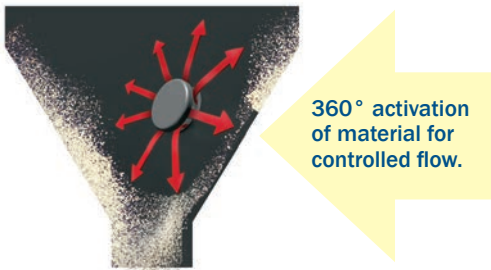


3/4" and 1-1/2" Sanitary-Style AirSweep® Systems

Ideal for applications requiring easy installation and removal for cleaning or sanitizing.

Solve tough flow problems and eliminate ratholes, bridging and sticky buildup.

The AirSweep® material activation system delivers on-demand product flow, eliminates hang-ups and blockages, cleans interior surfaces and enhances batch uniformity.



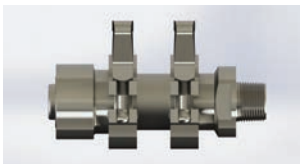
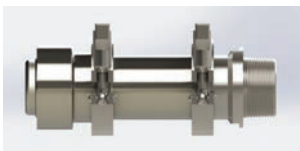
Each AirSweep nozzle directs a high-pressure, high-volume 360° burst of compressed air or inert gas along the inside walls of process equipment or vessels, breaking friction to lift and sweep stalled material back into the flow stream. The patented nozzle design ensures an immediate reseal after each pulse to eliminate material feedback.

Sequenced pulsing of strategically-positioned AirSweep units activate bulk material to produce a first-in, first-out controlled flow.



3/4" VA-06-TRI-TRI
Shown with solenoid valve.

- Patented valve design utilizes only one moving part, ensuring an immediate reseal after each pulse to prevent clogging and material build-up
- System is mounted on the outside of the vessel for easy cleaning and maintenance
- Tri-clover clamp allows simple installation and removal without tools
- Low air consumption – each unit uses less than 10 CFM, on average
- Activate 2 ft. to 7 ft. diameter of material (depending on model)
- Manufactured from high-grade 316 Stainless Steel for long service life

| | | Performance, per unit* | | |
|---|---------------|-------------------------|-------------------------------------|---|
| | | Solenoid Valve Diameter | Material Activation Area (diameter) | Compressed Air/Gas Consumption (per pulse) |
|  | VA-06-TRI-TRI | 3/4" (19.05 mm) | 2 feet (0.61 m) | 0.08 scf @ 40 psi (0.002 m³ @ 2.76 bar) |
| | | | 3 feet (0.91 m) | 0.45 scf @ 60 psi (.0127 m³ @ 4.14 bar) |
|  | VA-12-TRI-TRI | 1-1/2" (38.1 mm) | 5 feet (1.52 m) | 1.9 scf @ 80 psi (.0538 m³ @ 5.52 bar) |
| | | | 7 feet (2.13 m) | 2.45 scf @ 100 psi (0.069 m³ @ 6.89 bar) |

*Average in 75 lbs/ft³ material; 250 millisecond pulse

Specifications subject to change without notice.

Contact us for a FREE engineered proposal to effectively implement the AirSweep® System into your specific application.

