

PISTON SENSING PRESSURE REDUCING VALVE P 20P (Low flow) DN 1/4"

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.

Connections are female screwed.

MAIN FEATURES

Compact design.

Machined from barstock materials

No rising handwheel

Ultrasonically cleaned and degreased



OPTIONS:

Different soft valves for liquids 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:

DN 1/4"

CONNECTIONS:

Female screwed ISO7/1Rp(BS 21) or NPT.
Special connections on request

INSTALLATION:

In any position

An upstream strainer should be provided 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

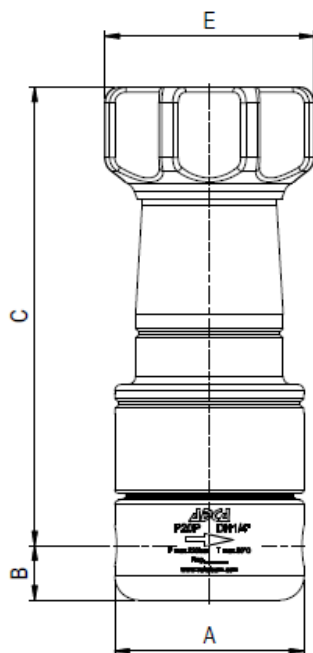
Capacity (maximum and minimum).

CAPACITIES			
Valve Size	1/4"	1/4"	1/4"
KVs (m3/h)	0,043	0,22	0,62

LIMITING CONDITIONS	
Valve model	P20P
Body design conditions	PN 320
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

*Other on request.

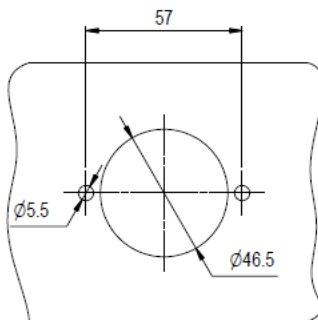
CE MARKING (PED - European Directive 97/23/EC)	
PN 320	Category
DN 1/4"	SEP - art. 3, paragraph3



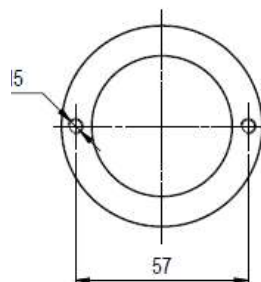
DIMENSIONS (mm)							
Screwed							
SIZE DN	A	B	C	ØE	d*	d1*	WGT. Kgs
1/4"	59	17	143,5	69	1/8"-1/4"	1/8"-1/4"	2,5

* Optional: pressure gauge or captured vent connection.

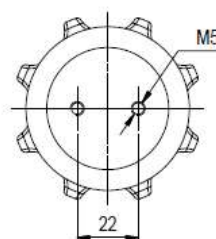
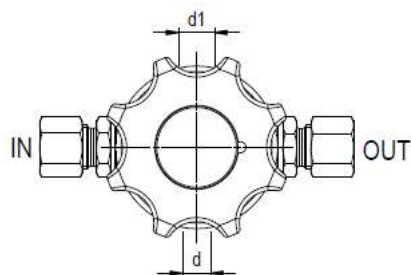
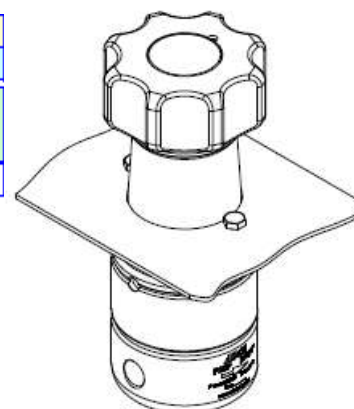
Panel mounting



