

DIAPHRAGM SENSING PRESSURE REDUCING VALVE P20DS

DESCRIPTION

The ADCA P20DS series direct acting, spring-loaded diaphragm sensing pressure reducing valves, are designed for use on steam, compressed air, and other gases or liquids compatible with the materials of construction.

They are suitable for pressure reducing stations where small loads are involved. They are also specifically recommended to operate as pilot valves in combination with other pressure regulators.

MAIN FEATURES

Compact design.
Machined from barstock materials or investment casting.
Ultrasonically cleaned and degreased.



OPTIONS: Different soft valves for water and gases.
Outlet 1/4" gauge connection on body.
Regulating screw with top cap.
Connection for external sensing line.

USE: Steam, compressed air and other gases and liquids compatible with the construction.

AVAILABLE MODELS: P20DS – Stainless steel diaphragm sensing.

SIZES: 1/4" to 1/2".

CONNECTIONS: Female screwed ISO7/1Rp (BS 21) or NPT.

INSTALLATION: Horizontal or vertical installation.
A strainer should be installed upstream the valve.
See IMI – Installation and maintenance instructions.

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

CE MARKING – GROUP 2 (PED – European Directive)	
PN25	Category
DN 08 to 15	SEP

CAPACITIES			
Valve size	1/4"	3/8"	1/2"
Kvs (m ³ /h)	1,2	1,8	1,8

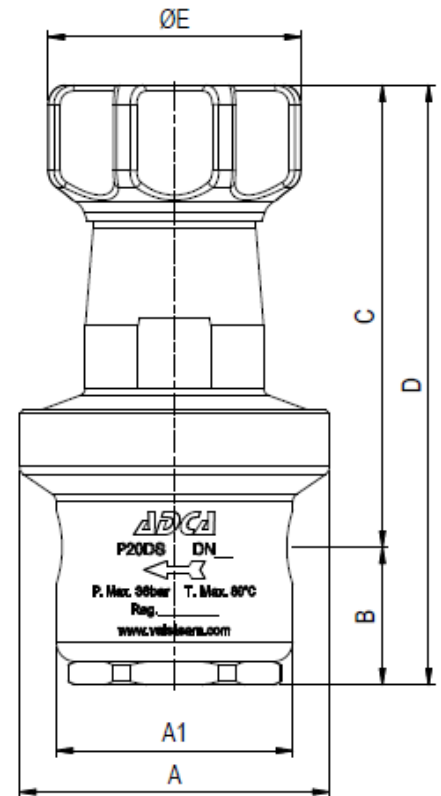
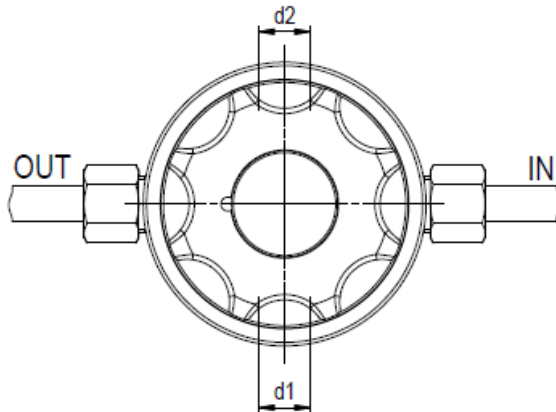
LIMITING CONDITIONS	
Valve model	P20DS
Body design conditions	PN25
Max. upstream pressure	14 bar
Max. downstream pressure	8 bar
Min. downstream pressure	0,2 bar
Max. design temperature *	200 °C
Max. recommended reducing ratio	10:1

* Others on request.

DIMENSIONS (mm)

SIZE	A	A1	B	C	D	E	d1 *	d2 *	WGT. (kg)
1/4"	80	61	35,5	120,5	156	69	1/4"	1/4"	1,8
3/8"	80	61	35,5	120,5	156	69	1/4"	1/4"	1,8
1/2"	80	80	35,5	120,5	156	69	1/4"	1/4"	2,5

* Optional: Captured vent connection and pressure gauge.