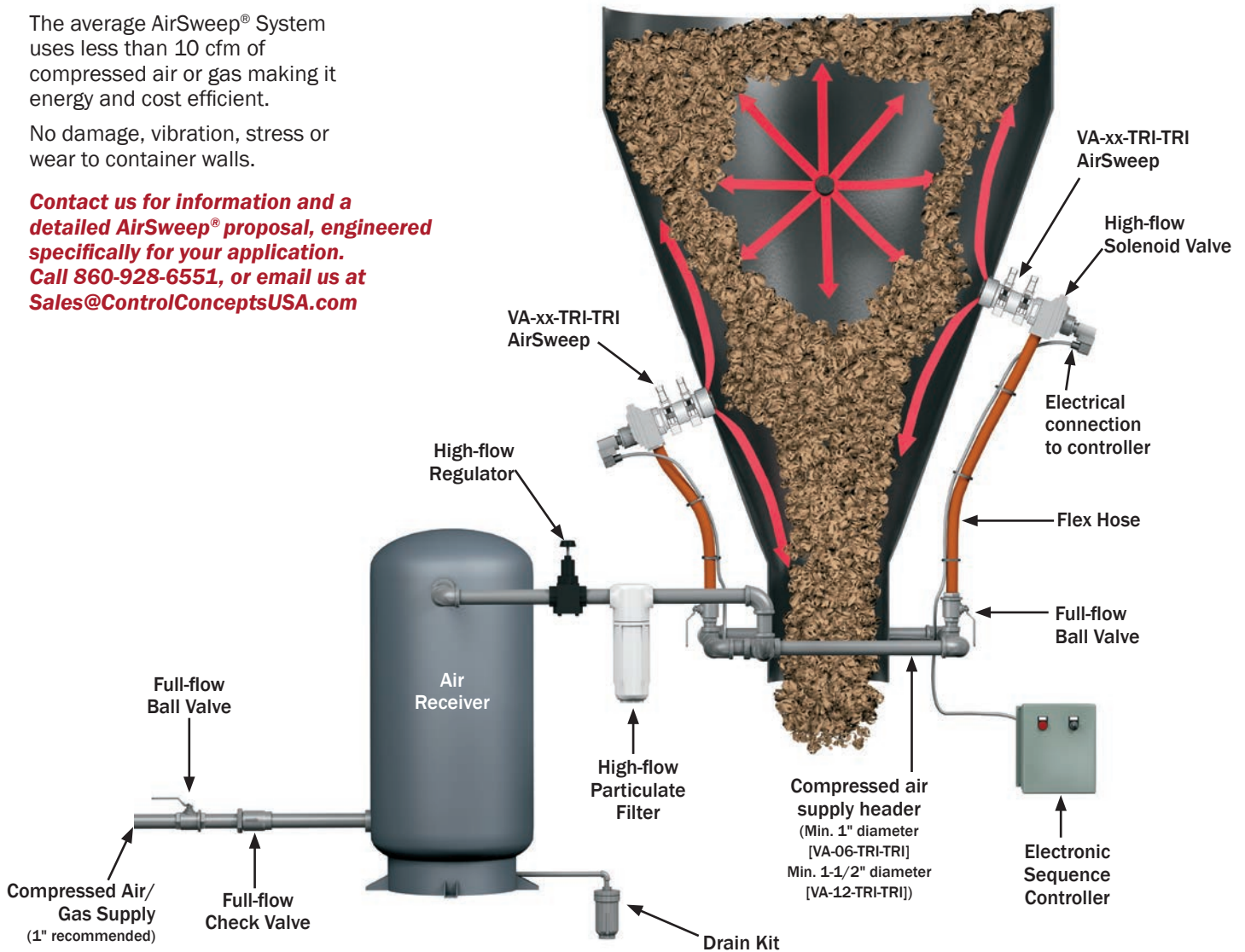
Typical Tri-Clamp Model AirSweep® System

A typical AirSweep® material activation system consists of strategically-located AirSweeps, high-flow solenoid valves, electronic sequence controller and air receiver.

The average AirSweep® System uses less than 10 cfm of compressed air or gas making it energy and cost efficient.

No damage, vibration, stress or wear to container walls.

Contact us for information and a detailed AirSweep® proposal, engineered specifically for your application. Call 860-928-6551, or email us at Sales@ControlConceptsUSA.com



