



Product feature

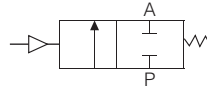
2/2-way Angle-Seat Valve
Pneumatically Operated,
for medium up to +180°C,
with Weld ends
port connection DN 10-80

1. High flow rate;
2. Long life cycle;
3. NC and NO universal actuators with modular universal accessory program up to control heads;
4. Deliverable with flow direction below or above seat
5. Simple conversion of the circuit function.

Symbol

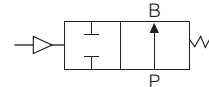
Control function A

(closed by spring force
in rest position)



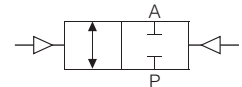
Control function B

(open in rest position)



Control function I

(double-acting actuator)



Ordering code

PV300		P	015		NC		S × 63mm	
Model			Nominal diameter		Control function	Body material	Acting type	
PV300	300 Seires angle seat valve		15	G1/2" 40	G1 1/2"	NO Normally open	Blank S.S 304 (standard)	S Single acting
			20	G3/4" 50	G2"	NC Normally closed (standard)	4 S.S 316	D Double acting
			25	G1" 65	G2 1/2"		5 S.S 316L	
			32	G1 1/4"				
Actuator material code								
P	Plastic actuator							
S	S.S. Actuator							
A	Aluminum actuator							

Actuator size

Port size	Standard actuator size (mm)		
	PA	S.S.	AL
DN15	40,50	40,50	40,50
DN20	50,63,80	50,63,90	50,63,80
DN25	50,63,80	50,63,90	50,63,80
DN32	63,80	63,90	63,80
DN40	63,80	63,90	63,80
DN50	63,80	63,90	63,80
DN65	80,100	90,125	80,100

PV300 Series plunger pilot angle seat valve is propelled by a piston actuator, either single acting or double acting.

Actuators are made of three different materials, applicable to different working temperature:

2/2 Way stainless steel valve with big flow capacity V type seals ensure reliable and effective sealing.

Maintenance free, compatible with various accessories, Direction indicating, stroke limiting or manual switching can be achieved conveniently.

Specifications

Model Specification	Normally Closed	P015NC	P020NC	P025NC	P032NC	P040NC	P050NC	P065NC
	Normally Open	P015NO	P020NO	P025NO	P032NO	P040NO	P050NO	P065NO
Material of body/ Actuator	S.S304 316 /PA							
Operating method	Plunger pilot							
Ambient and fluid	Air, Water, Oil, Steam (50CTS Bellow)							
Port size	G1/2"	G3/4"	G1"	G1 1/4"	G1 1/2"	G2"	G2 1/2"	
Nominal diameter (mm)	13	18	24	31	35	45	61	
Kv (m³/h)	4.2	9	19	33	42	59	90	
Model Specification	Normally Closed	S015NC	S020NC	S025NC	S032NC	S040NC	S050NC	S065NC
	Normally Open	S015NO	S020NO	S025NO	S032NO	S040NO	S050NO	S065NO
Material of body/ Actuator	S.S304 316 /PA							
Seat seal	PTFE/FPM							
Stem seal	PTFE/FPM							
Piston seal	PTFE/FPM/NBR							
Temperature of medium	PTFE	-10~200°C						
	FPM	-10~150°C						
Installing	Downsteam/Upsteam							

Pressure data sheet

Control function	Acting type	Flow direction	Water hammer	Application
Normally closed	Single acting	Upstream	Yes	For compressible medium (such as gas and steam) and liquid of comparatively low pressure
		Downstream	No	For anti water hammer pipeline, bears certain pressure difference
	Double acting	Upstream	Yes	Reliable performance, bears pressure difference; valve closes automatically in case of an emergency.
		Downstream	No	For pipeline required of better anti water hammer, bears big pressure difference
Normally open		Upstream	Yes	For pipeline where valve keeps open. double acting & normally open when silencer comes off.
		Downstream	No	For pipeline where valve keeps open, anti water hammer, double acting & normally open when silencer comes off

Water hammer (or, more generally, fluid hammer) is a pressure surge or wave caused when a fluid (usually a liquid but sometimes also a gas) in motion is forced to stop or change direction suddenly (momentum change). A water hammer commonly occurs when a valve closes suddenly at an end of a pipeline system, and a pressure wave propagates in the pipe. It is also called hydraulic shock.

