

## SANITARY PRESSURE REDUCING VALVE P-130

### DESCRIPTION

The ADCA P-130 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 barstock, 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-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:

P-130

### SIZES:

1/2" to 1" ; DN08 to DN25.

### OUTLET SPRING RANGES:

0,2 – 1,5 bar; 0,3 – 3 bar; 0,8 – 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).



Cut away view with pressure gauge connection

CE MARKING ( PED - European Directive )	
PN 16	Category
1/2" to 1"	SEP

LIMITING CONDITIONS	
Valve model	P-130
Body design conditions	PN 16
Max.upstream pressure	16 bar
Max.downstream pressure	8 bar
Min.downstream pressure	0,2 bar
Max.design temperature *	150 °C

\*Other on request.

**DIMENSIONS (mm) ASME BPE**

SIZE	Kv *	A**	B	C	D	d1	d2**	E	F	H	WGT. Kg
1/2"	1,7	130	36,5	130	80	25	15,75	65	25	9,4	2,9
3/4"	3	130	36,5	130	80	25	15,75	67,5	25	15,75	2,9
1"	3	130	36,5	130	80	25	15,75	72,5	50,4	22,1	3,4

**DIMENSIONS (mm) DIN**

SIZE DN	Kv *	A**	B	C	D	d1	d2**	E	F	H	WGT. Kg
10	1,7	120	36,5	130	80	25	15,75	65	34	10	2,9
15	3	120	36,5	130	80	25	15,75	67,5	34	16	3
20	3	120	36,5	130	80	25	15,75	67,5	34	20	3,1
25	3	120	38,5	128	80	25	15,75	72,5	50,5	26	3,4

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

**DIMENSIONS (mm) ISO**

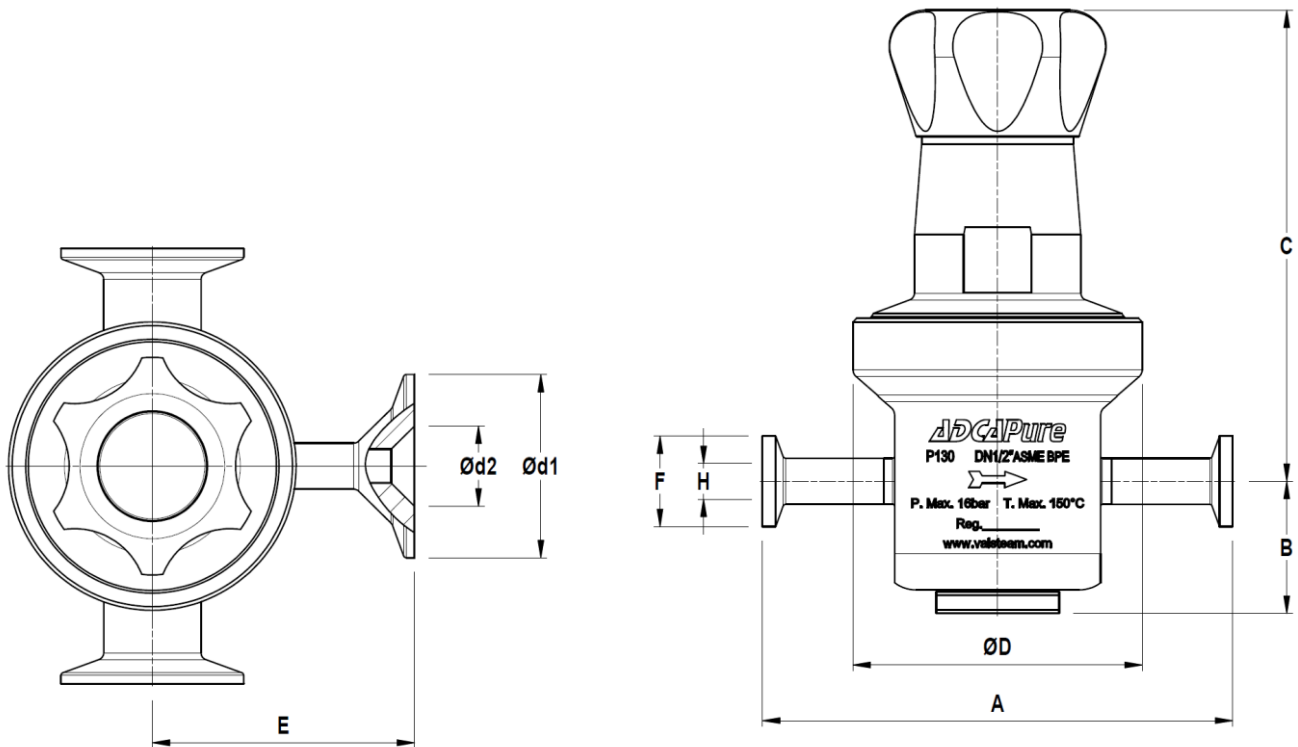
SIZE DN	Kv *	A**	B	C	D	d1	d2 **	E	F	H	WGT. Kg
8	1,7	120	36,5	130	80	25	15,75	65	25	10,3	2,9
10	3	120	36,5	130	80	25	15,75	67,5	25	14	3
15	3	120	36,5	130	80	25	15,75	67,5	50,5	18,1	3,2
20	3	120	38,5	128	80	25	15,75	72,5	50,5	23,7	3,4

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

\* Reduced Kv 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 weight less 0,3 kg.



