SANITARY PRESSURE REDUCING VALVE
P130L
(Low flow)

DESCRIPTION

The ADCA P130L low flow series direct acting, spring-loaded 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: ≤ 0,51 micron Ra – SF1.
External: ≤ 0,76 micron Ra – SF3.
Other surface conditions see IS PV20.00 E - Technical information.
Ultrasonic cleaning.

Cutaway view with pressure gauge connection and vinyl knob.

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 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:	In any position.
ORDER REQUIREMENTS:	Type of fluid. Maximum operating temperature. Inlet pressure and required outlet pressure. Capacity (maximum and minimum).

CE MARKING (PED – European Directive)	
PN16	**Category**
1/2" to 3/4" ; DN 08 to DN 20	SEP

LIMITING CONDITIONS	
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 ºC

* Others on request.

CAPACITIES									
	BPE			DIN			ISO		
Valve size	1/2" and 3/4"			DN 10 to 20			DN 8 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	Ø D	Ø d1	Ø 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

DIMENSIONS (mm) DIN

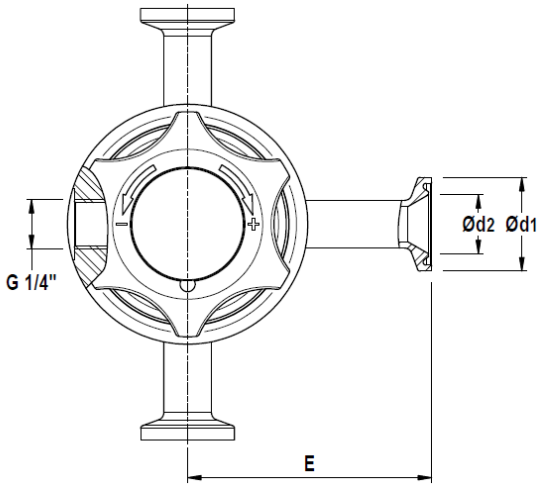
SIZE DN	A **	B	C	Ø D	Ø d1	Ø d2 **	E	F	H	WEIGHT (kg)
10	115	23	120	64	25	15,75	65	34	10	2,11
15	115	23	120	64	25	15,75	65	34	16	2,13
20	115	23	120	64	25	15,75	65	34	20	2,15

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

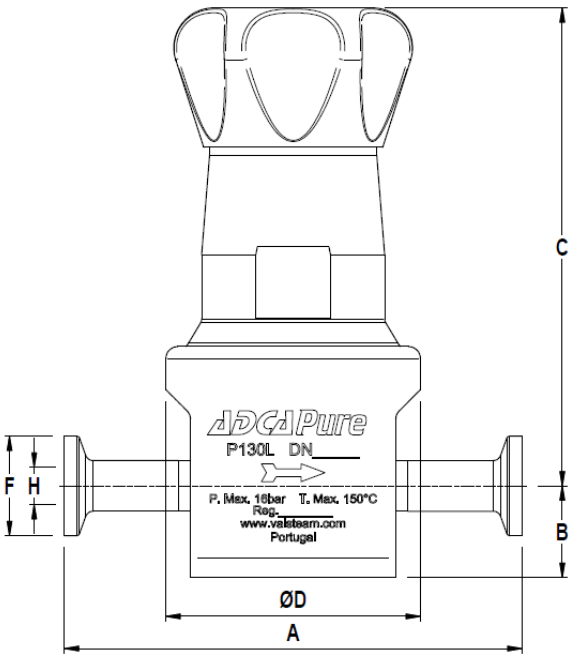
DIMENSIONS (mm) ISO

SIZE DN	A **	B	C	Ø D	Ø d1	Ø d2 **	E	F	H	WEIGHT (kg)
8	115	23	120	64	25	15,75	65	25	10,3	2,11
10	115	23	120	64	25	15,75	65	25	14	2,12
15	115	23	120	64	25	15,75	65	50,5	18,1	2,13

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.
Threaded connections (1/4" to 1/2") and others, available on request.



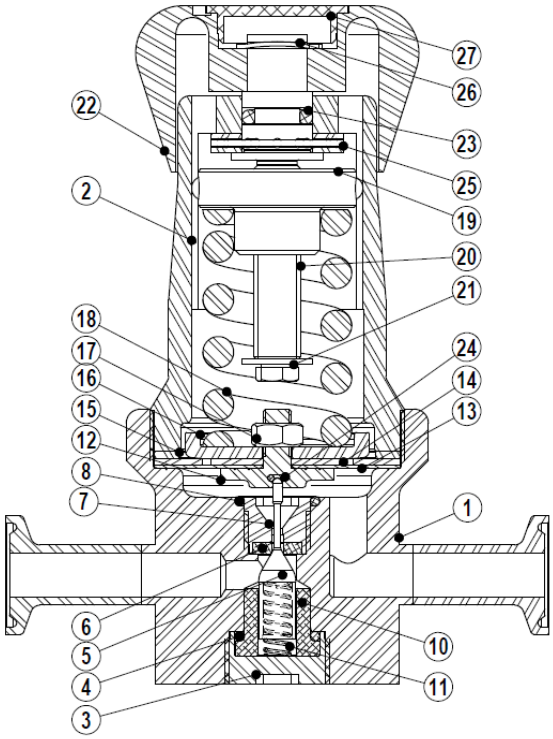
Pressure gauge connection. (Optional)

