

# PA magneticValve

## Purpose

Flow rate control valve for steel shot media and cut wire for peening and blasting.



## Model

PA-SV-5 magneticValve: Range 0.5-5 kg/min  
PA-SV-15 magneticValve: Range 1.5-15 kg/min  
PA-SV-45 magneticValve: Range 4.5-45 kg/min  
PA-SV-150 magneticValve: Range 15-150 kg/min

PA-SV-300 magneticValve: Range 30-300 kg/min  
PA-SV-500 magneticValve: Range 50-500 kg/min  
PA-SV-1000 magneticValve: Range 100-1000 kg/min  
PA-SV-1500 magneticValve: Range 150-1500 kg/min

## Features

- $\pm 5\%$  full-scale accuracy, on special request  $\pm 1\%$  of full scale
- Power off: valve closed
- FPGA technology, closed loop in real-time
- Shock resistant Touchscreen for improved troubleshooting
- No moving parts for low-maintenance operation
- Meets SAE AMS 2430 and AMS 2432 specifications
- Digital signal: no data transmission lost
- Less cable: Only one (1) cable per valve
- 24V DC
- Anti-leakage protection (if disconnected to FlowMaster)
- Includes a 1 meter plug and cable (option 0.5, 5 and 10m)
- CE compliant
- Patented in USA

## Description

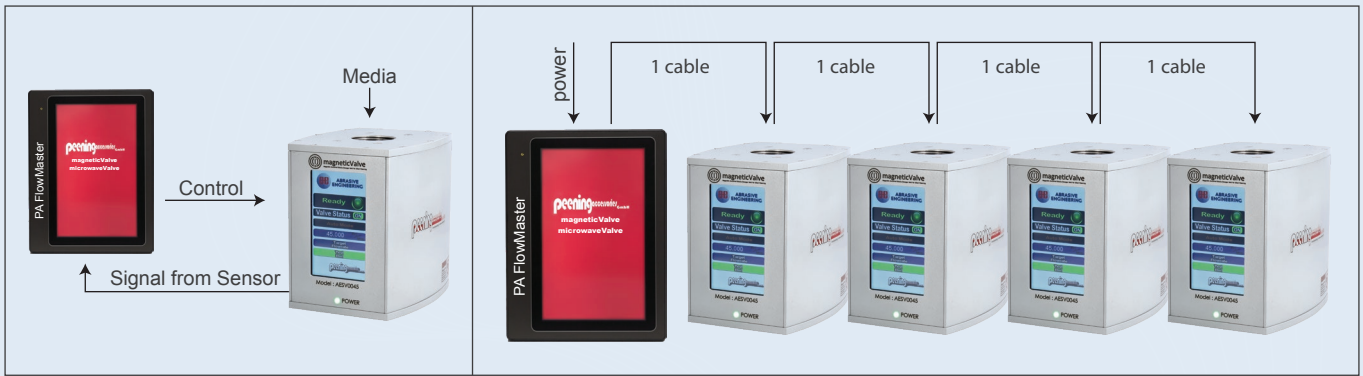
The unit is a precision control valve that regulates media in pressure or gravity feed peening and blasting machines. The valve has a built-in flow sensor that is able to provide closed loop feedback to the shot flow processor. The shot flow processor is a high end processing device which regulates the media flow rate with auto tune technology.

When connected to the PA FlowMaster, the configuration of the PA magneticValve can be retrieved and manipulated by the users for their desired applications. The equipment can be operated in two modes – manual mode or auto mode. Manual mode allows users to control the valve with constant flow rate, while auto mode enables auto tune technology to regulate the flow rate.

The PA magneticValve complies with SAE AMS 2430, AMS 2432 and other technical requirements. It only needs a 24V DC power supply to operate. The valve has no moving parts, which ensures a low maintenance operation.



Contact the official distributor at:  
Peening Accessories GmbH  
Frohbergstr. 38, 8620 Wetzikon Switzerland

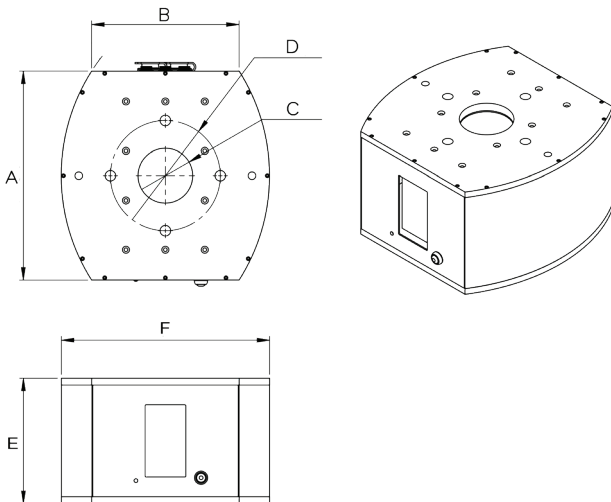


Closed loop system using PA FlowMaster (sold separately) and PA magneticValve

Easy plug & play system with a minimum of cables. Valves connect in serial order.

