

Second Ride Height Leveling Valve



- Shear-Seal® Technology
- Accurate Second Ride Height Control



# Second Ride Height Leveling Valve

The 52331 Air Suspension Leveling Valve (SRHLV) combines Barksdale's patented Shear Seal technology with a second ride height feature. This new product offers Shear Seal's industry leading durability with the ability to select two controlled ride settings at the flip of switch.

The SRHLV is engineered to customer specifications to either raise or lower vehicle air suspensions a specific distance at the end of the valve arm or number of degrees of shaft angle. The second ride height is activated by simply applying 75 PSI (5 bar) to the pilot port. Releasing pressure at the pilot port returns height control to the standard (default) setting.

Whether in second ride height or standard (default) ride height vehicle suspension control our proportional response design conserves on-board compressed air while maintaining precise control.

#### **Features**

- Shear-Seal® Technology provides superior performance and durability
- > Precise ride control at standard ride and second ride heights
- Raise or lower from normal ride height
- Second ride height control point set at the factory to customer requirements
- Remotely activated with air pressure / no electronics needed
- Available in standard duty or severe service option
- Compact size / uses current Barksdale bolt pattern

Operating Media	Air
Seal Type	Shear-Seal®
Operating Pressure	150 PSI (10 bar) Maximum
Operating Temperature	-40°F to +200°F (-40°C to +93°C)
Flow Curve	Proportional response
Maximum Flow Rate	Low flow: 120 L/Min (4.2 cfm) Standard flow: 350 L/Min (4.2 cfm)
Port Size	Standard 1/4" NPT 1/4" Push in tube* 6mm Push in tube* 3/8" Push in tube* *DOT approved
Delivery Ports (Bag Ports)	Dual delivery ports
Mounting Studs	1/4-20 UNF
Linkage Mounting Hole	0.25" (6.3 mm) or 0.38" (9.5 mm)
Maximum Handle Movement	+/- 75° For fill or exhaust
Second Ride Height	Set at factory
Direction of Second Ride Height	CW/CCW Set at factory



### Applications

Tractor

Raise suspension for additional under-vehicle clearance Lower for trailer undock / Vehicle aerodynamics

Trailer

Raise suspension for additional clearance Lower for overhead obstacles

Bus and Coach

Raise suspension for additional under-vehicle clearance Lower (kneel) for passenger load / unload

Dump Flow Rate	875 L/min (31 cfm)
Dump Port Activation	70 psi (4.8 bar) minimum
Dump Port Configuration	Normally open or normally closed
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Materials Of Construction	Body: Anodize aluminum
	Housing: Engineered plastics
	Arm: Zinc plated steel
	Internal Elements: Stainless steel
	and hard anodized aluminum
	Seals: Buna-N
Weight (typical)	1.45 lb (660g)

### **Additional Options Available**

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

# 52331 Series

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# **52331 Series**

### **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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