

SANITARY PRESSURE REDUCING VALVE P160 (2 1/2" – 3")

DESCRIPTION

The ADCA P160 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 bar stock material, no castings or forgings are used on the standard version.

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: 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.
Gauge connection on body.
Lifting lugs to ease installation.

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

AVAILABLE MODELS: P160.

SIZES: 2 1/2" and 3".

OUTLET SPRING RANGES: 1 – 1,7 bar; 1,5 – 4 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 sealed with recyclable thermo-shrinkable 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	P160
Body design conditions	PN16
Max. upstream pressure	8 bar
Max. downstream pressure	4 bar
Min. downstream pressure *	1 bar
Max. design temperature **	150 °C

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

** Others on request.

CE MARKING – GROUP 2 (PED – European Directive)

PN16	Category
2 1/2" – 3"	1 (CE Marked)

DIMENSIONS (mm) ASME BPE

SIZE	Kvs	A	B	C	D	d1 *	d2 *	E *	F	H	WGT. (kg)
2 1/2"	19,6	144	78	410	245	25	15,75	141	77,4	60,2	34,6
3"	19,6	144	84	417	245	25	15,75	141	90,9	72,9	36,2

* Optional.

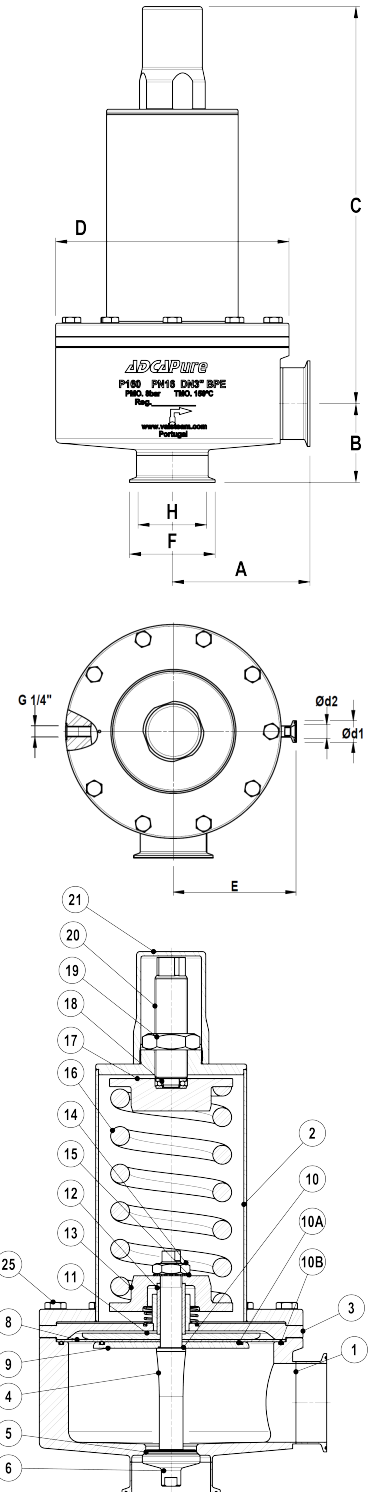
MATERIALS

POS. N°	DESIGNATION	MATERIAL
1	Valve body	AISI 316L / 1.4404
2	Cover	AISI 316L / 1.4404
3	Centering plate	AISI 316L / 1.4404
4	* Valve stem	AISI 316L / 1.4404
5	* Soft plug	EPDM; PTFE **
6	* Valve plug	AISI 316L / 1.4404
8	* Diaphragm	PTFE (Gylon)
9	Diaphragm plate	AISI 316L / 1.4404
10	* O-ring	EPDM
11	* O-ring	EPDM
12	* O-ring	EPDM
11	Diaphragm plate	AISI 316L / 1.4404
12	Stem guide	AISI 316 / 1.4401
13	Spring plate	AISI 316 / 1.4401
14	Nut	Stainless steel A2-70
15	Washer	AISI 316 / 1.4401
16	* Adjustment spring	Zinc plated spring steel
17	Top spring plate	AISI 316 / 1.4401
18	Bearing	Corrosion resistant steel
19	Nut	Stainless steel A2-70
20	Adjusting screw	AISI 304 / 1.4301
21	Top cap	AISI 316L / 1.4404
25	Bolts	A2

* Available spare parts ; ** Others according to fluid;

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.



OPTIONS

LOCK SYSTEM	PRESSURE GAUGE CONNECTION	LEAKAGE LINE CONNECTION

ORDERING CODES P160										
Valve model		P16								
P160 – AISI 316L / 1.4404 diaphragm sensing pressure reducing valve		P16								
Outlet spring range										
1 to 1,7 bar		8								
1,5 to 4 bar		9								
Flow capacity										
Kvs – 19,6 bar		9								
Diaphragm material										
PTFE (Gylon)			T							
Valve head										
Metal to metal (non standard)			M							
EPDM			E							
PTFE			T							
FPM / Viton			V							
Regulating knob, top cap and captured vent										
Top cap (adjusting screw sealing)			T							
Top cap (adjusting screw sealing) w/ diaphragm cover leakage connection in case of diaphragm failure			U							
Gauge port options										
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 – ISO 7 Rp 1/4"								4		
Threaded gauge port on the right side (rel. to the flow direction) – downstream pressure – ISO 7 Rp 1/4"								3		
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 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		
Surface finish (a)										
Standard surface finish								X		
Mirror mechanical polished external surfaces (SF1)								P		
Electropolished internal wetted parts (SF5)								E		
Special features										
None								X		
Degreased for oxygen								O		
CIP / SIP lock system								C		
Pipe connections										
Clamp ferrule ASME BPE								D		
ETO according to ASME BPE								DI		
Size										
2 1/2"									65	
3"									80	
Special valves / Extras										
Full description or additional codes have to be added in case of a non-standard combination										E

a) Consult IS PV20.00 (Technical information) for further details and other surface finish options.