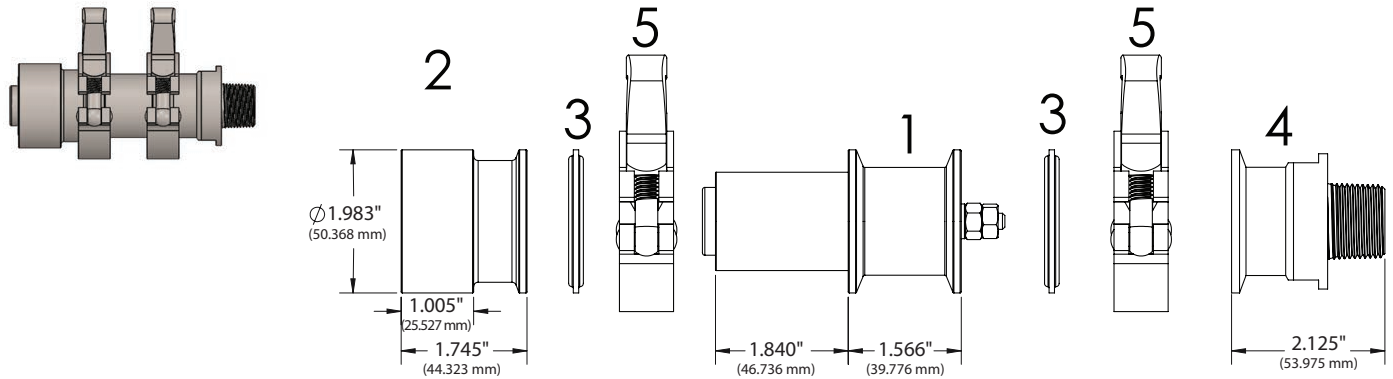
Typical AirSweep® System Components

| Model VA-06-TRI-TRI | Model VA-12-TRI-TRI | Description |
|---------------------------------|-------------------------------------|--|
| 3/4" Solenoid Valve | 1-1/2" Solenoid Valve | Delivers rapid, high-volume pulse of compressed air/gas to AirSweep nozzle. |
| 3/4" Flex Hose Assembly | 1-1/2" Flex Hose Assembly | Connects the solenoid valve to hard-piped header loop. |
| 3/4" Full-flow Ball Valve | 1-1/2" Full-flow Ball Valve | Isolation valve for individual nozzles. |
| 1" High-flow Particulate Filter | 1-1/2" High-flow Particulate Filter | Point-of-use particulate filtration enhances life of system components by removal of in-line contaminants. |
| 30-gallon Air Receiver | 60-gallon Air Receiver | Compressed air reservoir ensures instantaneous volume for system. |
| 1" High-flow Regulator | 1-1/2" High-flow Regulator | Regulates compressed air supply for proper AirSweep operation. |
| 1" Full-flow Check Valve | 1-1/2" Full-flow Check Valve | Ensures one-way flow to system. |
| 1" Full-flow Ball Valve | 1-1/2" Full-flow Ball Valve | System shut-off. |
| Electronic Sequence Controller | | Controls sequenced pulsing of AirSweep system; adjustable for any process. |

Tri-Clamp Model Specifications

Specifications subject to change without notice.

