ARV® Series

Auto Release Venturi with Manual Override

Destaco has improved upon their already extremely successful ARV® by adding the manual override feature to allow easy fine tune adjustment of vacuum cup position.

ARV® - the original, patented Auto-Release Venturi offers users the fastest vacuum and blow-off in the industry with single line operation, integrated blow-off and built-in exhaust silencer. Mounting options include right or left hand apple core mounting or no apple core mount for use with Destacos’ spring cup mounts.

The ARV® Series is also available in a block style for remote mounting and each mount can be ordered with Imperial or Metric ports.

Product Highlights/Options

- Single air line operation
- No air needed for blow-off
- Comprehensive mount offering
- Integrated silencer
- Maintenance free operation

Features, Markets and Applications

<table>
<thead>
<tr>
<th>Features</th>
<th>SPEED</th>
<th>PERFORMANCE</th>
<th>INTERCHANGEABLE</th>
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<tbody>
<tr>
<td>• 75% faster than the standard venturi blow-off</td>
<td>• 60% less air consumption</td>
<td>• Adaptable to existing product</td>
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<td>• 150 plus cycles per minute</td>
<td>• Only need ½ the air lines and fittings</td>
<td>• Designed for easy “INSTALLATION”</td>
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<td>• Increased line speeds and parts per hour</td>
<td>• Quiet operation, Less than 70dB</td>
<td>• Configurations accommodate any cup location</td>
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US PAT No: 7,540,309 - 7,681,603 - 7,950,422

Dimensions and technical information are subject to change without notice.
**ARV® SERIES**

Auto Release Venturi with Manual Override

**5 Easy Steps to Convert from Existing Vacuum Systems**

**From** (2) line System using venturi with blow-off

1. Locate blow-off air-line.
2. Disconnect/remove air line and plug blow-off port.
3. Disconnect/remove existing venturi and replace with ARV®.
4. Reconnect air line to ARV®.
5. Verify operation.

**OR**

**From** Centralized Vacuum System (CVS)

1. Locate CVS/vacuum generator and remove from system
2. Install (2) Position Valve, connect to air supply and plug blow-off port
3. Disconnect/remove existing port-only adaptor and replace with ARV®
4. Reconnect air line to ARV®
5. Verify operation

**To** Completed conversion with ARV®

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**Operation for New Installations**

**For use with Vacuum Switch**

**Valves:** (2) Position, Double Solenoid, Detented, (CV rating of at least 1 recommended)

**Airline:** (1) Line for Vacuum and Release

**Operations:**  
- Energize Sol B: Air in vacuum port. Generates vacuum. (Holds position in case of power loss)
- Energize Sol A: Air off. Release panel instantly

**For use with Vacuum Switch**

**Valves:** (3) Position, Open Center, Double Solenoid, Side B: Detented, Side A: Spring Return

**Airline:** (1) Line for Vacuum (ARV: Vacuum and Release)  
(1) Line for Blow-Off (Plug with ARV®)

**Connection:**  
- Port A: Plugged*  
- Port B: Air in (to Venturi)

**Operations:**  
- Energize Sol B: Air in (Venturi port), Generates vacuum (Holds position in case of power loss)
- Energize Sol A: Air stopped, Release panel instantly
- De-Energize Sol A: All air off, Valve Centers

(*)For ARV®: plug port A line on tool side of Quick Disconnect

**Sensor Mounted Remotely**

- Remove M5 Plug  
- Install air fitting in M5 port  
- Mount sensor to automation  
- Connect vacuum line from M5 fitting to sensor

**Sensor Mounted to ARV®**

- Remove M5 Plug  
- Install sensor in M5 port  
- Connect Electric cable to controller

**Notes**

- When sensing from (2) ARV® to a single sensor, both vacuum lines should be equal in length.
- Smaller Diameter/Shorter Length vacuum lines give faster response.
- Choose the cup location(s) that could best determine part present/not present
- Maximum (2) cups per vacuum sensor

**ARV® Series Specifications:**

- Specifications @ 4 bar [60psi]:  
  - Speed to Vacuum: 0.2-0.3 seconds  
  - Speed to Release: 0.02 seconds  
  - Air Consumption:  
    - Vacuum: 40 l/m [1.4 scfm]  
    - Blow-off: 0  
- Noise Level (At one meter): 68dBA  
- Material: Aluminum

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**ARV® Auto-Release-Venturi Available Models**

**Left Hand Apple Core**
CPI-VSA-ARVL-750-(X)  
114g [0.25lb]

**Right Hand Apple Core**
CPI-VSA-ARVR-750-(X)  
114g [0.25lb]

**Without Apple Core**
CPI-VSA-ARVR-000-(X)  
86g [0.19lb]

**RH/LH Spherical Ball**
CPI-VSA-ARV(R/L)-B112-(X)  
126g [0.28lb]  
CPI-VSA-ARV(R/L)-B32-(X)  
134g [0.30lb]

**Block Style**
CPI-VSA-ARVR-312-(X)  
104g [0.23lb]

**SCARA Block Style**
CPI-VSA-ARVS-5-U18  
98g [0.22lb]  
Also compatible with

**Vacuum Sensor Option**
Add “-VS” to end of “ARV” order code

**Mounting/Vacuum Thread**
U38 = 3/8” NPT Male  
G38 = 3/8” G Male

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