

## SANITARY PRESSURE REDUCING VALVE P-160

### DESCRIPTION

The ADCA P-160 series **direct acting, spring-loaded diaphragm sensing**, pressure reducing valves are designed for use with clean steam, compressed air, water and other gases or liquids compatible with the construction materials.

### MAIN FEATURES

Compact design.  
Completely machined from barstock material, no castings or forgings are used on the standard version.  
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:

Leakage line connection 1/8" (captured vent).  
Different soft valves for liquids and gases.  
Lock system, allows clean-in-place (CIP) and sterilization-in-place (SIP) operations with valve in line.

### USE:

Clean steam, compressed air, water and other gases and liquids compatible with the construction.

### AVAILABLE MODELS:

P-160

### SIZES:

3/4", 1", 1 1/2", 2" .

### OUTLET SPRING RANGES:

0,8 – 1,5 bar; 1 – 3 bar; 1,5 – 5 bar.

### CONNECTIONS:

ASME BPE.  
Clamp ferrules or others on request.

### PACKAGING:

Assembling and packaging in a clean room certified according to ISO 14644-1.  
The product is end capped and vacuum sealed with recyclable plastic film to avoid contamination.

### INSTALLATION:

Horizontal installation. Inlet vertical and horizontal outlet angle connection. See IMI.

### ORDER REQUIREMENTS:

Type of fluid.  
Maximum operating temperature.  
Inlet pressure and required outlet pressure.  
Capacity (maximum and minimum).



LIMITING CONDITIONS	
Valve model	P-160
Body design conditions	PN 16
Max.upstream pressure	8 bar 4 bar*
Max.downstream pressure	5 bar
Min.downstream pressure **	0,8 bar
Max.design temperature ***	150 °C

\* See capacity table.

\*\* For tight shut off, with regulating spring relaxed, ensure a minimum 0,2 bar downstream pressure.

\*\*\* Other on request.

CE MARKING (PED - European Directive)	
PN 16	Category
3/4" to 2"	SEP

**CAPACITIES**

Valve Size	3/4"	1"	1 1/2"	2"	2" *
KVs (m3/h)	1,3	3,5	5,3	5,5	8,5 *

\* Limited to a maximum 4 bar inlet pressure.

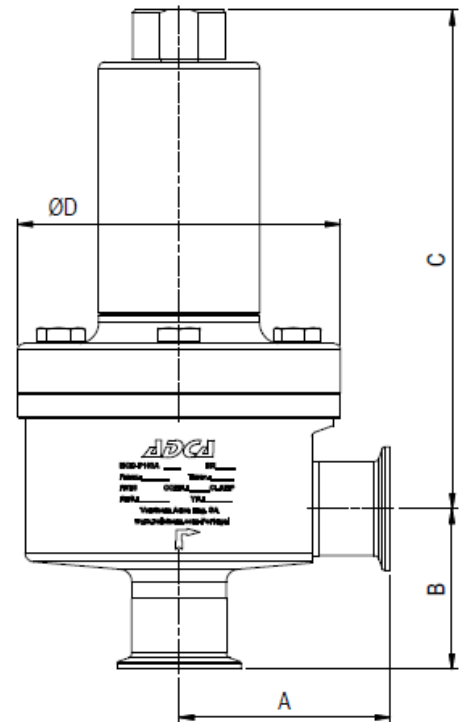
**DIMENSIONS (mm) ASME BPE**

SIZE	A	B	C	D	WGT. Kg
3/4"	85	56	192	130	6,7
1"	85	55	192	130	6,8
1 1/2"	85	65	199	130	7,6
2"	85	69	205	130	7,8

\* Different lenghts on request.

Consult factory for certified dimensions.

Dimensions subject to change without notice.

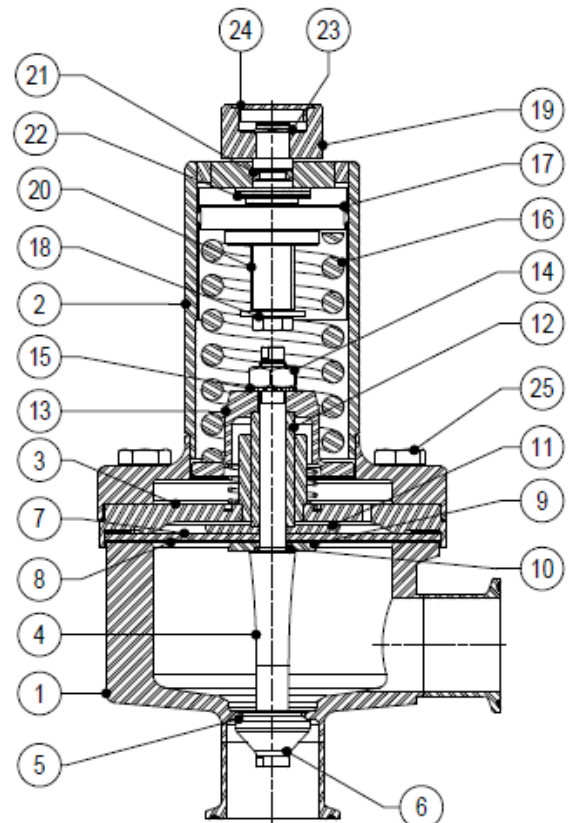

**MATERIALS**

POS.	DESIGNATION	MATERIAL
1	Valve body	AISI316L / 1.4404
2	Cover	AISI316L / 1.4404
3	Centering plate	AISI316L / 1.4404
4	* Valve stem	AISI316L/1.4404
5	* Soft plug	EPDM; PTFE **
6	* Valve plug	AISI316L / 1.4404
7	* Upper diaphragm	EPDM;VITON**
8	* Lower diaphragm	PTFE
9	Diaphragm plate	AISI316L / 1.4404
10	* O-ring	EPDM
11	Diaphragm plate	AISI316L / 1.4404
12	Stem guide	AISI316 / 1.4401
13	Spring plate	AISI316 / 1.4401
14	Nut	St.Steel A2 - 70
15	Washer	AISI316 / 1.4401
16	* Adjustment spring	AISI 302 / 1.4300
17	Top spring plate	AISI316 / 1.4401
18	Retaining washer	St.Steel A2 - 70
19	Regulating nut	AISI316L / 1.4404
20	Adjustment screw	AISI304 / 1.4301
21	O-ring	EPDM
22	Bearing	Corrosion res. Steel
23	Ext. bowed shaft ring	Stainless steel
24	Cover nut	Plastic
25	Bolts	A2

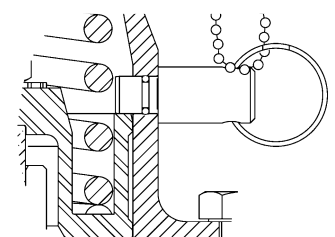
\* Available spare parts; \*\*Others according to the fluid.

FDA/USP Class VI seals certificate on request.

Viton diaphragm only with FDA approval (Pos.7).



**Special cover with lock system.**



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

We reserve the right to change the design and material of this product without notice.