







## 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.

The valve is available in a dome-loaded version.

## MAIN FEATURES

Compact design.

Completely machined from 316L stainless steel bar stock, no castings or forgings are used.

FDA / USP Class VI compliant seals.

Non-rising adjustment knob.

## 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.

OPTIONS: Self relieving.

Leakage line connection 1/8" (captured vent).

Gauge connection on body.

Different soft valves for liquids and gases.

Dome-loaded version.

USE: Clean air, nitrogen, carbon dioxide, oxygen,

argon and other gases or liquids compatible with

the construction.

**AVAILABLE** 

MODELS: P130G.

SIZES: 11/2"; DN 32 to DN 40.

REGULATING

RANGES: 0,2 to 1,5 bar; 0,3 to 3 bar; 2 to 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	
Valve model	P130G
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

<sup>\*</sup> Others on request.

CE MARKING (PED – Europea	
PN 16	Category
11/2" – DN 32 to 40	SEP







			FLOW	RATE COEFI	FICIENTS (m³/	h)			
		ASME BPE			DIN			ISO	
SIZE	11/2" DN 32 and DN 40			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	Α	В	С	D	d1	d2	E	F	Н	WEIGHT (kg) *
11/2"	148	48	140	100	25	15,75	78,5	50,5	34,8	4,99

<sup>\*</sup> Valves with nylon adjustment knob weigh 0,3 kg less.

				DIME	NSIONS (mn	n) DIN				
SIZE	Α	В	С	D	d1	d2	E	F	Н	WEIGHT (kg) *
DN 32	133	48	140	100	25	15,75	78,5	50,5	32	4,98
DN 40	133	48	140	100	25	15,75	78,5	50,5	38	4,94

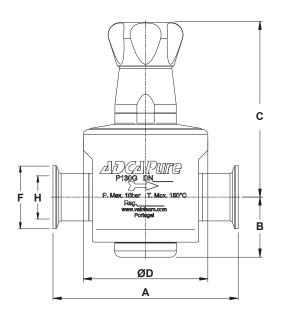
<sup>\*</sup> Valves with nylon adjustment knob weigh 0,3 kg less.

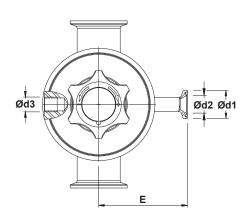
Remarks: Clamp ferrules according to DIN 32676-A; Tube weld (ETO) according to DIN 11866-A (DIN 11850-2).

				DIME	NSIONS (mn	n) ISO				
SIZE	Α	В	С	D	d1	d2	E	F	Н	WEIGHT (kg) *
DN 32	133	48	140	100	25	15,75	78,5	64	42,4	5,1

<sup>\*</sup> Valves with nylon adjustment knob weigh 0,3 kg less.

Remarks: Clamp ferrules according to DIN 32676-B; Tube weld (ETO) according to DIN 11866-B (ISO 1127).



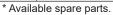


Optional pressure gauge connection.





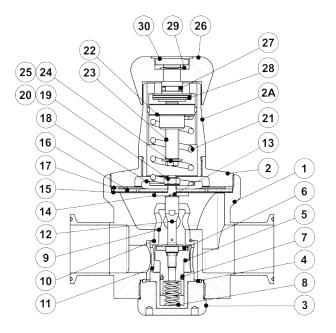
	MATERIA	LS
POS.	DESIGNATION	MATERIAL
1	Valve body	AISI 316L / 1.4404
2	Cover	AISI 316L / 1.4404
2A	Spring cover	AISI 316L / 1.4404
3	Bottom cover	AISI 316L / 1.4404
4	* O-ring	EPDM
5	* Piston	AISI 316L / 1.4404
6	* Valve head	AISI 316L / 1.4404, Viton or PTFE
7	* O-ring	EPDM
8	* Valve spring	AISI 316 / 1.4401 electropolished
9	* Seat	AISI 316L / 1.4404
10	* O-ring	EPDM
11	* Guide	AISI 316L / 1.4404
12	* Stem	AISI 316L / 1.4404
13	* O-ring <b>a)</b>	EPDM
14	Pusher disk	AISI 316L / 1.4404
15	* Lower diaphragm	PTFE (Gylon)
16	* Upper diaphragm	EPDM
17	Washer	AISI 304 / 1.4301
18	Plate	AISI 304 / 1.4301
19	Nut	Stainless steel A2-70
20	* Serrated washer	AISI 304 / 1.4301
21	* Adjustment spring	AISI 302 / 1.4300
22	Spring guide	AISI 316 / 1.4401
23	Adjustment screw	Brass
24	Washer	Stainless steel A2-70
25	Bolt	Stainless steel A2-70
26	Adjustment knob	AISI 316L / 1.4404 or Nylon
27	O-ring	NBR
28	Bearing	Corrosion resistant steel
29	Shaft ring	Stainless steel
30	Cover nut	Plastic
31	Leakage line/Captured vent ring	AISI 316 / 1.4401
32	* O-ring	EPDM
33	O-ring	NBR
34	Bolt	AISI 304 / 1.4301
35	O-ring	Viton
36	Compression fitting	AISI 304 / 1.4301
* A!	phla enara narte	

