

## PRESSURE REGULATING VALVE RP6D and RP6P

### DESCRIPTION

The ADCA RP6 series pressure regulating valves are single seated balanced plug, operated without auxiliary energy, designed for use on gases and liquids compatible with the construction.

They are particularly suitable for reducing or sustaining pressure in all industrial process systems where pressures should be kept constant.

### OPERATION

Pressure reduction is achieved by means of variable throttling of the inlet flow at the valve seat by variation of the flow area between seat and disc. The basic control element is composed by a pilot valve type P-20 (see IS P20D.01E), externally piped. It can vary according with the foreseen options, but always with basic function of controlling pressure in the chamber above valve's diaphragm (RP6D) or piston (RP6P)

### MAIN FEATURES

Robust construction  
Wide range of tailor made versions

OPTIONS:            Pressure sustaining design (SP6...)

USE:                 Gases and other fluids compatible with the construction.

AVAILABLE MODELS:    RP6DS– PN16 or PN40 diaphragm sensing  
RP6DI – PN16 or PN40 diaphragm sensing  
RP6PS – PN16 or PN40 piston sensing  
RP6PI– PN16 or PN40 piston sensing  
Suffix S : Cast steel construction  
Suffix I : Stainless steel construction

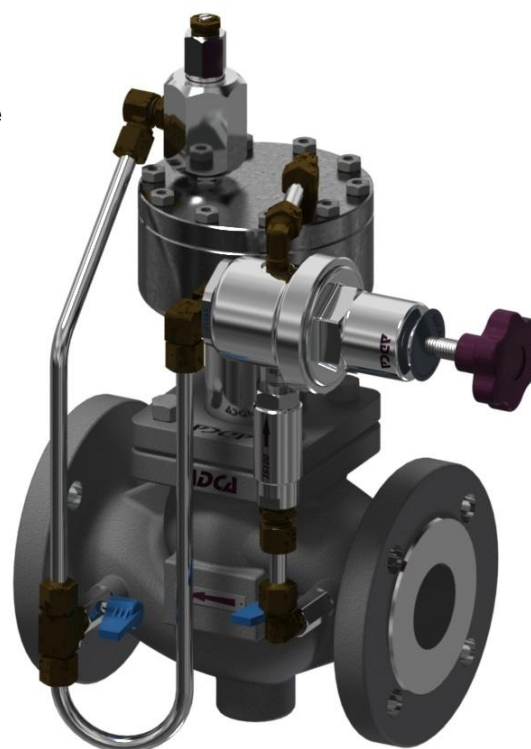
SIZES:                DN 32 to DN 100

CONNECTIONS:    Flanged EN 1092-1 PN16 and PN40  
ANSI on request

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



RP6D



RP6P

CE MARKING (PED - European Directive 97/23/EC)		
PN 16	PN 40	Category
DN32 to DN50	DN32	SEP - art. 3, paragraph3
DN65 to DN100	DN40 to DN100	1 (CE Marked)

**VALVE BODY LIMITING CONDITIONS**

RP6...S - PN16 *		RP6...I - PN16 *		RP6...S - PN40 *		RP6...I - PN40 *	
ALLOWABLE PRESSURES	RELATED TEMP.	ALLOWABLE PRESSURES	RELATED TEMP.	ALLOWABLE PRESSURES	RELATED TEMP.	ALLOWABLE PRESSURES	RELATED TEMP.
16 bar	-10 /120° C	16 bar	-10 /50° C	40 bar	-10 /50° C	40 bar	-10 /50° C
13,3 bar	200 °C	13,4 bar	200 °C	33,3 bar	200 °C	33,7 bar	200 °C
12,1 bar	250 °C	12,7 bar	250 °C	27,6 bar	300 °C	29,7 bar	300 °C
11 bar	300 °C	11,8 bar	300 °C	25,7 bar	350 °C	28,5 bar	350 °C
10,2 bar	350 °C	11,4 bar	350 °C	23,8 bar	400 °C	27,4 bar	400 °C

\* Rating according to EN1092-1:2007

Maximum temperature limited by the materials used such as o-rings, diaphragms, etc

