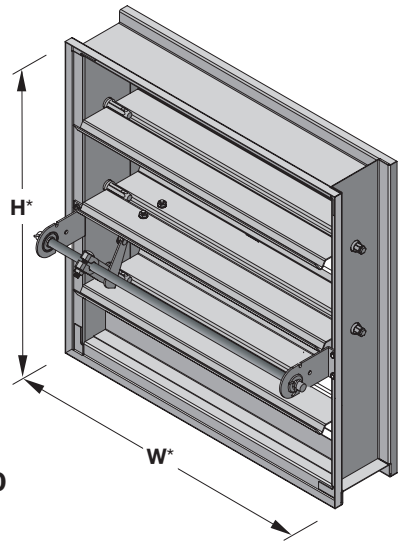
POTTORFF®

FD-340

3-Hour – Fire Damper
Triple-V Blade



FD-340
(standard)

*Damper dimensions furnished approximately 1/4" (6) undersize.
(sleeve thickness not included)

The FD-340 fire damper employs triple-V blades for point-of-origin control of fire in static and dynamic HVAC systems. The FD-340 is qualified to 4,000 ft/min (20.3 m/s) and 6 in.wg. (1.5 kPa) and may be installed in vertical walls or partitions with fire resistance ratings up to 4 hours.

Ratings

UL 555 Fire Resistance Rating: 3 Hour (vertical)

UL HNLN: Ventilation Duct Assemblies

Maximum Dynamic Closure Velocity: 4,000 fpm (20.3 m/s)
2,000 fpm (10.2 m/s) Multiple Sections

Maximum UL555S Rated Pressure: 6 in.wg. (1.5 kPa)

Listings

UL 555 listing: R11767

CAN/ULC S112 listing: R11767

CSFM listing: 3225-0368:110

New York City MEA listing: 295-98-E

Meets NFPA Standards: 90A, 92A, 92B and 101

Meets Building Code Standards: IBC, NBC, NFPA, SBC and UBC

Options

- **PI-50 — Dual-position indicator switch package**
- **Factory-installed sleeve:**
  Type: ▪ A (Std.) ▪ C
  Gauge: ▪ 20 (1.0) ▪ 18 (1.3) ▪ 16 (1.6) ▪ 14 (2.0) ▪ 10 (3.4)
  Length: ▪ 12" (305) ▪ 16" (406) ▪ 24" (610) ▪ Other_____
- **Transitions (sleeve required):**
  ▪ Round ▪ Oval ▪ Flanged
  ▪ Duct connections: ▪ DM-25 ▪ DM-35 ▪ S & Drive ▪ WARD
- **16 ga. (1.6) Retaining angle systems:**
  Picture frame: ▪ SSPF (single-side) ▪ DSPF (2-sided)
  Individual angle sets: ▪ SS (single-side) ▪ DS (2-sided)
- **Alternate fire closure temperature:**
  ▪ 212°F (100°C)
- **Duct access door factory mounted in common sleeve**
- **Burglar bars**
- **Manual locking quadrant**
- **Type-304 stainless steel construction**
- **Actuator for multi-section sizes**
  ▪ Internal ▪ External
  ▪ 24 VAC ▪ 120 VAC

Standard Construction

Frame: 5" × 1" (127 × 25) galvanized steel hat channel with interlocking corner gusset. Equivalent to 13 gauge (2.4) channel frame. Low profile head and sill are used on sizes less than 13" (330) high.

Blades: 6" × 16 gauge (152 × 1.6) galvanized steel — triple-V

Axles: 1/2" (13) diameter plated steel hex

Linkage: Concealed in frame

Bearings: Stainless steel oilite, sleeve-type

Seals: Flexible metal jamb seals

Fire Closure Device: Fusible link

Fire Closure Temperature: 165°F (75°C)

Minimum Size: 6" × 6" (152 × 152)
Type C: 4" × 4" (102 × 102)

Maximum Size: Single Section: 36" × 48" (914 × 1219)
Type C: 34" × 46" (864 × 1168)
Multiple Section: 72" × 48" (1828 × 1219)
or 36" × 96" (914 × 2438)
Stainless steel: 36" × 48" (914 × 1219)

NOTE: Dimensions in parentheses ( ) are millimeters.
Information is subject to change without notice or obligation.

