

## PISTON SENSING PRESSURE REDUCING VALVE

### PRV 31SS

DN 11/2" – 2"; DN40 – DN50

#### DESCRIPTION

The ADCA PRV31 series **direct acting, spring-loaded piston sensing, balanced valve** pressure reducing valves, are designed for use on compressed air, water and other gases or liquids compatible with the materials of the construction.

They are suitable for pressure reducing stations at the point of use on laundry machines, dyeing, food industries, sterilizers, etc.

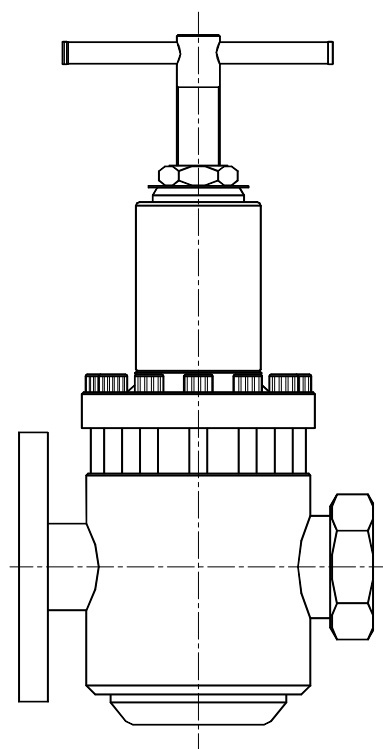
Connections are female screwed or flanged.

#### MAIN FEATURES

Compact design.

Balanced valve.

Machined from barstock materials.



#### OPTIONS:

Different soft valves for water and gases.

Relieving-Internal relief valve to allow reduce outlet pressure in a no-flow condition.

Built-in strainer.

Outlet 1/4" gauge connection on body.

Regulating screw with top cap.

#### USE:

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

#### AVAILABLE MODELS:

PRV31/SS – Stainless steel.

#### SIZES:

DN 11/2" and DN 2"  
DN 40 and DN 50

#### CONNECTIONS:

Female screwed ISO7/1Rp(BS 21) or NPT.  
Flanged EN 1092-1 PN40-PN63.  
Special flanges upon request.

#### INSTALLATION:

Horizontal installation.  
An "Y" strainer should be provided upstream the valve.

#### ORDER

#### REQUIREMENTS :

See IMI, installation and maintenance instructions.

Type of fluid

Maximum operating temperature

Inlet pressure and required outlet pressure

Capacity (maximum and minimum).

#### CAPACITIES

Valve Size	40	50
KVs (m3/h)	14,4	15,4

#### LIMITING CONDITIONS

Valve model	PRV31SS
Body design conditions	PN 63
Max.upstream pressure	50 bar
Max.downstream pressure	50 bar
Min.downstream pressure	3 bar
Max.design temperature *	80 °C
Max.recommended reducing ratio	40:1

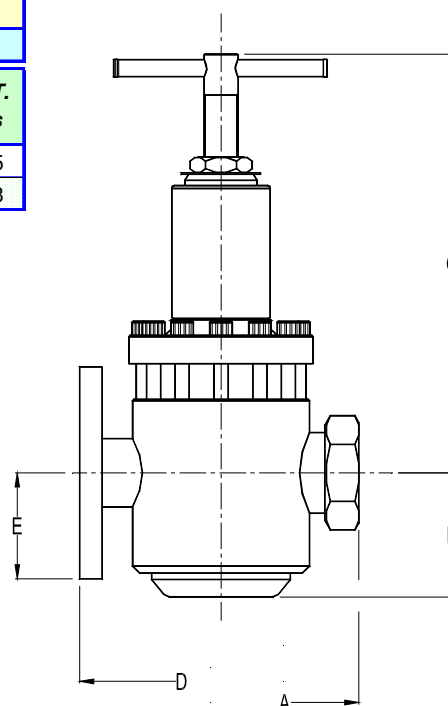
\*Other on request.

