

PNEUMATIC CONTROL VALVES PPV25 ON/OFF

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 way, direct or reverse action valve.

Soft sealing as standard.

Actuator housing 360° rotation (clockwise).

OPTIONS AND

ACCESSORIES: 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 – SG iron.
PPV25I – stainless steel.

SIZES: DN 15 to DN 50.

CONNECTIONS: Flanged EN 1092-1/-2 PN 16.

AVAILABLE ACTUATORS: PPI-63 (stainless steel).
PPI-90 (stainless steel).

ACTUATORS CONNECTIONS: PPI-63: 1/8" NPT.
PPI-90: 1/4" NPT.



AIR SUPPLY
PRESURE: 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.

CE MARKING – GROUP 2 (PED – European Directive)

PN 16	Category
DN 15 to 50	SEP

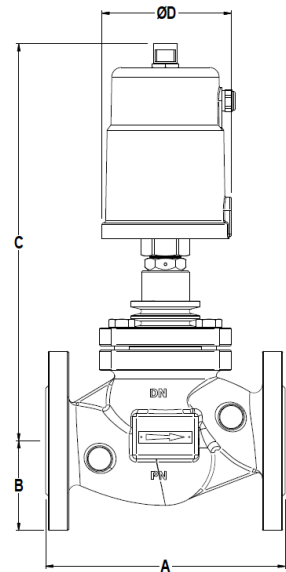
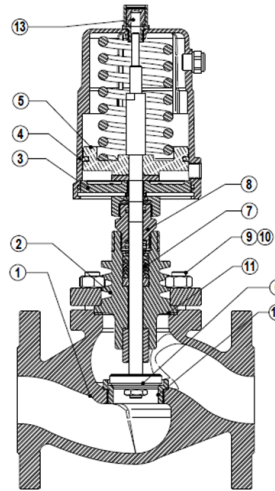
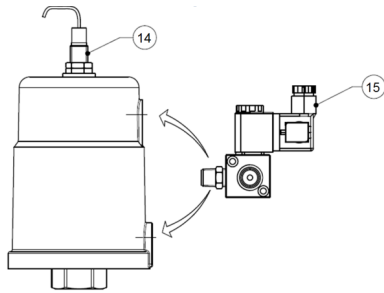
BODY LIMITING CONDITIONS

PPV25G *		PPV25I **	
ALLOWABLE PRESSURE	RELATED TEMPERATURE	ALLOWABLE PRESSURE	RELATED TEMPERATURE
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

* Rating according to EN 1092-2:2007.

** Rating according to EN 1092-1:2018.

Remarks: Max. temperature limited to the valve packing selected. Valves with soft sealing, max. allowable temperature: 200 °C.



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.

FLOW RATE COEFFICIENTS (m³/h)

SIZE	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
Kvs	5,2	7,3	11,7	18	27	43

MAX. PERM. PRESSURE DROP (bar) – N.C. (fluid to open) – Reverse action actuator (air signal to open)

ACTUATOR	AIR SUPPLY	VALVE SIZE					
		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

Remark: waterhammer free design.

MAX. PERM. PRESSURE DROP (bar) – N.O. (fluid to open) – Direct action actuator (air signal to close)

ACTUATOR	AIR SUPPLY	VALVE SIZE					
		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

Remark: waterhammer free design.

MAX. PERM. PRESSURE DROP (bar) – N.C. (fluid to close) – Reverse action actuator (air signal to open)

ACTUATOR	AIR SUPPLY	VALVE SIZE					
		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

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

DIMENSIONS (mm)

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

MATERIALS

POS. N°	DESIGNATION	PPV25G	PPV25I
1	Valve body	GJS-400-15 / 0.7040	A351 CF8M / 1.4408
2	Bonnet	A351 CF8M / 1.4408	A351 CF8M / 1.4408
3	Actuator flange	A351 CF8 / 1.4308	A351 CF8 / 1.4308
4	Actuator cover	A351 CF8 / 1.4308	A351 CF8 / 1.4308
5	Piston	Aluminium	Aluminium
6	* Valve plug	AISI 316 / 1.4401; PTFE/GR	AISI 316 / 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	Stainless steel A4-70
10	Nuts	Steel 8.8	Stainless steel 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.

** Optional.

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) – Metallic (AISI 316 / 1.4401)			10					
Pipe connection								
Flanged EN 1092 PN 16				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								
Full description or additional codes have to be added in case of non-standard combination.								E

ACTUATOR CODES (PNEUMATIC)			
VALVE CODES	PI.	.63	.D
Group designation			
Piston linear actuator	PI.		
Actuator type			
PPI-63		.63	
PPI-90		.90	
Actuator type			
Direct action (air to close)			.D
Reverse action (air to open)			.R
Actuator Construction			
Stainless steel construction			(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.
- (2) – Omitted if the standard valve is selected.

ADCArol 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 has also an E (extras).