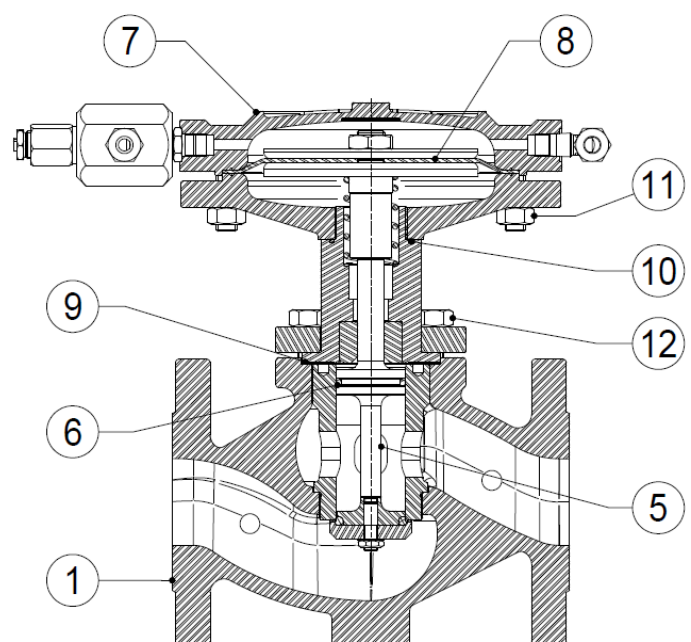
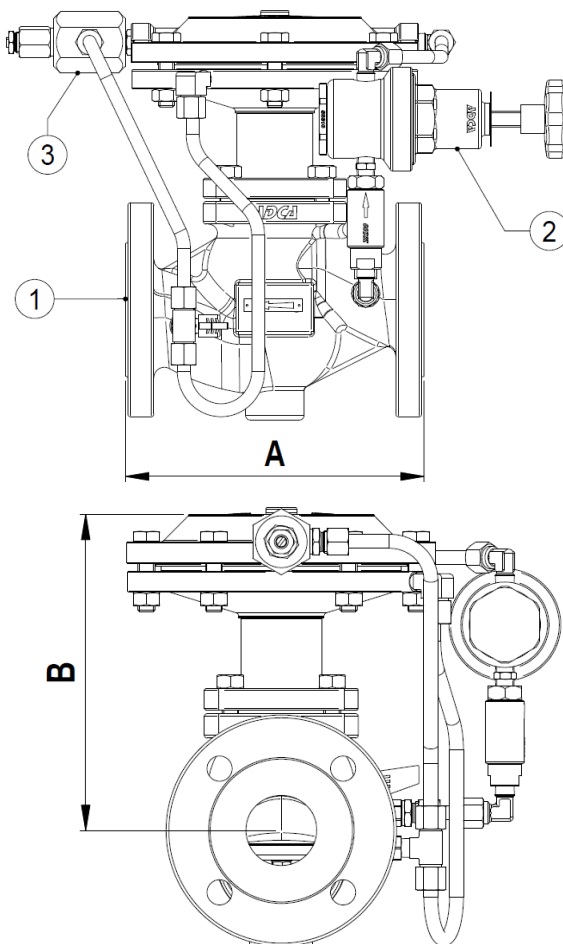
**MATERIALS**

POS.	DESIGNATION	MATERIAL RP6DS	MATERIAL RP6DI
1	Valve Body	ASTM A216WCB / 1.0619 ; GP240GH / 1.0619	CF8M / 1.4408
2	Pilot valve	AISI316 / 1.4401	AISI316 / 1.4401
3	Needle valve	AISI316 / 1.4401	AISI316 / 1.4401
5	Trim	Stainless steel	Stainless steel
6	O-Ring	NBR	NBR
7	Actuator	Steel	St. Steel
8	Diaphragm	Rubber	Rubber
9	Gasket	Non asbestos	Non asbestos
10	O-ring	NBR	NBR
11,12	Bolts	Steel 8.8	A2-70

