

## SANITARY PRESSURE REDUCING VALVE P130A

### DESCRIPTION

The ADCA P130A series direct acting, dome 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.

### MAIN FEATURES

Compact design.  
Completely machined from 316L stainless steel bar stock, no castings or forgings are used.  
Set point can be adjusted remotely using a relieving gas pressure regulator or through an I/P converter.  
Ease operation during the sterilization or cleaning process (SIP – CIP), by remotely increasing the set point, ensures that the valve stays totally open during the process.

### 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: Different soft valves for liquids and gases.  
Gauge connection on body.  
Wall mounting.

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

AVAILABLE MODELS: P130A – dome loaded.

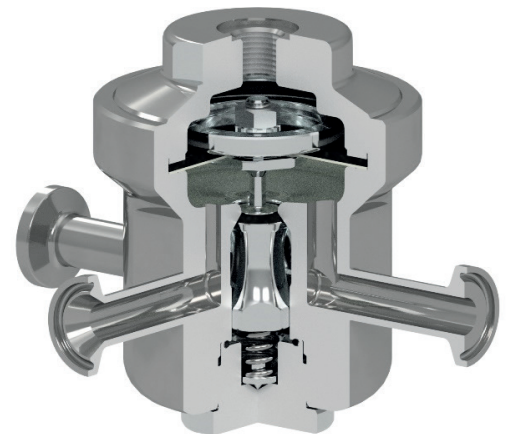
SIZES: 1/2" to 1"; DN 08 to DN 25.

REGULATING RANGE: 0,2 – 8 bar.

CONNECTIONS: ASME BPE, DIN and ISO clamp ferrules or tube weld (ETO) ends.  
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.



LIMITING CONDITIONS	
<b>Valve model</b>	<b>P130A</b>
Body design conditions	PN 16
Maximum upstream pressure	16 bar
Maximum downstream pressure	8 bar
Minimum downstream pressure	0,2 bar
Maximum design temperature *	150 °C

\* Others on request.

CE MARKING – GROUP 2 (PED – European Directive)	
PN 16	Category
1/2" to 1" – DN 08 to DN 25	SEP

**FLOW RATE COEFFICIENTS (m<sup>3</sup>/h) \***

SIZE	ASME BPE		DIN		ISO	
	1/2"	3/4" to 1"	DN 10	DN 15 to DN 25	DN 08	DN 10 to DN 20
Kvs	1,7	3	1,7	3	1,7	3

\* Reduced Kvs on request.

**DIMENSIONS (mm) ASME BPE**

SIZE	A	B	C	D	d1	d2	d3	d4	E	F	H	WEIGHT (kg)
1/2"	130	36,5	62	80	1/4"	25	15,75	1/4"	65	25	9,4	2,9
3/4"	130	36,5	62	80	1/4"	25	15,75	1/4"	67,5	25	15,75	2,9
1"	130	36,5	62	80	1/4"	25	15,75	1/4"	72,5	50,5	22,1	3,4

Remark: As standard, connections d1 and d4 are female threaded NPT.

