SANITARY PRESSURE SUSTAINING VALVE
PS-173

DESCRIPTION

The ADCA PS-173 series ***direct acting, spring-loaded diaphragm sensing ,*** pressure sustaining valves are designed for use on clean steam, compressed air, water and other gases or liquids compatible with the materials of construction .

MAIN FEATURES

Compact design.
Completely machined from barstock material, no castings or forgings are used on the standard version.
No rising stem

STANDARD SURFACE FINISH

Internal wetted parts: ≤ 0,5 micron Ra
External : ≤ 0,8 micron Ra
(0,25 micron Ra and electro polished as option)
Ultrasonic cleaning

OPTIONS:	Leakage line connection 1/8" . Different soft valves for liquids and gases. Casted cover (CF8M) with rising stem handwheel for economic reasons.
USE:	Clean steam, compressed air, water and other gases and liquids compatible with the construction.
AVAILABLE MODELS:	PS-173
SIZES:	DN 11/2", 2" ; DN 32 - 50.
SPRING RANGES:	0,8 – 1,5 bar; 1 – 3 bar; 1,5 – 8 bar.
CONNECTIONS:	Sanitary clamps or others on request.
PACKAGING:	Assembling and packaging in a clean room certified according to ISO 14644-1. The product is end capped and vacuum sealed with recyclable plastic film to avoid contamination.
INSTALLATION:	Horizontal installation. Inlet horizontal and vertical outlet angle connection. See IMI.
ORDER REQUIREMENTS:	Type of fluid Maximum operating temperature Maximum inlet pressure and required open pressure. Capacity (maximum and minimum).

CE MARKING (PED - European Directive)	
PN 16	**Category**
DN32 to DN50	SEP

We reserve the right to change the design and material of this product without notice.

CAPACITIES						
	BPE		DIN		ISO	
Valve Size	11/2"	2"	40	50	32	40
KVs (m3/h)	5,3	8,5	5,3	8,5	5,3	8,5

LIMITING CONDITIONS	
Valve model	PS-173
Body design conditions	PN 16
Max.upstream pressure	8 bar
Min.upsteam pressure	0,8 bar
Max.design temperature *	150 °C

*Other on request.

DIMENSIONS (mm) ASME BPE

SIZE DN	A*	B	B1	C	D	d1	d2	E	F	H	WGT. Kgs
11/2"	170	113	76	199	130	50,5	22,1	90	50,5	34,8	9
2"	170	119	82	205	130	50,5	22,1	90	64	47,5	9,3

DIMENSIONS (mm) DIN

SIZE DN	A*	B	B1	C	D	d1	d2	E	F	H	WGT. Kgs
40	170	113	76	199	130	50,5	22,1	90	50.5	38	8,9
50	170	119	82	205	130	50,5	22,1	90	64	50	9,2

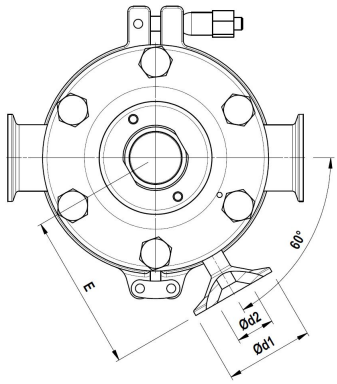
Clamp ferrules DIN 32676 Series A; Tube weld DIN 11866 Series A (DIN 11850 Series 2)

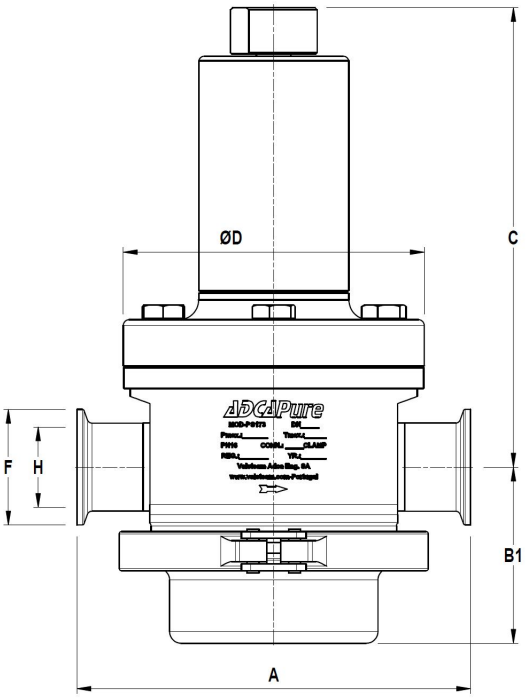
DIMENSIONS (mm) ISO

SIZE DN	A*	B	B1	C	D	d1	d2	E	F	H	WGT. Kgs
32	170	113	76	199	130	50,5	22,1	90	64	38,4	8,9
40	170	119	82	205	130	50,5	22,1	90	64	44,3	9,2