Pressure gauge connection.  
(Optional)

**MATERIALS**

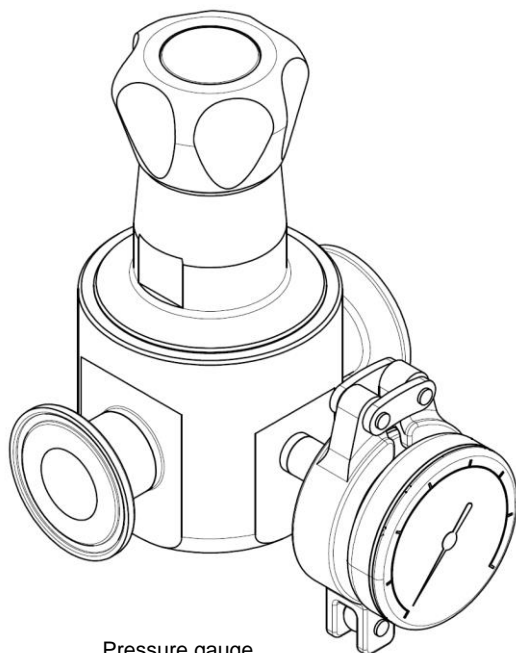
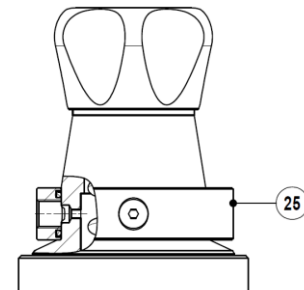
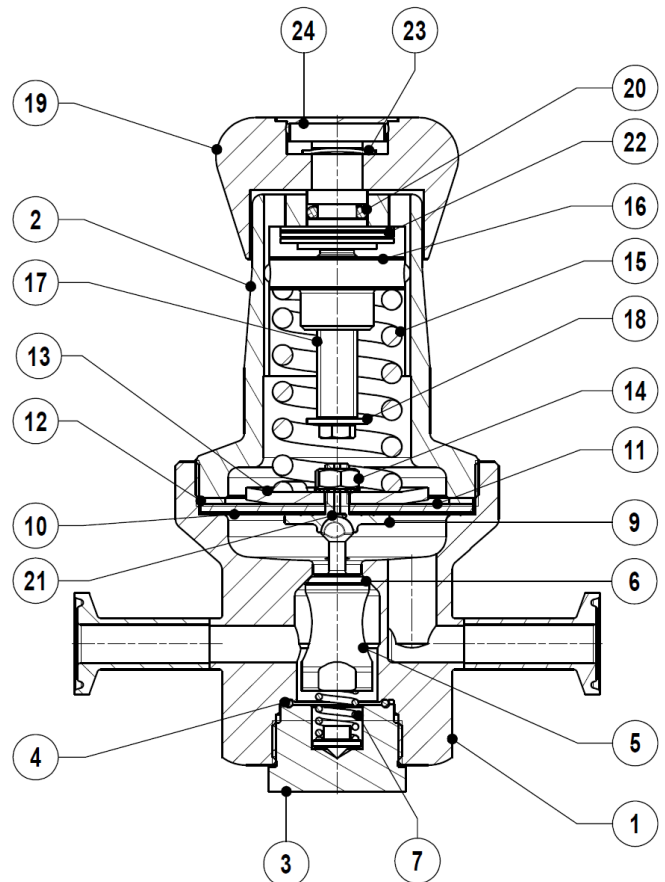
POS.	DESIGNATION	MATERIAL
1	Valve body	AISI316L / 1.4406
2	Cover	AISI316L / 1.4404
3	Seat cover	AISI316L / 1.4404
4	* O-ring	Viton / EPDM
5	*Piston	AISI316L / 1.4404
6	* Valve head	AISI316L / 1.4404 ; Viton ,PTFE
7	* Valve spring	AISI316 / 1.4401 Electropolished
9	Pusher disc	AISI 316L / 1.4404
10	* Lower diaphragm	PTFE (Gylon)
11	* Upper diaphragm	EPDM
12	Washer	AISI304 / 1.4301
13	Spring plate	AISI304 / 1.4301
14	Nut	St.steel A2-70
15	* Adjustment spring	AISI302 / 1.4300
16	Spring plate	AISI304 / 1.4301
17	Adjustment screw	Brass
18	Retaining washer	St.steel A2-70
19	Handwheel	AISI316L / 1.4404
19	Handwheel	Vinyl
20	O-ring	NBR
21	** O-ring	EPDM
22	Bearing	Corrosion res. Steel
23	Ext.bowed shaft ring	Stainless steel
24	Cover nut	Plastic
25	Captured vent ring	AISI 316L / 1.4404

