

REMAX ENERGY

Pneumatic Angle Seat Valve Model: RASV12 / RASV12P

Description:

Angle seat valves are 2/2-way pneumatically actuated piston valves. The piston actuator provides a linear motion to lift the seal off its seat. Because the seat is positioned under an angle, the flow is minimally impeded in the open position, resulting in an excellent flow rate and a low pressure loss. They are used to regulate the flow of liquids, gases, steam, vacuum and even aggressive fluids. They can also operate with high temperatures and high viscosity media, even under zero differential pressures. The robust design makes angle seat valves a popular choice for harsh applications and they have very high cycle lives. Therefore, they are excellent long-life alternatives to ball valves. These valves are also suitable alternatives for solenoid valves, especially with contaminated, viscous media where typical solenoid valves would fail. They may be operated using a single acting or double acting configuration, which has an influence on its pressure rating. They can also be designed as manually operated or electrically operated, a visual indicator on the top of the piston shows whether the valve is open or closed. Angle seat valves are **operated pneumatically such that air pressure is used to control the** piston actuator, which lifts the valve plug off its seat. Normally Closed (NC) valves usually have the valve closed in unpressurized conditions and use a spring to return the valve to the rest state. Normally Open (NO) valves have the valve opening always open unless air pressure acts to close it. A NO valve can be obtained if the spring is placed on the opposite side of the piston actuator. Double Acting valves can be used to handle flow in both directions. These valves have no spring and depend on the supply air to determine the valve position. These configurations influence the pressure rating of the valve. Flow up and under the valve (causing valve to open) will reduce water hammer effect but reduces the maximum working pressure of the valve by typically 50%. However, fitting a strong return spring will help increase the working pressure but a larger actuator will be required to overcome this increased spring strength. With flow over seat (causing valve to close), a full working pressure is achieved and water hammer can be reduced by restricting the compressed air supply flow. RASV12 is a long life angle seat valve.



These valves can be used to deliver millions of cycles of operation in demanding applications such as steam, water and aggressive media. They are ideally suited for vacuum applications and can be used in fast acting applications up to 1000 cycles per hour with expected life of over 15 million cycles. They are used in many industries, including food & beverage, chemical, oil & gas, water & sewage etc.

Connection: Screwed BSP/NPT , Welded , Clamp , Flanged ANSI150

Size: DN10 to DN150

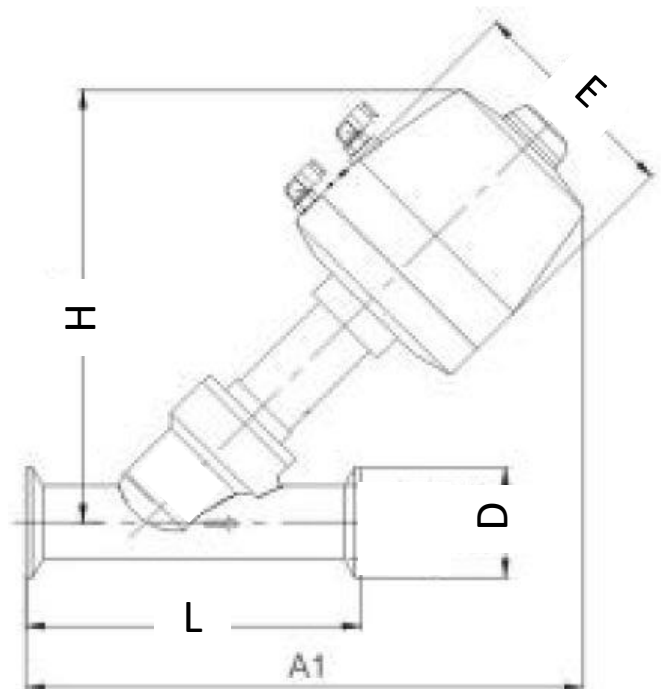
Condition: Pressure rating: PN25 , Temperature rating: -60 to 300

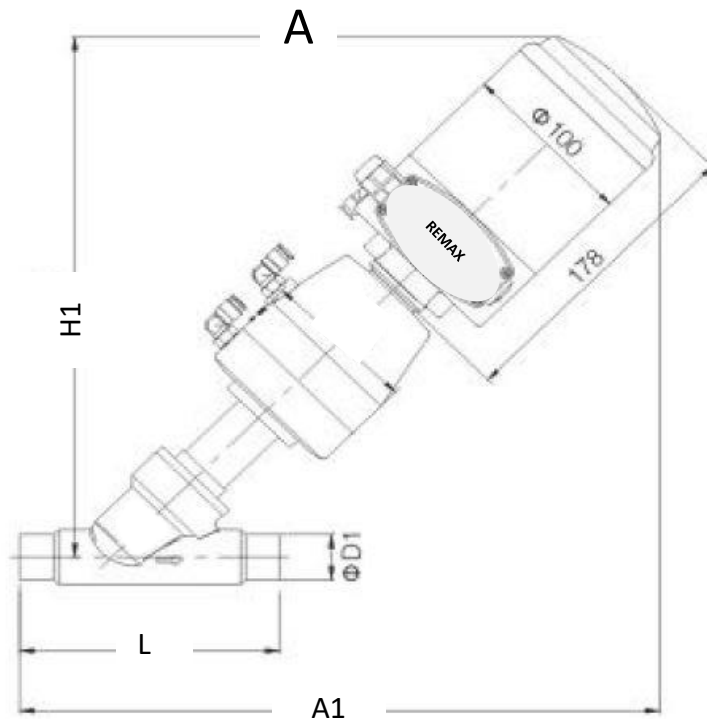
Advantages:

The main advantage of the angle seat configuration is that compared with other valve types it gives a high flow rate with low pressure loss. Other benefits include elimination of water hammer and also resistance to backflow. Hence angle seat valves are an economical alternative to ball valves while providing a longer service life. Various parameters as mentioned above must be considered for the right selection of angle seat valve. The valve material selected must also be compatible with the medium that flows in the valve.

Material table

	Item	material
1	Body	AISI 304 / AISI316 / AISI316L / brass
2	Nut	AISI 304 / 316
3	Gasket	AISI 304 / 316
4	seat	PTFE / EPDM / stainless steel /
5	Valve core	AISI 304 / 316
6	Stem	AISI 304 / 316
7	Connecting	AISI 304 / 316
8	Stem seal	PTFE / EPDM / Graphite
9	Body seal	AISI 304 / 316 / viton
10	Metal pads	AISI 304 / 316
11	Spring	60Si2Mn
12	Actuator	Plastic - PPS





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6	Stem	AISI 304 / 316
7	Connecting piece	AISI 304 / 316
8	Stem seal	PTFE / EPDM / Graphite
9	Body seal	AISI 304 / 316 / viton
10	Metal pads	AISI 304 / 316
11	Spring	60Si2Mn
12	Actuator	AISI304 / 316 /plastic

Dimension

Size	RASV12						
	A	H	E	A1	D	L	H1
1/2"	232	173	62	310	14	145	67
3/4"	232	173	62	310	14	145	74
1"	256	202	62	319	18	155	90
1 1/4'	272	195	76	330	18	155	113
1 1/2'	272	245	76	335	18	182	115
2"	307	295	96	370	20	182	132
2 1/2"	345	350	96	400	24	200	140
3"	350	385	114	440	28	210	155