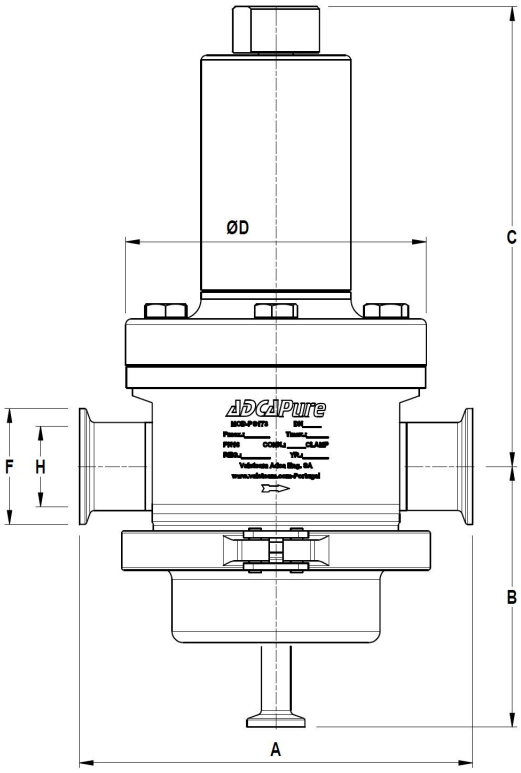
Clamp ferrules DIN 32676 Series B; Tube weld DIN 11866 Series B (ISO 1127 Series 1)

* Special versions or non-standard sanitary clamp ferrules are available on request, both for the inlet/outlet and pressure gauge connection.





Without bottom connection



With bottom connection for condensate drainage

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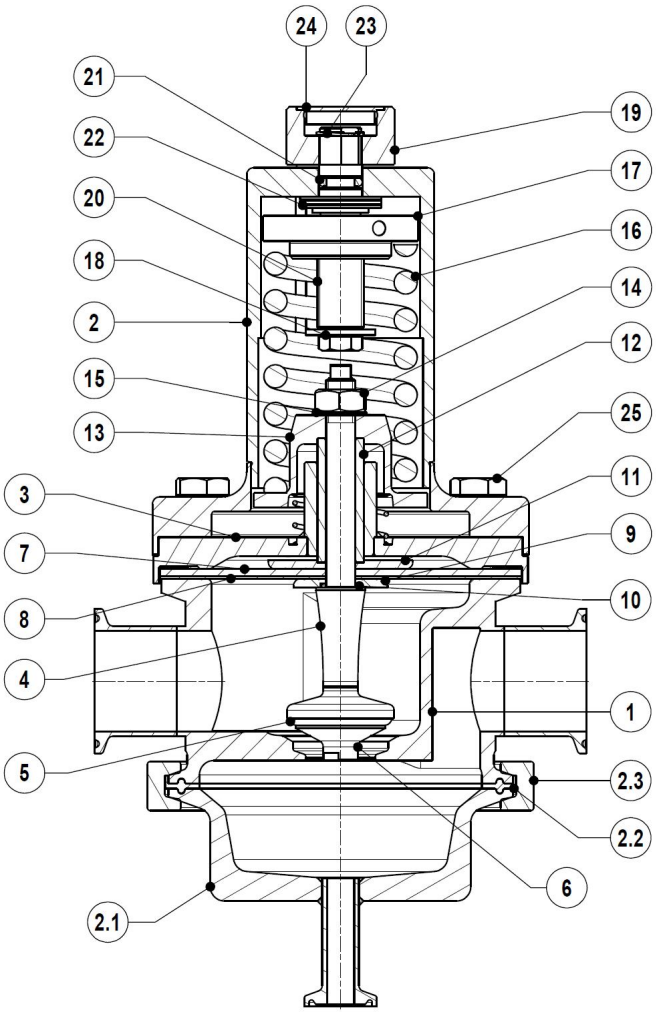
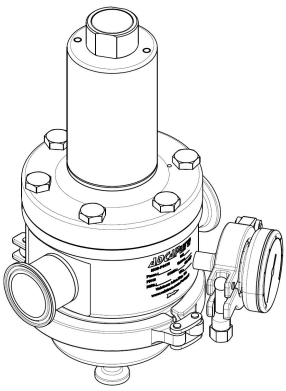
MATERIALS		
POS.	**DESIGNATION**	**MATERIAL**
1	Valve body	AISI316L / 1.4404
2	Cover	AISI316L / 1.4404
2.1	Bottom cover	AISI316L / 1.4404
2.2	Gasket	PTFE/TFM® Envelope gasket
2.3	Safety clamp	AISI316 / 1.4401
3	Centering plate	AISI316L / 1.4404
4	* Valve stem	AISI316L/1.4404
5	* Soft plug	EPDM; PTFE **
6	* Valve plug	AISI316L / 1.4404
7	* Upper diaphragm	EPDM;VITON**
8	* Lower diaphragm	PTFE
9	Diaphragm plate	AISI316L / 1.4404
10	* O-ring	EPDM
11	Diaphragm plate	AISI316L / 1.4404
12	Stem guide	AISI316 / 1.4401
13	Spring plate	AISI316 / 1.4401
14	Nut	St.Steel A2 - 70
15	Washer	AISI316 / 1.4401
16	* Adjustment spring	AISI 302 / 1.4300
17	Top spring plate	AISI316 / 1.4401
18	Retaining washer	St.Steel A2 - 70
19	Regulating nut	AISI316L / 1.4404
20	Adjustment screw	AISI304 / 1.4301
21	O-ring	EPDM
22	Bearing	Corrosion res. Steel
23	Ext. bowed shaft ring	Stainless steel
24	Cover nut	Plastic
25	Bolts	A2



