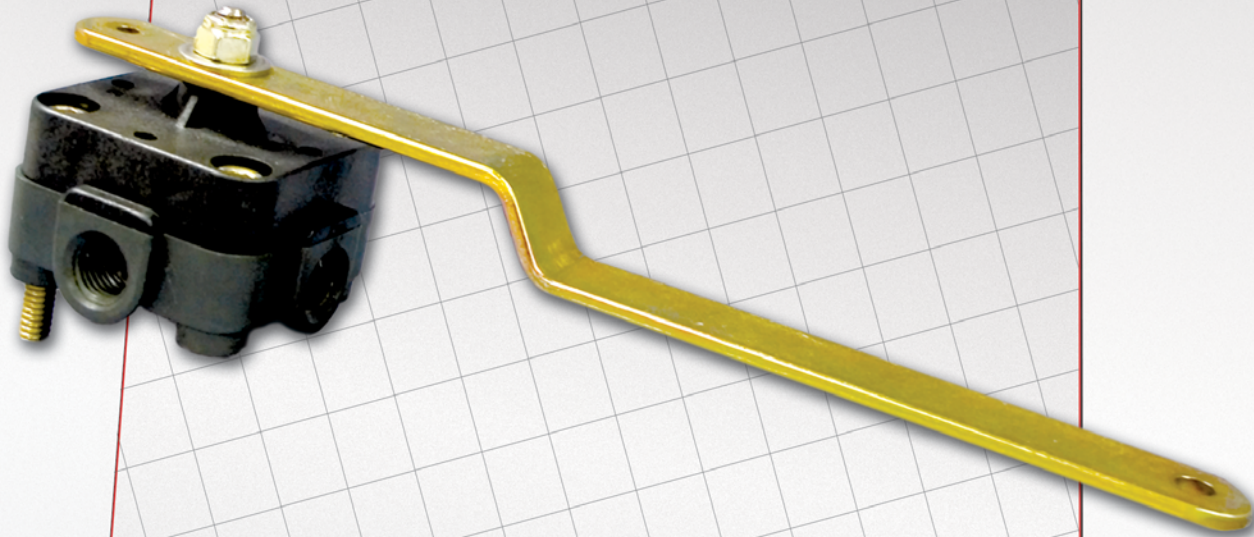


# 52321 Series

## 52321 Series

Air Suspension Valve



- ▶ Shear-Seal® Technology
- ▶ Accurate Ride Height
- ▶ Low Air Consumption

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

The 52321 Air Suspension Valve utilizes Barksdale's patented Shear-Seal® technology to accurately control suspension height in commercial and recreational vehicle applications. Shear-Seal® has become the industry leader through superior performance and long life, even under the most demanding conditions.

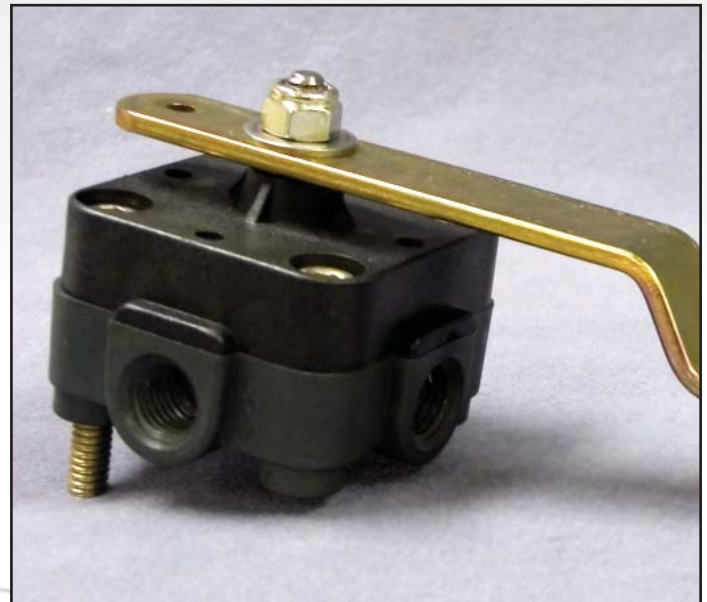
Barksdale height control valves feature proportional response and are available in both low flow and high flow configurations. These features combine to minimize air consumption without the use of inaccurate and failure prone time delay elements found in competing products.

