

### Application and Design

The PS-32 Series dampers are constructed of UV-stabilized PVC plastic for many years of corrosion resistance and quiet operation. The dampers are designed to prevent reverse airflow in vertical and horizontal exhaust applications. Featuring a pressure sensitive blade design, the PS-32 series open and remain open under low velocity conditions. The dampers are opened by air pressure differential and closed by gravity. Optional motor pack converts the dampers to motorized operation.

### Ratings (See page 2 for specific limitations)

- Back Pressure:** 1.0 in. wg  
(PS-32 & PS-32T)  
2.0 in. wg  
(PS-32R & PS-32TA)
- Velocity:** 1000 fpm  
(PS-32 & PS-32TA)  
2500 fpm  
(PS-32R & PS-32TA)
- Temperature:** 165°F.

### Standard Construction

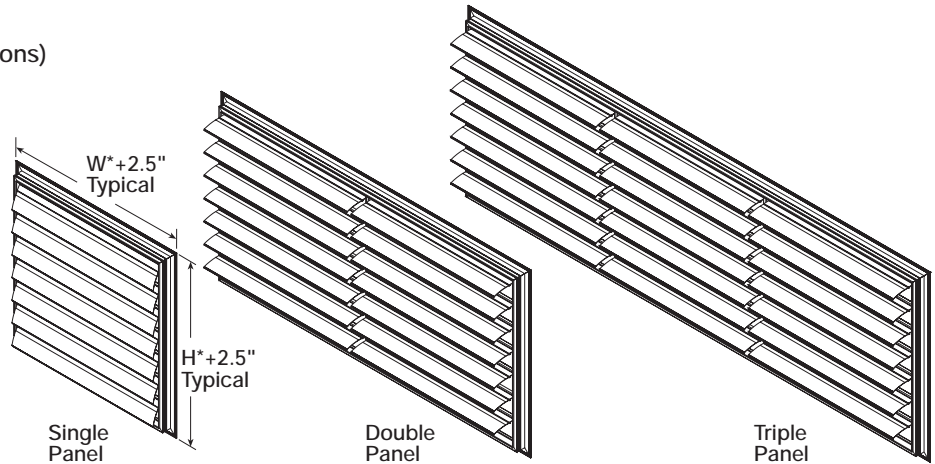
- Frame:** 0.100" PVC
- Blades:** 0.050" PVC
- Axles:** PS-32 : Acetal Pin  
PS-32T : Acetal Pin  
PS-32TA: Full Length  
Fiberglass Rod  
PS-32R : Full Length  
Fiberglass Rod
- Linkage:** ABS & PVC.

### Size Limitations (see page 2 for specific limitations)

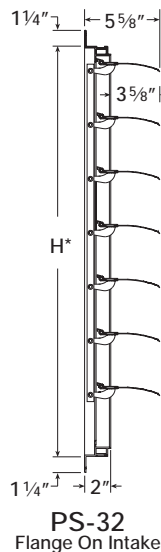
- Minimum Panel Size**  
10" W x 10" H
- Maximum Panel Size**  
Single Panel: 32" W x 74" H  
Double Panel: 64" W x 74" H  
Triple Panel: 74" W x 74" H

### Options and Accessories (at additional cost)

- Motor Packs (24V, 115V, 220V, 440V)  
(Only available on Model PS-32TA; see page 3)



\* W & H dimensions furnished approximately 1/8" under size. Dimensioning shown is from outside of flange to outside of flange.



