



## PISTON SENSING PRESSURE REDUCING VALVE PRV31SS

1" - 11/4"; DN 25 - DN 32

## **DESCRIPTION**

The ADCA PRV31 series direct acting, spring-loaded piston sensing, balanced plug 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.



Compact design. Balanced valve.

OPTIONS: Different soft valves for water and gases.

Relieving - Internal relief valve to allow reduced

outlet pressure in a no-flow condition. 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: PRV31SS – Stainless steel.

SIZES: 1" and 11/4".

DN 25 and DN 32.

CONNECTIONS: Female threaded ISO 7 Rp or NPT.

Flanged EN1092-1 PN40 or PN63. Special flanges upon request.

Horizontal installation.

INSTALLATION: An "Y" strainer should be installed upstream of

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)							
PN40 / PN63	Category						
1" and 11/4"; DN 25 and DN 32	SEP						

CAPACITIES											
Valve size	1" – DN 25	11/4" – DN 32									
Kvs (m3/h)	7,5	8,2									

LIMITING CONDITIONS										
Valve model	PRV31SS									
Body design conditions	PN63									
Max. upstream pressure	50 bar									
Max. downstream pressure	50 bar									
Min. upstream pressure	3 bar									
Max. design temperature *	80 °C									
Max. recommended reducing ratio	40:1									

<sup>\*</sup> Others on request.





DIMENSIONS (mm) - BAR STOCK																
THREADED					PN40		PN63		ANSI 150 lb			ANSI 300 lb				
SIZE	Α	В	С	WGT. (kg)	D *	E	WGT. (kg)	D *	E	WGT. (kg)	D *	Е	WGT. (kg)	D *	E	WGT. (kg)
1" – DN 25	125	66	275	9,7	230	58	12	230	70	15	230	54	14	230	62	17
11/4" – DN 32	125	66	275	9,7	260	70	14	260	78	17	260	59	15	260	67	18

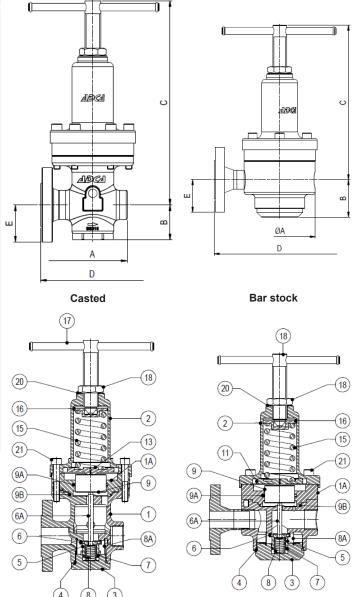
<sup>\*</sup> Different lenghts on request.

DIMENSIONS (mm) - CASTED											
	T	PN40									
SIZE	A B C		WGT. (kg)	D *	E	WGT. (kg)					
1" – DN 25	105	60	320	8,6	160	57,5	10,7				

	MATERIA	LS
POS.	DESIGNATION	MATERIAL
1	Valve body	AISI 316 / 1.4401; CF8M / 1.4408
1A	Piston sleeve	AISI 316 / 1.4401
2	Top cover	CF8M / 1.4408
3	Seat cover	AISI 316 / 1.4401
4	* O-ring	NBR
5	* Piston valve	AISI 316 / 1.4401
6	* Valve head	NBR; EPDM; PTFE; etc.
6A	Pushrod	AISI 316 / 1.4401
7	* O-ring	NBR; EPDM; PTFE; etc.
8	* Valve spring	AISI 302 / 1.4300
8A	* Strainer screen	AISI 304 / 1.4301
9	Piston	AISI 316 / 1.4401
9A	* O-ring	NBR; EPDM; Viton; etc.
9B	* O-ring	NBR; EPDM; PTFE; etc.
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	Locknut	Stainless steel A2-70
20	Spring id. plate	Aluminium
21	Bolts	Stainless steel A2-70
20	Spring id. plate	Aluminium

<sup>\*</sup> 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.







ORE	ERING	G C	DDES P	RV31S	3							
Valve model	R31	1.	5	W	N	С				Α		
PRV31SS – Piston sensing	R31	T										
Outlet spring range												
Nº 5 - 3 to 30 bar			5	1								
Nº 6 - 5 to 50 bar			6									
Application												
Water				W								
Gases	-			G								
Oxygen (degreased)	-			0								
Seal material												
NBR	-				N							
EPDM					E							
PTFE a)					Т							
FPM / Viton					V							
Maximum inlet pressure	_											
30 bar	_					С						
50 bar						D						
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					
Relieving												
Non-relieving								(1)				
Relieving (only for non dangerous gases)								R	Ц			
Pipe cor	nectio	n										
Threaded ISO 7 Rp										Α		
Threaded NPT ANSI B1.20.1									- '	С		
Socket weld SW ANSI B16.11										Н		
Butt weld BW ANSI B16.25										I		
Flanged EN 1092-1 PN40										N		
Flanged EN 1092-1 PN63										0		
Flanged ANSI B16.5 150 lb										U		
Flanged ANSI B16.5 300 lb									'	V		
Flanged ANSI B16.5 600 lb									١	W		
	Size											
1" or DN 25											25	
11/4" or DN 32											32	
			/ Extra									
Full description or additional codes have to be added in case	of non-	-sta	ndard c	ombinati	ion.							E

<sup>(1)</sup> Omitted if a standard valve is requested.

a) Valve seal only, other seals in Viton.