\* Available spare parts. \*\* On request

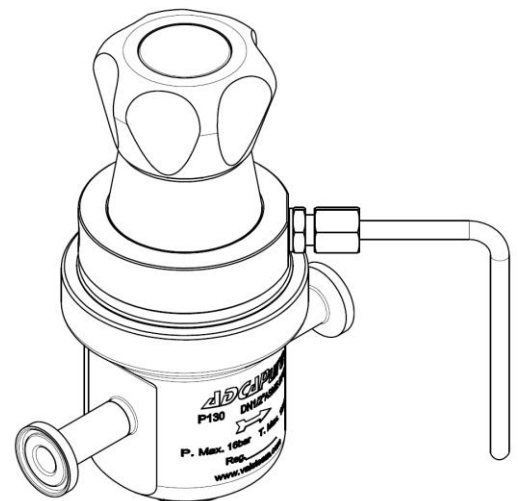
Remarks: FDA/USP Class VI seals certificate on request

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)



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

<b>ORDERING CODES P130</b>													
<b>Valve Model</b>	<b>P13</b>	<b>1</b>	<b>3</b>	<b>T</b>	<b>M</b>	<b>X</b>	<b>I</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>D</b>	<b>15</b>	<b>E</b>
P-130 - AISI 316L / 1.4404 Diaphragm sensing regulator	<b>P13</b>												
<b>Outlet spring range</b>													
0,2 to 1,5 bar		<b>1</b>											
0,3 to 3 bar		<b>2</b>											
0,8 to 8 bar		<b>3</b>											
<b>Flow capacity</b>													
Kv - 0,6		<b>1</b>											
Kv - 1		<b>2</b>											
Kv - 1,7		<b>3</b>											
Kv - 3 ( Only aplicable to sizes 3/4",1" and DN20, DN25).		<b>6</b>											
<b>Diaphragm material</b>													
PTFE (Gylon)				<b>T</b>									
<b>Valve head</b>													
Metal to metal (non-standard)					<b>M</b>								
EPDM					<b>E</b>								
PTFE					<b>T</b>								
FPM/ Viton					<b>V</b>								
<b>Relieving</b>													
Non-relieving						<b>X</b>							
Relieving (only for non-dangerous gases)						<b>R</b>							
Relieving with captured vent						<b>L</b>							
<b>Regulating knob and top cap</b>													
Stainless steel							<b>I</b>						
Plastic							<b>P</b>						
Top cap (adjusting screw sealing)							<b>T</b>						
<b>Gauge port options</b>													
Without gauge ports								<b>X</b>					
Tri-clamp gauge port on the left side (Rel. to the flow direction) - Downstream pressure								<b>7</b>					
Tri-clamp gauge port on the right side (Rel. to the flow direction) - Downstream pressure								<b>6</b>					
Tri-clamp gauge port on both sides - Downstream pressure								<b>5</b>					
Threaded gauge port on the left side (Rel. to the flow direction) - Downstream pressure								<b>4</b>					
Threaded gauge port on the right side (Rel. to the flow direction) - Downstream pressure								<b>3</b>					
Threaded gauge port on both sides - Downstream pressure								<b>2</b>					
<b>Surface finish, special services and options</b>													
None (fine machined)									<b>X</b>				
Mechanical polishing									<b>P</b>				
Electropolishing									<b>E</b>				
<b>Special features</b>													
None										<b>X</b>			
Degreased for oxygen										<b>O</b>			
<b>Pipe connection</b>													
Clamp ferrule ASME BPE												<b>D</b>	
Clamp ferrule DIN (DIN32676-A)												<b>F</b>	
Clamp ferrule ISO (DIN32676-B)												<b>E</b>	
ETO according to ASME BPE												<b>DI</b>	
ETO according to DIN11966-A (DIN11850-2)												<b>FI</b>	
ETO according to ISO 1127-1												<b>EI</b>	
<b>Size</b>													
1/2" or DN 15												<b>15</b>	
3/4" or DN 20												<b>20</b>	
1" or DN 25												<b>25</b>	
<b>Special valves / Extras</b>													
Full description or additional codes have to be added in case of non-standard combination.													<b>E</b>