

PNEUMATIC ON/OFF GLOBE VALVES PPV15 (ASME)

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 -10 °C to 80 °C.

OPTIONS AND

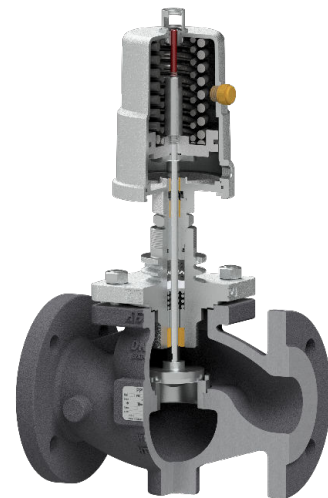
ACCESSORIES: M26 x 1,5 threaded connection on actuator.
Solenoid valves and limit switches.

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

AVAILABLE MODELS: PPV15S – carbon steel.

SIZES: 1/2" to 2"

CONNECTIONS: Flanged ASME B16.5 Class 150 or 300.



CE MARKING – GROUP 2 (PED – European Directive)

Class 150	Class 300	Category
1/2" to 2"	1/2" to 1"	SEP
–	1 1/2" and 2"	1 (CE marked)

BODY LIMITING CONDITIONS *

CLASS 150		CLASS 300	
ALLOWABLE PRESSURE	RELATED TEMPERATURE	ALLOWABLE PRESSURE	RELATED TEMPERATURE
19,3 bar	-10 °C / 50 °C	50 bar	-10 °C / 50 °C
15,8 bar	150 °C	43,9 bar	200 °C
12,1 bar	250 °C	36,9 bar	350 °C
8,4 bar	350 °C	34,6 bar	400 °C

* Rating according to EN 1759-1:2004.

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

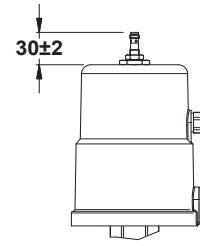
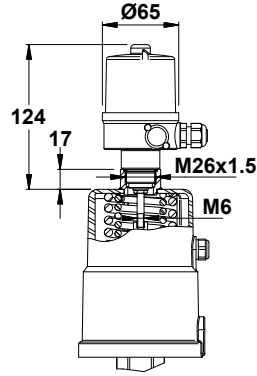
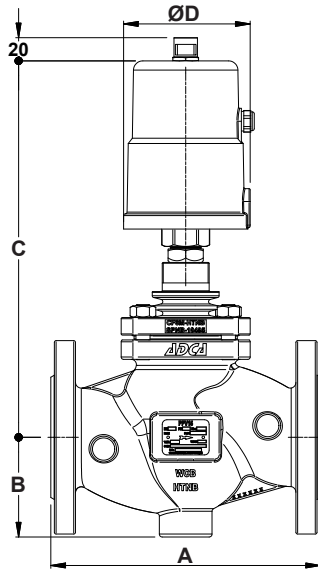
FLOW RATE COEFFICIENTS (m³/h)					
	SIZES				
	1/2"	3/4"	1"	1 1/2"	2"
Kvs	5,1	6,3	10	25	40
SEAT Ø (mm)	19,2	19,2	25	38	48
STROKE (mm)	5	8	8	10	12,5

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

PPV15 – PPI 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)											
			1	2	3	4	5	6	7	8	MIN.	MAX.	MIN.	MAX.
1/2"	PPI63 (30cm²)	22	2,5	9,7	17	24,2	31,5	38,7	46	53,2	5	8	1	8
3/4"	PPI63 (30cm²)	22	2,5	9,7	17	24,2	31,5	38,7	46	53,2	5			
1"	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			
1 1/2"	PPI90 (60cm²)	15	1,3	5	8,7	12,4	16,1	19,8	23,5	27,2	5,5			
2"	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

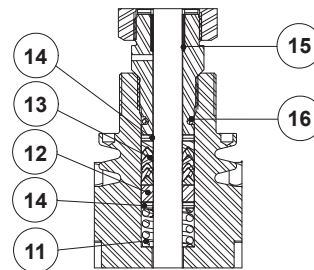
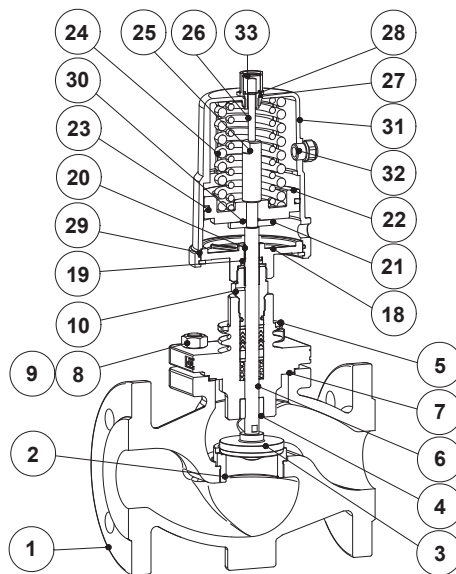


Limit switch box

Inductive limit switch

DIMENSIONS (mm)												
SIZE	A		B		PPI63				PPI90			
	CLASS 150	CLASS 300	CLASS 150	CLASS 300	C	ØD	WEIGHT (kg)		C	ØD	WEIGHT (kg)	
							CLASS 150	CLASS 300			CLASS 150	CLASS 300
1/2"	184	190	45	48	227	75	5,8	6,2	-	-	-	-
3/4"	184	194	49	58,5	227	75	6,2	7,2	-	-	-	-
1"	184	197	54	62	232	75	6,8	8,2	287	106	8,8	10,2
1 1/2"	222	235	65	78	-	-	-	-	307	106	13,8	16,6
2"	254	267	85	85	-	-	-	-	321	106	17,7	20

MATERIALS



PTFE/GR V-Rings
(V1.2)

MATERIALS

POS. N°	DESIGNATION	MATERIAL
1	Valve body	A216 WCB / 1.0619
2	* Seat	AISI 316L / 1.4404
3	* Valve plug	AISI 316L / 1.4404; Graphite filled PTFE
4	Stem guide	Bronze CB1
5	Bonnet	A351 CF8M / 1.4408; A216 WCB / 1.0619
6	* Stem	AISI 316L / 1.4404
7	* Gasket	Stainless steel / Graphite
8	Nuts	EN 10269 steel
9	Studs	EN 10269 steel
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	S	U	1	3	06	I	R	X	U	15	
Pneumatic on/off globe valve, two-way, straight body	PPV												
Valve series													
Series 1		1											
Body material													
A216 WCB / 1.0619 carbon steel			S										
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 ASME B16.5 Class 150											U		
Flanged ASME B16.5 Class 300											V		
Size													
1/2"												15	
3/4"												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.