



Dust Collection



Solutions for Life



MAC[®] PULSE VALVES



MAC Design Advantage

- High Flow / Long Life / Low Leak / Balanced Spool Design
- Drop-in Mounting - Without Disturbing Existing Piping
- Fast/Repeatable Response Times for Quick and Accurate Purges
- Optimized for Reliable Performance in Harsh Environmental Conditions
- Bonded Spool Technology - Self Cleaning Bore

Industry Specific Features

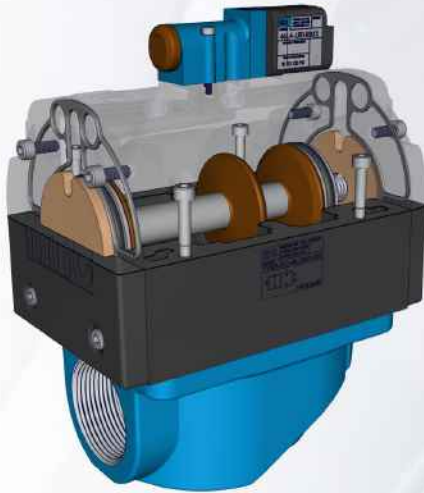
- Wide Range of Seals (Nitrile, Viton[®] and Proprietary Compounds)
- Environmentally Sealed for Wash Down Environments
- Remote Bleed and Integral Solenoid Pilot Available (AC & DC Voltage)



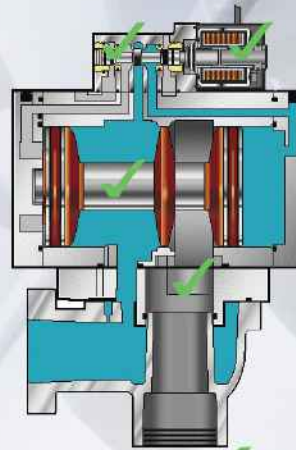


DUST COLLECTION SOLUTIONS

MAC PULSE VALVE

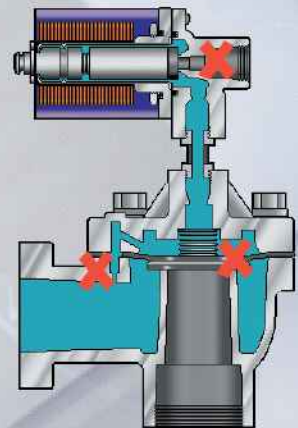


MAC Design



- ✓ **D-Seal Technology**
Isolates Solenoid
- Longer Life -
- ✓ **Dynamic Bonded Rubber Spool**
- Balanced -
- Wiping Action -
- ✓ **Lifting Solenoid**
- Consistent Response -
- ✓ **Adapter Plate**
- Drop-in Replacement to Existing Manifold -

vs. Competition Design



- ✗ Contaminated Air Passes Through Unbalanced Solenoid
- Sticking & Burnout -
- ✗ Small Fixed Orifice
- Blocked By Contaminants -
- ✗ Diaphragm Ruptures
- Air Leaks -

MAC Spool Design



- + 10 Million Cycles = Longer Life
- Wiping Action = Self Cleaning
- Balanced Design = Repeatable Purges
- No Ruptured Diaphragms = Less Wasted Air
- Viton Rubber = Harsh Environments

Diaphragm Design



- 1 Million Cycles = Short Life
- Cracking and Leaking = Wasted Air
- Constant Maintenance Required = High Cost of Ownership

MAC Technology Improved Filter Cleaning per Pulse

- ✓ Pulse time frequency optimization - Enhanced bag life
- ✓ Drop-in mounting: Adapter plates available without disturbing existing piping
- ✓ Balanced spool & pilot design: Unaffected by pressure variations
- ✓ Very fast & repeatable response times
- ✓ Long life: Spool technology
- ✓ Energy savings - Less consumption of air



MAC Valves - Highly engineered solutions for the highest performing applications since 1948

