

SANITARY PRESSURE SUSTAINING VALVE PS130

DESCRIPTION

The ADCA PS130 series direct acting, spring-loaded diaphragm sensing, pressure sustaining valves are designed for use with clean air, nitrogen, carbon dioxide, oxygen, argon and other gases or liquids compatible with the construction materials and valve design.

This valve is specifically designed for the high purity gas systems found in the pharmaceutical cosmetic, fine chemical and food & beverage processes.

MAIN FEATURES

- Compact design.
- Completely machined from 316L stainless steel bar stock, no castings or forgings are used.
- FDA / USP Class VI compliant seals.
- No rising stem.

STANDARD SURFACE FINISH

- Internal wetted parts: $\leq 0,51$ micron Ra – SF1.
- External: $\leq 0,76$ micron Ra – SF3.
- Other surface conditions see IS PV20.00 E – Technical information.
- Ultrasonic cleaning.

OPTIONS:

- Self relieving.
- Leakage line connection 1/8" (captured vent).
- Panel mounting version (thread M45).
- Gauge connection on body.
- Different soft valves for liquids and gases.
- Wall mounting.

USE:

Clean air, nitrogen, carbon dioxide, oxygen, argon and other gases or liquids compatible with the construction.

AVAILABLE MODELS:

PS130.

SIZES:

1/2" to 1"; DN 08 to DN 25.

SPRING RANGES:

0,2 – 1,5 bar; 0,3 – 3 bar; 2 – 8 bar.

CONNECTIONS:

Clamp ends or 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:

Horizontal installation recommended.

ORDER REQUIREMENTS:

- Type of fluid.
- Maximum operating temperature.
- Maximum inlet pressure and required open pressure.
- Capacity (maximum and minimum).



Cutaway view with pressure gauge connection

CE MARKING (PED – European Directive)	
PN16	Category
1/2" to 1" ; DN 08 to DN 25	SEP

LIMITING CONDITIONS	
Valve model	PS130
Body design conditions	PN16
Max. upstream pressure	8 bar
Min. upstream pressure	0,8 bar
Max. design temperature *	150 °C

* Other on request.

DIMENSIONS (mm) ASME BPE											
SIZE	Kvs *	A **	B	C	Ø D	Ø d1	Ø d2 **	E	F	H	WEIGHT (kg)
1/2"	1,7	130	30	127	80	25	15,75	65	25	9,4	2,9
3/4"	3	130	30	127	80	25	15,75	67,5	25	15,75	2,9
1"	3	130	30	127	80	25	15,75	72,5	50,5	22,1	3,4

DIMENSIONS (mm) DIN											
SIZE DN	Kvs *	A **	B	C	Ø D	Ø d1	Ø d2 **	E	F	H	WEIGHT (kg)
10	1,7	120	30	127	80	25	15,75	65	34	10	2,9
15	3	120	30	127	80	25	15,75	67,5	34	16	3
20	3	120	30	127	80	25	15,75	67,5	34	20	3,1
25	3	120	32	125	80	25	15,75	72,5	50,5	26	3,4