VA-06-TRI-TRI

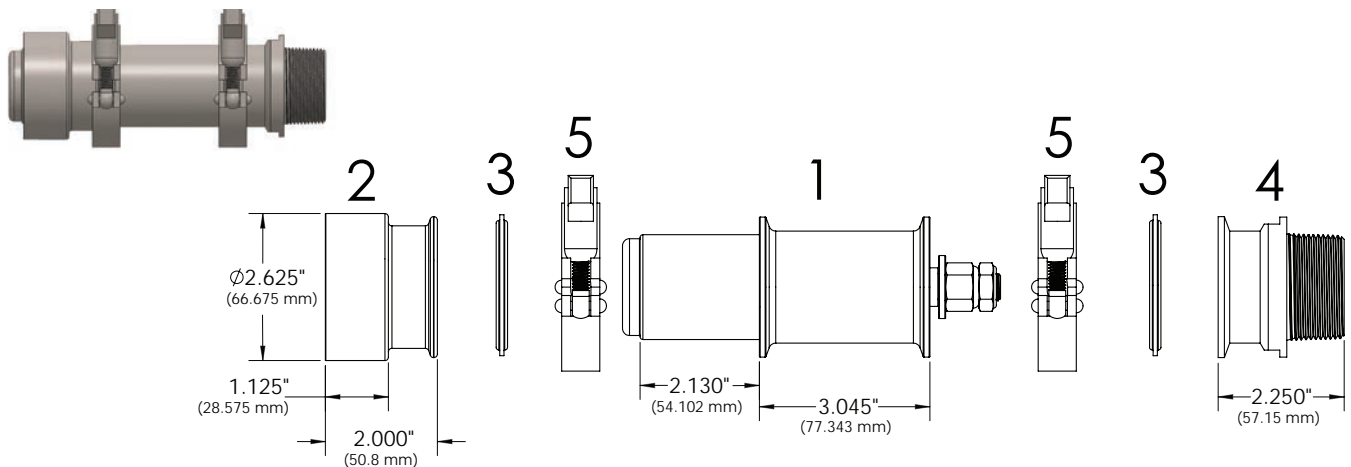


| Item No. | Description | VA-06-TRI-TRI | VA-12-TRI-TRI |
|----------|-------------------------|-------------------|-------------------|
| 1 | Tri-Clamp AirSweep Body | VA-06-316-TRI-TRI | VA-12-316-TRI-TRI |
| 2 | Mounting Coupling | MC-06-316-TRI | MC-12-316-TRI |
| 3 | Gasket | GASKET-06-TRI | GASKET-12-TRI |
| 4 | Adapter | AD-06-TRI | AD-12-TRI |
| 5 | Clamp | CLAMP-06-TRI | CLAMP-12-TRI |

Note: AirSweep Tri-Clamp Assemblies typically include the following parts, all sold separately:

- One (1) AirSweep Body
- One (1) Mounting Coupling
- Two (2) Clamps
- Two (2) Gaskets
- One (1) Adapter