## Specifications

Power	24 Vdc @ 2A (50 VA)
Media	Ferrous media except cast stainless steel
Maximum pressure	7 bar (100 PSI)
Mode	Manual/Auto
Temperature range	5° – 48 ° C (40 ° – 110 ° F )
Analog input	0 – 10 Vdc
Valve ON signal supply	24 Vdc
Flow sensor output	0 – 10 Vdc



Model	A (mm)	Model	B (mm)	Model	C (mm)
PA-SV-05	148	PA-SV-05	97	PA-SV-05	Ø39
PA-SV-15	148	PA-SV-15	97	PA-SV-15	Ø39
PA-SV-45	148	PA-SV-45	97	PA-SV-45	Ø39
PA-SV-150	172	PA-SV-150	130.50	PA-SV-150	Ø54.50
PA-SV-300	275.20	PA-SV-300	195	PA-SV-300	Ø72.20
PA-SV-500	275.20	PA-SV-500	195	PA-SV-500	Ø72.20
PA-SV-1000	368	PA-SV-1000	230	PA-SV-1000	Ø127.00
PA-SV-1500	368	PA-SV-1500	310	PA-SV-1500	Ø127.00

Model	D (mm)	Model	E (mm)	Model	F (mm)
PA-SV-05	Ø39	PA-SV-05	148	PA-SV-05	119
PA-SV-15	Ø39	PA-SV-15	148	PA-SV-15	119
PA-SV-45	Ø39	PA-SV-45	148	PA-SV-45	119
PA-SV-150	Ø110	PA-SV-150	154	PA-SV-150	160.25
PA-SV-300	Ø145	PA-SV-300	165	PA-SV-300	275
PA-SV-500	Ø145	PA-SV-500	165	PA-SV-500	275
PA-SV-1000	Ø210	PA-SV-1000	165	PA-SV-1000	300
PA-SV-1500	Ø210	PA-SV-1500	165	PA-SV-1500	380

## Price

PA-SV-5 magneticValve (FlowMaster sold separately)	Ref. No. 822 201	Price on request
PA-SV-15 magneticValve (FlowMaster sold separately)	Ref. No. 822 202	Price on request
PA-SV-45 magneticValve (FlowMaster sold separately)	Ref. No. 822 203	Price on request
PA-SV-150 magneticValve (FlowMaster sold separately)	Ref. No. 822 204	Price on request
PA-SV-300 magneticValve (FlowMaster sold separately)	Ref. No. 822 205	Price on request
PA-SV-500 magneticValve (FlowMaster sold separately)	Ref. No. 822 206	Price on request
PA-SV-1000 magneticValve (FlowMaster sold separately)	Ref. No. 822 207	Price on request
PA-SV-1500 magneticValve (FlowMaster sold separately)	Ref. No. 822 208	Price on request
Recalibration for 1 valve (FlowMaster sold separately)	Ref. No. 822 900-R	<b>€ 450/pc</b>



Contact the official distributor at:  
Peening Accessories GmbH  
Frohbergstr. 38, 8620 Wetzikon Switzerland

## PA FlowMaster (sold separately)



Alternatively the PA FlowMaster LITE is available.  
The LITE version is design for OEM's that prefer to use their PLC control.

Power	24 Vdc @ 0.5 A
Analog input	0 – 10 Vdc
Flow recording output	0 – 10 Vdc
Flow enable output	24 Vdc @ 10 mA
Temperature range	32 – 122 ° F (0 – 50 ° C)
Dimensions	188mm (W) x 143mm (H) x 90mm (D)
Display touchscreen	7"
Functions	Flow rate display: Up to 4 valves! <b>Substantial cost savings if more than one valve is in use.</b>
	Valve status
	Standard configuration 6 languages: English, Spanish, French, German Chinese Simplified, Japanese. Other languages on request.
	Up to 64 peening data recipes
	Configuration
	Alarm system