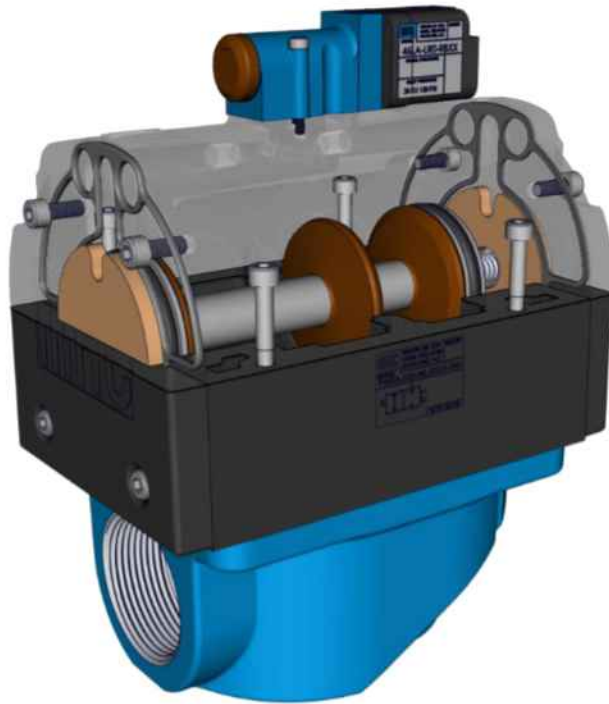


MAC Valves, Inc. Wixom, Michigan - MAC Valves, Inc. Dundee, Michigan - MAC Valves Europe, Inc. Liège, Belgium - MAC Valves Asia, Inc. Taiwan

To find your **local** distributor, visit www.macvalves.com



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VS



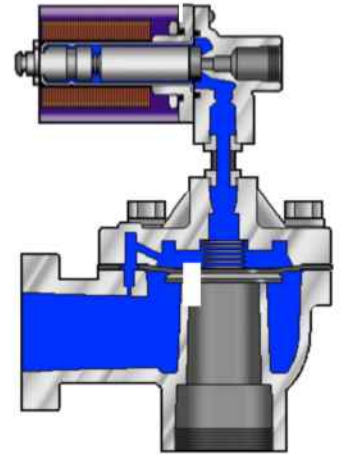


Collection systems

Diaphragm valve

Skinner pilot type

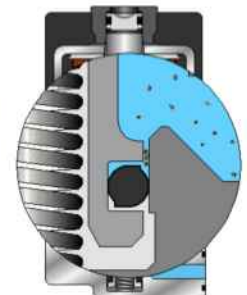
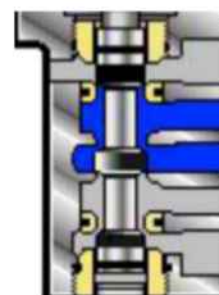
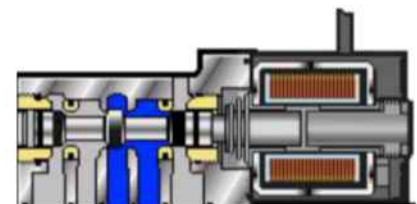
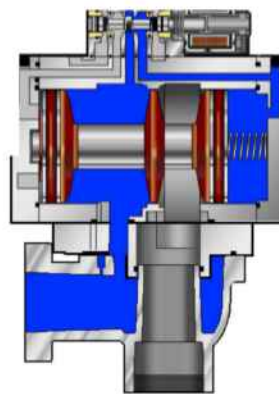
- Low response time when energize
- Low response time when de-energize
- Pneumatic part & electrical part connected
- Coil affected by contamination
- Pilot performances affected by external environment



MAC Pulse Valve

MAC pilot

- Short response time when **energizing**
- Short response time when **de-energizing**
- **Short stroke**
- Strong **return spring**
- **Balanced** design – not affected by pressure variation
- **Not affected by contamination**
- **D seals**
- Low friction
- 4/2 pilot





Diaphragm valve



Diaphragm technology

- **1 000 000** cycles life time
- Affected by **T°C differences**
- Damaged by the return **spring**
- Gets **cracked & torn** with the time
- Continuous **leakages** in case of holed **diaphragm**

