

Activair® Differential Engine

The Vapor Activair Differential Engine incorporates new features for improved performance, easier, less costly maintenance, greater reliability and enhanced passenger security.

NEW Features
Improved Performance



NEW

Optional locking mechanism secures engine, even if air pressure is lost

- Solid state sensors include visual status indication
- Mechanical release allows rapid emergency egress

NEW

Fixed position DOOR CLOSED sensor

- Faster, more consistent door system setup and adjustment
- No chance for adjustment drift
- Highly reliable proximity sensor

NEW

Relocated speed and cushioning adjustments – NO TOOLS NEEDED

- Easier access at end of large end cap
- Faster, more precise adjustment
- End cap available separately for upgrade of existing door engines

NEW

Adjustable cushioning onset

- Precisely matches cushioning to the door system and permits optimizing door opening speed while preventing slamming
- Eliminates unnecessary wear on door system components
- Potential for dwell time reduction

NEW

Removable teeter lever

- Simplifies engine rebuilding or replacement
- Reduces parts inventory because engine assembly is no longer specific to bus application.

Shown with optional locking mechanism

Activair™ Differential Engine

FEATURES

- Adjustable cushioning onset
- Finger screws for door speed adjustments
- Solid-state, non-contact proximity switches
- Door closed signal (inductive type sensor), non-adjustable
- Swivel tube fittings: NTA, DOT approved

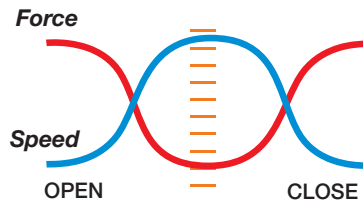
OPTIONAL

- Integral mechanical lock

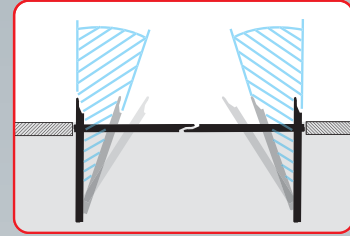
TECHNICAL SPECIFICATIONS

- **Operating pressure:** 90 to 120 psi
- **Output shaft rotation:** 153 ± 2° of rotation
- **Output torque:** 50 ft. lbs. @ 120 psi
- **Operating voltage:** 12 - 24 VDC Nominal
- **Opening time:** Adjustable 1.5 to 3.5 seconds
- **Closing time:** Adjustable 1.5 to 3.5 seconds
- **Operating temperature:** -40°F to 145°F (-40°C to 63°C)
- **Design life:**
 - 1,000,000 door cycles
 - 500,000 miles
 - 12 years

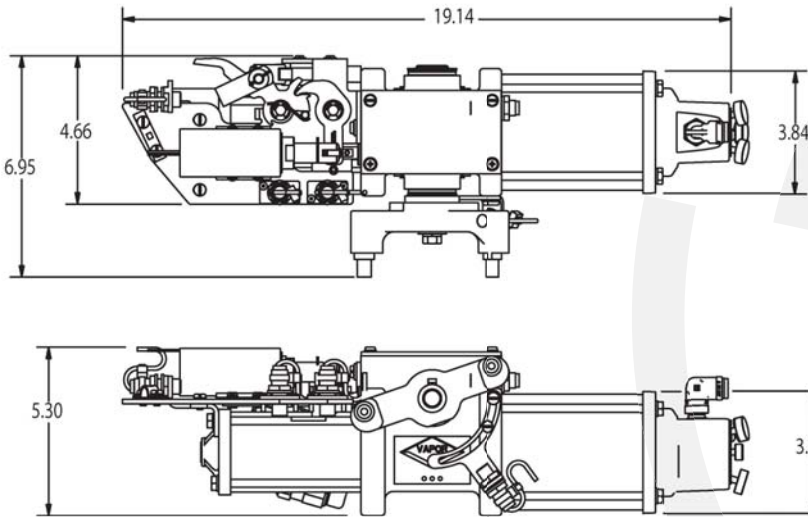
Force versus Speed Curves



Vapor's transit-tested pneumatic differential engine provides maximum velocity and minimum force in the mid-point of its range of motion, and maximum force and minimum speed at the extremes of its motion.



NEW Adjustable Cushioning Range for precise door open speed adjustment – prevents slamming



Upgrade kits and unit exchange program available. Contact your Vapor representative for more information.



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