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.
Non-rising adjustment knob.

STANDARD SURFACE FINISH

Internal wetted parts: ≤ 0,51 micron Ra – SF1.
External: ≤ 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.
REGULATING RANGES:	0,2 – 1,5 bar; 0,3 – 3 bar; 2 – 8 bar.
CONNECTIONS:	ASME BPE, DIN and ISO clamp ferrules or tube weld (ETO) ends. 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. See IMI – Installation and maintenance instructions.

LIMITING CONDITIONS	
Valve model	**PS130**
Body design conditions	PN 16
Maximum upstream pressure	8 bar
Minimum upstream pressure	0,2 bar
Maximum design temperature *	150 ºC

* Others on request.

CE MARKING – GROUP 2 (PED – European Directive)	
PN 16	**Category**
1/2" to 1" – DN 08 to DN 25	SEP

FLOW RATE COEFFICIENTS (m³/h) *						
	ASME BPE		DIN		ISO	
SIZE	1/2"	3/4" to 1"	DN 10	DN 15 to DN 25	DN 08	DN 10 to DN 20
Kvs	1,7	3	1,7	3	1,7	3

* Reduced Kvs on request.

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

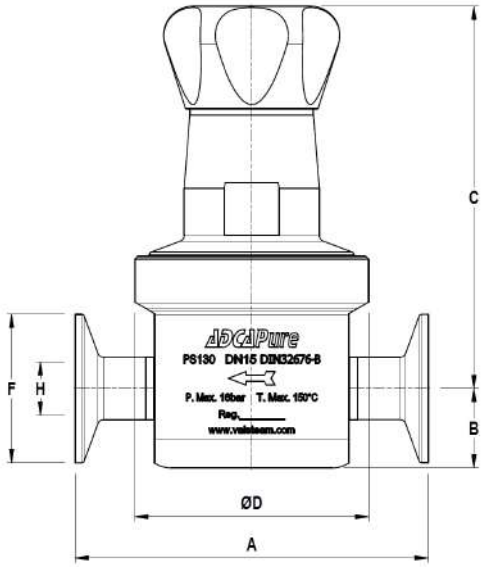
* Valves with nylon adjustment knob weigh 0,3 kg less.

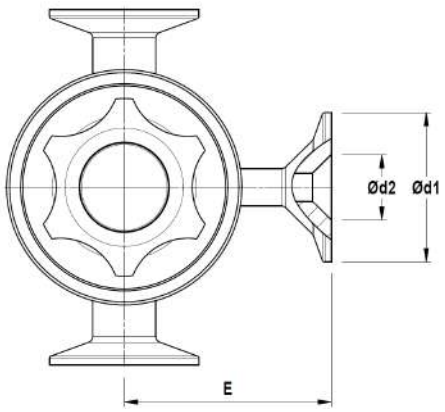
DIMENSIONS (mm) DIN										
SIZE	A	B	C	D	d1	d2	E	F	H	WEIGHT (kg)
DN 10	120	30	127	80	25	15,75	65	34	10	2,9
DN 15	120	30	127	80	25	15,75	67,5	34	16	3
DN 20	120	30	127	80	25	15,75	67,5	34	20	3,1
DN 25	120	32	125	80	25	15,75	72,5	50,5	26	3,4

* Valves with nylon adjustment knob weigh 0,3 kg less.
Remarks: Clamp ferrules according to DIN 32676-A; Tube weld (ETO) according to DIN 11866-A (DIN 11850-2).

DIMENSIONS (mm) ISO										
SIZE	A	B	C	D	d1	d2	E	F	H	WEIGHT (kg)
DN 08	120	30	127	80	25	15,75	65	25	10,3	2,9
DN 10	120	30	127	80	25	15,75	67,5	25	14	3
DN 15	120	30	127	80	25	15,75	67,5	50,5	18,1	3,2
DN 20	120	32	125	80	25	15,75	72,5	50,5	23,7	3,4

* Valves with nylon adjustment knob weigh 0,3 kg less.
Remarks: Clamp ferrules according to DIN 32676-B; Tube weld (ETO) according to DIN 11866-B (ISO 1127).





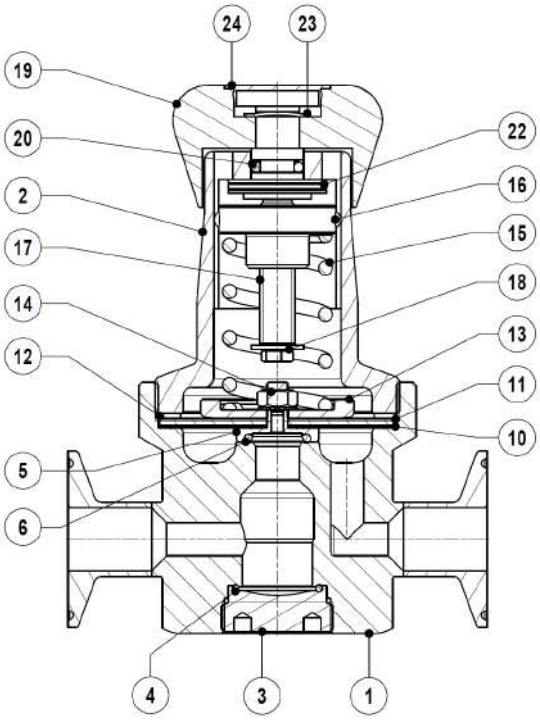
Optional pressure gauge connection.

