SANITARY AIR VENT VALVES
SAV10

DESCRIPTION

The ADCAPure SAV10 sanitary air vent is a self-acting valve designed for air venting applications with liquids.
The valve closes when filled with liquid product. As the level falls, the valve opens if pressure is also relieved. The valve does not open under operating pressure, thus being mostly used as a start-up bleeding valve. Typical applications include air venting in CIP lines (e.g. installed at suction of SIP return pump to prevent air lock), tanks, high points in pipelines, amongst others.
Specifically designed for hygienic systems found in the pharmaceutical, cosmetic, fine chemical and food & beverage processes.





MAIN FEATURES

Compact and easy to install.
Springless design.
Complete 316L stainless steel construction, including float.
Different models available depending on the intended application.

STANDARD SURFACE FINISH

Internal wetted parts: ≤ 0,51 µm Ra – SF1.
External: ≤ 0,76 µm Ra – SF3.
Other surface conditions see TIS.GIA – General information ADCAPure.
Ultrasonic cleaning.

USE: Water and other liquids compatible with the construction.

AVAILABLE MODELS:
SAV10 – soft upper seat; metal lower seat.
SAV10D – soft upper and lower seats.
SAV10CK – soft upper seat; grooved lower seat.

SIZES: 1" x 3/4" and 1" x 1".

CONNECTIONS: ASME BPE clamp ferrules.
Others on request.

PACKAGING: Assembling and packaging in a clean room certified according to ISO 14644-1.
The product is end capped and sealed with recyclable thermo-shrinkable plastic film, to avoid contamination.

INSTALLATION: Vertical installation.
See IMI – Installation and maintenance instructions.

CE MARKING – GROUP 2 (PED – EUROPEAN DIRECTIVE)	
PN 10	**CATEGORY**
1" x 3/4" and 1" x 1"	SEP

LIMITING CONDITIONS *	
Maximum operating pressure	10 bar
Minimum closing pressure – silicone seals	0,7 bar
Minimum closing pressure – EPDM, FPM or FFKM seals	1,5 bar
Maximum operating temperature **	150 ºC
Minimum operating temperature	-10 ºC

* Other limits on request. Maximum operating conditions may be limited by the valve end connections due to normative restrictions.
** See "Ordering Codes" table for restrictions.
Mininum liquid specific weight: 0,75 kg/dm³

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FLOW RATE CAPACITY (NL/min)													
MODEL	DIFFERENTIAL PRESSURE (bar)												
	0,5	0,7	1	1,5	2	3	4	5	6	7	8	9	10
SAV10	470	567	698	897	1086	1451	1812	2174	2536	2897	3259	3620	3982

Values shown refer to capacities of air discharge at 15 ºC, under average atmospheric pressure (1013 mbar).
If the temperature of the air differs from 15 ºC, the discharge capacity can be corrected by multiplying it by: $\frac{288}{273 + T}$, where T is the actual temperature in ºC.
It may be assumed that the temperature of the air is equal to the temperature of the liquid.

OPERATION

The SAV10 air vents are composed of a stainless steel valve body and cover and a free-moving stainless steel ball float.

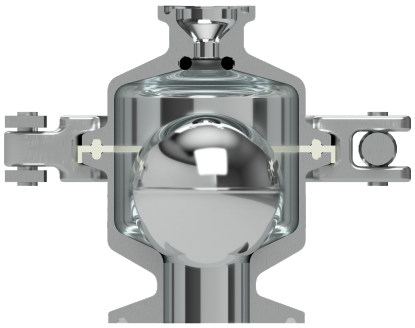
When the system is starting up, the valve vents air to the outlet. As pressure increases and the product level rises, the float becomes buoyant and closes the valve once it reaches the upper soft seat. When the product level falls, the valve will only open and vent excess air once the pressure is also relieved.

Three different models are available, distinguishable by the design of the lower seat in the body.

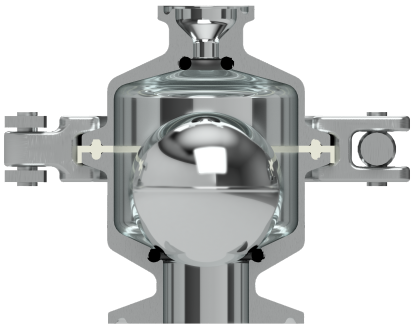
The SAV10 is the standard unit, with a metal-sealed lower seat. As such, when the ball float rests on the lower seat (metal-to-metal contact), some air may be permitted to re-enter the system, either while the system is depressurized or in the case of vacuum.

The SAV10D features a lower seat with soft sealing, which prevents backflow of air into the system, thus preventing possible contamination when the system is depressurized or in case of vacuum.

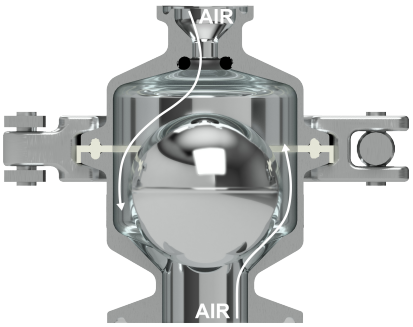
The SAV10CK features a grooved body. As such, when the float rests on the lower seat, air is permitted to flow, in either direction, through the grooves. It was designed for applications where air should be allowed to flow freely in and out of the system, while the product must be kept inside.



