

PNEUMATIC ON/OFF ANGLE SEAT VALVES PAV21

DESCRIPTION

The ADCATrol PAV21 is a series of pneumatic angle seat shut-off valves with piston actuators. These valves are suitable for use with the most common process fluids such as steam, water, superheated water, air, neutral gases and oils. The PAV21 is recommended for applications where flexibility and affordability are important requirements.

MAIN FEATURES

Corrosion resistant stainless steel body.
Easy to service.
Compact and cost-effective with high flow capacity.
Self-centering plug with Class VI shut-off and 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.

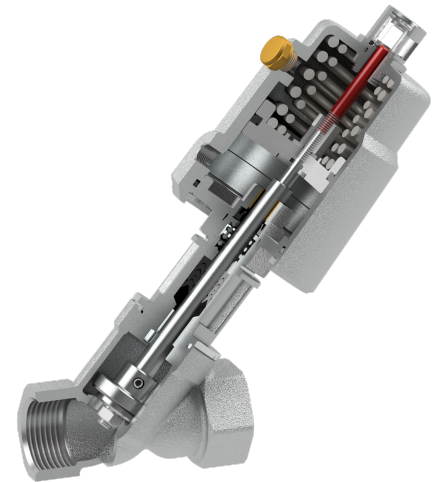
USE: Saturated steam.
Hot and superheated water.
Air, gases and others.

AVAILABLE

MODELS: PAV21.

SIZES: 1/2" to 2".

CONNECTIONS: Female threaded ISO 7 Rp or NPT.

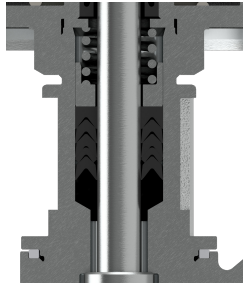


CE MARKING – GROUP 2 (PED – European Directive)

PN 16	Category
1/2" to 2"	SEP

STEM SEALING

PTFE/GR V-RINGS



-10 °C to 200 °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 1/4"	1 1/2"	2"
Kvs	4,8	9,5	18	23,2	32,7	52,6
SEAT Ø (mm)	13	18	24	31	35	45

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

PAV21 – PPI SERIES ACTUATORS – FTO, UNBALANCED TRIM, SOFT SEALING (CLASS VI)

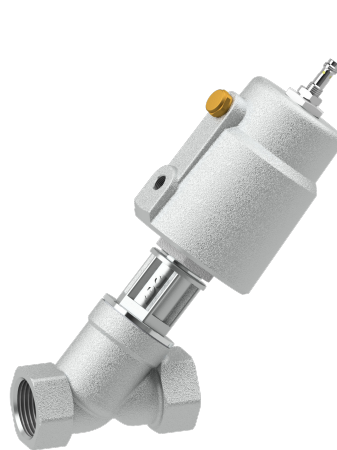
VALVE SIZE	ACTUATOR MODEL	MAX. PERMISSIBLE PRESSURE DROP (bar)									AIR SUPPLY PRESSURE (bar)			
		AIR TO OPEN (stem extends by spring force)	AIR TO CLOSE (stem retracts by spring force)								AIR TO OPEN (stem extends by spring force)	AIR TO CLOSE (stem retracts by spring force)		
			AIR SUPPLY PRESSURE (bar)											
			1	2	3	4	5	6	7	8			MIN.	MAX.
1/2"	PPI63 (30cm²)	16	6,2	16	16	16	16	16	16	16	5	8	1	8
3/4"	PPI63 (30cm²)	16	3,1	11,4	16	16	16	16	16	16				
1"	PPI63 (30cm²)	14	1,7	6,3	10,9	15,6	16	16	16	16				
1 1/4"	PPI90 (60cm²)	16	2	7,5	13,1	16	16	16	16	16				
1 1/2"	PPI90 (60cm²)	16	1,5	5,9	10,2	14,6	16	16	16	16				
2"	PPI90 (60cm²)	10	0,9	3,5	6,1	8,8	11,4	14,1	16	16				

ACCESSORIES

SOLENOID VALVE

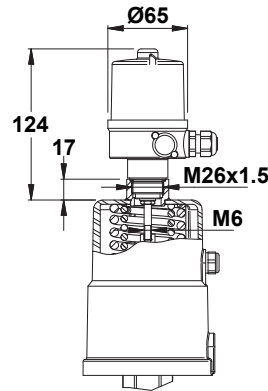
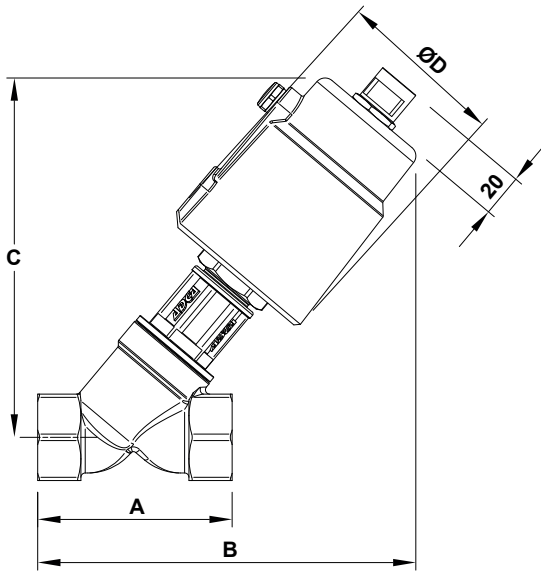


