

The 52520 Air Suspension Valve utilizes Barksdale's patented Shear-Seal® technology to accurately control suspension height in commercial truck cabin applications. Shear-Seal® has become the industry leader through superior performance and long life, even under the most demanding conditions. The Shear-Seal® advantage combined with enclosed housing enables high dirt/contamination resistance.

Barksdale height control valves feature proportional response for minimal air consumption near deadband and better driver comfort. At the same time, new stem-less cartridge fittings and tamper-resistant screws increase robustness in the field. The Barksdale valve's compact design and two sets of mounting holes (M6 & M8) allow easy direct replacement and installation in current cab air suspension systems.

Features

High reliability and performance

- ▶ Genuine Shear-Seal® sealing technology
- ▶ Enclosed housing to prevent dirt/dust ingress
- ▶ Designed into 90% of North American Truck OEMs

Ease of Installation

- ▶ Same port directions allow for symmetry
- ▶ Smaller footprint and lower weight (175g vs competitor's 200g)
- ▶ Mounting holes (M8) matching competitor's for easy direct replacement

Deliver the right flow rate as the air bags require

- ▶ Higher flow rate (140L/min vs Competitor's 60L/min) when handle in critical angles/positions for quick response time
- ▶ Low flow rate when handle near deadband position to minimize cab valve air consumption

Push-to-connect cartridge & tubing performance

- ▶ New stem-less cartridges increase robustness

Tamper-resistant

- ▶ Pin-in Torx screws to prevent in-field tampering

Genuine Shear-Seal® Advantage

- ▶ Metal to metal seal
- ▶ Virtually zero leak rate
- ▶ Excels at handling contaminated air
- ▶ Precise deadband

Additional Options Available

- ▶ Arm length
- ▶ Arm orientation
- ▶ Linkages
- ▶ Mounting brackets

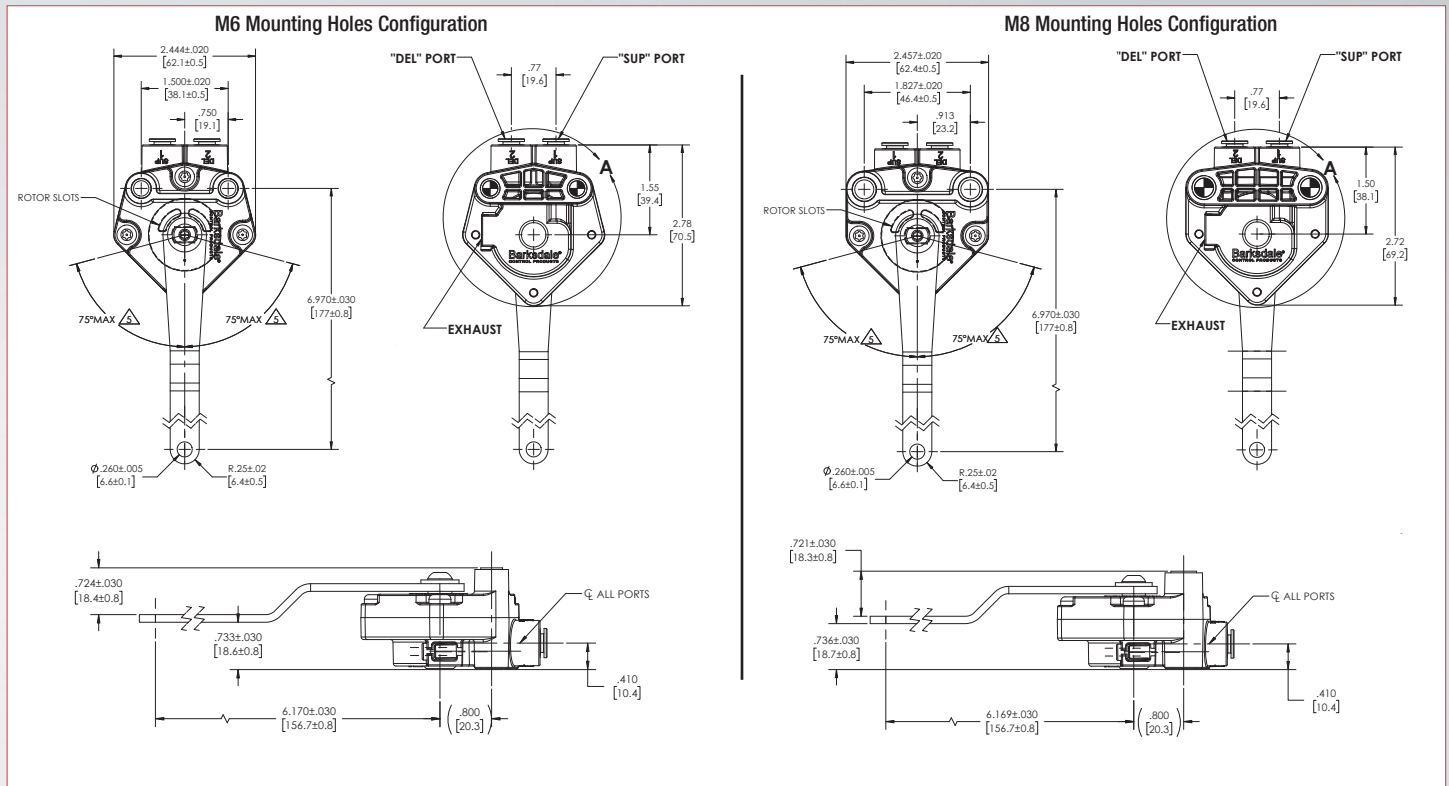
Barksdale®



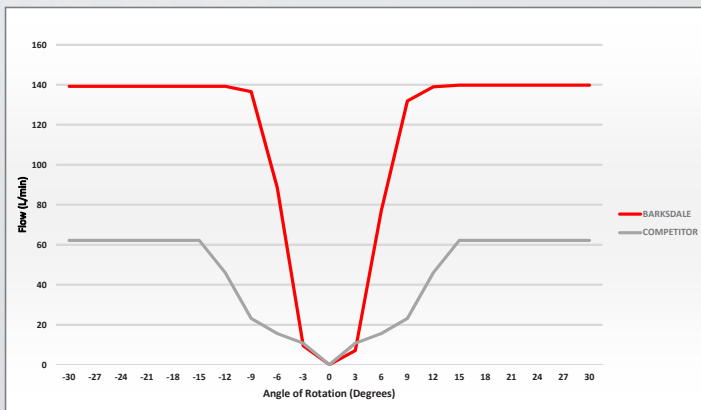
General Specifications*

Operating Media:	Air
Seal Type:	Shear-Seal®
Operating Pressure:	130 PSI (9 bar) Maximum
Operating Temperature:	-40°F to +185°F (-40°C to +85°C)
Flow Curve:	Proportional response
Maximum Flow Rate:	Standard flow: 120 L/Min (4.2 cfm) Maximum flow: 140L/min (4.94 cfm) *Contact factory for higher flow options
Port Size:	1/4" Push in tube* 6mm Push in tube *DOT approved
Mounting Through Holes:	M6 38.1mm (1.5in) M8 46.4mm (1.83in)
Linkage Mounting Hole :	0.25" (6.3 mm) or 0.38" (9.5 mm)
Maximum Handle Movement:	+/- 75° For fill or exhaust
Materials Of Construction:	Body & Housing: Engineered plastics Arm: Zinc plated steel Internal Elements: Stainless steel and hard anodized aluminum Seals: HNBR
Weight (typical):	0.4 lb (175g)

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.