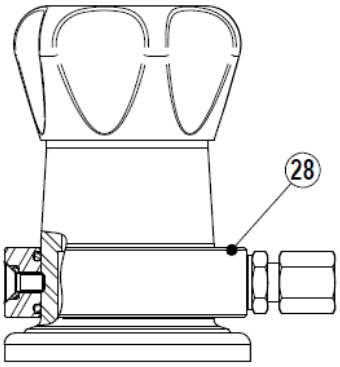


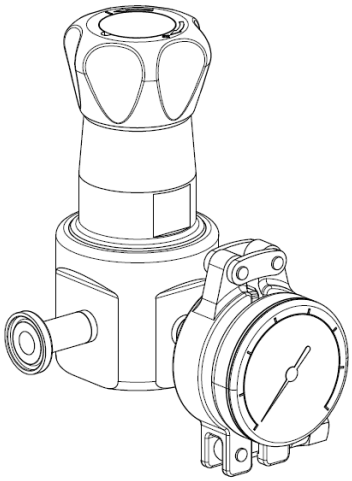
MATERIALS		
POS. Nº	**DESIGNATION**	**MATERIAL**
1	Valve body	AISI 316L / 1.4404
2	Cover	AISI 316L / 1.4404
3	Seat cover	AISI 316L / 1.4404
4	* O-ring	Viton ; EPDM
5	* Valve	AISI 316L / 1.4404
6	* Valve seat seal	TFM 1600 ; EPDM ; ...
7	* Valve seat	AISI 316L / 1.4404
8	* O-ring	EPDM
10	Guide	TFM 1600
11	* Valve spring	AISI 316 / 1.4401 Electropolished
12	Pusher disc	AISI 316L / 1.4404
13	* Lower diaphragm	PTFE (Gylon)
14	* Upper diphragm	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.

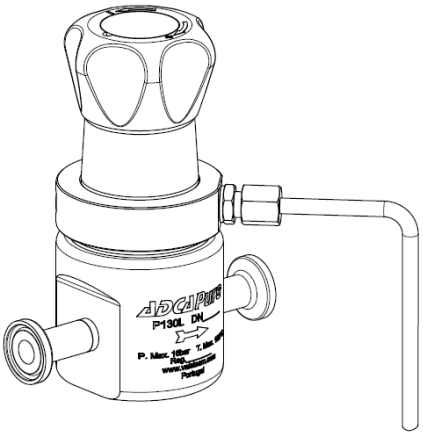
** On request.







Pressure gauge connection. (Optional)



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

MAIN STANDARD FEATURES

Hygienic stainless steel or vinyl regulating knob

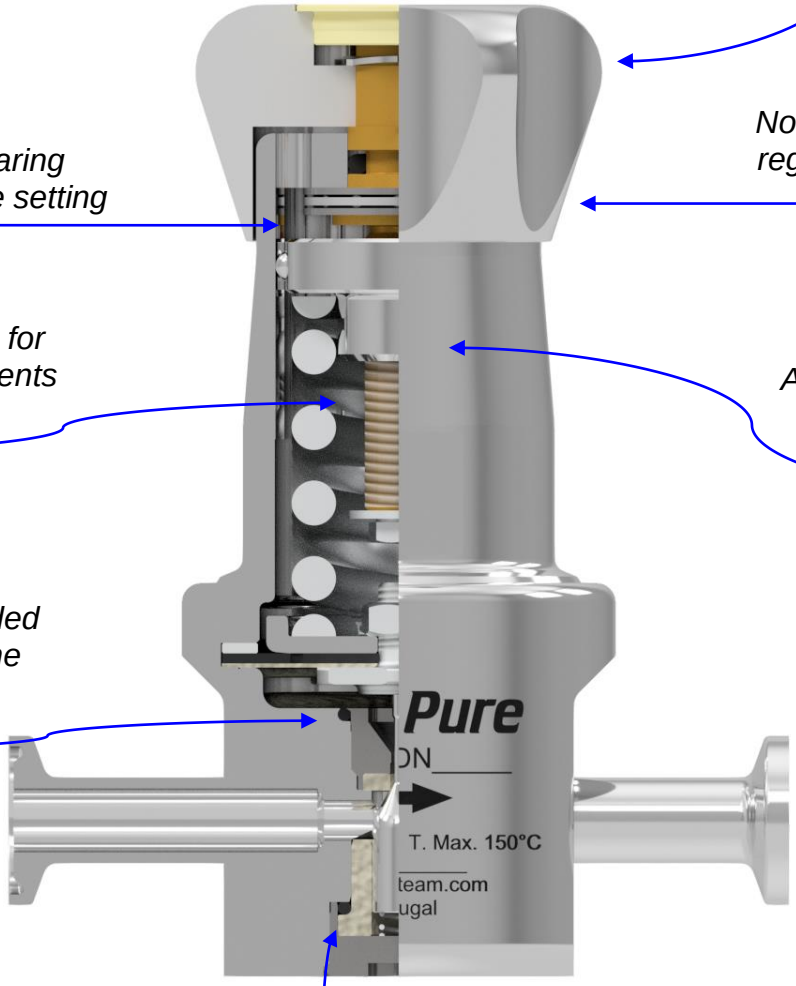
Non rising stem regulating knob

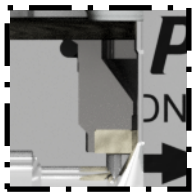
Antifriction bearing for easy pressure setting

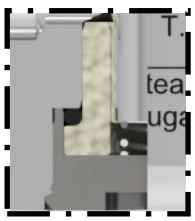
Fine thread pitch for precision adjustments

AISI 316L barstock construction

No exposed threaded connections on the wetted parts







Bottom seat cover for easy and quick seat inspection and cleaning

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								**4**					
Threaded gauge port on the right side (rel. to the flow direction) – Downstream pressure								**3**					
Threaded gauge port on both sides – Downstream 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**	
Special valves / Extras													
Full description or additional codes have to be added in case of non-standard combination													**E**