

## AIRSWEEP® 1.5" THREADED PULSE VALVE

Best for general-purpose, dry, and cost-sensitive applications



## ENGINEERED FOR EVERYDAY PERFORMANCE

- **DESIGNED FOR DURABILITY\***
- **EASY SPRING REPLACEMENT**

This globally patented pulse valve is specially designed for combining high flow, fast opening and closing to create a powerful pulse of compressed inert gas. Ideal for all industrial applications.

\*Equal to 4 million cycles based on added lifespan from four free replacement springs

## PRODUCT HIGHLIGHTS

### FEATURES

- **Bodies:** Machined from solid stock, 6061 Hard Anodized Aluminum
- **Remote Pilot (RP):** High-temperature, or hazardous settings where safety, accessibility, and centralized control matters
- **Right Angle Porting:** Standard construction with Top Inlet and Side Outlet with Air Relief Exhaust Port on other side
- **Threaded connections:** Connect to airlines with threaded fittings National Pipe Taper (NPT) & British Standard Pipe Taper (BSPT)
- **Spring Return:** 316L Stainless Steel Compression Spring
- **Traceability:** All machined valve components available with material certifications
- **Warranty:** 7 years except 1 million cycles for springs

### APPLICATIONS

Pulse valves are typically used for agricultural, personal care, pet care, utility processing, corrosive environments, mining, dust collectors, chemical and bag house applications.

### OPERATION

Normally closed single acting plunger opens and closes with compressed air with the use of a solenoid valve. The compression spring allows the valve to be mounted in any position. **The valve requires filtered dry air, free from oil and particles.**

## VALVE SPECIFICATIONS

### CONSTRUCTION FEATURES

- **Body:** 6061 Hard Coat Anodized Aluminum
- **Compression Spring:** 316L Stainless steel (1 million life cycle)
- **Plunger Assembly:** PEEK (Polyetheretherketone) and Viton (Fluoroelastomer)

The AirSweep PV-150 is fully machined from certified 6061 Aluminum, then finished with a Hard Coat Anodize to ensure durability. The valve is equipped with NPT or BSPT threads and a threaded exhaust port with push-to-connect 3/8" (9.5mm) tube for simple installation.

Contact us for a detailed AirSweep® System proposal, engineered specifically for your application.

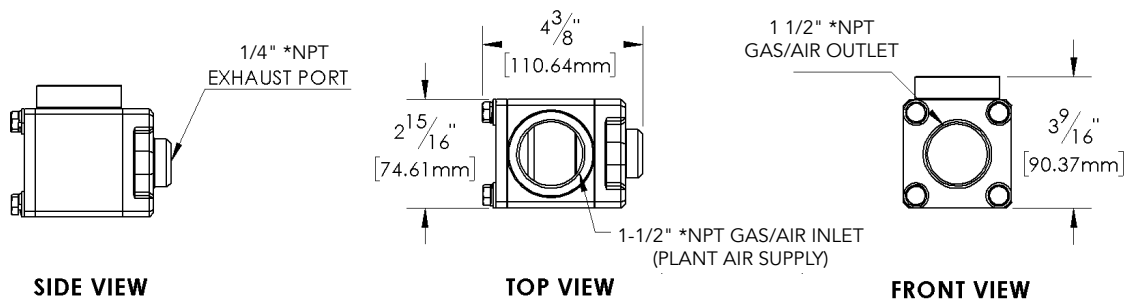
# AIRSWEEP PV-150 PRESSURE RATING

NOMINAL PORT SIZE		NUMBER OF PLUNGERS	FLOW COEFFICIENT*		WORKING PRESSURE PSI (Bar)	
1.5"	38.1mm	1	Cv	Kv	MIN	MAX
			51	44	20 (1.38)	110 (7.38)

\*Flow coefficient (Cv) is the amount of water (in gallons per minute) at 60°F (15.56°C) that will flow through a fully open valve with a difference of 1 PSI (.07 Bar) between the inlet and the outlet.

