

# **HEIGHT CONTROL VALVES**

- Superior air flow
- Outstanding ride and value
- Superior performance and durability



To learn more about HEIGHT CONTROL VALVES, call 866.743.3247 or visit [www.hendrickson-intl.com](http://www.hendrickson-intl.com)

 **HENDRICKSON**  
*The World Rides On Us®*

# Precise Air Flow Re

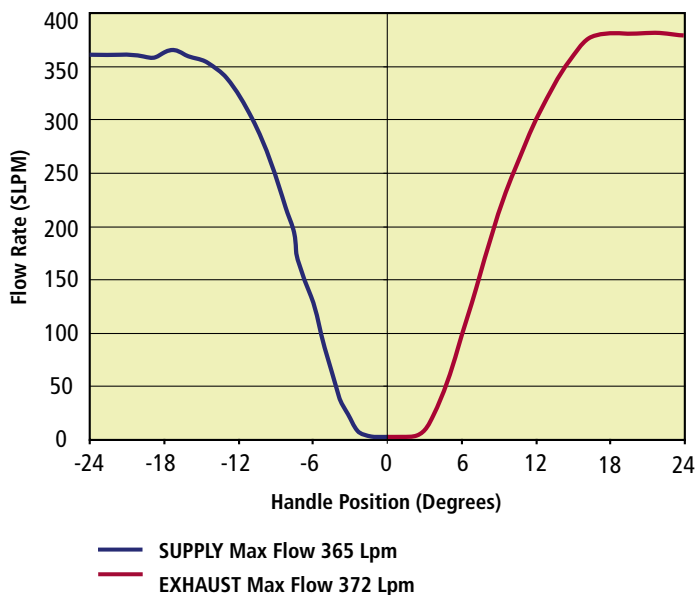
To deliver the ride quality and other benefits fleets and owner operators expect, trailer air suspension systems require precise air flow management — a key element featured in Hendrickson's standard height control valve (HCV) and integral HCV with automatic dump valve.

Specified by trailer OEMs on new vehicles or through the aftermarket, Hendrickson's HCVs offer a choice of superb designs to keep trailers at the correct ride height. Using an advanced Shear-Seal® design to ensure accurate air flow, Hendrickson HCVs deliver superior performance and durability. A precise, highly repeatable dead band and high air flow with a proportional response optimize ride height control to deliver superior ride quality, while helping to prolong air spring and shock absorber life.

Specifically designed and tested for optimum performance with Hendrickson trailer air suspensions, our HCVs help maintain outstanding load stability over the road. In addition, Hendrickson HCVs minimal dead band and high flow rate provide compatibility with on-board trailer weight scales.



**Valve Flow Curve\***  
Pressure 124 psi



\* Above data is based upon internal testing and/or published specifications. Actual product specifications and performance may vary depending upon suspension and vehicle configuration, operation, service and other factors.

## All Hendrickson HCVs

- **Operating pressure**
  - 130 psi (9 bar) maximum
- **Operating temperature**
  - -40° F to +150° F (-40° C to +65° C)
- **Maximum flow rate**
  - 350 L/Min (12.4 cfm)
- **Delivery ports**
  - ¼-inch NPT fittings
  - Dual delivery ports
- **Maximum handle movement**
  - +/- 75° for fill or exhaust
- **Options**
  - Air fittings
  - Mounting brackets
- **Dead Band**
  - +/- 2°

# gulation Delivered

## HCV with Integral Dump

Hendrickson's HCV with integral dump features a high-flow design for rapid exhaust to save drivers time and effort as they load, unload and get back on the road.

The dump valve is designed to automatically discharge the air springs with the setting of the trailer parking brake and begins to air up with release of the brake. Integrating the dump function in the HCV eliminates components and simplifies plumbing maintenance and installation.



