

PISTON SENSING PRESSURE REDUCING VALVE P20P (Low flow)

DESCRIPTION

The ADCA P20P series direct acting, spring-loaded piston sensing, pressure reducing valves, are designed for use on compressed air and other gases or liquids compatible with the materials of construction. They are suitable for low flow pressure reducing in instrumentation systems among others.

MAIN FEATURES

Compact design.
Machined from barstock materials.
No rising handwheel.
Ultrasonically cleaned and degreased.

OPTIONS: Different soft valves for water and gases.
Relieving – Internal relief valve to allow reduce outlet pressure in a no-flow condition.
Relieving – captured vent below panel.
Panel mounting ring.
Bottom mounting.
Outlet 1/4" gauge connection on body.

USE: Compressed air, water and other gases and liquids compatible with the construction.

AVAILABLE MODELS: P20P – Stainless steel piston sensing.

SIZES: 1/4".

CONNECTIONS: Female threaded ISO 7 Rp or NPT.
Special connections on request.

INSTALLATION: In any position.
A strainer should be installed upstream of the valve in case of dirty fluids usage.
See IMI – Installation and maintenance instructions.

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



CAPACITIES			
Valve size	1/4"		
Kvs (m³/h)	0,043	0,22	0,62

LIMITING CONDITIONS	
Valve model	P20P
Body design conditions	PN320
Max. upstream pressure	220 bar
Max. downstream pressure	200 bar
Min. downstream pressure	0,2 bar
Max. design temperature *	80 °C
Max. recommended reducing ratio	40:1

* Others on request.

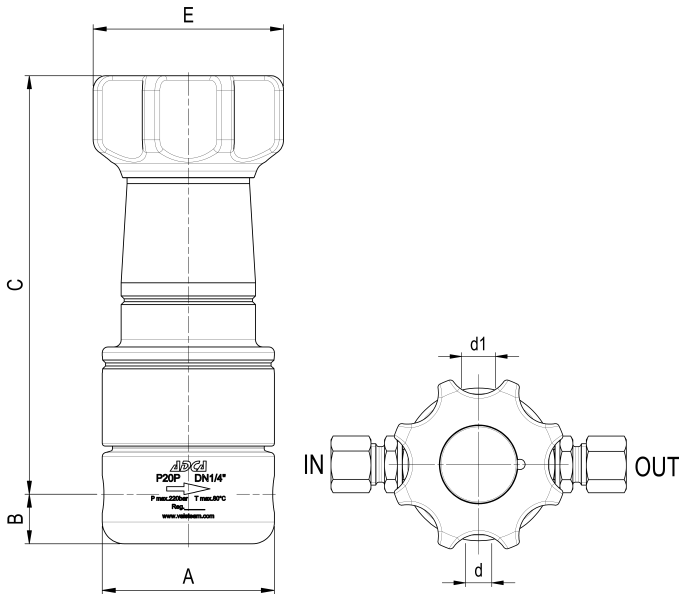
CE MARKING – GROUP 2 (PED – European Directive)

PN320	Category
1/4"	SEP

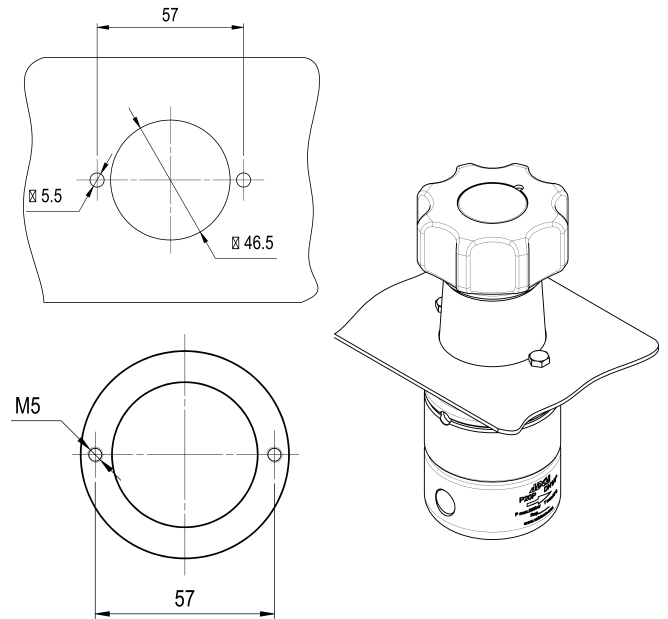
DIMENSIONS (mm)

SIZE	A	B	C	E	d *	d1 *	WEIGHT (kg)
1/4"	59	17	143,5	69	1/8" NPT	1/4"	2,5

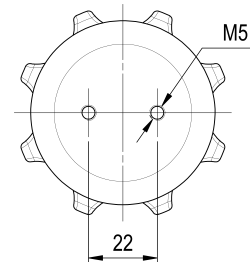
* Optional: Captured vent connection (d); Pressure gauge (d1).



