

**PNEUMATIC CONTROL VALVES  
PPV25 – ON-OFF**

(V25 globe valves series with PPI series linear piston actuators)

**DESCRIPTION**

The PPV25 on-off valves are single seated, two-way body constructed with in-line straight connections. The PPI pneumatic actuators are of the piston type. Their wide application ranges allows the use of this valve with the most common process fluids such as water, superheated water, steam, air, gas and other fluids.

**MAIN FEATURES**

Single seated, two ways, direct or reverse action valve.  
Soft sealing as standard.  
Actuator housing 360° rotation (clockwise).

**OPTIONS:** Air filter regulator.  
Normally open and double effect actuator versions.  
Inductive travel switch.  
Pilot solenoid valve.

**USE:** Saturated and superheated steam.  
Hot and superheated water.  
Air, gases and other non-corrosive fluids.

**AVAILABLE MODELS:** PPV25G – Nodular iron.  
PPV25I – Stainless steel.

**VALVE SIZES:** DN 15 to DN 50.

**CONNECTIONS:** Flanged EN1092-1/-2 PN16.

**ACTUATORS:** PPI-63 (stainless steel);  
PPI-90 (stainless steel).

**ACTUATORS CONNECTIONS:** PPI-63: G1/8" NPT;  
PPI-90: G1/4" NPT.

**AIR SUPPLY PRES.:** 5 - 8 bar (max. 8 bar).



**AMBIENT TEMP.:** -20 °C to 70 °C.

**BONNET:** Standard – up to 220 °C;  
Extended finned – above 220 °C.

**STEM SEALING:** PTFE/GR V-Rings – up to 220 °C.

**PLUG DESIGN:** PT – On-off.

**PORT:** Full port as standard.

FLOW RATE COEFFICIENTS						
	SIZES					
	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
<b>Kvs</b>	5,2	7,3	11,7	18	27	43

VALVE BODY LIMITING CONDITIONS			
PPV25G		PPV25I	
ALLOW. PRESS.	RELATED TEMP.	ALLOW. PRESS.	RELATED TEMP.
16 bar	-10 / 120 °C	16 bar	-10 / 100 °C
15,5 bar	150 °C	14,5 bar	150 °C
14,7 bar	200 °C	13,4 bar	200 °C
13,9 bar	250 °C	12,7 bar	250 °C
12,8 bar	300 °C	11,8 bar	300 °C

Note: Maximum temperature limited to the valve packing selected.  
Valves with soft seat, maximum allowable temperature: 200 °C.

CE MARKING – GROUP 2 (PED – European Directive)	
PN16	Category
DN 15 to DN 50	SEP

**MAX. PERMISSIBLE PRESS. DROP (bar)**  
Normally closed valve (fluid to open)  
Reverse action actuator (air signal to open)

ACT. TYPE	AIR PRESSURE	SIZES					
		DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
PPI-63	5 – 8 bar	18	18	8	4	3	-
PPI-90	5 – 8 bar	-	-	24	18	13	9

Note: Waterhammer free design.

**MAX. PERMISSIBLE PRESS. DROP (bar)**  
Normally open valve (fluid to open)  
Direct action actuator (air signal to close)

ACT. TYPE	AIR PRESSURE	SIZES					
		DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
PPI-63	5 – 8 bar	16	16	16	16	16	-
PPI-90	5 – 8 bar	-	-	16	16	16	8

Note: Waterhammer free design.

**MAX. PERMISSIBLE PRESS. DROP (bar)**  
Normally closed valve (fluid to close)  
Reverse action actuator (air signal to open)

ACT. TYPE	AIR PRESSURE	SIZES					
		DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
PPI-63	5 – 8 bar	16	16	16	-	-	-
PPI-63	6 – 8 bar	16	16	16	16	-	-
PPI-63	7 – 8 bar	16	16	16	16	16	8
PPI-90	5 – 8 bar	-	-	-	16	-	-
PPI-90	6 – 8 bar	-	-	-	16	16	-
PPI-90	7 – 8 bar	-	-	-	16	16	16

Note: not recommended when controlling liquids at high speed due to waterhammer occurrence.

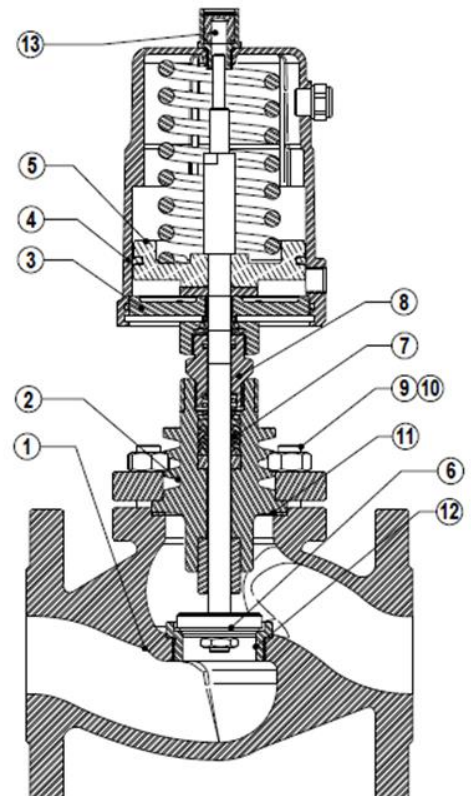
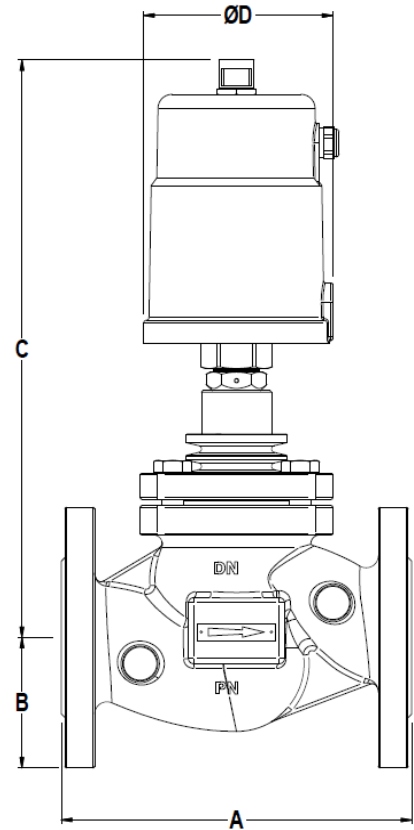
**DIMENSIONS (mm)**

