

**SANITARY PRESSURE REDUCING VALVE
P130H**

DESCRIPTION

The ADCA P130H series direct acting, spring-loaded diaphragm sensing, balanced plug, pressure reducing 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).
 - Gauge connection on body.
 - Different soft valves for liquids and gases.

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

- AVAILABLE MODELS:**
- P130H.

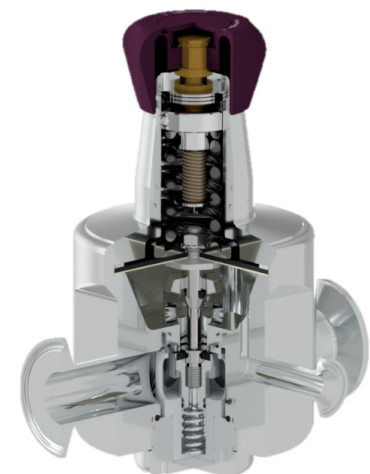
- SIZES:** 1"; DN 25.
- OUTLET SPRING RANGES:** 0,2 – 1,5 bar; 0,3 – 3 bar; 2 – 8 bar.

- CONNECTIONS:** Clamp ferrules 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. See IMI – Installation and maintenance instructions.

- ORDER REQUIREMENTS:** Type of fluid.
Maximum operating temperature.
Inlet and outlet pressures.
Flow rate (maximum and minimum).



LIMITING CONDITIONS	
Valve model	P130H
Body design conditions	PN16
Max. upstream pressure	16 bar
Max. downstream pressure	8 bar
Min. downstream pressure	0,2 bar
Max. design temperature *	150 °C

* Others on request.

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

DIMENSIONS (mm) ASME BPE

SIZE	Kvs *	A	B	C	D	d1	d2	E	F	H	WEIGHT (kg)
1"	4,2	148	42	146	100	25	15,75	78,5	50,5	22,1	5,14

* Reduced Kvs on request.

Remarks: 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 0,3 kg less.

DIMENSIONS (mm) DIN

SIZE	Kvs *	A	B	C	D	d1	d2	E	F	H	WEIGHT (kg)
DN 25	4,2	135	42	146	100	25	15,75	78,5	50,5	26	5,17

* Reduced Kvs on request.

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

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 0,3 kg less.

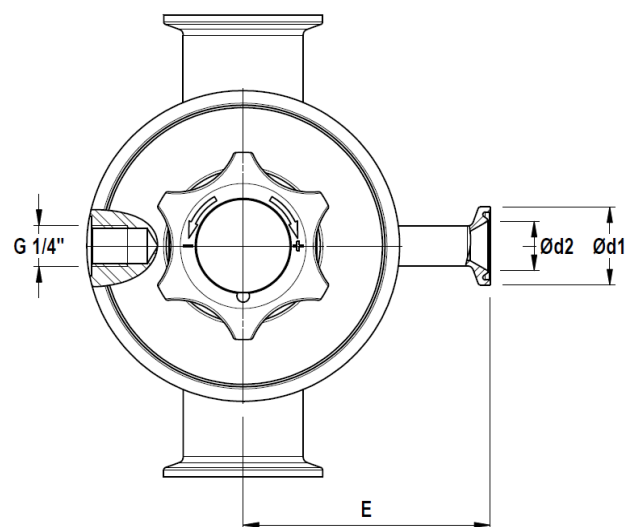
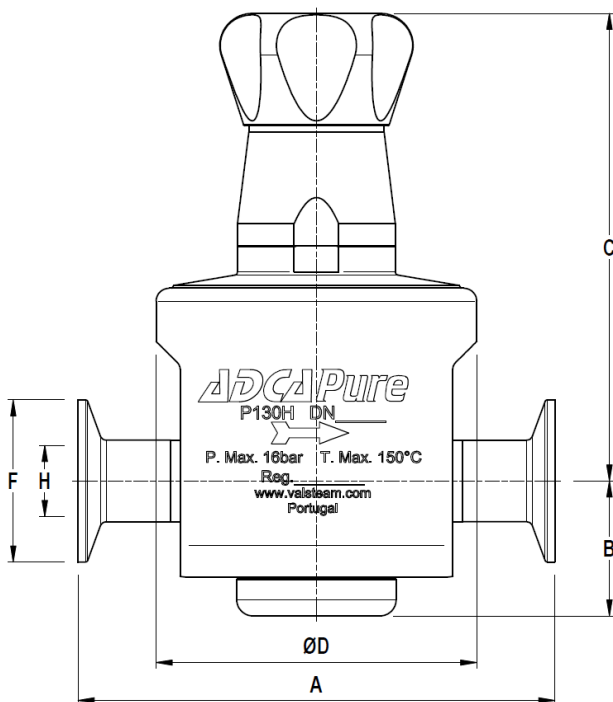
DIMENSIONS (mm) ISO

SIZE	Kvs *	A	B	C	D	d1	d2	E	F	H	WEIGHT (kg)
DN 25	4,2	135	46	142	100	25	15,75	78,5	50,5	29,7	5,16

* Reduced Kvs on request.

Remarks: 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; Valves with vinyl handwheel weights 0,3 kg less.



Optional pressure gauge connection.