### Models Available

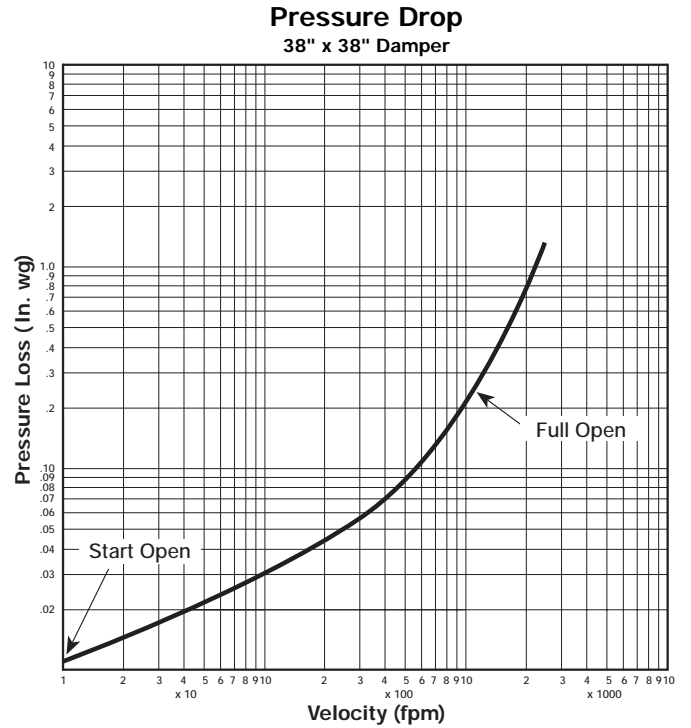
- PS-32:** No tie bar.  
Acetal pin axles.
- PS-32T:** With tie bar.  
Acetal pin axles.
- PS-32R:** No tie bar.  
Full length fiberglass rod  
blade reinforcement.
- PS-32TA:** With tie bar.  
Full length fiberglass rod  
blade reinforcement.

Quantity	Model	Size	
		W Width	H Height
Project		Location	
Contractor		Design Specifier	

## Pressure Drop

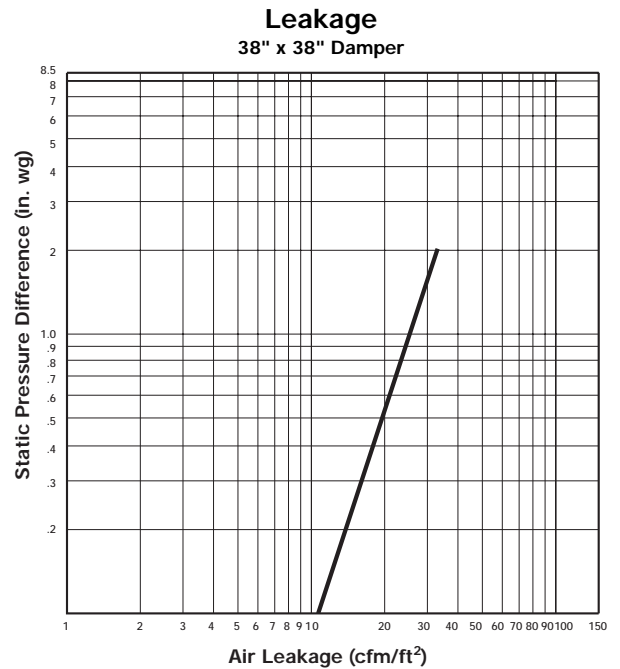
Performance data results from testing a 38" x 38" damper in accordance with AMCA Standard 500 using Figure 5.5. All data has been corrected to represent standard air at 0.075 lb/ft<sup>3</sup>.

Operational Data		$\Delta P$ in. w.g.	Velocity fpm
Blades Start Open	non-ducted	0.011	10
Blades Fully Open	non-ducted	0.25	1100



## Leakage

Leakage testing was conducted in accordance with AMCA Standard 500 and is expressed as cfm/ft<sup>2</sup> of damper face area. All data has been corrected to represent standard air at 0.075 lb/ft<sup>3</sup>.



## PS-32 Series Motor Packs

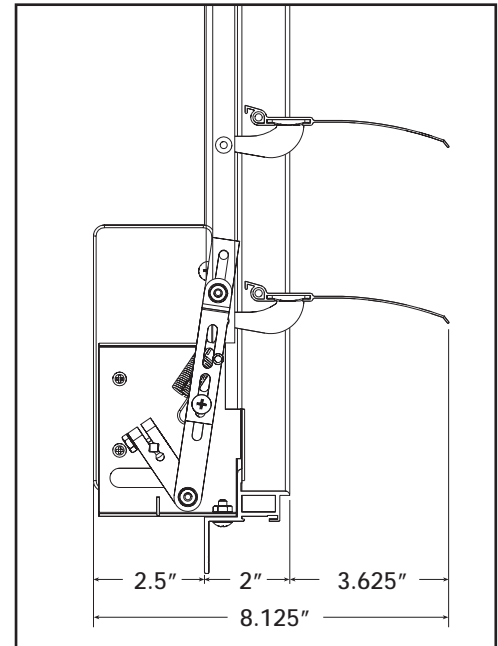
PS-32 Series motor packs may be field installed to convert the PS-32TA backdraft damper to motorized operation. These versatile motor packs feature power opening with spring return. The springs also provide damper closure in the event of electrical failure.