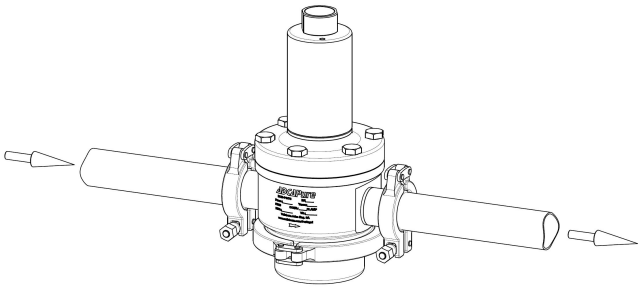
* Available spare parts; **Others according to the fluid

FDA/USP Class VI seals certificate on request

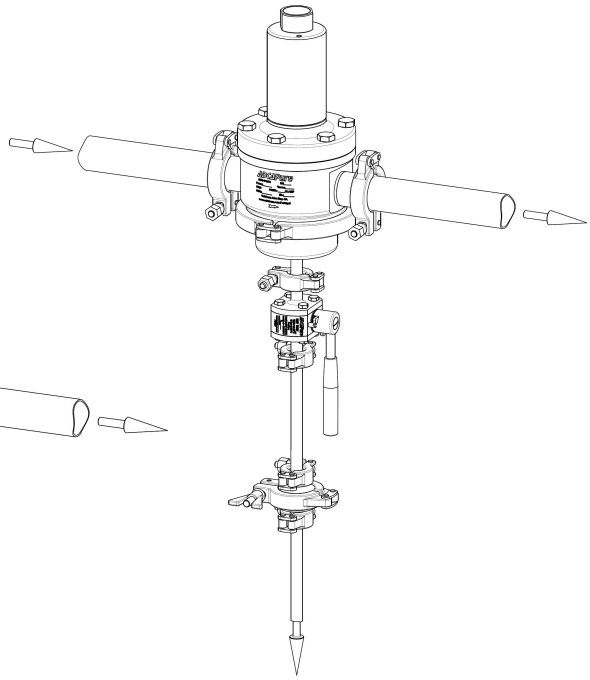
Viton diaphragm only with FDA approval (Pos. 7)



Pressure gauge connection (Optional)



Valve without bottom drain for clean gases



Valve with condensate drain for clean steam

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