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

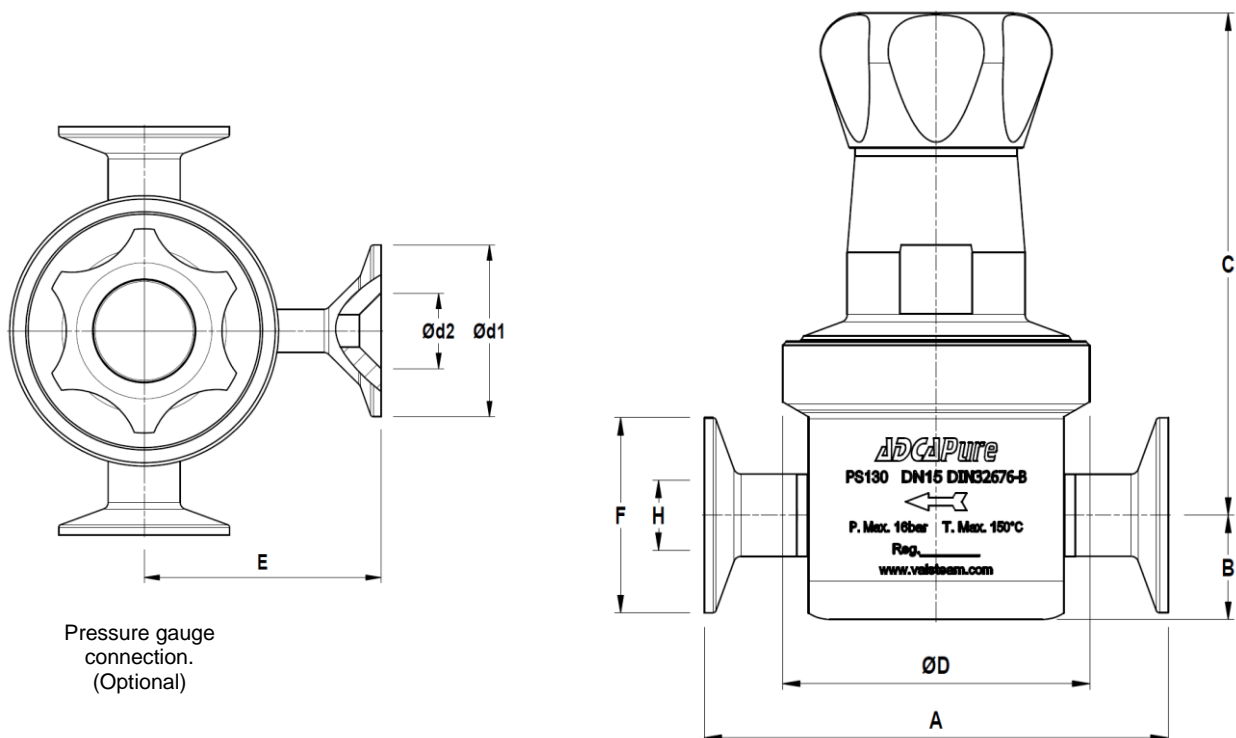
DIMENSIONS (mm) ISO											
SIZE DN	Kvs *	A **	B	C	Ø D	Ø d1	Ø d2 **	E	F	H	WEIGHT (kg)
8	1,7	120	30	127	80	25	15,75	65	25	10,3	2,9
10	3	120	30	127	80	25	15,75	67,5	25	14	3
15	3	120	30	127	80	25	15,75	67,5	50,5	18,1	3,2
20	3	120	32	125	80	25	15,75	72,5	50,5	23,7	3,4

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

* Reduced Kvs on request.

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

Valves with vinyl handwheel weights less 0,3 kg.



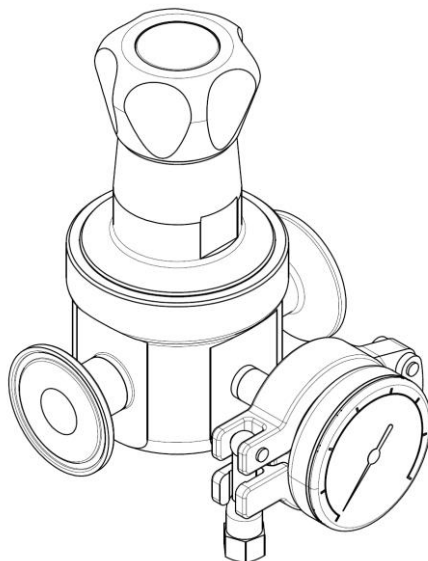
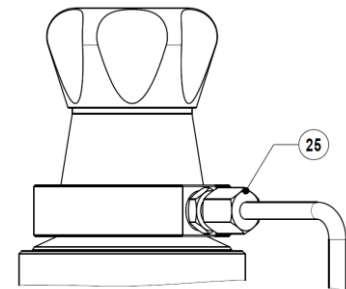
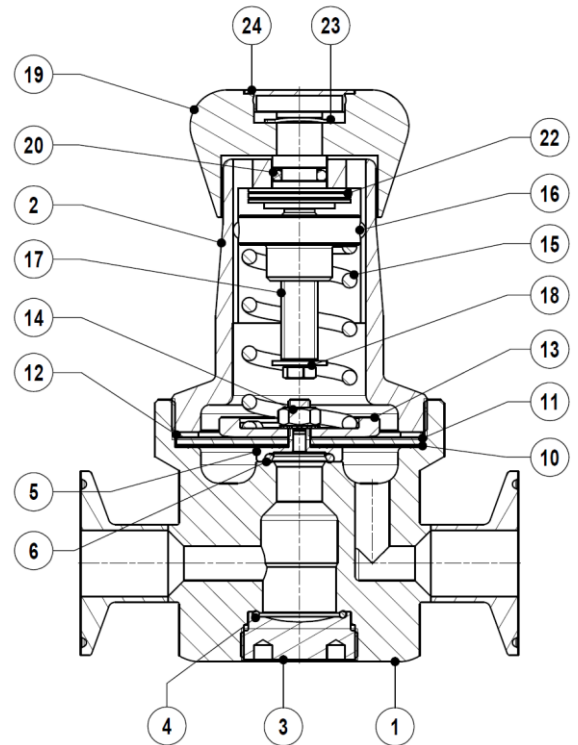
Pressure gauge connection. (Optional)