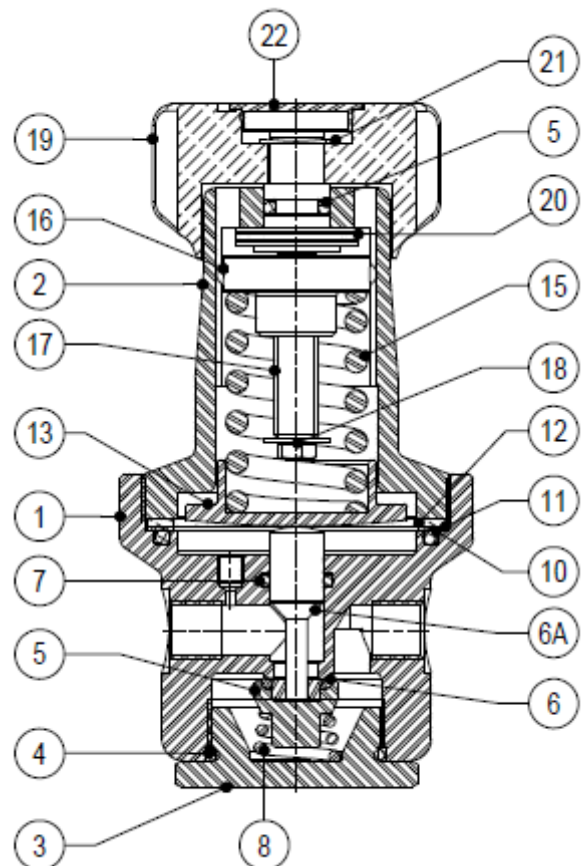


MATERIALS

POS. N°	DESIGNATION	MATERIAL
1	Valve body	AISI 316 / 1.4401 ; CF8M / 1.4408
2	Top cover	AISI 316 / 1.4401 ; CF8M / 1.4408
3	Seat cover	AISI 316 / 1.4401 ; CF8M / 1.4408
4	* O-ring	Viton
5	* Piston valve	AISI 316 / 1.4401
6	* Valve head	Viton
6A	Pushrod	AISI 316 / 1.4401
7	* O-ring	Viton
8	Valve spring	AISI 302 / 1.4300
10	* Gasket	Compressed aramid fiber
11	* Diaphragm	AISI 301 / 1.4410
12	Gasket	Aluminium
13	Spring plate	AISI 304 / 1.4301
15	* Adjustment spring	Spring steel
16	Top spring plate	Brass
17	Adjustment screw	AISI 304 / 1.4301
18	Retaining washer	Stainless steel A2
19	Handwheel	Aluminium painted
20	Bearing	Corrosion resistant steel
21	Ext. bowed shaft ring	Stainless steel
22	Cover nut	Plastic

* Available spare parts.

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



ORDERING CODES P20DS										
Valve model	P20DS	.	1	S	T	S			.A	08
P20DS – Diaphragm sensing	P20DS									
Outlet spring range										
Nº1 – 0,2 to 1,5 bar			1							
Nº2 – 0,3 to 3 bar			2							
Nº3 – 0,8 to 8 bar			3							
Application										
Steam				S						
Gases				G						
Oxygen (degreased)				O						
Seal material										
NBR					N					
EPDM					E					
PTFE					T					
FPM / Viton					V					
Diaphragm material										
Stainless steel						S				
Gauge port 1/4" *										
Without gauge ports							(1)			
Gauge port on the left side (relative to the flow direction)								4		
Gauge port on the right side (relative to the flow direction)									3	
Gauge ports on both sides										2
Pipe connection										
Threaded BSP ISO 7/1 Rp									A	
Threaded NPT ANSI B1.20.1										C
Size										
1/4"										08
3/8"										10
1/2"										15
Special valves / Extras										
Full description or additional codes have to be added in case of non-standard combination.										E

*Gauge port can also be used as external sensing line.

(1) Omitted if a standard valve is requested.