## Exhaust Function

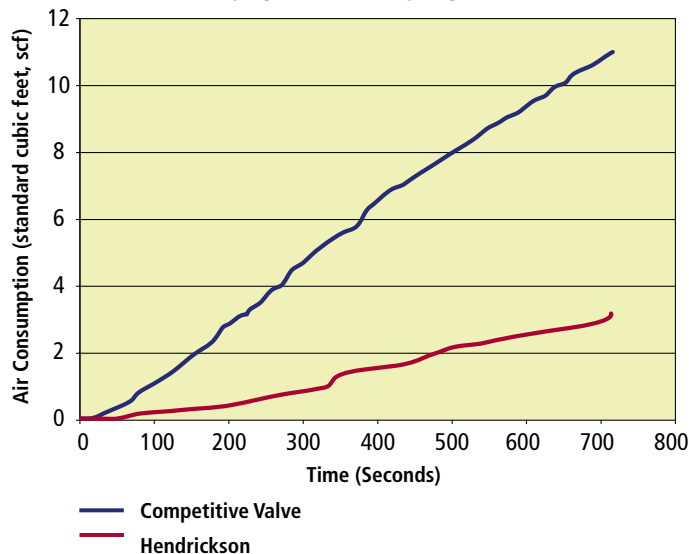
- **Automatic**
  - Dumps when trailer parking brake engages
- **Dump flow rate**
  - 875 L/min (31 cfm)
- **Dump port**
  - Normally closed
- **Dumps full suspension 40 percent faster than HCV with add-on dump valve**
  - Integral = 12 seconds
  - Add-on = 20 seconds

## Shear-Seal® Design

- Metal-to-metal seal
- Rotor and Shear-Seals are the major components
- Rotor is the only internal moving part
- Rotor slots provide metering action for reduced air consumption
- Tested to 100 million cycles

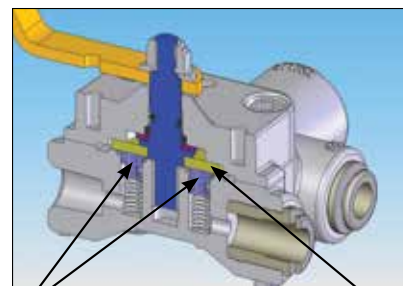
### Height Control Valve Comparison\*

75 psig Normal Air Spring Pressure

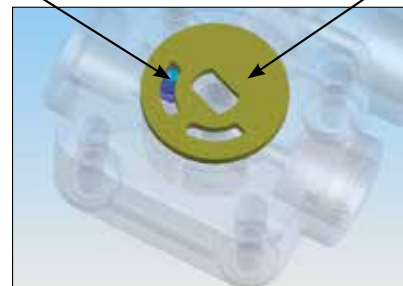


— Competitive Valve  
— Hendrickson

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Shear-Seals      Rotor



Slots allow flow to increase with arm rotation

## Hendrickson linkage enhances valve

Hendrickson's linkage employs shoulder bolts for the HCV and bracket attachment. This helps prevent overtightening that can lead to improper valve function and decreased service life. We set our pivot points in pliable rubber bushings, which reduce stress on the valve.



## Retrofit for outstanding ride

The standard Hendrickson HCV (VS-227) adapts to fit all Hendrickson trailer air suspension applications, except for VANTRAAX® ULTRA-K®. With our aftermarket kit, order and stock only one valve part number to meet your needs for these applications.

## DST® Dock Stabilizing Technology™ drives more efficient dock operations

Integrated into the VANTRAAX® system, DST® addresses loading dock issues like trailer drop and walk. DST consists of a combination of refined suspension geometry and optimized plumbing including our patented\* Height Control Differencial Dump Valve.

Hendrickson installs the HCDDV and adjusts the system to the correct ride height at the factory to help ensure optimum performance in the field. New plumbing also simplifies installation and maintenance.

When parking brakes are set, DST automatically exhausts up to twice as quickly as traditional configurations. This allows the trailer to rest on the air spring bumpers before the parking brakes fully engage, thus eliminating further trailer drop.



\* This product is covered by at least one or more U.S. and/or foreign patents and/or pending U.S. and/or foreign patent applications. See Hendrickson for details.

*Actual product performance may vary depending upon vehicle configuration, operation, service and other factors.*

*All applications must comply with applicable Hendrickson specifications and must be approved by the respective vehicle manufacturer with the vehicle in its original, as-built configuration. Contact Hendrickson for additional details regarding specifications, applications, capacities, and operation, service and maintenance instructions.*

Call Hendrickson at **330.489.0045** or **866.RIDEAIR (743.3247)** for additional information.



[www.hendrickson-intl.com](http://www.hendrickson-intl.com)

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