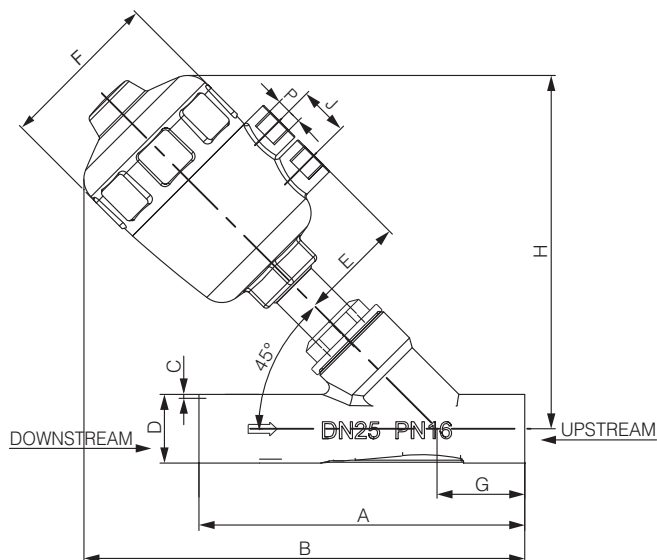
This pressure wave can cause major problems, from noise and vibration to pipe collapse. It is possible to reduce the effects of the water hammer pulses with accumulators, expansion tanks, surge tanks, and other features.

Designed to close againstflow. Will not chatter or produce water hammer. Operates smoothly and quietly.

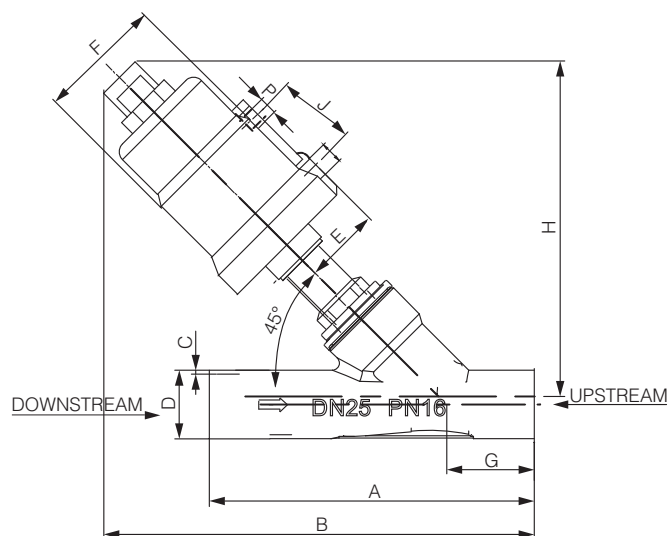
Port size	DN (mm)	Actuator (mm)	Normally closed				Normally closed				Normally open					
			Upstream		Downstream		Upstream		Downstream		Upstream		Downstream		Double acting assistant pressure MPa	Rest position pressure MPa
			Press. range MPa	Control press. MPa	Press. range MPa	Control press. MPa	Press. range MPa	Control press. MPa	Press. range MPa	Control press. MPa	Press. range MPa	Control press. MPa	Press. range MPa	Control press. MPa		
1/2"	DN15	40	0~1.6	0.3~0.45	0~1.1					≥0.3				0.2~0.4	≥0.4	0~0.2
		50	0~1.6	0.3~0.35	0~1.4	0.45	0~1.6	0.3~0.35	0~1.6	≥0.3	0~1.6	0~1.6	0~1.6	0.2~0.4	≥0.4	0~0.1
3/4"	DN20	50	0~1.6	0.3~0.4	0~1.4	0.45	0~1.6	0.3~0.4	0~1.6	0.3	0~1.6	0~1.2	0~1.6	0.3~0.65	0.3~0.4	0~0.2
		63	0~1.6	0.3~0.38	0~1.4	0.45	0~1.6	0.3~0.38	0~1.6	0.3~0.5	0~1.6	0~1.4	0~1.6	0.35~0.7	0.3~0.35	0~0.35
		80	0~1.6	0.2~0.35	0~1.4	0.4	0~1.6	0.2~0.35	0~1.6	0.3~0.4	0~1.6	0~1.4	0~1.6	0.35~0.7	0.3~0.4	0~0.5
		90 SS	0~1.6	0.2~0.3	0~1.4	0.35	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.4	0~0.4
1"	DN25	50	0~1.6	0.3~0.45	0~0.75	0.45	0~1.6	0.3~0.45	0~1.3	0.3~0.6	0~1.6	0~0.3	0~1.3	0.3~0.6	0.3~0.4	0~0.35
		63	0~1.6	0.3~0.35	0~1.4	0.5	0~1.6	0.3~0.35	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.6	0.3~0.55	0~0.35
		80	0~1.6	0.2~0.3	0~1.4	0.45	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.6	0.35~0.55	0~0.5
		90 SS	0~1.6	0.2~0.25	0~1.4	0.4	0~1.6	0.2~0.25	0~1.6	0.2~0.3	0~1.6	0~1.6	0~1.6	0.35~0.6	0.35~0.55	0~0.4
1-1/4"	DN32	63	0~1.6	0.3~0.5	0~0.06	0.5	0~1.4	0.3~0.5	0~1.4	0.3~0.6	0~1.6	0~1.4	0~1.3	0.35~0.7	0.3~0.5	0~0.4
		80	0~1.6	0.2~0.45	0~1.4	0.6	0~1.6	0.2~0.45	0~1.6	0.3~0.5	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.55	0~0.5
		90 SS	0~1.6	0.2~0.35	0~1.6	0.65	0~1.6	0.2~0.35	0~1.6	0.2~0.4	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.55	0~0.4
1-1/2"	DN40	63	0~1.6	0.3~0.6	0~0.05	0.5	0~1.1	0.3~0.6	0~1.3	0.3~0.7	0~1.6	0~1.4	0~0.6	0.35~0.7	0.3~0.6	0~0.4
		80	0~1.6	0.3~0.55	0~1.4	0.6	0~1.6	0.3~0.55	0~1.6	0.3~0.6	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.7	0~0.5
		90 SS	0~1.6	0.2~0.35	0~1.6	0.65	0~1.6	0.2~0.35	0~1.6	0.2~0.6	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.7	0~0.5
2"	DN50	63	0~1.0	0.3~0.65	0~0.35	0.5	0~0.9	0.3~0.65	0~0.8	0.35~0.8	0~1.0	0~0.6	0~0.5	0.35~0.7	0.35~0.7	0~0.8
		80	0~1.6	0.3~0.55	0~0.9	0.65	0~1.6	0.3~0.55	0~1.6	0.3~0.7	0~1.6	0~1.0	0~0.6	0.35~0.7	0.35~0.7	0~0.5
		90 SS	0~1.6	0.3~0.5	0~1.1	0.65	0~1.6	0.3~0.5	0~1.6	0.3~0.6	0~1.6	0~1.0	0~1.2	0.35~0.7	0.35~0.7	0~0.4
		100	0~1.6	0.25~0.4	0~1.4	0.65	0~1.6	0.25~0.4	0~1.6	0.3~0.6	0~1.6	0~1.4	0~1.4	0.35~0.7	0.35~0.7	0~0.4
		125 SS	0~1.6	0.2~0.3	0~1.6	0.65	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.4	0~1.4	0.35~0.7	0.35~0.7	0~0.5
2-1/2"	DN65	80	0~1.6	0.3~0.65	0~0.5	0.65	0~1.6	0.3~0.65	0~1.1	0.3~0.7	0~1.6	0~0.5	0~0.75	0.3~0.65	0.35~0.7	0~0.5
		90 SS	0~1.6	0.2~0.6	0~0.7	0.65	0~1.6	0.2~0.6	0~1.6	0.3~0.7	0~1.6	0~1.0	0~1.4	0.3~0.6	0.35~0.7	0~0.4
		100	0~1.6	0.3~0.45	0~0.8	0.65	0~1.6	0.3~0.45	0~1.6	0.3~0.55	0~1.6	0~1.0	0~0.8	0.35~0.7	0.35~0.7	0~0.4
		125 SS	0~1.6	0.2~0.7	0~0.9	0.65	0~1.6	0.2~0.7	0~1.6	0.2~0.55	0~1.6	0~1.4	0~1.4	0.3~0.7	0.35~0.7	0~0.5