Available push-to-connect fittings and single or dual bag ports allow for easy and fast installation. The Barksdale valve's compact design and Barksdale's ability to customize the product make it a perfect fit on any suspension.

## Features

- ▶ Shear-Seal® Technology provides superior performance and durability
- ▶ Precise dead band optimizes ride height control
- ▶ Proportional flow reduces vehicle air consumption
- ▶ 120 or 350 l/min (4.2 to 12.4 CFM) peak flow balances suspension response and air use
- ▶ Dual outlet ports for simplified hose routings
- ▶ Optional push-to-connect fittings ease installation
- ▶ Compact size and flexible design fits any application

Operating Media	Air
Seal Type	Shear-Seal®
Operating Pressure	130 PSI (9 bar) Maximum
Operating Temperature	-40°F to +150°F (-40°C to +65°C)
Flow Curve	Proportional response
Maximum Flow Rate	Low flow: 120 L/Min (4.2 cfm) Standard flow: 350 L/Min (12.4 cfm)
Port Size	1/4" NPT (Standard) 1/4" Push in tube* 6mm Push in tube* *DOT approved
Delivery Ports (Bag Ports)	Dual delivery ports
Mounting Studs	1/4-20 UNF or M6
Linkage Mounting Hole	0.25" (6.3 mm) or 0.38" (9.5 mm)
Maximum Handle Movement	+/- 75° For fill or exhaust



## Applications

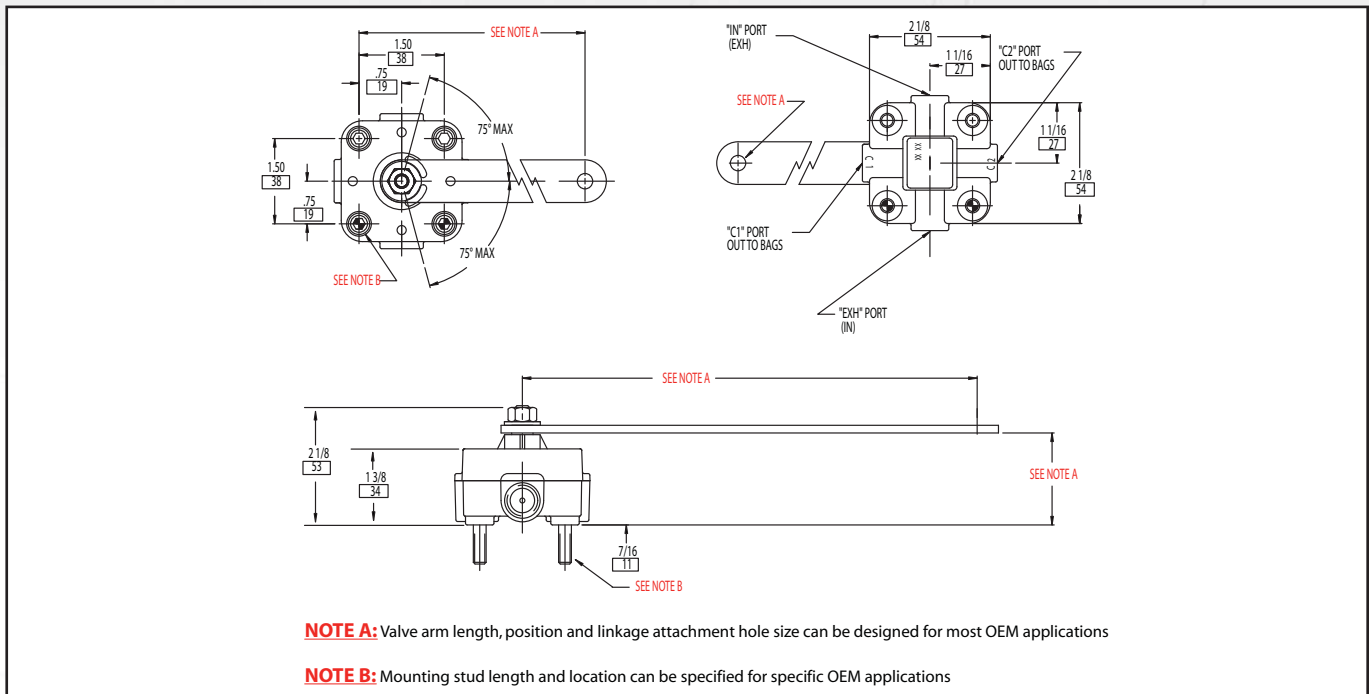
- ▶ Tractor
  - Primary Suspension
  - Cab Suspension
  - Front Suspension
- ▶ Trailer
- ▶ Bus
- ▶ RV