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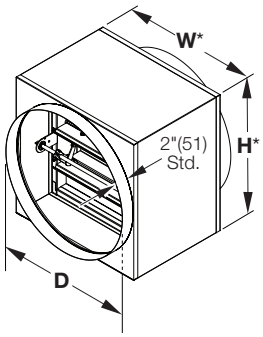
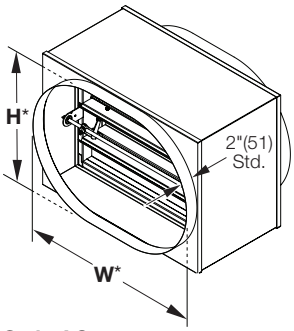
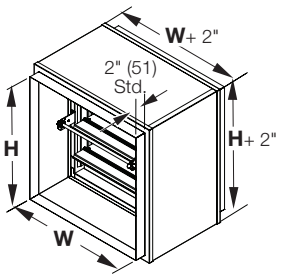
Typical Damper Dimensional Data



Sleeve Style AR (Optional)
Round duct transitions are standard with D=W=H. (available with D<W and H)



Style AO (Optional)
Oval duct transitions are standard with W and H equal to damper width and height dimensions. (available with W and H smaller than damper width and height)

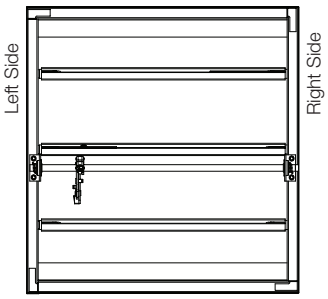


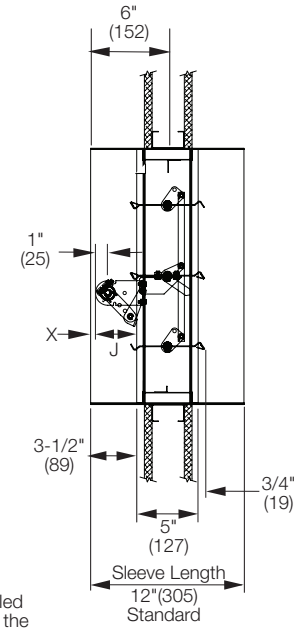
Type C (Optional)
Damper is oversized and uses rectangular transitions to remove damper frame from airstream

*Damper dimensions furnished approximately 1/4" (6) undersize. (sleeve thickness not included)

The drawings and corresponding table show the position of the damper when mounted in a factory sleeve. The standard mounting locations provide enough space for installation of retaining angles and duct connections.

Damper Height	J	X
<8"	2"	1-1/2"
≥ 8"	3-3/8"	1/8"



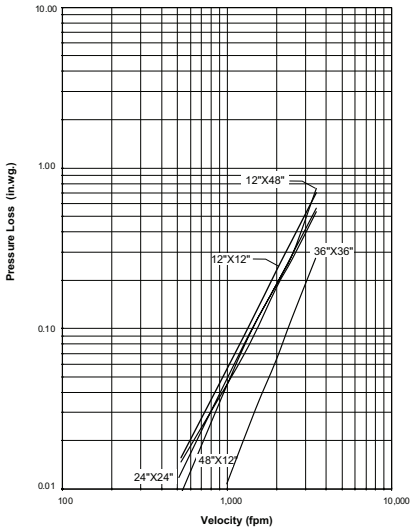


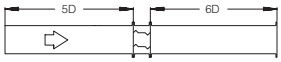
Note: 1. The entire damper frame is not required to be installed within the wall, partition or floor. However, the closed plane of the damper blades must be inside the wall, partition or floor.

Airflow Performance Data

Pressure Loss vs. Velocity

Figure 5.3 — Ducted Inlet and Outlet





Ducted Inlet and Outlet

AMCA Figure 5.3 Illustrates a fully ducted damper. This configuration represents the lowest pressure drop of the three test configurations because entrance and exit losses are minimized by straight duct runs upstream and downstream of the damper.

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AIR PERFORMANCE
AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL, INC.

Air Performance

Pottorff certifies that the model FD-340 shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings only.

Pressure drop testing was performed in accordance with AMCA Standard 500-D using the configuration shown. All data has been corrected to represent air density of 0.075 lb/ft. Actual pressure drop in any ducted HVAC system is a combination of many elements. This information, along with analysis of other system influences, should be used to estimate actual pressure losses for a damper installed in a given HVAC system.