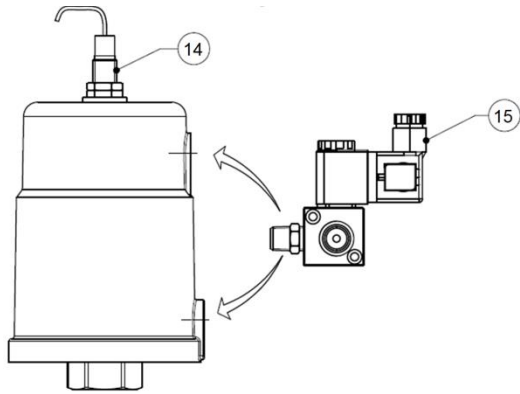
SIZE DN	A	B	C		ØD		WGT. (kg) w/PPI63	WGT. (kg) w/PPI90
			ACTUATOR PPI-63	ACTUATOR PPI-90	ACTUATOR PPI-63	ACTUATOR PPI-90		
15	130	48	250	75	300	110	3,7	5,2
20	150	53	250	75	300	110	4,5	6
25	160	58	250	75	300	110	5,5	7
32	180	70	270	75	325	110	7	8,5
40	200	75	280	75	330	110	9,7	11,2
50	230	83	290	75	340	110	11,7	13,2

**MATERIALS**

POS. Nº	DESIGNATION	MATERIAL PPV25G	MATERIAL PPV25I
1	Valve body	GJS-400-15 / 0.7040	CF8M / 1.4408
2	Bonnet	CF8M / 1.4408	CF8M / 1.4408
3	Actuator flange	CF8 / 1.4308	CF8 / 1.4308
4	Actuator cover	CF8 / 1.4308	CF8 / 1.4308
5	Piston	Aluminium	Aluminium
6	* Valve plug	1.4401 / PTFE/GR	AISI 1.4401 ; PTFE/GR
7	* Packing	PTFE/GR	PTFE/GR
8	Gland nut	AISI 316 / 1.4401	AISI 316 / 1.4401
9	Studs	34CrNiMo6 / 1.6582	A4 – 70
10	Nuts	Steel 8.8	A4 – 70
11	Gasket	St. steel / Graphite	St. steel / Graphite
12	Seat	AISI 316 / 1.4401	AISI 316 / 1.4401
13	Indication stem	Plastic	Plastic
14	** Travel switch	Metal	Metal
15	** SV32C valve	Aluminium alloy	Aluminium alloy

\* Available spare parts.





**\*\* TRAVEL SWITCH**

The travel switch provides an electrical signal that indicates either the open or closed position of the valve. This signal is given by a non-contact electronic inductive proximity sensor.

ORDERING CODES PPV25							
VALVE CODES	PPV	.25G	9	L	15	A	.X.
Group designation							
Pneumatic on-off valve	PPV						
Valve model							
GJS-400-15 body, stainless steel trim		.25G					
CF8M / 1.4408 body, stainless steel trim		.25I					
Valve plug							
PT (on-off) – Soft (PTFE/GR)			9				
PT (on-off) – Metal AISI 316 / 1.4401			10				
Pipe connection							
Flanged EN 1092 PN16				L			
Size							
DN 15					15		
DN 20					20		
...							
Fluid direction							
Fluid enters above the seat						A	
Fluid enters below the seat						B	
Actuator							(1)
Extras (3)							
Full description or additional codes have to be added in case of non-standard combination							E

ACTUATOR CODES (pneumatic)	PI.		
Group designation			
Piston linear actuator	PI.		
Actuator size			
Piston pneumatic actuator PPI 63		.63	
Piston pneumatic actuator PPI 90		.90	
Actuator type			
Direct action (air to close)			.D
Reverse action (air to open)			.R
Actuator Construction			
Stainless steel			(2)

→ To be introduced on ".X.", if supplied in combination with the valve.

Example:

PPV25G valve model, on-off soft plug, DN 15, fluid entering above the seat, complete with reverse action stainless steel actuator:

Code: PPV.25G9L15A.90.R

REMARKS:

- (1) – Indicate actuator type.
- (2) – Omitted if the standard valve is selected.

ADCA Trol control valves are identified by a serial number on a nameplate, located on the actuator yoke. When ordering spares, always use that serial number. If the valve has non-standard extras the serial number also has an E (extras).