

SANITARY PRESSURE REDUCING VALVE P130L (Low flow)

DESCRIPTION

The ADCAP130L low flow series direct acting, springloaded diaphragm sensing, 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).
- 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: P130L.

SIZES: 1/2" to 3/4"; DN 08 to DN 20.
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: Any position. See IMI.

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



Cutaway view of valve with pressure gauge connection and vinyl regulating knob

LIMITING CONDITIONS	
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Valve model	P130L
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)	
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PN16	Category
1/2" to 3/4"; DN 08 to DN 20	SEP

CAPACITIES

Valve size	BPE			DIN			ISO		
	1/2" and 3/4"			DN 10 to 20			DN 08 to 15		
Kvs	0,06	0,19	0,25	0,06	0,19	0,25	0,06	0,19	0,25

DIMENSIONS (mm) ASME BPE

SIZE	A	B	C	D	d1	d2	E	F	H	WEIGHT (kg)
1/2"	115	23	120	64	25	15,75	65	25	9,4	2,13
3/4"	115	23	120	64	25	15,75	65	25	15,75	2,14

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 less 0,3 kg.

DIMENSIONS (mm) DIN

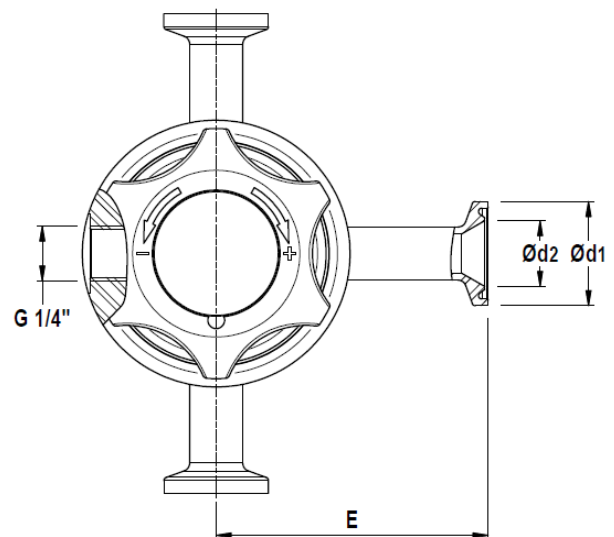
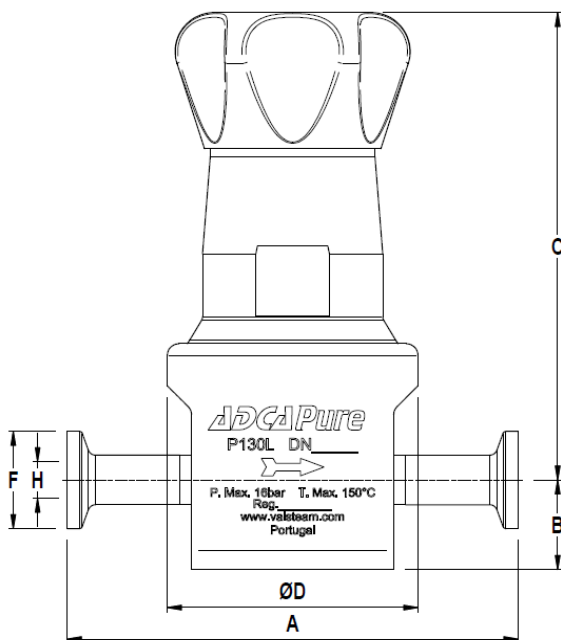
SIZE	A	B	C	D	d1	d2	E	F	H	WEIGHT (kg)
DN 10	115	23	120	64	25	15,75	65	34	10	2,11
DN 15	115	23	120	64	25	15,75	65	34	16	2,13
DN 20	115	23	120	64	25	15,75	65	34	20	2,15

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 less 0,3 kg.

DIMENSIONS (mm) ISO

SIZE	A	B	C	D	d1	d2	E	F	H	WEIGHT (kg)
DN 08	115	23	120	64	25	15,75	65	25	10,3	2,11
DN 10	115	23	120	64	25	15,75	65	25	14	2,12
DN 15	115	23	120	64	25	15,75	65	50,5	18,1	2,13

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 less 0,3 kg.



Optional pressure gauge connection.