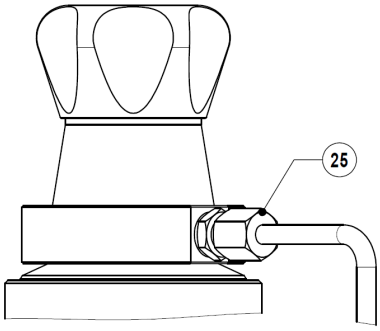
MATERIALS		
POS. Nº	**DESIGNATION**	**MATERIAL**
1	Valve body	AISI 316L / 1.4404
2	Cover	AISI 316L / 1.4404
3	Seat cover	AISI 316L / 1.4404
4	* O-ring	Viton ; EPDM
5	* Piston plug	AISI 316L / 1.4404
6	* Valve head	AISI 316L / 1.4404 ; Viton ; PTFE
10	* Lower diaphragm	PTFE (Gylon)
11	* Upper diaphragm	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 316 / 1.4401
17	Adjustment screw	Brass
18	Retaining washer	Stainless steel A2-70
19	Adjustment knob	AISI 316L / 1.4404
		Nylon
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
25	Captured vent ring	AISI 316L / 1.4404
26	Clamp	AISI 316L / 1.4404

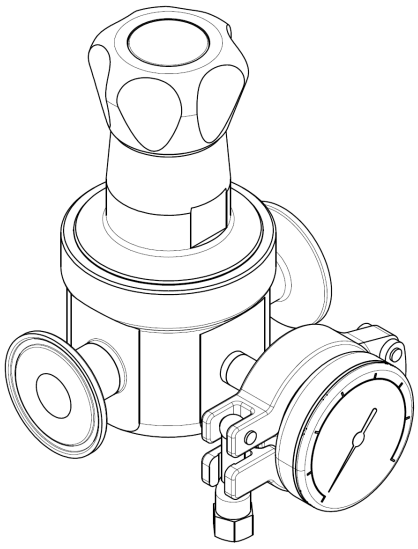
* Available spare parts ; ** On request.

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

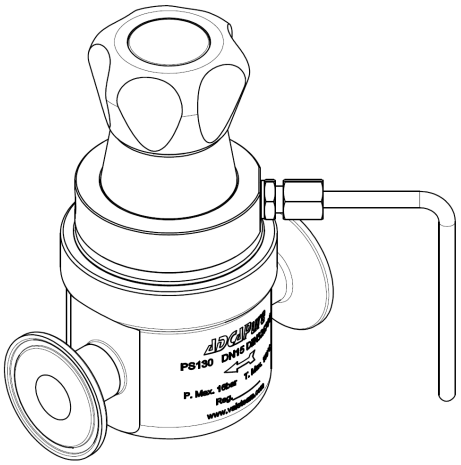
All valves have a serial number. In case of non-standard valves, this number must be supplied if spare parts are ordered.







Optional pressure gauge connection.



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	DI	15	E
PS130 – AISI 316L / 1.4404 diaphragm sensing pressure sustaining valve	**PS13**												
Regulating range													
0,2 to 1,5 bar		**1**											
0,3 to 3 bar		**2**											
2 to 8 bar		**3**											
Flow rate coefficient													
Kvs 1,7			**3**										
Kvs 3 (not applicable to sizes 1/2” ASME BPE, DIN DN 10 and ISO DN 08)			**6**										
Diaphragm													
PTFE (Gylon)				**T**									
EPDM (non-standard)				**E**									
Seat material													
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**							
Adjustment knob and top cap													
Stainless steel adjustment knob							**I**						
Nylon adjustment knob							**P**						
Top cap (adjustment screw with cover)							**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 – ISO 7 Rp 1/4”								**4**					
Threaded gauge port on the right side (rel. to the flow direction) – upstream pressure – ISO 7 Rp 1/4”								**3**					
Threaded gauge port on both sides – upstream pressure – ISO 7 Rp 1/4”								**2**					
Threaded gauge port on the left side (rel. to the flow direction) – upstream pressure – 1/4” NPT								**W**					
Threaded gauge port on the right side (rel. to the flow direction) – upstream pressure – 1/4” NPT								**Y**					
Threaded gauge port on both sides – upstream pressure – 1/4” NPT								**Z**					
Surface finish a)													
Standard surface finish									**X**				
Mirror mechanical polished external surfaces (SF1)									**P**				
Electropolished internal wetted parts (SF5)									**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**		
Tube weld (ETO) according to ASME BPE											**DI**		
Tube weld (ETO) according to DIN 11866-A (DIN 11850-2)											**FI**		
Tube weld (ETO) according to DIN 11866-B (ISO 1127)											**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**

a) Consult IS PV20.00 for further details and other surface finish options.