Dimensions

Weld ends --PV300P



Weld ends --PV300S



Weld ends -- PV300P

Port size	DN(mm)	Actuator(mm)	A	B	C	D	E	F	G	H	J	P
1/2"	DN15	40	100	142	3	21	30	53	18	115	20	G1/8
		50	100	150	3	21	44	64	18	115	24	G1/4
3/4"	DN20	50	117	170	3	27	44	64	30	131	24	G1/4
1"	DN25	50	130	175	3	34	44	64	30	138	24	G1/4
		63	130	200	3	34	54	79.5	30	166	24	G1/4
1-1/4"	DN32	63	145	207	3	42	54	79.5	30	172	24	G1/4
1-1/2"	DN40	63	160	207	4	48	54	79.5	30	174	24	G1/4
2"	DN50	63	190	227	4	60	54	79.5	30	193	24	G1/4
		80	190	235	4	60	62	101	30	202	24	G1/4
2-1/2"	DN65	80	230	235	5	76	62	101	40	209	24	G1/4

Weld ends -- PV300S

Port size	DN(mm)	Actuator(mm)	A	B	C	D	E	F	G	H	J	P
1/2"	DN15	40	100	135	3	21	28	53	18	117	38	G1/8
		50	100	152	3	21	35	56	18	134	38	G1/8
3/4"	DN20	50	117	174	3	27	35	56	30	144	38	G1/8
1"	DN25	50	130	177	3	34	35	56	30	147	38	G1/8
		63	130	188	3	34	43	70	30	158	44	G1/8
1-1/4"	DN32	63	145	197	3	42	43	70	30	167	44	G1/8
1-1/2"	DN40	63	160	197	4	48	43	70	30	167	44	G1/8
2"	DN50	63	190	216	4	60	43	70	30	186	44	G1/4
		90	190	235	4	60	56	94	30	205	67	G1/8
2-1/2"	DN65	90	230	255	5	76	56	94	40	215	67	G1/4