

**PISTON SENSING PRESSURE REDUCING VALVE
 PRV31
 (1" – 1 1/4"; 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.

MAIN FEATURES

Compact design.
 Balanced plug.

OPTIONS: Different soft valves for water and gases.
 Relieving – Internal relief valve to allow reduced outlet pressure in a no-flow condition.
 1/4" outlet gauge connection on body.
 Top cap (adjustment screw with cover).

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

AVAILABLE MODELS: PRV31SS – stainless steel, piston sensing.

SIZES: 1" and 1 1/4"; DN 25 and DN 32.

CONNECTIONS: Female threaded ISO 7 Rp or NPT.
 Flanged EN 1092-1 PN 40 or PN 63.
 Flanged ASME B16.5 Class 150 and 300.

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



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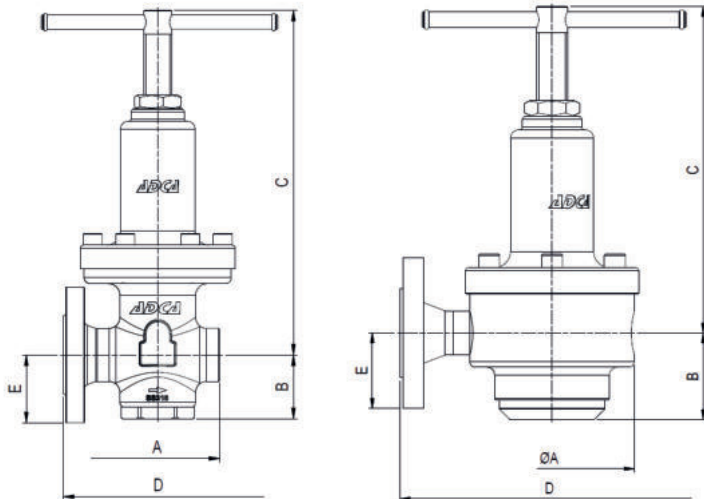
PN 63

FLOW RATE COEFFICIENTS (m³/h)		
SIZE	1" – DN 25	1 1/4" – DN 32
Kvs	7,5	8,2

LIMITING CONDITIONS	
Valve model	PRV31SS
Body design conditions	PN 63
Maximum upstream pressure	50 bar
Maximum downstream pressure	50 bar
Minimum downstream pressure	3 bar
Maximum design temperature *	80 °C
Maximum recommended reducing ratio	40:1

* Others on request.

CE MARKING – GROUP 2 (PED – European Directive)	
PN 63	Category
1" to 1 1/4" – DN 25 to 32	SEP



DIMENSIONS (mm) – CASTED VERSION							
THREADED				PN 40			
SIZE	A	B	C	WGT. (kg)	D *	E	WGT. (kg)
1" – DN 25	105	60	320	8,6	160	57,5	10,7

* Different lengths and connections on request.

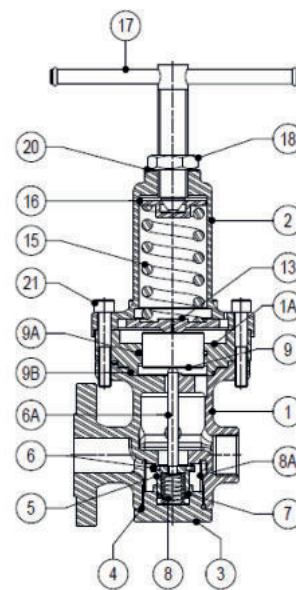
DIMENSIONS (mm) – BAR STOCK VERSION																
THREADED				PN 40			PN 63			CLASS 150			CLASS 300			
SIZE	A	B	C	WGT. (kg)	D *	E	WGT. (kg)	D *	E	WGT. (kg)	D *	E	WGT. (kg)	D *	E	WGT. (kg)
1" – DN 25	125	66	275	9,7	230	58	12	230	70	15	230	54	14	230	62	17
1 1/4" – DN 32	125	66	275	9,7	260	70	14	260	78	17	260	59	15	260	67	18

* Different lengths on request.

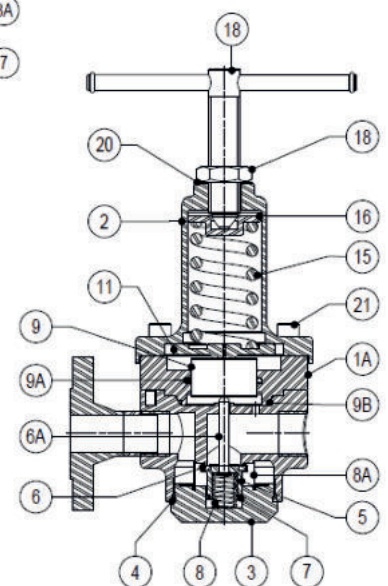
MATERIALS		
POS. N°	DESIGNATION	MATERIAL
1	Valve body	AISI 316 / 1.4401; A351 CF8M / 1.4408
1A	Piston sleeve	AISI 316 / 1.4401
2	Top cover	A351 CF8M / 1.4408
3	Seat cover	AISI 316 / 1.4401
4	* O-ring	NBR
5	* Piston valve	AISI 316 / 1.4401
6	* Valve head	NBR; EPDM; PTFE; etc.
6A	Pushrod	AISI 316 / 1.4401
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

* 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.



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ORDERING CODES PRV31												
Valve model	R31	.	5	W	N	C	4	R	.	A	25	
PRV31SS – piston sensing pressure reducing valve	R31											
Regulating range												
N° 5 - 3 to 30 bar			5									
N° 6 - 5 to 50 bar			6									
Application												
Water				W								
Gases				G								
Oxygen (degreased)				O								
Seal material a)												
NBR					N							
EPDM					E							
PTFE b)					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 (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		
Pipe connection												
Female threaded ISO 7 Rp											A	
Female threaded NPT ASME B1.20.1											C	
Socket weld (SW) ASME B16.11											H	
Butt weld (BW) ASME B16.25											I	
Flanged EN 1092-1 PN 40											N	
Flanged EN 1092-1 PN 63											O	
Flanged ASME B16.5 Class 150											U	
Flanged ASME B16.5 Class 300											V	
Flanged ASME B16.5 Class 600											W	
Size												
1" or DN 25												25
1 1/4" or DN 32												32
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 limited to the materials' maximum operating temperature. Consult manufacturer for more details.

b) Valve seal only, other seals in Viton.