# PASV Introduction (Peening Accessories Smart Valve)

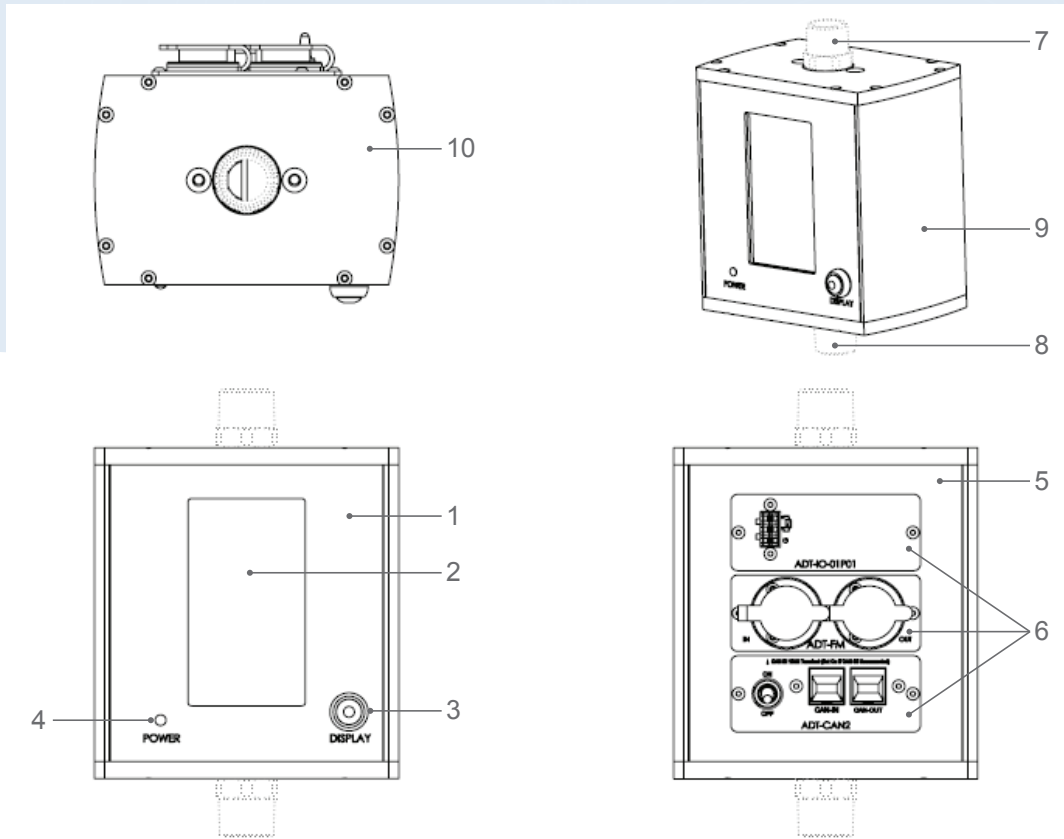


Figure 1 - PASV Outer Views

ID	Features Description	Index	ID	Features Description	Index
1	Front Frame		6	ADT (Adapter Module)	7
2	VUI	5	7	Media Inlet	
3	VBT (Valve Button)	6	8	Media Outlet	
4	Power LED		9	Side Frame	
5	Back Frame		10	Top Bottom Frame	

Table 1 - PASV Outer Features Descriptions

# VUI (Valve User Interface)

## VUI Introduction

Valve User Interface (VUI)

Is Part Of PASV Outer View Features

## Icon Description / Flow Of Operation / Supported Languages

- Available languages
  - i English
- Coming soon languages
  - i Simplified Chinese
  - ii German
  - iii Japanese iv French
  - v Spanish

## Page Description / Main Page

- Main Page Features
  - i Customizable Logo
  - ii Valve Ready, Valve Miss Comm, Alarm Status indication and button
  - iii Valve Run, Valve Stop Status indication and button
  - iv Open Loop, Close Loop indication
  - v Target Flowrate value entry box and indication
  - vi Actual Flowrate (Sensor Feedback) indication
  - vii Kg/min, Lbs/min toggle switch
  - viii Device ID indication
  - ix Main menu button



Figure 2 - VUI Main Page Features

## Flow Analysis Page

- i Flow Stability Bar
- ii Real Time Sensor Feedback Chart Line
- iii First Flow Derivative Chart Line
- iv Jitter Chart Line
- v Unstable Chart Line
- vi Jitter Indication
- vii Unstable Indication
- viii Actual KGS Indication
- ix Real Time Sensor Feedback Indication
- x Sequence Update Point Indication (UDP)
- xi Home Button