Materials Of Construction	<b>Body:</b> Anodize aluminum <b>Housing:</b> Engineered plastics <b>Arm:</b> Zinc plated steel <b>Internal Elements:</b> Stainless steel and hard anodized aluminum <b>Seals:</b> Buna-N
Weight (typical)	0.6 lb (272g)

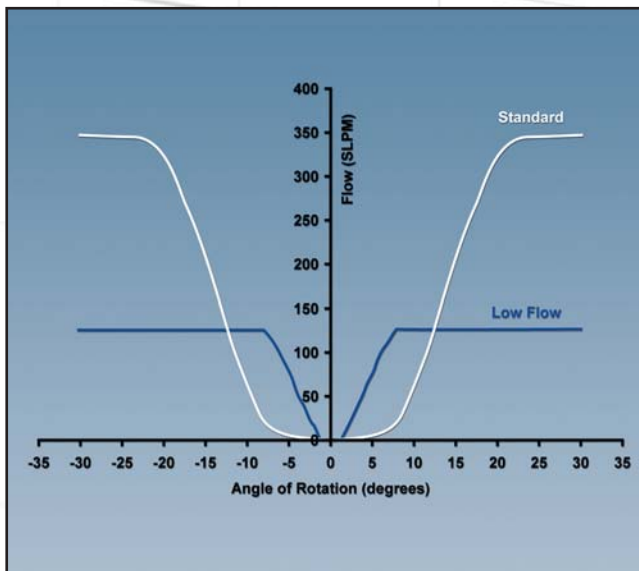
## Additional Options Available

- ▶ Arm length
- ▶ Port locations
- ▶ Arm orientation
- ▶ Mounting stud location
- ▶ Air fittings
- ▶ Mounting brackets

## Technical Drawings



## Barksdale Valve Flow Curve



Barksdale's patented proportional air flow design optimizes air usage within the vehicle air suspension system. The Barksdale height control valve reacts instantly to large suspension movement, providing maximum rated flow to rapidly restore vehicle ride height. Smaller changes in ride height result in proportional reductions in the volume of air flow to or from the air springs. Air is conserved and ride height overshoot and undershoot are virtually eliminated.

Barksdale's precise and highly repeatable deadband results in exact control of vehicle and cab ride height. This maintains critical driveline geometry while yielding a smooth ride and ensuring years of reliable service.

## Engineered Solutions



Barksdale specializes in engineered solutions that exceed customer expectations.

The Barksdale height control valve is highly adaptable, including customized:

- ▶ Actuating arm length, offset, attachment points
- ▶ Mounting stud length, and location, and threads
- ▶ Threaded SAE & metric ports and push to connect fittings
- ▶ Ready to bolt on sub-assemblies with brackets, linkages and fasteners

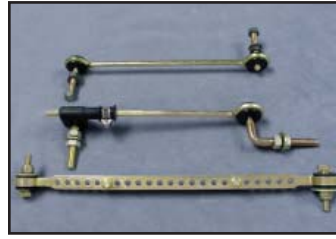
Barksdale has a solution for every application. Let us find one for you.



## Accessory Components



Barksdale Pressure Protection Valves (PPV) optimize the safety of your installation. This critical valve from Barksdale comes with male inlet threads for direct connection into your air reservoir. It is factory calibrated for the exact operating pressure required.



Barksdale offers several linkage options for use with Barksdale Air Suspension valves. Available in both fixed length and adjustable length these linkages provide a reliable connection between the air suspension valve and the suspension.



## Global Presence

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