#### CE MARKING (PED - European Directive 97/23/EC)

PN 63	Category
DN 40-50	1 (CE Marked)

DIMENSIONS (mm)											
Screwed					Fig.PN16/40			Fig.PN63/100			
SIZE DN	A	B	C	WGT. Kgs	D*	E	WGT. Kgs	D*	E (PN63)	E PN100)	WGT. Kgs
11/2"-40	195	90	295	17	200	75	21,4	260	85	85	20,5
2"-50	205	90	295	17,4	230	82,5	22,5	300	90	97,5	23.3

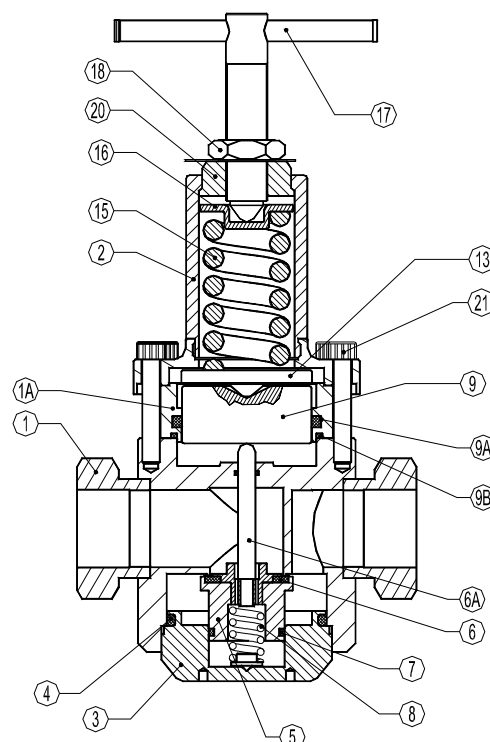
\* Different lenghts on request.



MATERIALS		
POS.	DESIGNATION	MATERIAL
1	VALVE BODY	AISI316 / 1.4401 ; CF8M / 1.4408
1A	PISTON SLEEVE	AISI316 / 1.4401 ; CF8M / 1.4408
2	TOP COVER	AISI316 / 1.4401 ; CF8M / 1.4408
3	SEAT COVER	AISI316 / 1.4401 ; CF8M / 1.4408
4	* O-RING	NBR
5	* PISTON VALVE	AISI316 / 1.4401
6	* VALVE HEAD	NBR-EPDM-PTFE,etc
6A	PUSHROD	AISI316 / 1.4401
7	* O-RING	NBR-EPDM-PTFE,etc
8	* VALVE SPRING	AISI302 / 1.4300
8A	* STRAINER SCREEN	AISI304 / 1.4301
9	PISTON	AISI316 / 1.4401
9A	* O-RING	NBR-EPDM-PTFE,etc
9B	*O-RING	NBR-EPDM-PTFE,etc
13	SPRING PLATE	AISI304 / 1.4301
15	* ADJUSTMENT SPRING	SPRING STEEL
16	TOP SPRING PLATE	BRASS
17	ADJUSTMENT SCREW	AISI304 / 1.4301
18	LOCKNUT	ST.STEEL A2-70
20	SPRING IDENT. PLATE	ALUMINIUM
21	BOLTS	STAINLESS ST. A2-70

\* 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 PRV31SS												
Valve Model	R31	.	1	W	N	C	.	.	.	.	15	
PRV31SS - Piston sensing	R31											
Outlet spring range												
Nº5 - 3 to 30 bar			5									
Nº6 - 5 to 50 bar			6									
Application												
Water				W								
Gases				G								
Oxygen (Degreased)				O								
Seal material												
NBR					N							
EPDM					E							
PTFE					T							
FPM/VITON					V							
Maximum inlet pressure												
30 bar						C						
50 bar						D						
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					
Pipe connection												
Threaded BSP ISO 7/1 Rp								A				
Threaded NPT ANSI B1.20.1								C				
Socket weld SW ANSI B16.11								H				
Butt weld BW ANSI B16.25								I				
Flanged EN1092-1 PN40								N				
Flanged EN1092-1 PN63								O				
Flanged ANSI B16.5 150#								U				
Flanged ANSI B16.5 300#								V				
Flanged ANSI B16.5 600#								W				
Size												
DN 1/2" or DN 15											15	
DN 3/4" or DN 20											20	
....											25	
											32	
											40	
											50	
Special valves / Extras b)												E

(1) Omitted if a standard valve is requested

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