

## SANITARY PRESSURE REDUCING VALVE P130G

### DESCRIPTION

The ADCA P130G 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.

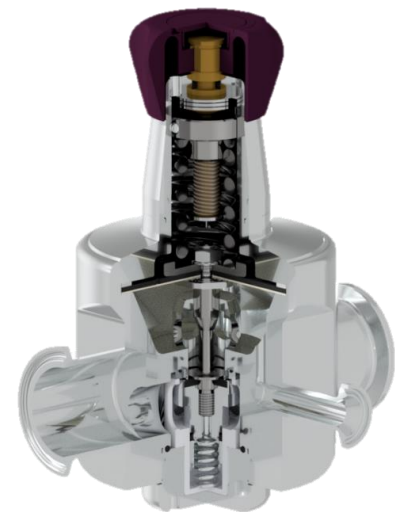
### MAIN FEATURES

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:** P130G.
- SIZES:** 1 1/2"; DN 32 and DN 40.
- 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:** Horizontal installation recommended.
- ORDER REQUIREMENTS:** Type of fluid.  
Maximum operating temperature.  
Inlet pressure and required outlet pressure  
Capacity (maximum and minimum).



*Cutaway view with pressure gauge connection*

CE MARKING (PED – European Directive)	
PN16	Category
1 1/2" ; DN 32 ; DN 40	SEP

LIMITING CONDITIONS	
Valve model	P130G
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

\* Other on request.

CAPACITIES									
Valve size	BPE			DIN			ISO		
	11/2"			DN 32 and 40			DN 32		
Kvs *	4,2	4,8	6,3	4,2	4,8	6,3	4,2	4,8	6,3

DIMENSIONS (mm) ASME BPE										
SIZE	A **	B	C	Ø D	Ø d1	Ø d2 **	E	F	H	WEIGHT (kg)
11/2"	148	48	140	100	25	15,75	78,5	50,5	34,8	4,99

DIMENSIONS (mm) DIN										
SIZE DN	A **	B	C	Ø D	Ø d1	Ø d2 **	E	F	H	WEIGHT (kg)
32	133	48	140	100	25	15,75	78,5	50,5	32	4,98
40	133	48	140	100	25	15,75	78,5	50,5	38	4,94

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

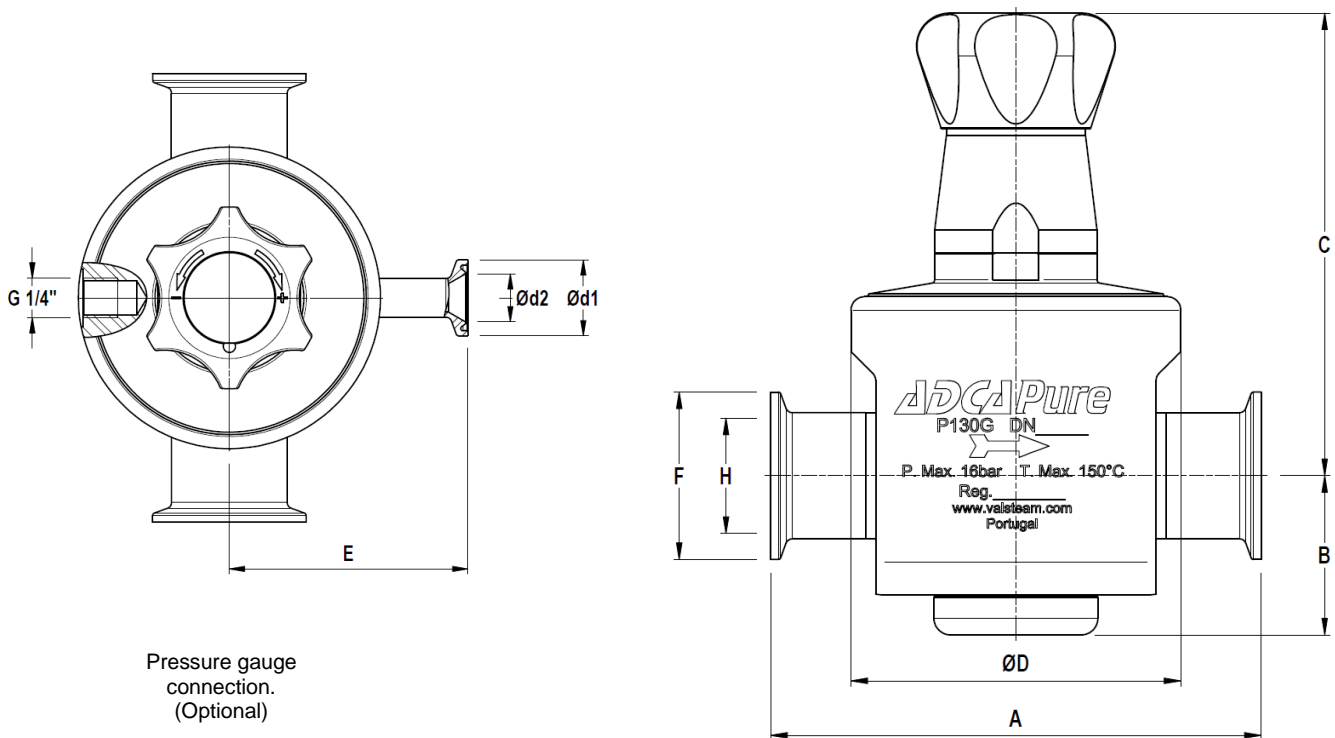
DIMENSIONS (mm) ISO										
SIZE DN	A **	B	C	Ø D	Ø d1	Ø d2 **	E	F	H	WEIGHT (kg)
32	133	48	140	100	25	15,75	78,5	64	42,4	5,1