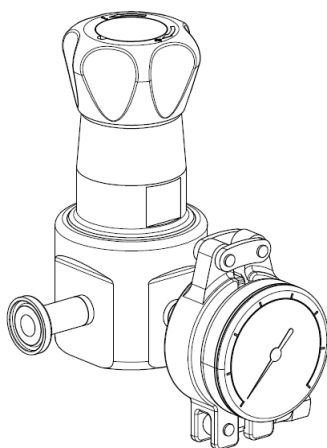
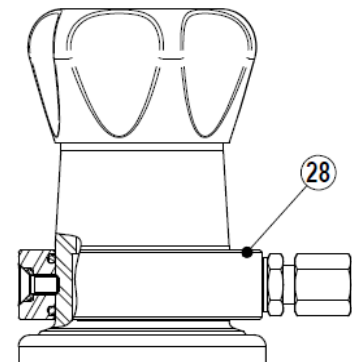
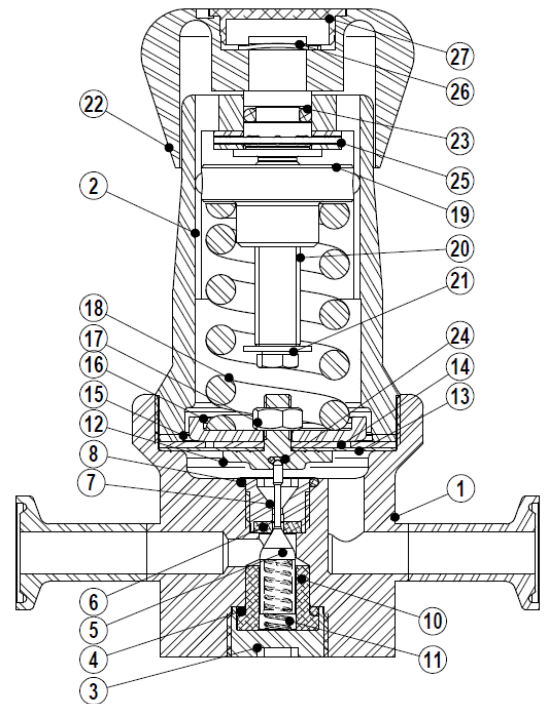
MATERIALS

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	* Valve	AISI 316L / 1.4404
6	* Valve seat seal	TFM 1600 ; EPDM ; ...
7	* Valve seat	AISI 316L / 1.4404
8	* O-ring	EPDM
10	Guide	TFM 1600
11	* Valve spring	AISI 316 / 1.4401 Electropolished
12	Pusher disc	AISI 316L / 1.4404
13	* Lower diaphragm	PTFE (Gylon)
14	* Upper diaphragm	EPDM
15	Washer	AISI 304 / 1.4301
16	Spring plate	AISI 316 / 1.4401
17	Nut	Stainless steel A2-70
18	* Adjustment spring	AISI 302 / 1.4300
19	Spring plate	AISI 316 / 1.4401
20	Adjustment screw	Brass
21	Retaining washer	Stainless steel A2-70
22	Handwheel	AISI 316L / 1.4404
		Vinyl
23	O-ring	NBR
24	** O-ring	EPDM
25	Bearing	Corrosion resistant steel
26	Ext. bowed shaft ring	Stainless steel
27	Cover nut	Plastic
28	Captured vent ring	AISI 316L / 1.4404

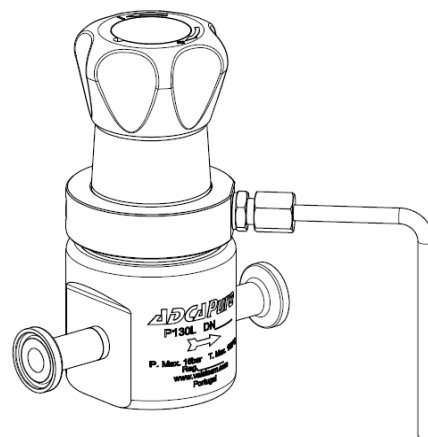
* Available spare parts ; ** If applicable.

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.

