

PNEUMATIC ON/OFF GLOBE VALVES PPV15 (EN)

DESCRIPTION

The ADCATrol PPV15 is a series of single seated, two-way pneumatic on/off globe valves with piston actuator. These valves are suitable for use with the most common process fluids such as steam, water, superheated water, air, neutral gases and oils.

MAIN FEATURES

- Easy to service.
- Compact and cost-effective.
- Class VI shut-off with PTFE/GR soft sealing up to 200 °C.
- Robust and compact piston actuator with 360° rotation.
- Ambient temperature from -20 °C to 70 °C.

OPTIONS AND

ACCESSORIES: M26 x 1,5 threaded connection on actuator.
Solenoid valves and limit switches.

USE: Saturated steam.
Hot and superheated water.
Air, gases and others.

AVAILABLE

MODELS: PPV15G – SG iron.
PPV15S – carbon steel.
PPV15i – stainless steel.

SIZES: DN 15 to DN 50.

CONNECTIONS: PPV15G – Flanged EN 1092-2 PN 16.
PPV15S and PPV15i – Flanged EN 1092-1
PN 16 or PN 40.



CE MARKING – GROUP 2 (PED – European Directive)

PN 16	PN 40	Category
DN 15 to 50	DN 15 to 32	SEP
–	DN 40 to 50	1 (CE marked)

BODY LIMITING CONDITIONS

PPV15G **		PPV15S *				PPV15i *			
FLANGED PN 16		FLANGED PN 16		FLANGED PN 40		FLANGED PN 16		FLANGED PN 40	
ALLOW. PRESSURE	RELATED TEMP.	ALLOW. PRESSURE	RELATED TEMP.	ALLOW. PRESSURE	RELATED TEMP.	ALLOW. PRESSURE	RELATED TEMP.	ALLOW. PRESSURE	RELATED TEMP.
16 bar	-10 °C/50 °C	16 bar	-10 °C/50 °C	40 bar	-10 °C/50 °C	16 bar	-10 °C/50 °C	40 bar	-10 °C/50 °C
14,7 bar	200 °C	13,3 bar	200 °C	33,3 bar	200 °C	13,4 bar	200 °C	33,7 bar	200 °C
13,9 bar	250 °C	12,1 bar	250 °C	27,6 bar	300 °C	12,7 bar	250 °C	29,7 bar	300 °C
12,8 bar	300 °C	11 bar	300 °C	25,7 bar	350 °C	11,8 bar	300 °C	28,5 bar	350 °C
11,2 bar	350 °C	10,2 bar	350 °C	23,8 bar	400 °C	11,4 bar	350 °C	27,4 bar	400 °C

* Rating according to EN 1092-1:2018, ** Rating according to EN 1092-2:2007.

STEM SEALING

PTFE/GR V-RINGS (V1.2)

-10 °C to 220 °C

PLUG DESIGN

PARABOLIC (SOFT SEALING)

Sealing: PTFE/GR
Characteristic: Quick-opening (On/Off)
Flow direction: From below
Leakage: Class VI, acc. to IEC 60534-4
Max. temp.: 200 °C

FLOW RATE COEFFICIENTS (m³/h)

	SIZES					
	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
Kvs	5,1	6,3	10	16	25	40
SEAT ø (mm)	19,2	19,2	25	32	38	48
STROKE (mm)	5	8	8	10	10	12,5

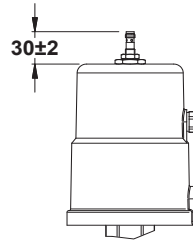
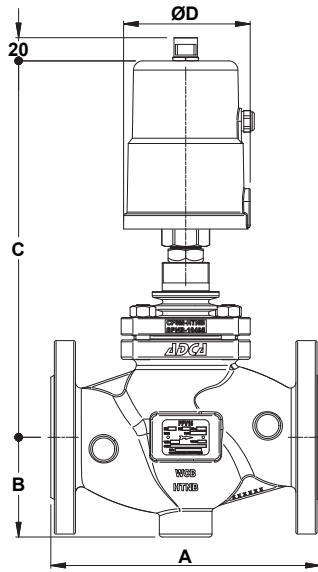
For conversion Kvs = Cv (US) x 0,865.

PPV15 – PA SERIES ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

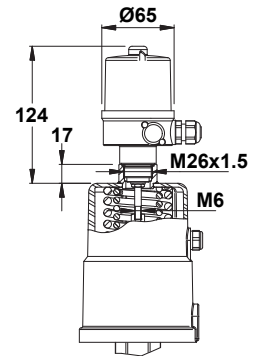
VALVE SIZE	ACTUATOR MODEL	MAX. PERMISSIBLE PRESSURE DROP (bar)									AIR SUPPLY PRESSURE (bar)				
		AIR TO OPEN (stem extends by spring force)	AIR TO CLOSE (stem retracts by spring force)								AIR TO OPEN (stem extends by spring force)	AIR TO CLOSE (stem retracts by spring force)			
			AIR SUPPLY PRESSURE (bar)									MIN.	MAX.	MIN.	MAX.
			1	2	3	4	5	6	7	8					
DN 15	PPI63 (30cm²)	22	2,5	9,7	17	24,2	31,5	38,7	46	53,2	5	8	1	8	
DN 20	PPI63 (30cm²)	22	2,5	9,7	17	24,2	31,5	38,7	46	53,2	5				
DN 25	PPI63 (30cm²)	12	1,4	5,6	9,9	14,2	18,5	22,8	27	31,3	5				
	PPI90 (60cm²)	28	3,1	11,6	20,2	28,8	37,3	45,9	54,4	63	5,5				
DN 32	PPI63 (30cm²)	8	0,8	3,4	6	8,6	11,2	13,8	16,4	19,1	5				
	PPI90 (60cm²)	21	1,8	7	12,3	17,5	22,7	27,9	33,2	38,4	5,5				
DN 40	PPI90 (60cm²)	15	1,3	5	8,7	12,4	16,1	19,8	23,5	27,2	5,5				
DN 50	PPI90 (60cm²)	9	0,8	3,1	5,4	7,7	10	12,4	14,7	17	6				