MAC Pulse Valve

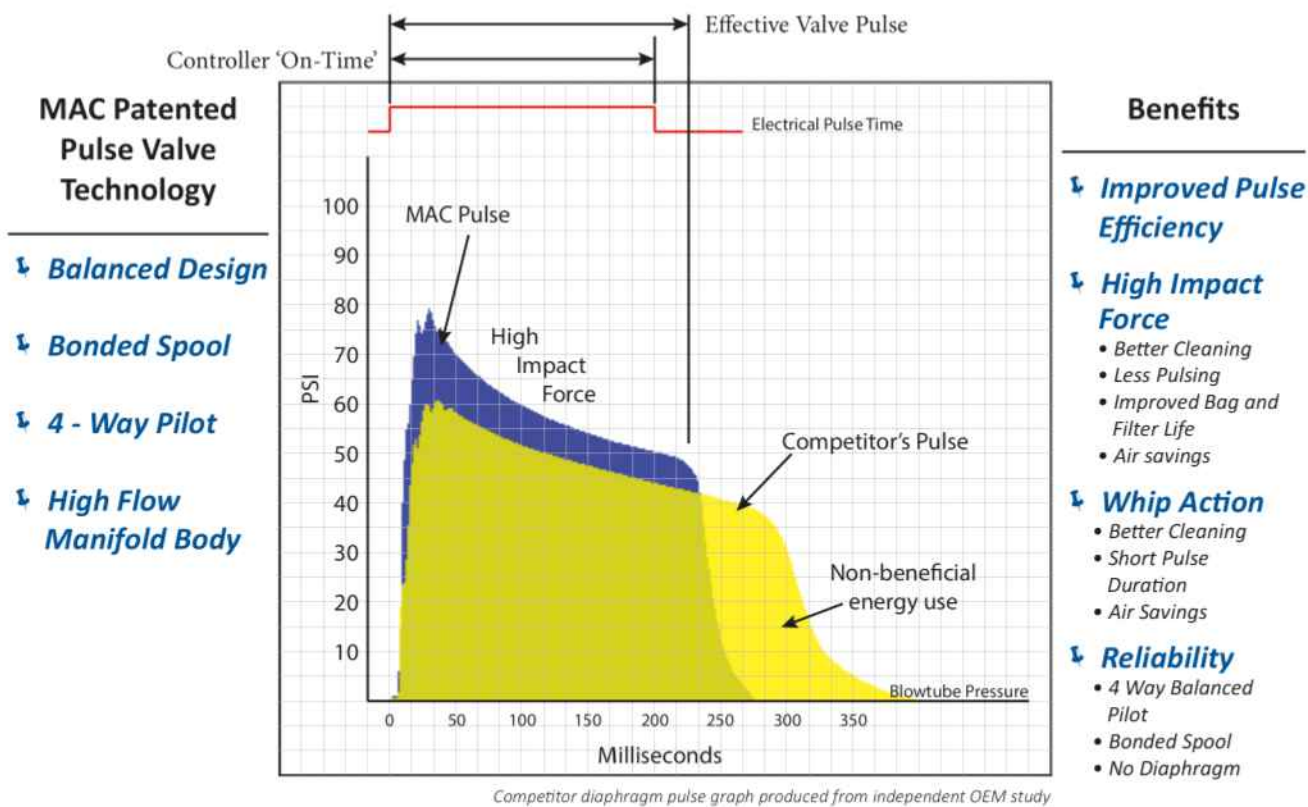


Spool technology

- **10 000 000** cycles life time
- **Vulcanised bonded rubber**
- Not affected by **T°C differences**
- **Wiping Action**
- **Self cleaning** process
- **Balanced** design / repeatable purges
- **No leakage** in case of failure



The graph shows the **MAC valve** opens and closes **quicker** than the comparable **membrane valve** – this has two effects – the **air pulse** created by the MAC valve is more **powerful** and **effective** in cleaning the dust bags, and also the MAC valve uses less energy in creating the pulse.



Enhance your pulse™

www.macvalves.com







Competition valves that are /have been functioning properly.



Before shooting.
Not functioning during a month.



After two pulses on each bag
(PV03)

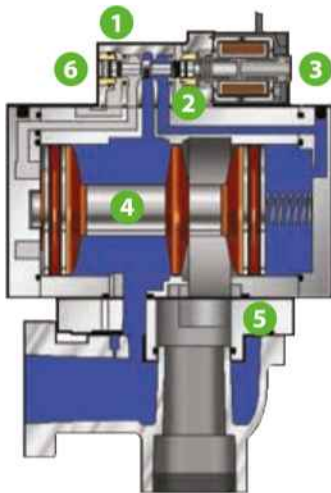




Dust Collection Solutions

MAC® Pulse Valve Technology

Enhance Your Pulse™



- 1 4-Way Pilot** (Maximized Shifting Forces)
- 2 D-Seal Technology Isolates Solenoid** (Longer Life)
- 3 Lifting Solenoid** (Consistent Response)
- 4 Dynamic Bonded Rubber Spool** (Balanced, Wiping Action)
- 5 Adapter Plate** (Drop-in Replacement to Existing Base)
- 6 Manual Override**

www.macvalves.com

7 KEY ADVANTAGES

Energy Savings	Powerful pulse action extends time needed between pulses, lowering energy costs.
Access	Access to valves in the dust collection system is difficult. The MAC spool valve's long life reduces lost labor and safety concerns attributed with repairs.
Downtime	When dust collection systems fail, plant operations come to a halt. MAC spool valves reduce downtime.
Product	Weak pulses cause excess waste to build up in the system and can cause a reduction in waste removal resulting in product contamination or a reduction in product yield.
Maintenance Costs	Diaphragm valves cause daily maintenance issues and increased labor costs. Spool valves allow for better use of labor throughout the plant.
Filter Bag Life	More efficient and effective pulses lead to cleaner filters/bags increasing overall filter life by reducing pulse frequency, lowering costs.
Ease of Use	Only the MAC solenoid pilot offers a manual override to test the pulse valve

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Wij verheugen ons op uw aanvraag.

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