MATERIALS		
POS. N°	DESIGNATION	MATERIAL
1	Valve body	AISI 316L / 1.4404
2	Cover	AISI 316L / 1.4404
3	Seat cover	AISI 316L / 1.4404
4	* O-ring	Viton ; EPDM
5	* Piston plug	AISI 316L / 1.4404
6	* Valve head	AISI 316L / 1.4404 ; Viton ; PTFE
10	* Lower diaphragm	PTFE (Gylon)
11	* Upper diaphragm	EPDM
12	Washer	AISI 304 / 1.4301
13	Spring plate	AISI 304 / 1.4301
14	Nut	Stainless steel A2-70
15	* Adjustment spring	AISI 302 / 1.4300
16	Spring plate	AISI 304 / 1.4301
17	Adjustment screw	Brass
18	Retaining washer	Stainless steel A2-70
19	Handwheel	AISI 316L / 1.4404
		Vinyl
20	O-ring	NBR
22	Bearing	Corrosion resistant steel
23	Ext. bowed shaft ring	Stainless steel
24	Cover nut	Plastic
25	Leakage connection	AISI 316L / 1.4404

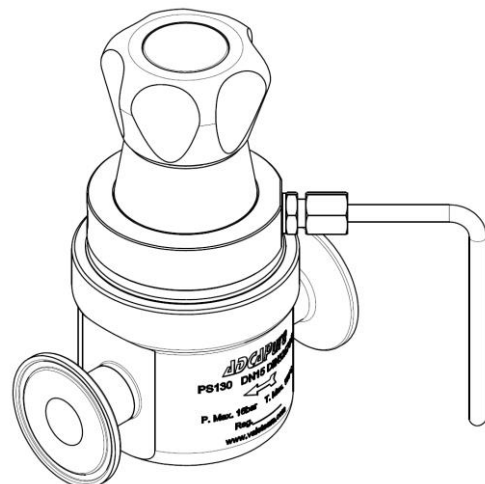
* Available spare parts.

Remarks: FDA / USP Class VI seals certificate on request.

All valves have a serial number. In case of non-standard valves, this number must be supplied if spare parts are ordered.



Pressure gauge connection. (Optional)



Optional 1/8" captured vent and/or leakage connection. (Compression fitting and tube not included).

ORDERING CODES PS130													
Valve model	PS13	1	3	T	M	X	I	X	X	X	D	15	E
PS130 – AISI 316L / 1.4404 diaphragm sensing regulator	PS13												
Outlet spring range													
0,2 to 1,5 bar		1											
0,3 to 3 bar		2											
2 to 8 bar		3											
Flow capacity													
Kvs – 1,7		3											
Kvs – 3 (Only applicable to sizes 3/4", 1", DIN DN 15 to 25, ISO DN 10 to 20)		6											
Diaphragm material													
PTFE (Gylon)				T									
Valve head													
Metal to metal (non-standard)					M								
EPDM					E								
PTFE					T								
FPM / Viton					V								
Relieving													
Relieving option not applicable						X							
Diaphragm cover leakage connection in case of diaphragm failure (captured vent)						L							
Regulating knob and top cap													
Stainless steel							I						
Plastic							P						
Top cap (adjusting screw sealing)							T						
Gauge port options													
Without gauge ports								X					
Tri-clamp gauge port on the left side (rel. to the flow direction) – Upstream pressure								7					
Tri-clamp gauge port on the right side (rel. to the flow direction) – Upstream pressure								6					
Tri-clamp gauge port on both sides – Upstream pressure								5					
Threaded gauge port on the left side (rel. to the flow direction) – Upstream pressure								4					
Threaded gauge port on the right side (rel. to the flow direction) – Upstream pressure								3					
Threaded gauge port on both sides – Upstream pressure								2					
Surface finish, special services and options													
None (fine machined)									X				
Mechanical polishing									P				
Electropolishing									E				
Special features													
None										X			
Degreased for oxygen										O			
Pipe connection													
Clamp ferrule ASME BPE											D		
Clamp ferrule DIN (DIN 32676-A)											F		
Clamp ferrule ISO (DIN 32676-B)											E		
ETO according to ASME BPE											DI		
ETO according to DIN 11966-A (DIN 11850-2)											FI		
ETO according to ISO 1127-1											EI		
Size													
DN 08												08	
DN 10												10	
1/2" or DN 15												15	
3/4" or DN 20												20	
1" or DN 25												25	
Special valves / Extras													
Full description or additional codes have to be added in case of non-standard combination													E