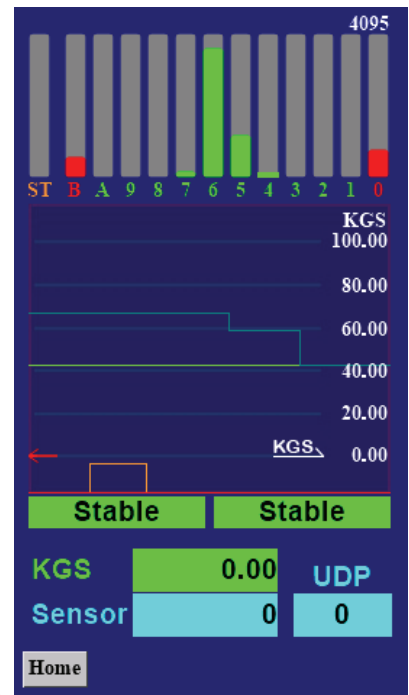


Figure 3 - VUI Flow Analysis Page

## Device Info Page

## Alarm Page

## Alarm History Page

## Valve Setting Page

## Number keyboard

## Alphabet keyboard



Contact the official distributor at:  
 Peening Accessories GmbH  
 Frobergstr. 38, 8620 Wetzikon Switzerland

## Page Description / Main Page

- Main Page Configuration

- i Main page can be configured to monitor up to five(5) device per page



Figure 4 - AUUI-MainPage-2x



Figure 5 - PAUI-MainPage-5x

- Main Page Features

- i Device monitoring window
- ii Main menu button

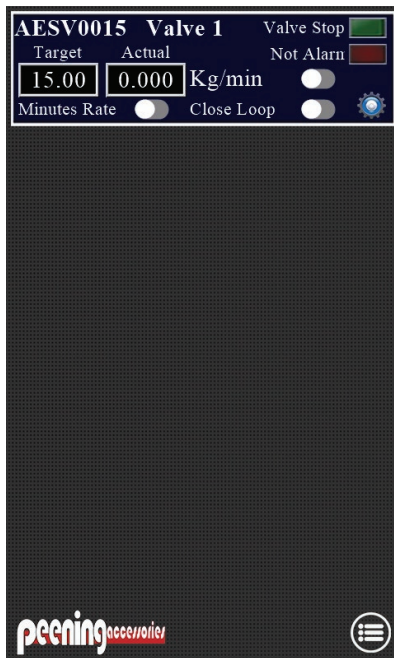


Figure 6 - Main Page Features

## Device monitoring window features

- i Device Model indication
- ii Device ID indication
- iii Valve Run, Valve Stop Status indication and button
- iv Alarm Status indication and clear alarm button
- v Kg/min, Lbs/min toggle switch
- vi Device setting page button
- vii Close Loop, Open Loop toggle switch
- viii Actual Flowrate (Sensor Feedback) indication
- ix Minutes Rate, Error rate toggle switch
- x Target Flowrate value entry box and indication

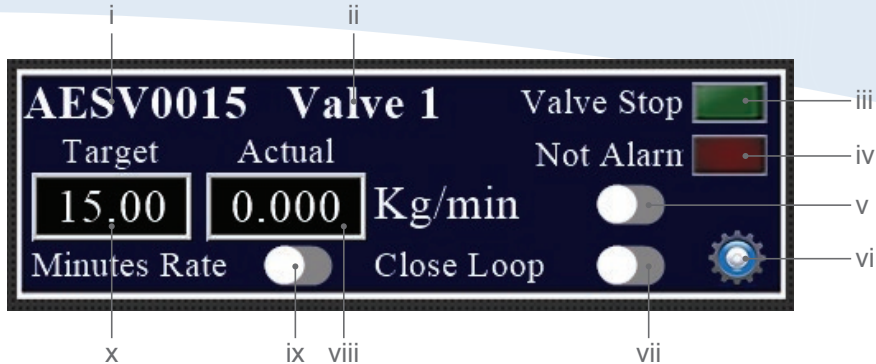


Figure 7 - Device monitoring window features

### Main Menu Page

### PAUI Info Page

### Device Info Page

### Device Tree Page

### Alarm Page

### Alarm History Page

### PAUI Configuration Page

### Valve Setting Page

### Number keyboard

### Alphabet keyboard

## Function Description

### New Device Configuration

### Run / Stop valves

### Set Target Flowrate

### Check Alarm History

### Set And Configuration Alarm Trigger Parameters

### Configuration Valve To Close Loop, Open Loop Mode



Contact the official distributor at:  
Peening Accessories GmbH  
Frohbergstr. 38, 8620 Wetzikon Switzerland

