

## 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 P20 (see IS P20D.01 E), 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.

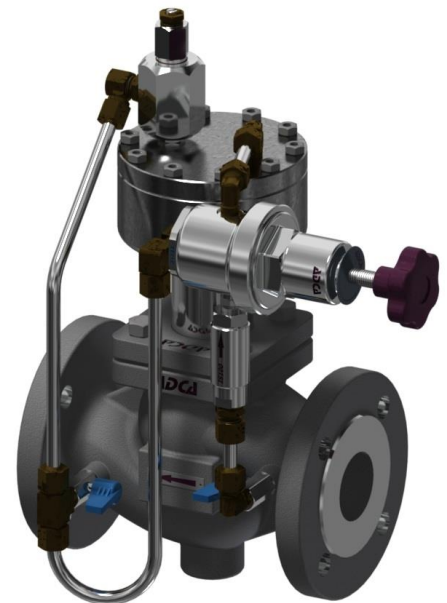
SIZES: DN 32 to DN 100.

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

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



RP6D



RP6P

#### CE MARKING – GROUP 2 (PED – European Directive)

PN16	PN40	Category
DN 32 to DN 50	DN 32	SEP
DN 65 to DN 100	DN 40 to DN 100	1 (CE marked)

**BODY LIMITING CONDITIONS**

RP6...S – PN16 *		RP6...I – PN16 *		RP6...S – PN40 *		RP6...I – PN40 *	
ALLOW. PRESS.	RELATED TEMP.	ALLOW. PRESS.	RELATED TEMP.	ALLOW. PRESS.	RELATED TEMP.	ALLOW. PRESS.	RELATED TEMP.
16 bar	-10 °C / 50 °C	16 bar	-10 °C / 50 °C	40 bar	-10 °C / 50 °C	40 bar	-10 °C / 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	250 °C	29,7 bar	300 °C
11 bar	300 °C	11,8 bar	300 °C	25,7 bar	300 °C	28,5 bar	350 °C
10,2 bar	350 °C	11,4 bar	350 °C	23,8 bar	350 °C	27,4 bar	400 °C

Note: Maximum temperatures limited by materials used, such as o-rings, diaphragms, etc.

\* Rating according to EN1092-1:2018;

**MATERIALS**

POS. Nº	DESIGNATION	MATERIAL RP6DS	MATERIAL RP6DI
1	Valve body	ASTM A216WCB / 1.0619; GP240GH / 1.0619	CF8M / 1.4408
2	Pilot valve	AISI 316 / 1.4401	AISI 316 / 1.4401
3	Needle valve	AISI 316 / 1.4401	AISI 316 / 1.4401
5	Trim	Stainless steel	Stainless steel
6	O-ring	NBR	NBR
7	Actuator	Steel	Stainless 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 – RP6D**

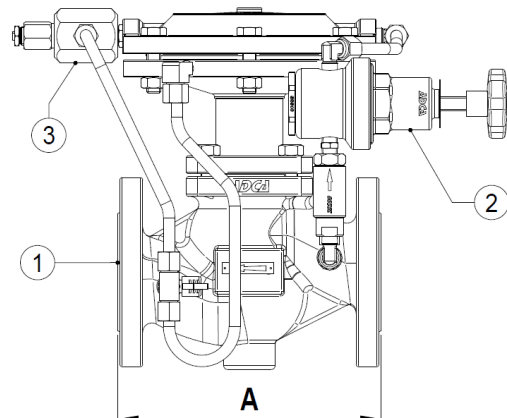
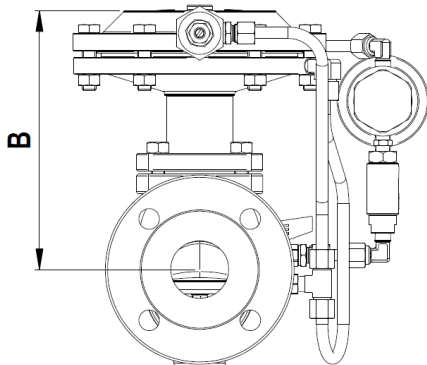
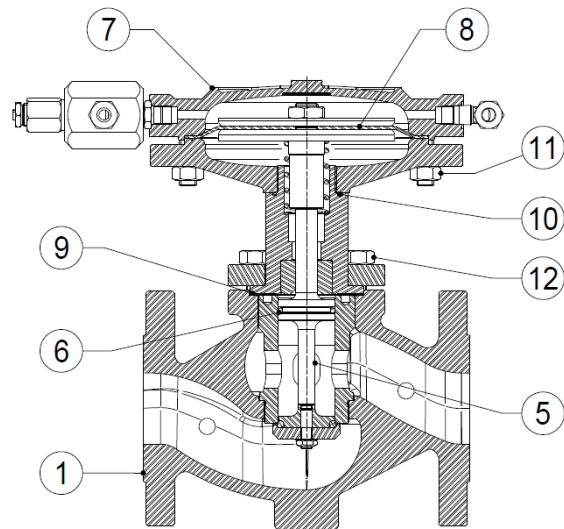
SIZE DN	A (mm)	B (mm)	WGT. (kg)
32	180	210	17
40	200	215	18,8
50	230	225	26,5
65	290	260	32
80	310	263	38
100	350	270	54

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

**FLOW RATE COEFFICIENTS (m³/h)**

SIZE DN	RP6D	RP6P
	Full bore Stand. Plug	Full bore Stand. 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

Sizing: see data sheet IS PV10.00 E;  
For conversion  $Kvs = Cv(US) \times 0,855$ .



MATERIALS			
POS. Nº	DESIGNATION	MATERIAL RP6PS	MATERIAL RP6PI
1	Valve body	ASTM A216WCB / 1.0619; GP240GH / 1.0619	CF8M / 1.4408
2	Pilot valve	AISI 316 / 1.4401	AISI 316 / 1.4401
3	Needle valve	AISI 316 / 1.4401	AISI 316 / 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	AISI 316 / 1.4401	AISI 316 / 1.4401
11	O-ring	NBR	NBR
12	Cover	S355J2G3 / 1.0570	AISI 316 / 1.4401
13	O-ring	NBR	NBR
14	Bolts	Steel 8.8	A2-70

DIMENSIONS – RP6P			
SIZE DN	A (mm)	B (mm)	WGT. (kg)
32	180	305	19
40	200	310	21
50	230	320	28,5
65	290	355	34
80	310	355	40
100	350	360	56

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