VA-12-TRI-TRI

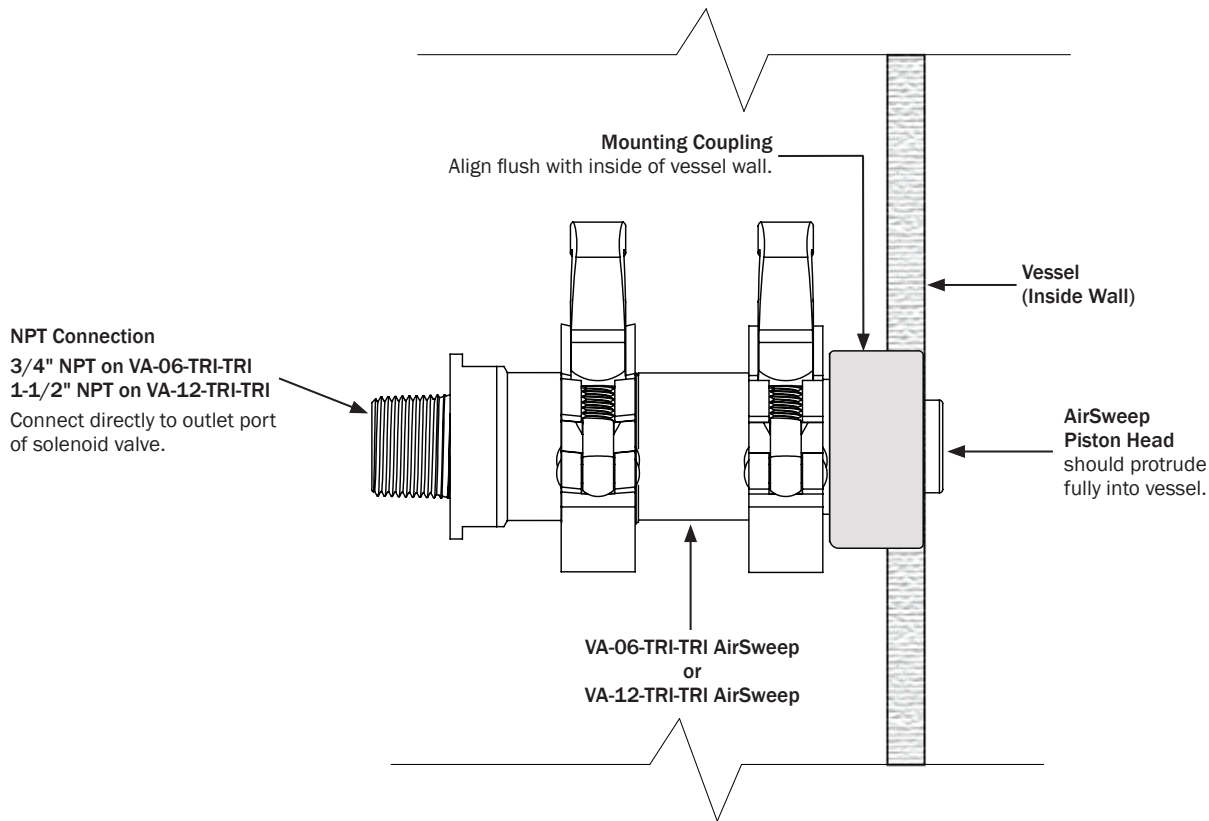


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Mounting Instructions for Tri-Clamp Models



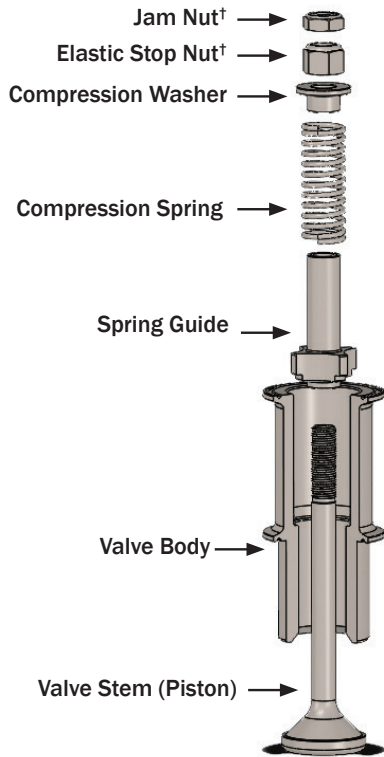
MC-06-TRI and MC-12-TRI Mounting Coupling Installation (Weld to vessel)

1. Cut hole in vessel wall. Recommended hole size of approximately 1/8" (3.175 mm) greater than diameter of coupling to allow coupling to pass through curved wall.
For MC-06-TRI mounting coupling, recommended hole size is 2.108" (53.54 mm)
For MC-12-TRI mounting coupling, recommended hole size is 2.75" (69.85 mm)
2. Align coupling flush with inside of vessel wall and weld continuous bead to exterior of wall.
3. Install clamp gasket to inside groove in mounting coupling flange.
4. Push AirSweep fully into mounting coupling, ensuring clamp gasket is tightly sandwiched between AirSweep and mounting coupling.
5. Install tri-clover clamp around AirSweep and mounting coupling flange and finger-tighten until snug.
6. Apply Teflon tape to adapter thread and thread solenoid valve onto adapter. Do not over-tighten.
Do not use pipe dope or paste on threads, as this material may foul the solenoid valve.
7. Install clamp gasket to inside groove in rear AirSweep flange.
8. Position adapter flange to mate with rear AirSweep flange – with gasket sandwiched between the two parts.
9. Install tri-clover clamp around rear flange and finger-tighten until snug.

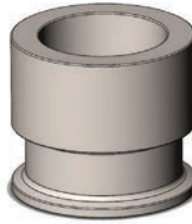
Note: On sharply curved vessel walls, front surface of mounting coupling may extend slightly into the vessel at top and bottom (12:00 & 6:00 positions), and should be flush at sides (3:00 & 9:00 positions).

- For maximum effectiveness, connection between adapter and solenoid valve should be direct, with no additional pipe nipples or fittings. When possible, use only the supplied adapter. If additional pipe length is required, do not exceed 12" between solenoid valve and AirSweep.

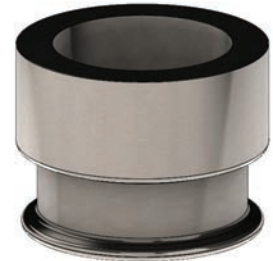
Tri-Clamp Model Assembly and Mounting



Mounting Coupling
for VA-06-TRI-TRI
(Weld to vessel)