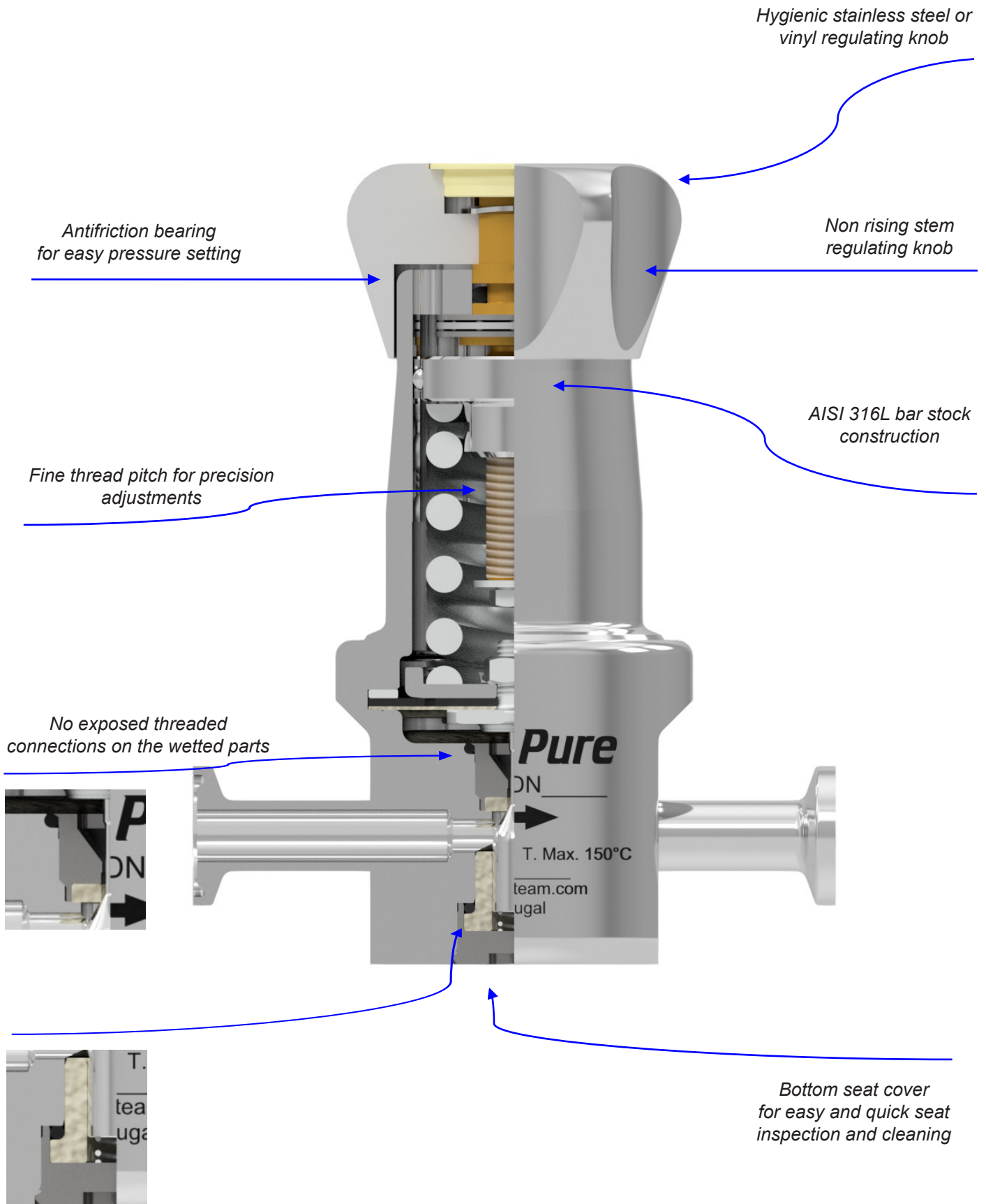


Optional Pressure gauge connection.



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

MAIN STANDARD FEATURES



ORDERING CODES P130L

Valve model	P3L	1	3	T	E	X	I	X	X	X	D	08	E
P130L – AISI 316L / 1.4404 diaphragm sensing regulator	P3L												
Outlet spring range													
0,2 to 1,5 bar		1											
0,3 to 3 bar		2											
2 to 8 bar		3											
Flow capacity													
Kvs – 0,06			3										
Kvs – 0,19			6										
Kvs – 0,25			7										
Diaphragm material													
PTFE (Gylon)				T									
Seat material													
TFM 1600					T								
EPDM					E								
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													
DN 08													08
DN 10													10
1/2" or DN 15													15
3/4" or DN 20													20
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.