**Recommended on-time range:** 50-500ms (Commonly used: .250ms)

**Remote Pilot (RP) Requires:** .52 Cv (0.45 Kv) Pilot Valve



\* National Pipe Taper

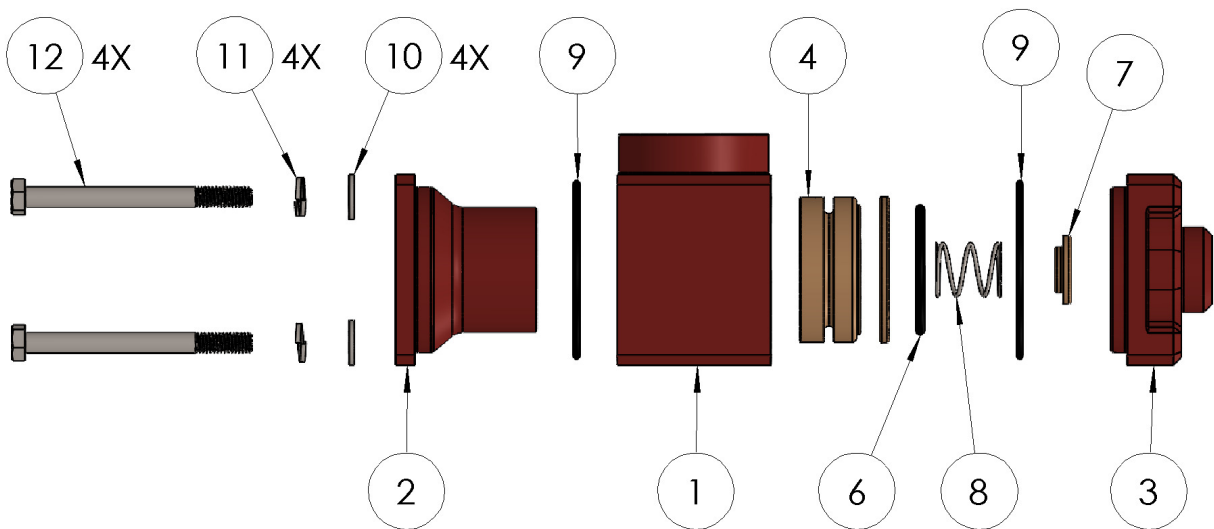
## TECHNICAL SPECIFICATIONS

- **Pulse Valve:** Typically used for agricultural, personal care, pet care, utility processing, corrosive environments, mining, dust collectors, chemical and bag house applications
- **Valve Function:** Air Pulse
- **Valve Type:** Plunger
- **Connection Type:** Thread
- **Connection Style:** Pipe Thread (NPT & BSPT)
- **Pipe Size:** 1 1/2" (38.1mm)
- **Remote Pilot Connection:** 1/4" (6.35mm) NPT
- **Activation:** Remote Pilot .52 Cv (0.45 Kv) min
- **Flow Coefficient:** 51 Cv (44 Kv)
- **Max Pressure:** 110 PSI (7.58 Bar)
- **Minimum Pressure:** 20 PSI (1.38 Bar)
- **Temperature:** Remote Pilot (RP) Type 0-200°F (-17.77 - 93.33°C)
- **Body Materials:** Hard Coat Anodized 6061 Aluminum
- **Seal Materials:** Viton
- **Plunger Material:** PEEK (Polyetheretherketone)
- **Spring Material:** 316L Stainless Steel (1 million life cycles)
- **Port Shape:** Right Angle
- **Made to last in Corrosive Environments:** Anti-Conductive Hard Coat Anodized 6061 Aluminum
- **Weight:** Aluminum 2.3 lbs. (1.04 kg)
- **Torque Specifications:** Aluminum type: 80 in-lbs. (922 mm-kg)

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# AIRSWEEP PV-150 BILL OF MATERIALS

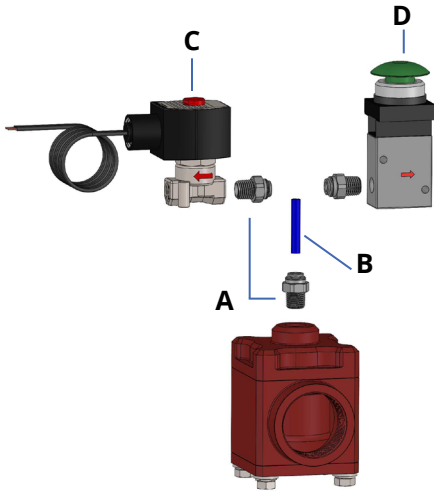
Item No.	Description	Material	Qty
1	PV Center Body	Aluminum 6061	1
2	PV Outlet Body	Aluminum 6061	1
3	PV Plunger Body	Aluminum 6061	1
4	PV PEEK Plunger	Polyetheretherketone (PEEK)	1
5	PV Wear Ring	Polyetheretherketone (PEEK)	1
6	-224 O-Ring	Viton	1
7	PEEK Spring Seat	Polyetheretherketone (PEEK)	1
8	Compression Spring	316 Stainless Steel	1
9	-145 O-Ring	Viton	2
10	Flat Washer	316 Stainless Steel	4
11	Lock Washer	316 Stainless Steel	4
12	Hex Head Bolt	316 Stainless Steel	4