Mounting Coupling
for VA-12-TRI-TRI
(Weld to vessel)



| Qty. | Description | VA-06-TRI-TRI | VA-12-TRI-TRI |
|------|--------------------|-------------------|-------------------|
| 1 | Valve Body | VB-06-316-TRI-TRI | VB-12-316-TRI-TRI |
| *1 | Valve Stem | VCW-06-316 | VCW-12-316 |
| *1 | Spring Guide | SG-06-316 | SG-12-316 |
| *1 | Compression Spring | CS-06-316 | CS-1251-316 |
| *1 | Compression Washer | CW-06-316 | CW-1251-316 |
| *† | Elastic Stop Nut | (2) ESN-06-SS | (1) ESN-1251-SS |
| *† | Jam Nut | NA | (1) JN-1251-SS |
| 1 | Mounting Coupling | MC-06-316-TRI | MC-12-316-TRI |
| 1 | Lock Nut | LN-06-316 | LN-12-316 |

* This part is included in the Rebuild Kit.

† VA-06-TRI-TRI model includes two (2) Elastic Stop Nuts. Model VA-12-TRI-TRI include one (1) Elastic Stop Nut and one (1) Jam Nut.

TRI-TRI Model Rebuild Kit

AirSweep Nozzle Rebuild Kit contains 1 each:

- valve stem
- spring guide
- compression washer
- compression spring
- elastic stop nut
- jam nut



Recommended service interval of internal parts:

Approximately 1 million cycles.*

Maintenance recommended:

Replacement of internal parts.

| Rebuild Kits | |
|---------------|-----------------|
| Model | Rebuild Kit No. |
| VA-06-TRI-TRI | RK-06-316 |
| VA-12-TRI-TRI | RK-12-316 |

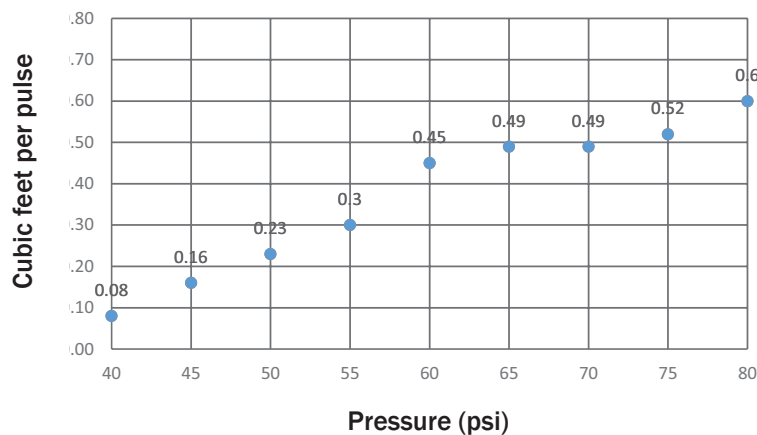
* Typical service interval under standard operating conditions. Some environments, materials and processes may result in a shorter useful service interval.

Typical Operating Parameters

Compressed Air/Gas Consumption for VA-06-TRI-TRI/VA-12-TRI-TRI AirSweep

| Model | VA-06-TRI-TRI | VA-12-TRI-TRI |
|--|--|--|
| Recommended operating pressure | 40 to 60 psi | 80 to 100 psi |
| Typical effective diameter of material activation <i>(dry, powdered material, 60-75 lbs/ft³)</i> | 2 to 3 feet (0.61 to 0.91 m) around each nozzle | 6 to 8 feet (1.83 to 2.44 m) around each nozzle |
| Recommended pulse time | 250 milliseconds | 250 milliseconds |
| Approximate air/gas consumption rate per 250 millisecond pulse | 0.45 ft ³ @ 60 psi | 1.9 ft ³ @ 80 psi |
| Typical sequence rate range <i>(application/material dependent)</i> | 3 pulses to 12 pulses per minute | 3 pulses to 12 pulses per minute |
| Typical (approx.) compressed air/gas consumption rate range <i>(based on typical sequence rate range of 3 to 12 pulses/min)</i> | 1.35 to 5.4 scfm @ 60 psi | 5.7 to 22.8 scfm @ 80 psi |

VA-06-TRI-TRI Compressed Air/Gas Consumption



● = Consumption per 250 millisecond pulse.

VA-12-TRI-TRI Compressed Air/Gas Consumption