**DIMENSIONS (mm) DIN**

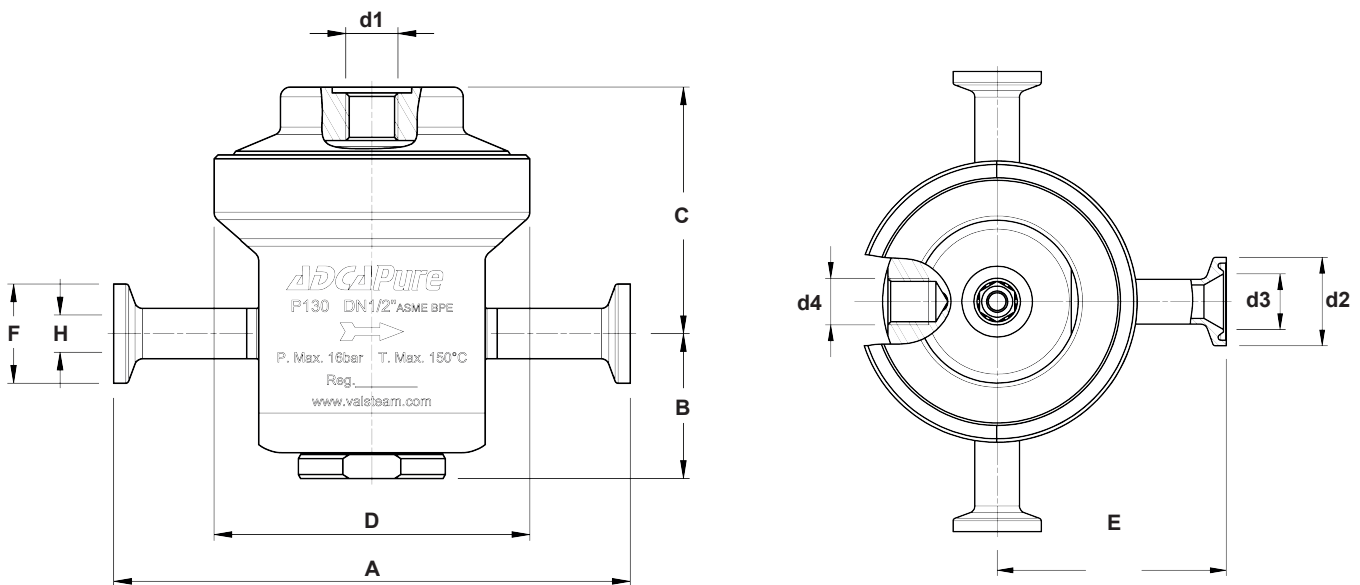
SIZE	A	B	C	D	d1	d2	d3	d4	E	F	H	WEIGHT (kg)
DN 10	120	36,5	62	80	1/4"	25	15,75	1/4"	65	34	10	2,9
DN 15	120	36,5	62	80	1/4"	25	15,75	1/4"	67,5	34	16	3
DN 20	120	36,5	62	80	1/4"	25	15,75	1/4"	67,5	34	20	3,1
DN 25	120	38,5	60	80	1/4"	25	15,75	1/4"	72,5	50,5	26	3,4

Remarks: Clamp ferrules according to DIN 32676-A; Tube weld (ETO) according to DIN 11866-A (DIN 11850-2);  
As standard, connections d1 and d4 are female threaded ISO 7 Rp.

**DIMENSIONS (mm) ISO**

SIZE	A	B	C	D	d1	d2	d3	d4	E	F	H	WEIGHT (kg)
DN 08	120	36,5	62	80	1/4"	25	15,75	1/4"	65	25	10,3	2,9
DN 10	120	36,5	62	80	1/4"	25	15,75	1/4"	67,5	25	14	3
DN 15	120	36,5	62	80	1/4"	25	15,75	1/4"	67,5	50,5	18,1	3,2
DN 20	120	38,5	60	80	1/4"	25	15,75	1/4"	72,5	50,5	23,7	3,4

Remarks: Clamp ferrules according to DIN 32676-B; Tube weld (ETO) according to DIN 11866-B (ISO 1127);  
As standard, connections d1 and d4 are female threaded ISO 7 Rp.



Optional pressure gauge connection.

