	E	H	L	T
1/2" NPT	204.5	SW27	183.0	18.5	SW30	164.0	65	13.0
G 1/2	204.5	SW27	183.0	18.5	SW30	164.0	65	15.0
3/4" NPT	213.5	SW32	189.0	21.0	SW36	168.0	75	14.0
G 3/4	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

The PVS100 Series pneumatic seat valves were developed and designed using the following harmonised standards:

EN 292

EN983

EN60204-1

Machine Safety

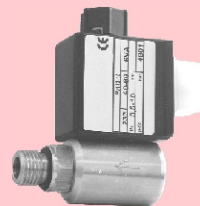
Pneumatic Systems

Electrical Equipment for Machinery

3/2 WAY SOLENOID PILOT VALVE

This brass-body directly actuated seat valve is used as pilot solenoid valve for Indumart series PVS100 and PVP200 pneumatic seat valves.

Silent ventilation, reliable switching and long life teflonic core make this valve the best choice for pilot switching.



Body

Seat Seal

Connection

Min. Pressure

Max. Pressure

Fluid Temperature

Standard Voltage

Weight

Brass

NBR (Perbunan)

1/4"

15 psi (1 bar)

120 psi (8 bar)

up to 60°C

24 VDC, 24 VAC,

230 VAC

0.3 kg