Panel mounting



Bottom mounting

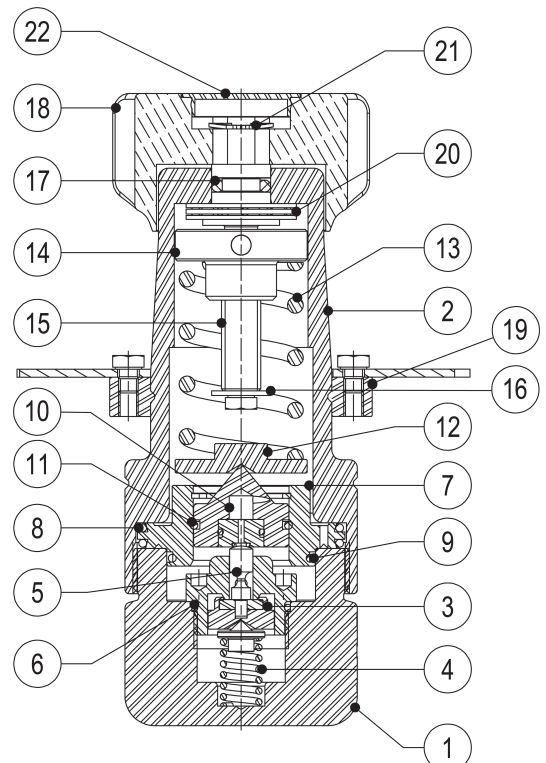


MATERIALS

POS. N°	DESIGNATION	MATERIAL
1	Valve body	AISI 316L / 1.4404
2	Top cover	AISI 316L / 1.4404
3	* Valve head	NBR; EPDM; PTFE; etc.
4	* Valve spring	AISI 302 / 1.4300
5	Pushrod	AISI 316L / 1.4404
6	* O-ring	NBR; EPDM; PTFE; etc.
7	Piston sleeve	AISI 316L / 1.4404
8	* O-ring	NBR; EPDM; PTFE; etc.
9	* O-ring	NBR; EPDM; PTFE; etc.
10	Piston	AISI 316L / 1.4404
11	* O-ring	NBR; EPDM; Viton; etc.
12	Spring plate	AISI 316L / 1.4404
13	* Adjustment spring	Spring steel
14	Top spring plate	AISI 316L / 1.4404
15	Adjustment screw	AISI 316L / 1.4404
16	Retaining washer	Stainless steel A2
17	* O-ring	NBR; EPDM; PTFE; etc.
18	Handwheel	Painted aluminium
19	** Panel mounting ring	AISI 316L / 1.4404
20	Bearing	Corrosion resistant steel
21	Ext. bowed shaft ring	Stainless steel
22	Cover nut	Plastic

* Available spare parts; ** Optional.

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 P20P										
Valve model	P20P	1	W	N	E				A	108
P20P – Piston sensing	P20P									
Outlet spring range										
N°1 – 0,2 to 1,5 bar		1								
N°2 – 0,3 to 3 bar		2								
N°3 – 0,8 to 8 bar		3								
N°4 – 1,5 to 15 bar		4								
N°5 – 3 to 30 bar		5								
N°6 – 5 to 50 bar		6								
N°7 – 20 to 200 bar		7								
Application										
Water			W							
Gases			G							
Oxygen (degreased)			O							
Seal material										
NBR			N							
EPDM			E							
PTFE a)			T							
FPM / Viton			V							
Maximum inlet pressure										
80 bar			E							
220 bar			F							
Gauge port 1/4" b)										
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							
Relieving										
Non-relieving			(1)							
Relieving (only for non dangerous gases)			R							
Relieving with captured vent			L							
Panel mounting										
Without panel mounting ring			(1)							
With panel mounting ring			P							
Pipe connection										
Threaded ISO 7 Rp			A							
Threaded NPT ANSI B1.20.1			C							
Size										
1/4" – Kvs 0,043										108
1/4" – Kvs 0,22										208
1/4" – Kvs 0,62										308
Special valves / Extras										
Full description or additional codes have to be added in case of non-standard combination.										E

(1) Omitted if a standard valve is requested.

a) Valve seal only, other seals in Viton.

b) Gauge port can also be used as external sensing line.