SAV10

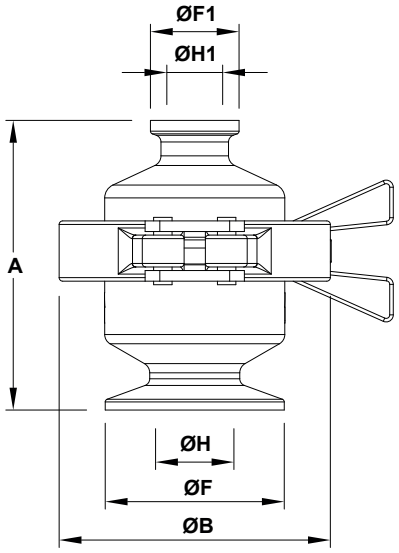


SAV10D

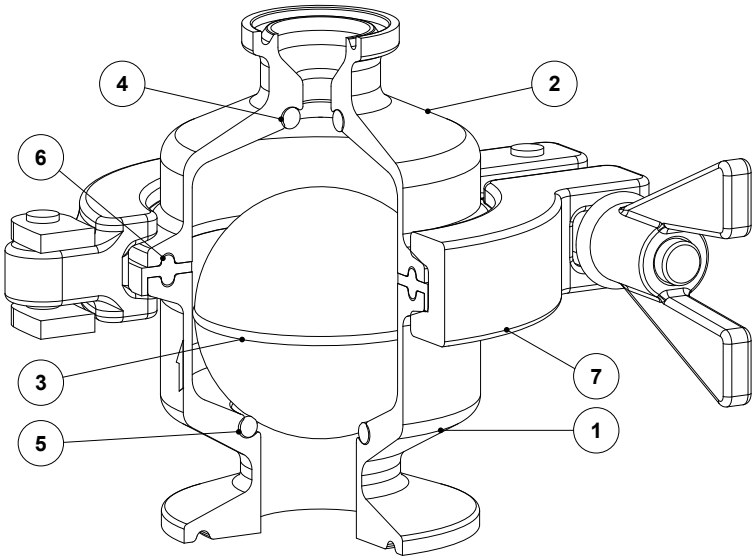


SAV10CK

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DIMENSIONS (mm)							
SIZE	**A**	**ØB**	**ØF**	**ØF1**	**ØH**	**ØH1**	**WEIGHT (kg)**
1" x 3/4"	81,7	76,5	50,4	25	22,1	15,8	0,8
1" x 1"	81,7	76,5	50,4	50,4	22,1	22,1	0,8



MATERIALS		
POS. No.	**DESIGNATION**	**MATERIAL**
1	Body	AISI 316L / 1.4404
2	Cover	AISI 316L / 1.4404
3	* Float / ball	AISI 316L / 1.4404; Polypropylene
4	* O-ring	** Silicone; EPDM; FPM; FFKM
5	* O-ring (SAV10D)	** Silicone; EPDM; FPM; FFKM
6	* Gasket	** Glass microsphere filled PTFE
7	Safety clamp	AISI 316 / 1.4401

* Available spare parts; ** Others on request.

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ORDERING CODES SAV10													
MODEL	**SAV**	**XX**	**X**	**X**	**T**	**M**	**X**	**X**	**D**	**25**	**D**	**20**	
SAV10 – Sanitary air vent valve	**SAV**												
DESIGN													
Soft upper seat and metal lower seat		**XX**											
Soft upper and lower seat		**DX**											
Soft upper seat and grooved lower seat		**CK**											
BODY MATERIAL													
AISI 316L / 1.4404			**X**										
FLOAT / BALL MATERIAL													
AISI 316L / 1.4404 float				**X**									
Polypropylene ball - Tmax 90 ºC (density of 0,906 kg/dm^3)				**R**									
BODY SEALING													
Glass microsphere filled PTFE					**T**								
VALVE SEALING													
Metal to metal						**M**							
EPDM						**E**							
FPM (USP Class VI on request)						**V**							
FFKM						**K**							
Silicone						**S**							
SURFACE FINISH (a)													
Standard surface finish							**X**						
Mirror mechanical polished external surfaces (SF1)							**P**						
Electropolished internal wetted parts (SF5)							**E**						
Electropolished internal wetted parts (SF4)							**Q**						
SPECIAL FEATURES													
None								**X**					
INLET PIPE CONNECTION													
Clamp ferrule ASME BPE									**D**				
INLET SIZE													
1"										**25**			
OUTLET PIPE CONNECTION													
Clamp ferrule ASME BPE											**D**		
OUTLET SIZE													
3/4"												**20**	
1"												**25**	
SPECIAL CONSTRUCTION / ADDITIONAL OPTIONS													
Full description or additional codes have to be added in case of non-standard combination													**E**

(a) Consult TIS.GIA – General information ADCAPure – for further details and other surface finish options.

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