

# Transportation

Air  
Suspension  
Products

Control  
Control  
every move



**Barksdale**  
CONTROL PRODUCTS

**CRANE** Barksdale, Inc./Barksdale GmbH  
A Subsidiary of Crane Co.

# Barksdale

## Barksdale

### Industry change



In 1992 the industry expectation for commercial vehicle air suspension height control valves was limited. Available HCV designs were based on seals that wore rapidly, requiring frequent replacement. As the seals failed, height control performance deteriorated and air consumption increased. Valve replacement and downtime costs were rising with trucking demand. Barksdale Controls identified the need for a solution and developed a series of height control valves based on its patented Shear-Seal® technology.

Today Barksdale supplies Original Equipment valves to some of the most prestigious commercial vehicle manufacturers in the world. Our success continues to be driven by our ability to combine high value customized solutions with best in class customer support.



#### Customized Solutions

Barksdale recognizes the unique requirements of the transportation business and focuses on them to provide products and service that exceed customer expectations. Engineering, experience, and attention to detail set Barksdale Controls apart from the competition.

#### Focus On The Future

Barksdale has taken this dedication game changing technologies into other Commercial Vehicle applications such as lift axle control, tire inflation systems, suspension dump control, electronic suspension control and bus kneeling systems. All of these products maintain the same level of quality performance and reliability combined with Barksdale's ability to serve the unique needs of our customers.



# Shear-Seal® Shear-Seal®

Barksdale invented Shear-Seal®, and since 1949 has used its technology with great success in demanding applications such as steel and paper mills, oil exploration and processing, and defense. Utilizing Shear-Seal in air suspension height control valve applications yielded breakthrough improvements in durability and performance.

Whether it is controlling critical application on an off shore oil rig, keeping steel production rolling at the mill, or maintaining control of a vehicle air suspension for years of trouble free miles Shear-Seal® is the solution. Precision engineering and manufacturing combine for unmatched performance and reliability.

The Shear-Seal® technology is based on the sliding of two precisely machined metal sealing surfaces across each other, creating a zero-leak seal. Media passes through the center of the seals, rather than across the seal surface, preventing contamination from entering the seal areas. As the valve shifts, the wiping action of the polished metal seals pushes away debris.

Bringing zero-leakage, long life Shear-Seal® technology to commercial vehicle ride control applications changed the industry and made Barksdale Controls the leader in suspension control technology.



\*Less than 4 cc per minute.

# Customized solutions



## Standard Valve

- Shear-Seal® Technology for Zero Leak
- Lapped rotor and long-wear pressure seals
- Tapered flow curve for lower air consumption
- Precise dead band for accurate suspension height
- Multiple flow rates available
- Compact design for difficult installations
- Valve can be customized to meet unique OEM needs



## Cab Suspension Valve

- Shear-Seal® Technology for Zero Leak
- Lapped rotor and long-wear pressure seals
- Standard push to connect tube fittings
- Tapered flow curve for lower air consumption
- Precise dead band for accurate suspension height
- Multiple flow rates available
- Valve can be customized to meet unique OEM needs



## Suspension Valve with Integral Dump

- Shear-Seal® Technology for Zero Leak
- Lapped rotor and long-wear pressure seals
- Dump valve integrated into suspension valve
  - ▶ Eliminates extra dump control valves
  - ▶ High flow fast dump of air bags
  - ▶ Simplifies air plumbing and saves installation time
- Tapered flow curve for lower air consumption
- Precise dead band for accurate suspension height
- Multiple flow rates available
- Valve can be customized to meet unique OEM needs



## Fixed Link • Adjustable Link • Multi-Hole Link

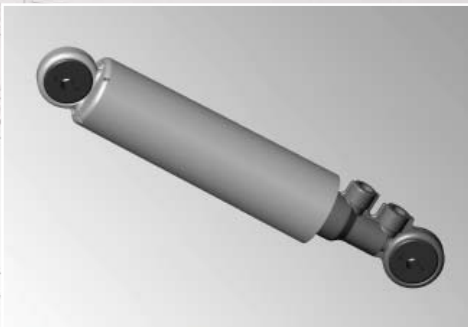
To ensure accurate response between the height control valve and the truck's suspension, Barksdale provides custom linkages. The various available link lengths allow the Barksdale Height Control Valve to be utilized in numerous configurations and to be a direct replacement for many height control valve manufacturers.

# Focus on the future

## Focus on the future



Longer life with  
Barksdale products  
means less downtime.



### Lower Cab Valve

Reduced part cost

- ▶ Engineered plastic construction
- ▶ Combined valve and link design
- ▶ Poppet design

Reduced installation cost

- ▶ Press onto mounting studs
- ▶ Push to connect tubing connections
- ▶ Fixed length / no adjustment required



### Pressure Protection Valve

- ▶ Compact size for easy installation
- ▶ Light weight
- ▶ Direct tank mounting
- ▶ 3/8" NPT female inlet and outlet
- ▶ 3/8" NPT male inlet with 3/8" NPT Female output
- ▶ Available with two outlet ports
- ▶ Factory calibrated and locked at exact open or closing pressure

### Direct Replacement Valve Kits

- ▶ No. 1 original equipment supplier
- ▶ Superior value
- ▶ Most reliable technology

- ▶ Double service time
- ▶ Contaminant-resistant
- ▶ Low temperature-resistant
- ▶ Leak free design
- ▶ Superior control



# Customized solutions

## Customized solutions

### Severe service



#### Severe Service Height Control Valve

Barksdale's focus on customer needs led us to develop a height control valve specifically for severe operating conditions. These applications include high levels of dust in air, rough or unsealed roads, mining, temperature extremes, and long duty cycles.

The Severe Service HCV teams up proven Shear-Seal® design with case hardened stainless steel components. The result is remarkable durability in some of the harshest environments imaginable, all in a package that slashes operating costs.

We further enhanced the value by offering the Severe Service HCV in cab, standard chassis, and integral dump configurations. A direct bolt in Severe Service HCV is available for any existing Barksdale application.





#### **We improve on reliability**

Our goal is to make today's commercial vehicle products even more reliable and to be able to bring the highest level of control to vehicle systems.

We put an extremely high priority on maintaining the highest quality and reliability of our products while continually working to improve product performance. R&D at Barksdale is not simply a response to market demands, but an integral part of our vision - and the resulting product concepts.

#### **Finding the right solution**

With extensive application experience in our targeted industries, we have the know-how to help customers choose the right product for their specific requirements. This helps them achieve significant and lasting improvements in efficiency, productivity, and profitability.





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