**DIMENSIONS (mm)**

SIZE DN	A	B	WGT. Kgs
32	180	210	17
40	200	215	18,8
50	230	225	26,5
65	290	260	32
80	310	263	38
100	350	270	54

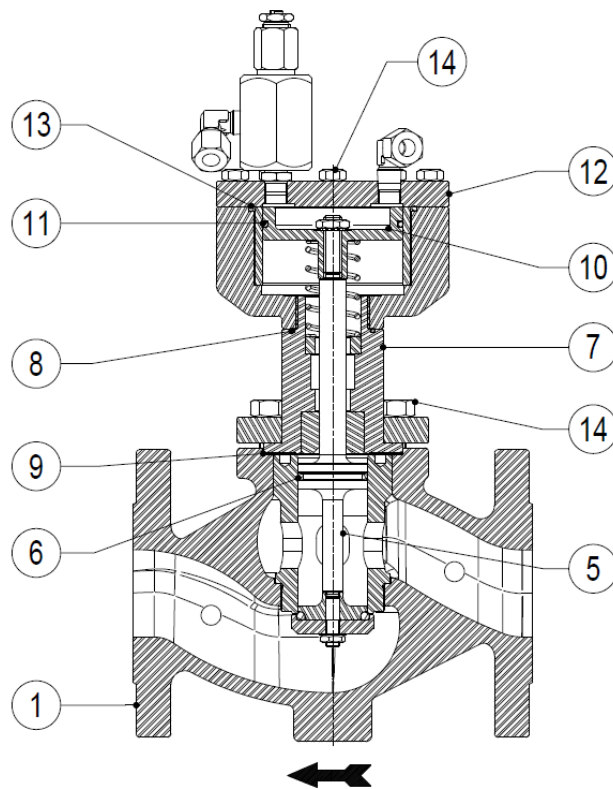
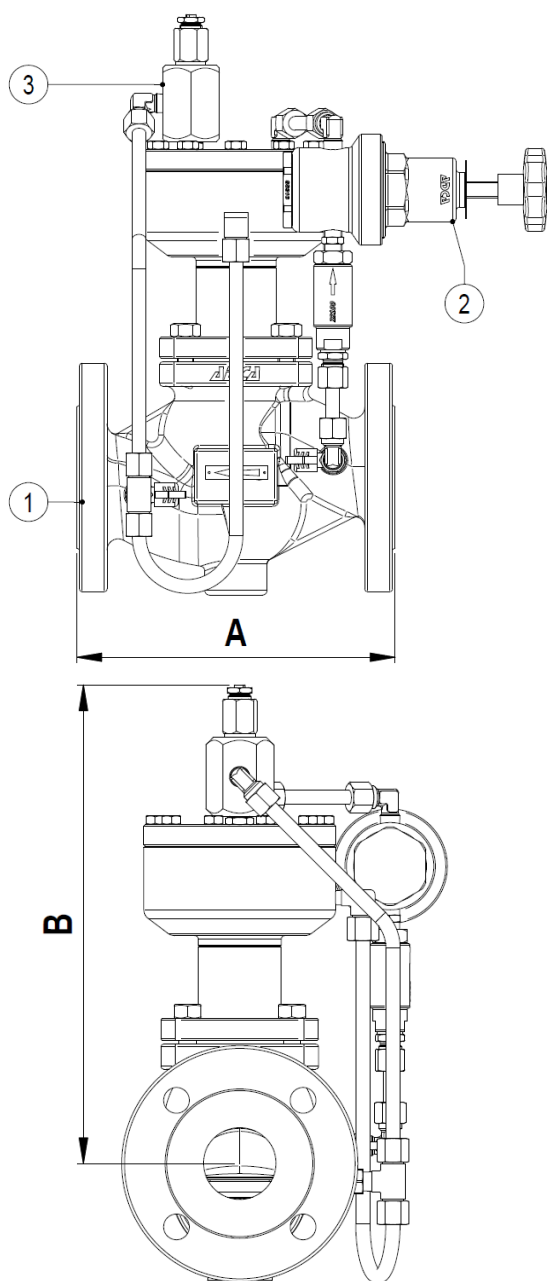
\*Approximate dimensions and weight, consult factory for certified figures.



MATERIALS			
POS.	DESIGNATION	MATERIAL RP6PS	MATERIAL RP6PI
1	Valve Body	ASTM A216WCB / 1.0619 ; GP240GH / 1.0619	CF8M / 1.4408
2	Pilot valve	AISI316 / 1.4401	AISI316 / 1.4401
3	Needle valve	AISI316 / 1.4401	AISI316 / 1.4401
5	Trim	Stainless steel	Stainless steel
6	O-Ring	NBR	NBR
7	Bonnet	CF8M / 1.4408	CF8M / 1.4408
8	O-Ring	NBR	NBR
9	Gasket	Non asbestos	Non asbestos
10	Piston	AISI316 / 1.4401	AISI316 / 1.4401
11	O-Ring	NBR	NBR
12	Cover	S355J2G3 / 1.0570	AISI316 / 1.4401
13	O-Ring	NBR	NBR
14	Bolts	Steel 8.8	A2-70

FLOW RATE COEFFICIENTS		
DN	RP6D	RP6P
	Kvs (m3/h) Full bore Std. Plug	Kvs (m3/h) Full bore Std. Plug
32	15,4	15,4
40	22,2	22,2
50	40,1	40,1
65	--	63,4
80	--	89,7
100	--	136,7

Kvs in m3/h , Sizing: see data sheet IS PV.10.00 E.  
For conversion Kvs = Cv(US) x 0,855



DIMENSIONS (mm)			
SIZE DN	A	B	WGT. Kgs
32	180	305	19
40	200	310	21
50	230	320	28,5
65	290	355	34
80	310	353	40
100	350	360	56

\*Approximate dimensions and weight, consult factory for certified figures.