# Dimensional Specifications

## PASV PASV Dimension Overview

PASV Model	Default PASV-FA	Valve Frame Dimensions (mm)			Recommend Installation Dimensions (mm)		
		Width	Depth	Hight	Width	Depth	Hight
PASV0005	PASV-FA-0015	139.6	96.0	152.0	150.0	130.0	175.0
PASV0015	PASV-FA-0015						
PASV0045	PASV-FA-0150	160.3	172.0	156.0	175.0	210.0	180.0
PASV0100	PASV-FA-0150						
PASV0150	PASV-FA-0150						
PASV0300	PASV-FA-0500	275.0	275.2	156.0	290.0	310.0	195.0
PASV0500	PASV-FA-0500						
PASV1000	PASV-FA-1000	300.2	368.0	156.0	330.0	390.0	210.0
PASV1500	PASV-FA-1500	380.2	368.0	156.0	395.0	390.0	250.0

Table 2 - Valve Frame Dimensions Overview

## PASV-FA-0015

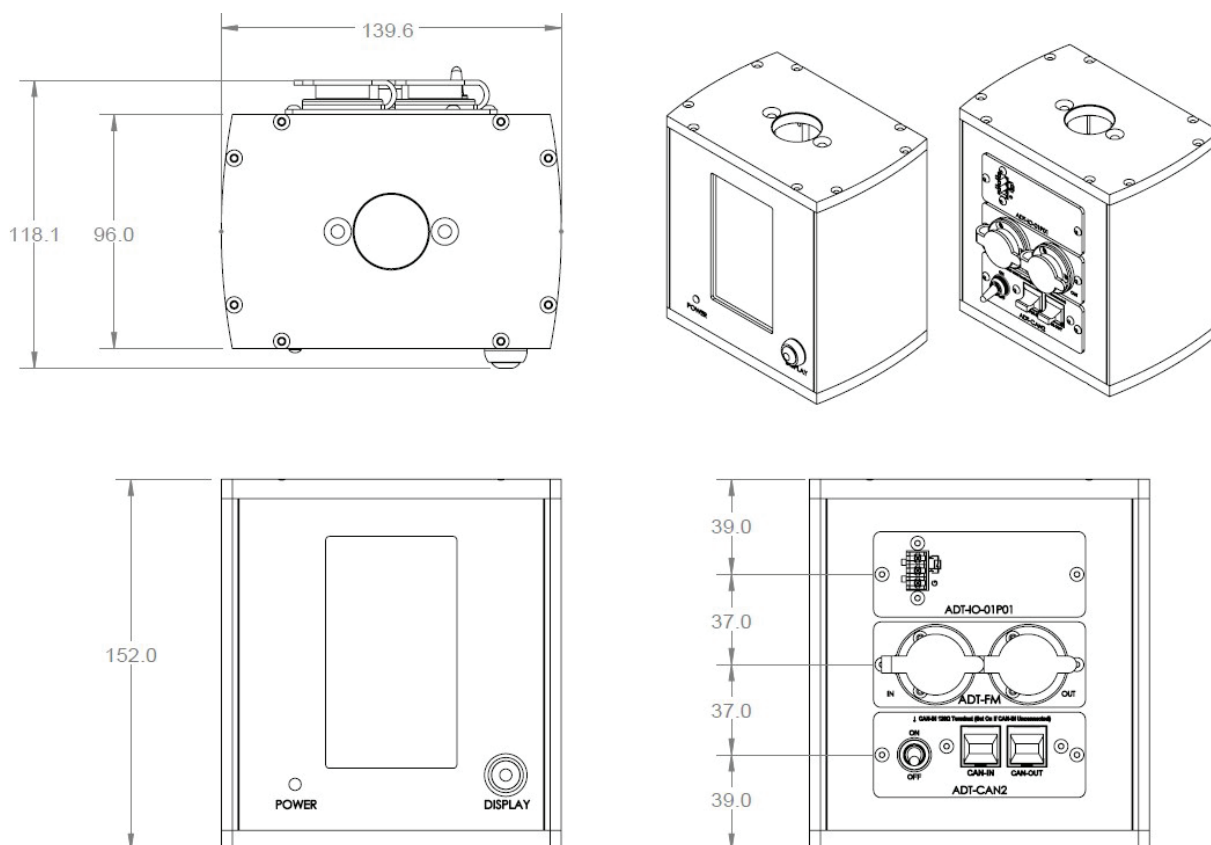


Figure 8 - PASV-FA-0015 Outer Dimension