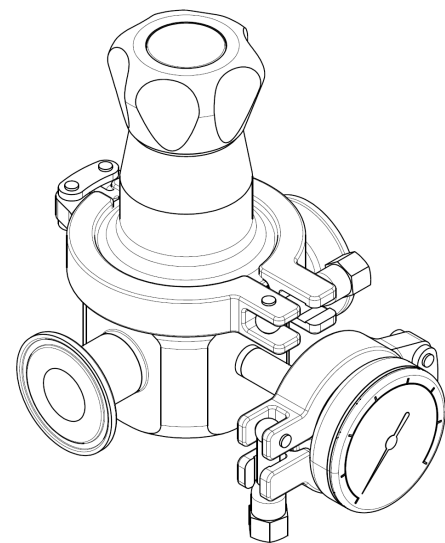
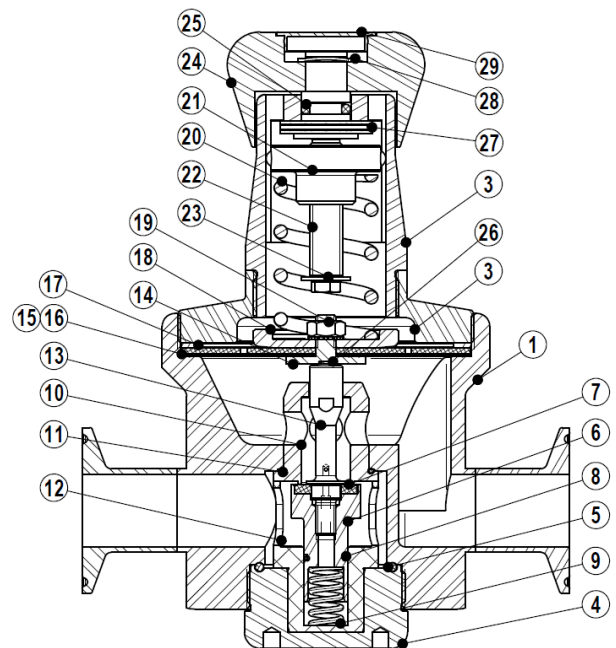
MATERIALS

POS. N°	DESIGNATION	MATERIAL
1	Valve body	AISI 316L / 1.4404
2	Cover	AISI 316L / 1.4404
3	Spring cover	AISI 316L / 1.4404
4	Seat cover	AISI 316L / 1.4404
5	* O-ring	EPDM
6	* Piston	AISI 316L / 1.4404
7	* Valve head	AISI 316L / 1.4404 ; Viton ; PTFE
8	* O-ring	EPDM
9	* Valve spring	AISI 316 / 1.4401 Electropolished
10	* Seat	AISI 316L / 1.4404
11	* O-ring	EPDM
12	* Piston guide	PTFE
13	* Stem	AISI 316L / 1.4404
14	Pusher disc	AISI 316L / 1.4404
15	* Lower diaphragm	PTFE (Gylon)
16	* Upper diaphragm	EPDM
17	Washer	AISI 304 / 1.4301
18	Spring plate	AISI 304 / 1.4301
19	Nut	Stainless steel A2-70
20	* Adjustment spring	AISI 302 / 1.4300
21	Spring plate	AISI 304 / 1.4301
22	Adjustment screw	Brass
23	Retaining washer	Stainless steel A2-70
24	Handwheel	AISI 316L / 1.4404
		Vinyl
25	O-ring	NBR
26	** O-ring	EPDM
27	Bearing	Corrosion resistant steel
28	Ext. bowed shaft ring	Stainless steel
29	Cover nut	Plastic

* Available spare parts ; ** If applicable.

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.

ORDERING CODES P130H													
Valve model	P3H	1	2	T	M	X	I	X	X	X	DI	25	
P130H – AISI 316L / 1.4404 diaphragm sensing regulator	P3H												
Outlet spring range													
0,2 to 1,5 bar		1											
0,3 to 3 bar		2											
2 to 8 bar		3											
Flow capacity													
Kvs – 4,2			2										
Diaphragm material													
PTFE (Gylon)				T									
Seat material													
Metal to metal (non-standard)					M								
EPDM					E								
PTFE					T								
FPM / Viton (FDA approval only)					V								
Relieving													
Non-relieving						X							
Relieving (only for non-dangerous gases)						R							
Relieving with 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) – downstream pressure								7					
Tri-clamp gauge port on the right side (rel. to the flow direction) – downstream pressure								6					
Tri-clamp gauge port on both sides – downstream pressure								5					
Threaded gauge port on the left side (rel. to the flow direction) – downstream pressure – ISO 7 Rp 1/4"								4					
Threaded gauge port on the right side (rel. to the flow direction) – downstream pressure – ISO 7 Rp 1/4"								3					
Threaded gauge port on both sides – downstream pressure – ISO 7 Rp 1/4"								2					
Threaded gauge port on the left side (rel. to the flow direction) – downstream pressure – 1/4" NPT								W					
Threaded gauge port on the right side (rel. to the flow direction) – downstream pressure – 1/4" NPT								Y					
Threaded gauge port on both sides – downstream 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	
ETO according to ASME BPE												DI	
ETO according to DIN 11866-A (DIN 11850-2)												FI	
ETO according to ISO 1127-1												EI	
Size													
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.