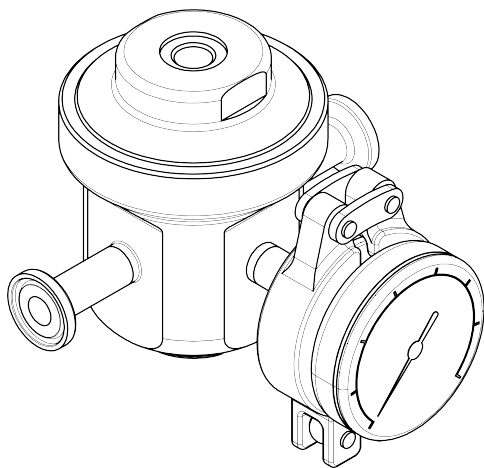
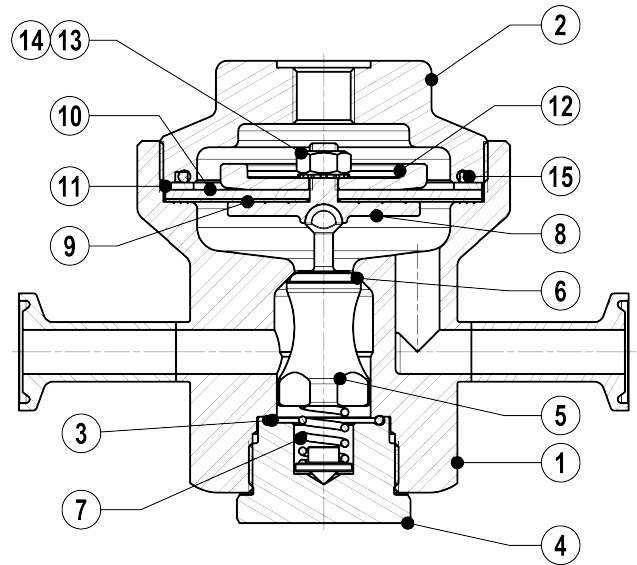
**MATERIALS**

POS. N°	DESIGNATION	MATERIAL
1	Valve body	AISI 316L / 1.4404
2	Cover	AISI 316L / 1.4404
3	* O-ring	Viton ; EPDM
4	Seat cover	AISI 316L / 1.4404
5	* Piston	AISI 316L / 1.4404
6	O-ring	EPDM
7	* Valve spring	AISI 316 / 1.4401 electropolished
8	Pusher disc	AISI 316L / 1.4404
9	* Lower diaphragm	PTFE (Gylon)
10	* Upper diaphragm	EPDM
11	Washer	AISI 304 / 1.4301
12	Spring plate	AISI 316 / 1.4401
13	Nut	AISI 304 / 1.4301
14	Washer	AISI 304 / 1.4401
15	O-ring	EPDM

\* 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.



*Optional pressure gauge connection.*

ORDERING CODES P130A

Valve model	P13	A	1	T	M	1	X	X	X	X	DI	08	E		
P130A – AISI 316L / 1.4404 diaphragm sensing pressure reducing valve	P13														
<b>Regulating range</b>															
0,2 to 8 bar (dome loaded) a)		A													
<b>Flow rate coefficient</b>															
Kvs 0,6			1												
Kvs 1			2												
Kvs 1,7			3												
Kvs 3 (not applicable to sizes 1/2" ASME BPE, DIN DN 10 and ISO DN 08)			6												
<b>Diaphragm</b>															
PTFE (Gylon)				T											
EPDM (non-standard)				E											
<b>Valve head</b>															
Metal to metal (non-standard)					M										
EPDM					E										
PTFE					T										
FPM / Viton					V										
<b>Dome connection</b>															
Female threaded ISO 7 Rp 1/4"						1									
Female threaded 1/4" NPT						2									
<b>Dome options</b>															
None								X							
I/P converter 0,2 to 8 bar output								C							
<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 – 1/4" ISO 7 Rp													4		
Threaded gauge port on the right side (rel. to the flow direction) – downstream pressure – 1/4" ISO 7 Rp														3	
Threaded gauge port on both sides – downstream pressure – 1/4" ISO 7 Rp															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
<b>Surface finish b)</b>															
Standard surface finish												X			
Mirror mechanical polished external surfaces (SF1)													P		
Electropolished internal wetted parts (SF5)													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		
Tube weld (ETO) according to ASME BPE													DI		
Tube weld (ETO) according to DIN 11866-A (DIN 11850-2)													FI		
Tube weld (ETO) according to DIN 11866-B (ISO 1127)													EI		
<b>Size</b>															
DN 08													08		
DN 10													10		
1/2" or DN 15													15		
3/4" or DN 20													20		
1" or DN 25													25		
<b>Special valves / Extras</b>															
Full description or additional codes have to be added in case of non-standard combination													E		

a) The loading control pressure can be up to a maximum of 1,2 bar above the required downstream pressure.  
b) Consult IS PV20.00 (Technical information) for further details and other surface finish options.