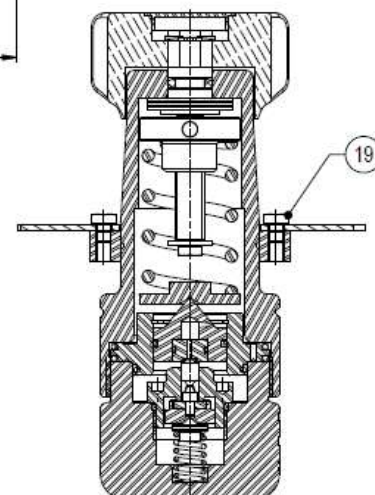
Panel cut-out



Ring



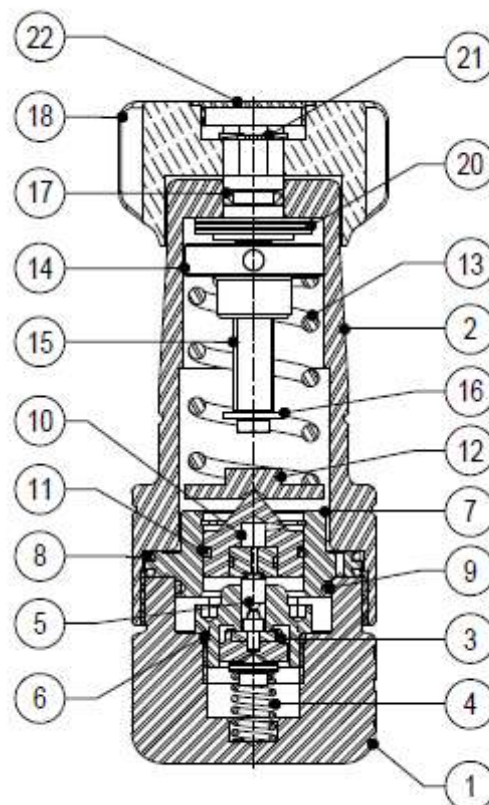
Bottom mounting



MATERIALS		
POS.	DESIGNATION	MATERIAL
1	VALVE BODY	AISI316L / 1.4404
2	TOP COVER	AISI316L / 1.4404
3	* VALVE HEAD	NBR-EPDM-PTFE, etc
4	* VALVE SPRING	AISI302 / 1.4300
5	PUSHROD	AISI316L / 1.4404
6	* O-RING	NBR-EPDM-PTFE, etc
7	PISTON SLEEVE	AISI316L / 1.4404
8	* O-RING	NBR-EPDM-PTFE, etc
9	* O-RING	NBR-EPDM-PTFE, etc
10	PISTON	AISI316L / 1.4404
11	* O-RING	NBR-EPDM-PTFE, etc
12	SPRING PLATE	AISI316L / 1.4404
13	* ADJUSTMENT SPRING	SPRING STEEL
14	TOP SPRING PLATE	AISI316L / 1.4404
15	ADJUSTMENT SCREW	AISI316L / 1.4404
16	RETAINING WASHER	ST. STEEL A2
17	* O-RING	NBR-EPDM-PTFE, etc
18	HANDWHEEL	ALUMINIUM PAINTED
19	** PANEL MOUNTING RING	AISI316L / 1.4404
20	BEARING	CORROSION RES. STEEL
21	EXT. BOWED SHAFT RING	STAINLE SS 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 - Diaphragm sensing	P20P									
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							
Nº4 - 1,5 to 15 bar			4							
Nº5 - 3 to 30 bar			5							
Nº6 - 5 to 50 bar			6							
Nº7 - 20 to 200 bar			7							
Aplication										
Water				W						
Gases				G						
Oxygen (Degreased)				O						
Seal material										
NBR					N					
EPDM					E					
PTFE					T					
FPM/VITON					V					
Maximum inlet pressure										
80 bar						E				
220 bar						F				
Gauge port 1/4" *										
Without gauge ports								(1)		
Gauge port on the left side (Related to the flow direction)								4		
Gauge port on the right side (Related to the flow direction)								3		
Gauge ports on both sides								2		
Relieving										
Non-relieving									(1)	
Relieving (Only for non dangerous gases)									R	
Panel mounting										
Without panel mounting ring										(1)
With panel mounting ring										P
Pipe connection										
Threaded BSP ISO 7/1 Rp										A
Threaded NPT ANSI B1.20.1										C
Size										
DN 1/4" - Kvs 0,043										108
DN 1/4" - Kvs 0,22										208
DN 1/4" - Kvs 0,62										308
Special valves / Extras b)										E

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

(1) Omitted if a standard valve is requested

b) Full description or additional codes have to be added in case of non-standard combination.