

SANITARY PRESSURE SUSTAINING VALVE PS130

DESCRIPTION

The ADCAPure PS130 is a series of direct acting, diaphragm sensing pressure sustaining valves.

These spring-loaded regulators 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.

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

MAIN FEATURES

Compact design.

Non-rising adjustment knob.

FDA / USP Class VI compliant seals.

Completely machined from 316L stainless steel bar stock, no castings or forgings are used.

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:

Leakage line connection (1/8").
Gauge connection on body.
Different soft sealings for liquids and gases.
Top cap (adjustment screw with cover).
Panel mounting (M45 thread).
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:

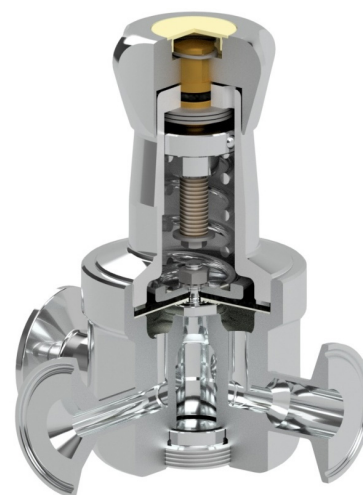
ASME BPE, DIN and ISO clamp ferrules or tube weld (ETO) ends. Others on request.

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 is 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 °C

* 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.

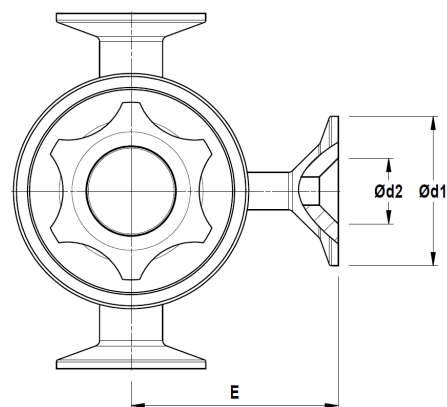
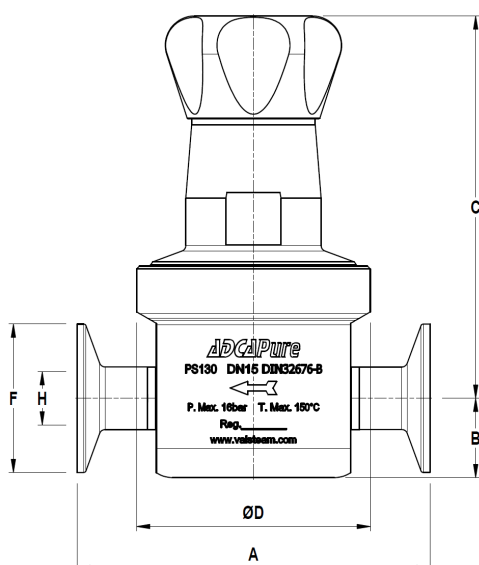
Remarks: Clamp ferrules according to DIN 32676-A; Tube weld (ETO) according to DIN 11866-A (DIN 11850-2).

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).



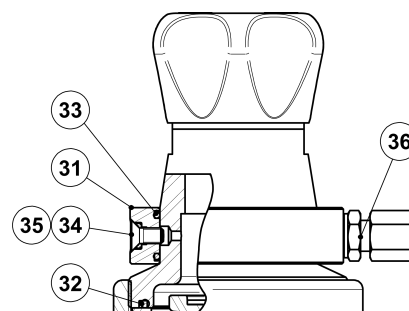
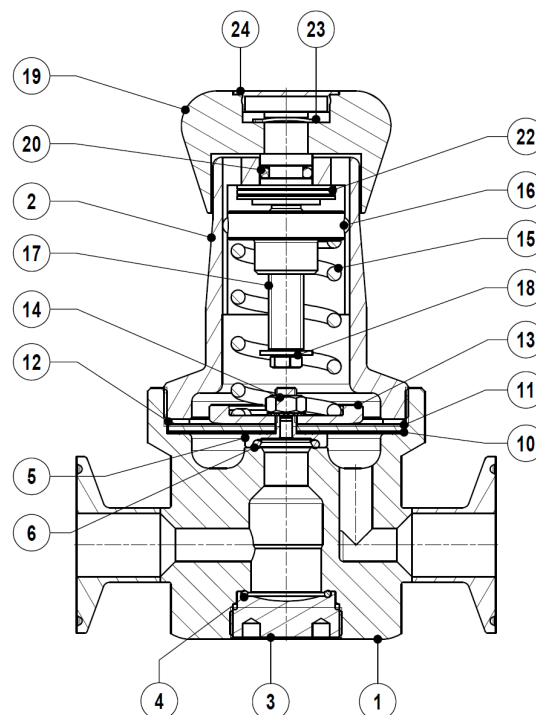
Optional pressure gauge connection

MATERIALS		
POS. 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	* Plug	AISI 316L / 1.4404
6	* Valve head	** EPDM; PTFE; FPM
10	* Lower diaphragm	PTFE (Gylon)
11	* Upper diaphragm	EPDM
12	Washer	AISI 304 / 1.4301
13	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 or Nylon
20	O-ring	NBR
22	Bearing	Corrosion resistant steel
23	Shaft ring	Stainless steel
24	Cover nut	Plastic
31	Leakage line ring	AISI 316L / 1.4404
32	* O-ring	EPDM
33	O-ring	NBR
34	Bolt	AISI 304 / 1.4301
35	O-ring	Viton
36	Compression fitting	AISI 304 / 1.4301

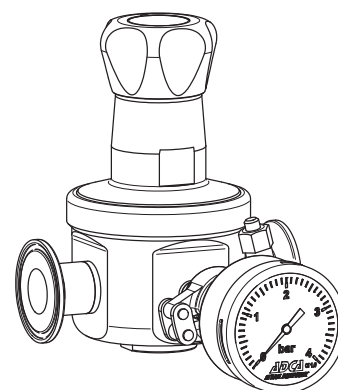
* Available spare parts ; ** Others on request.

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 leakage line connection (1/8")



Optional pressure gauge connection

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 (FDA approval only)					V								
Leakage line connection													
Without leakage line connection						X							
With leakage line connection						N							
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.