INDUCTIVE LIMIT SWITCH

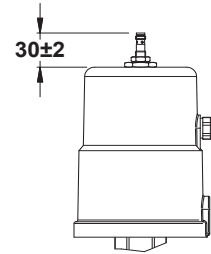


LIMIT SWITCH BOX





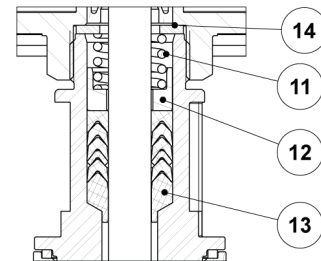
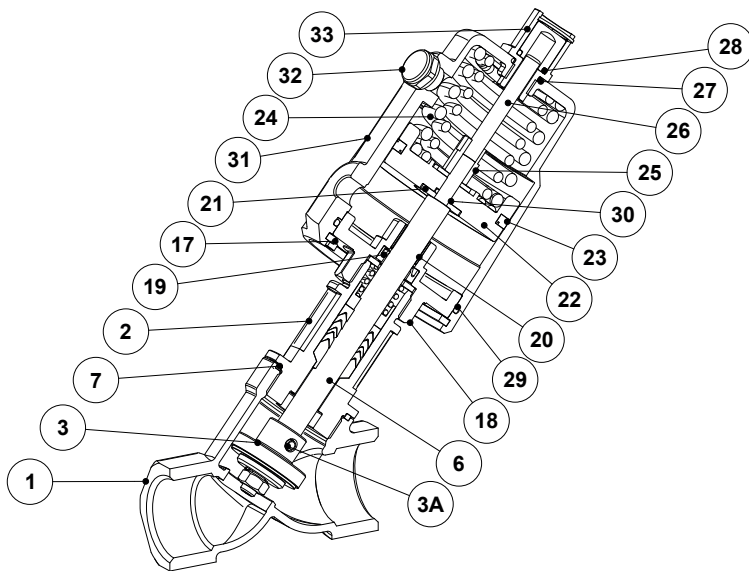
Limit switch box



Inductive limit switch

DIMENSIONS (mm)					
SIZE	A	B	C	ØD	WEIGHT (kg)
1/2"	68	174	155	75	1,4
3/4"	75	182	158	75	1,5
1"	90	190	166	75	1,7
1 1/4"	116	261	227	110	3,3
1 1/2"	116	265	229	110	3,5
2"	138	282	238	110	4,7

MATERIALS



PTFE/GR V-Rings

MATERIALS

POS. N°	DESIGNATION	MATERIAL
1	Valve body	A351 CF8M / 1.4408
2	Bonnet	A351 CF8M / 1.4408
3	* Valve plug	AISI 316L / 1.4404; Graphite filled PTFE
3A	* Pin	Bronze CB1
6	* Stem	AISI 316L / 1.4404
7	* Gasket	PTFE
11	Spring	AISI 302 / 1.4310
12	* Spring guide	AISI 304 / 1.4301
13	* Chevron packing set	Graphite filled PTFE
14	Washer	AISI 304 / 1.4301
17	Circlip	AISI 431 /1.4057
18	Actuator body	A351 CF8M / 1.4408
19	* Seal ring	NBR
20	Plain bearing	Bronze / PTFE
21	Plate	AISI 304 / 1.4301
22	Piston	Aluminium
23	* O-ring	NBR
24	* Springs	AISI 302 / 1.4310
25	Rod	Aluminium
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 PAV21								
Valve model	PAV.21	1	A	15	B	.63	.R	
Pneumatic on/off angle seat valve	PAV.21							
Valve sealing								
Soft sealed with PTFE/GR (class VI)		1						
Pipe connection								
Female threaded ISO 7 Rp			A					
Female threaded NPT			C					
Size								
1/2"				15				
3/4"				20				
...								
Flow direction								
Flow under the plug					B			
Actuator model								
PPI63 (30 cm ²)						.63		
PPI90 (60 cm ²)						.90		
Actuator direction of action								
Air to open (stem extends by spring force)							.R	
Air to close (stem retracts by spring force)							.D	
Special valves / Extras								
Full description or additional codes have to be added in case of non-standard combination.								E