The PS-32 Series motor packs are available in voltages of 24, 115, 220 and 440. 575/600 volts may be used with any of the motor packs by way of a transformer (Greenheck Part #380711) and the 115 volt motor pack. The PS-32 Series motor packs are U.L. Listed. *Please specify voltage when ordering.*

PS-32 Series motor packs are supplied with assembly instructions and stainless steel mounting bracket and hardware.

Motor Packs 1-Ø, 60 Hz	PS-24	PS-115	PS-220	PS-440
Voltages	24	115	220	440
Speed (RPM)	1.8	1.8	1.8	1.8
Running Amps	1.4	0.22	0.12	0.065
Stall Amps	1.6	0.24	0.14	0.075
Identification #	2651	UL-2-2469	UL-3-2495	UL-4-2576

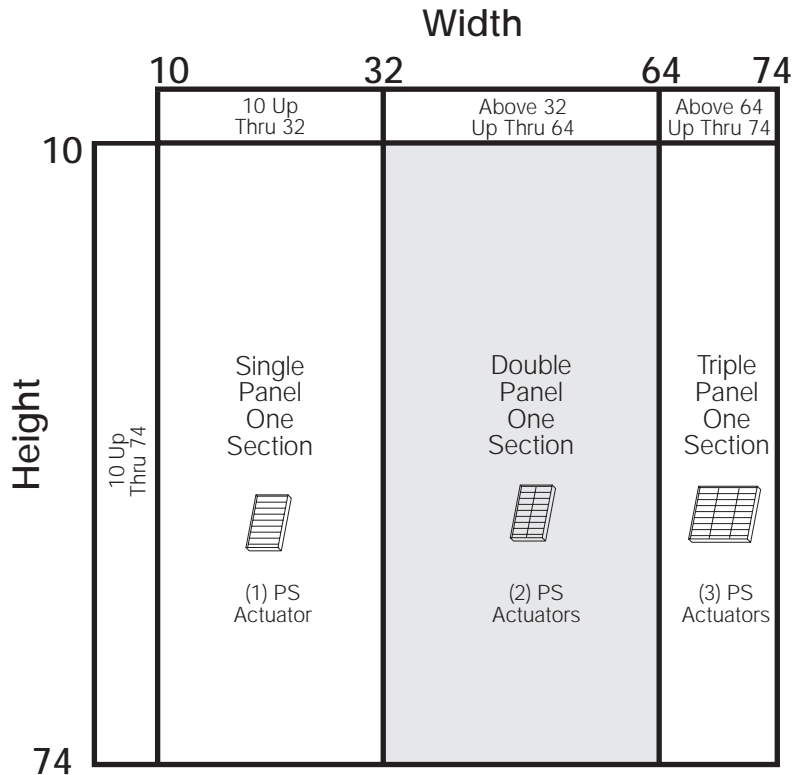
## Motor Pack Dimensional Data



**PS-32TA damper with optional motor pack**

PS-32TA dampers are available with an optional motor pack (PS-24, PS-115, PS-220, and PS-440). The diagram above illustrates the required clearance needed for proper operation of a mounted motor pack.

- PS-32 Series dampers are supplied as shown in the table below. PS-32 dampers are available up to a maximum overall size of 74"x74".
- Please note that the width dimension is **always** taken as being parallel to the length of the blades.
- **Note:** The type of motor packs available can be found on page 3.



## Specifications

Backdraft dampers meeting the following specifications shall be furnished and installed where shown on plans and/or as described in schedules. Dampers shall be constructed of all non-ferrous components. Dampers shall consist of: 0.100" thick PVC frame with 2" depth; 0.050" thick flexible PVC blades; and acetal axle pins. Frame corners shall be fused for rigidity and durability. Damper manufacturer's printed

application and performance data including pressure, velocity and temperature limitations shall be submitted for approval showing damper suitable for pressures to 2.0" w.g., velocities to 2500 fpm and temperatures to 165°F. Testing and ratings to be in accordance with AMCA Standard 500. Basis of design is Greenheck model PS-32.