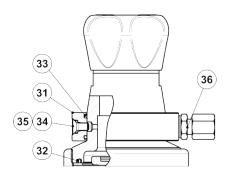


a) Only for versions with self-relieving option.

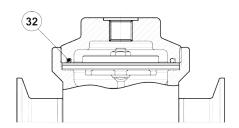
Remarks: FDA / USP Class VI seals certificate on request.

All valves have a serial number. In case of non-standard valves, this number must be supplied if spare parts are ordered.

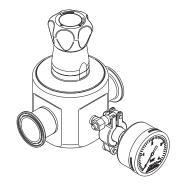




Leakage line / Captured vent option



Dome-loaded top



Optional pressure gauge connection.







Value medal	Bac	-	_	-	8.5	v		V	v	v	D.	20
Valve model	P3G	1	2	Т	M	Х	ı	X	X	X	DI	32
P130G – AISI 316L / 1.4404 diaphragm sensing pressure reducing valve	P3G											
Regulating range		L.	-									
0,2 to 1,5 bar		1	-									
0,3 to 3 bar		2										
2 to 8 bar		3	-									
0,2 to 8 bar (dome-loaded) a)		Α										
Flow rate coefficient				-								
Kvs 4,2			3									
Kvs 4,8 Kvs 6,3			5	-								
			5	ł								
Diaphragm PTFE (Gylon)				Т								
EPDM (non-standard)				Ė								
Seat material												
Metal to metal (non-standard)					М							
EPDM					E							
PTFE					T							
FPM / Viton (FDA approval only)					V							
Relieving					_							
Non-relieving b)						Х						
Relieving (only for non-dangerous gases)						R						
Relieving with captured vent						L						
Adjustment knob and top cap												
Stainless steel adjustment knob							ı	1				
Nylon adjustment knob				-			Р	1				
Top cap (adjustment screw with cover)							Т	1				
Dome-loaded top b)							Х	1				
Gauge port options												
Without gauge ports								X	]			
Tri-clamp gauge port on the left side (rel. to the flow direction) – downstream press	sure							7				
Tri-clamp gauge port on the right side (rel. to the flow direction) – downstream pre	ssure							6				
Tri-clamp gauge port on both sides – downstream pressure								5				
Threaded gauge port on the left side (rel. to the flow direction) – downstream pres	sure – IS	SO 7	Rp 1	/4"				4	]			
Threaded gauge port on the right side (rel. to the flow direction) – downstream pre	ssure –	ISO 7	7 Rp	1/4"				3	1			
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 pres								W	1			
Threaded gauge port on the right side (rel. to the flow direction) – downstream pre	ssure –	1/4" [	NPT					Υ				
Threaded gauge port on both sides – downstream pressure – 1/4" NPT								Z				
Surface finish c)												
Standard surface finish									X			
Mirror mechanical polished external surfaces (SF1)									Р	-		
Electropolished internal wetted parts (SF5)									Е			
Special features										_		
None Degreased for oxygen										X O	-	
Pipe connection										J	1	
Clamp ferrule ASME BPE											D	1
Clamp ferrule DIN (DIN 32676-A)											F	1
Clamp ferrule ISO (DIN 32676-B)											E	1
Tube weld (ETO) according to ASME BPE											DI	1
Tube weld (ETO) according to ASME BFE  Tube weld (ETO) according to DIN 11866-A (DIN 11850-2)											FI	1
Tube weld (ETO) according to DIN 11866-B (ISO 1127)											EI	1
Size												1
DN 32												32
												40
11/2" or DN 40												-+U

a) The loading control pressure can be up to a maximum of 1,2 bar above the required downstream pressure; b) These options must be chosen in case of dome-loaded version; c) Consult IS PV20.00 for further details and other surface finish options.