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# VALVE ACCESSORIES

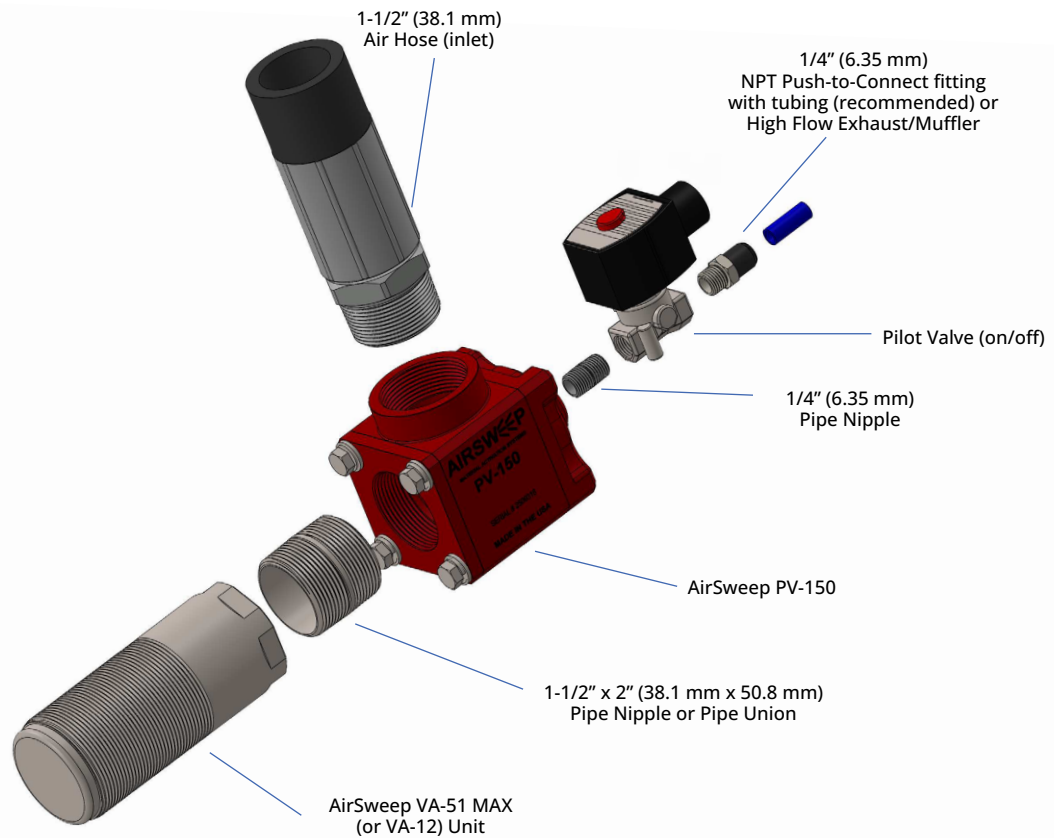
## REMOTE PILOT



Tube Size	A Push-to-Connect	B Tubing and Max Length	C Pilot Valve	D Manual Air Valve
1/4" (6.35mm)	1/4" NPT x 1/4" Tube OD	1/4" OD x 11/64" ID 15' Max	.52 Cv (.45 Kv) Rated	.52 Cv (.45 Kv) Rated
3/8" (9.52mm)	1/4" NPT x 3/8" Tube OD	3/8" OD x 9/32" ID 30' Max	.52 Cv (.45 Kv) Rated	.52 Cv (.45 Kv) Rated

Note: Lengths of tubing between Pulse Valve and Pilot Valve, at MAX length, ON-time needs to be increased by 100 ms.

# SYSTEM CONNECTIONS



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