ACCESSORIES

SOLENOID VALVE	INDUCTIVE LIMIT SWITCH	LIMIT SWITCH BOX



Inductive limit switch

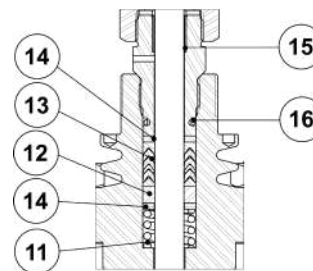
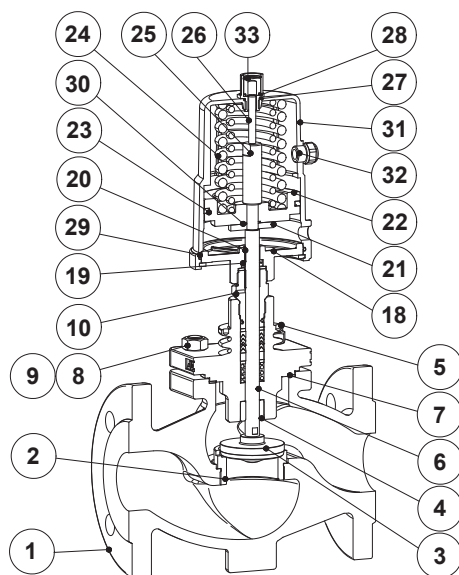


Limit switch box

DIMENSIONS (mm)

SIZE	A	B	PPI63			PPI90		
			C	D	WEIGHT (kg)	C	D	WEIGHT (kg)
DN 15	130	52	246	75	6,4	–	–	–
DN 20	150	53	246	75	7,2	–	–	–
DN 25	160	58	251	75	7,6	306	106	9,6
DN 32	180	70	251	75	10,5	304	106	12,7
DN 40	200	75	–	–	–	309	106	15,3
DN 50	230	85	–	–	–	321	106	18,9

MATERIALS



PTFE/GR V-Rings (V1.2)

MATERIALS		
POS. N°	DESIGNATION	MATERIAL
1	Valve body (PPV15G)	GJS-400-15 / 0.7040
	Valve body (PPV15S)	A216 WCB / 1.0619
	Valve body (PPV15i)	A351 CF8M / 1.4408
2	* Seat	AISI 316L / 1.4404
3	* Valve plug	AISI 316L / 1.4404; Graphite filled PTFE
4	Stem guide	Bronze CB1
5	Bonnet (PPV15G and PPV15S)	A351 CF8M / 1.4408; A216 WCB / 1.0619
	Bonnet (PPV15i)	A351 CF8M / 1.4408
6	* Stem	AISI 316L / 1.4404
7	* Gasket	Stainless steel / Graphite
8	Nuts (PPV15G and PPV15S)	Steel 8.8
	Nuts (PPV15i)	Stainless steel A2-70
9	Studs (PPV15G and PPV15S)	34CrNiMo6 / 1.6582
	Studs (PPV15i)	Stainless steel A2-70
10	* Packing nut	AISI 303 / 1.4305
11	Spring	AISI 302 / 1.4310
12	* Stem guide	Stainless steel filled PTFE
13	* Chevron packing set	PTFE; Graphite filled PTFE
14	Washer	AISI 304 / 1.4301
15	* Plain bearing	Bronze / PTFE
16	* O-ring	EPDM
18	Actuator body	A351 CF8M / 1.4408
19	* O-ring	NBR
20	* Plain bearing	Bronze / PTFE
21	Plate	AISI 304 / 1.4301
22	Piston	Alluminium
23	* O-ring	NBR
24	Spring	AISI 302 / 1.4310
25	Rod	Alluminium
26	Indicator rod	Plastic
27	* O-ring	NBR
28	* O-ring	NBR
29	* O-ring	NBR
30	* O-ring	NBR
31	Actuator cover	A351 CF8 / 1.4308
32	Silencer	Brass; Plastic
33	Visual position indicator	A351 CF8 / 1.4308; Acrylic

* Available spare parts.

ORDERING CODES PPV15												
Valve model	PPV	1	G	U	1	3	06	I	R	X	L	15
Pneumatic on/off globe valve, two-way, straight body	PPV											
Valve series												
Series 1		1										
Body material												
GJS-400-15 / 0.7040 SG iron			G									
A216 WCB / 1.0619 carbon steel			S									
A351 CF8M / 1.4408 stainless steel			I									
Flow direction												
Flow under the plug				U								
Stem sealing												
PTFE/GR V-Rings (V1.2)					1							
Valve sealing												
Soft sealed with PTFE/GR (class VI)						3						
Actuator model												
PPI63 (30 cm ²)							06					
PPI90 (60 cm ²)							09					
Actuator construction												
Stainless steel construction								I				
Actuator direction of action												
Air to open (stem extends by spring force)									R			
Air to close (stem retracts by spring force)									D			
Options												
None										X		
M26 x 1,5 threaded connection on actuator a)										T		
Pipe connection												
Flanged EN 1092-1/-2 PN 16											L	
Flanged EN 1092-1 PN 40											N	
Size												
DN 15												15
DN 20												20
...												
Special valves / Extras												
Full description or additional codes have to be added in case of a non-standard combination												E

a) Required for the assembly of top mounted limit switch box.