Clamp ferrules DIN 32676 Series B; Tube weld DIN 11866 Series B (ISO 1127 Series 1).

\* Reduced Kvs on request.

\*\* 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.



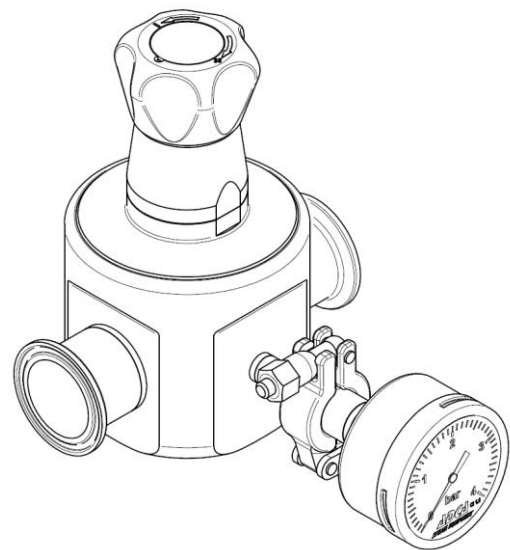
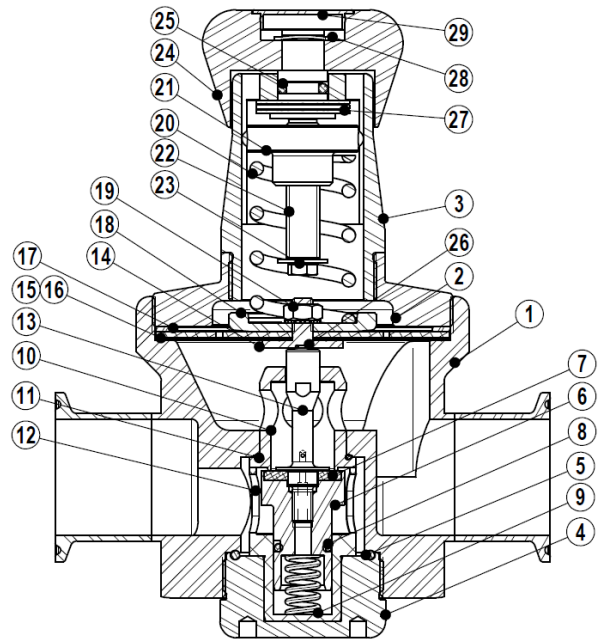
Pressure gauge connection.  
(Optional)

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. \*\* 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.



Pressure gauge connection.  
(Optional)

ORDERING CODES P130G													
Valve model	P3G	1	3	T	M	X	I	X	X	X	D	32	E
P130G – AISI 316L / 1.4404 diaphragm sensing regulator	P3G												
<b>Outlet spring range</b>													
0,2 to 1,5 bar		1											
0,3 to 3 bar		2											
2 to 8 bar		3											
<b>Flow capacity</b>													
Kvs – 4,2		2											
Kvs – 4,8		3											
Kvs – 6,3		5											
<b>Diaphragm material</b>													
PTFE (Gylon)				T									
<b>Valve head</b>													
Metal to metal (non-standard)					M								
EPDM					E								
PTFE					T								
FPM / Viton					V								
<b>Relieving</b>													
Non-relieving						X							
Relieving (only for non-dangerous gases)						R							
Relieving with captured vent						L							
<b>Regulating knob and top cap</b>													
Stainless steel							I						
Plastic							P						
Top cap (adjusting screw sealing)							T						
<b>Gauge port options</b>													
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					
<b>Surface finish, special services and options</b>													
None (fine machined)									X				
Mechanical polishing									P				
Electropolishing									E				
<b>Special features</b>													
None										X			
Degreased for oxygen										O			
<b>Pipe connection</b>													
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		
<b>Size</b>													
DN 32												32	
11/2" or DN 40												40	
<b>Special valves / Extras</b>													
Full description or additional codes have to be added in case of non-standard combination													E