

Application

The FD-125R fire damper employs a single round blade for point-of-origin control of fire in static and dynamic HVAC systems. This unique damper comes standard with mounting plates for interface to round or square openings in masonry, metal stud, or wood stud assemblies and is ideal for all round duct applications. The FD-125R is qualified to 2000 fpm (10.2 m/s) and 4 in. wg. (1.0 kPa) and may be installed in vertical walls or partitions, or horizontally in floors or assemblies with fire resistance ratings up to 2 hours.

Standard Construction

Sleeve/Frame: Integral 16" x 20 gauge (406 x 1.0) galvanized steel with reinforcing beads.

Retaining Plates: Dual sided system suitable for round or square penetrations.

Blade: 14 gauge (2.0) equivalent galvanized steel — round.

Axles: ½" (13) diameter plated steel, D<8" (203), ¾" (19), D≥8" (203).

Linkage: In the air-stream.

Bearings: Bronze oilite, sleeve-type.

Fire Closure Device: Fusible link.

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

Minimum Size: 8" Ø (203 Ø)

Maximum Size: 24" Ø (610 Ø)

Options

- Alternate sleeve/frame length:
 - 20" (508) 24" (610)
- Single-sided mounting plate.
- Duct access door factory mounted to sleeve/frame.
- Alternate fire closure temperature:
 - 212°F (100°C)
- Type - 304 stainless steel construction.
- Manual locking quadrant.

Ratings

UL 555 Fire Resistance Rating: 1½ hour (vertical and horizontal)

Maximum Dynamic Closure Velocity: 2,000 fpm (10.2 m/s)

Maximum UL555S Rated Pressure: 4 in.wg. (1.0 kPa)

Listings

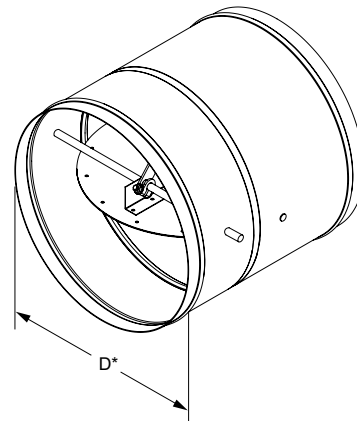
UL 555 listing: R14981

CSFM listing: 3225-1404:112 and 3230-1404:113

New York City MEA listing: 295-98-E

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

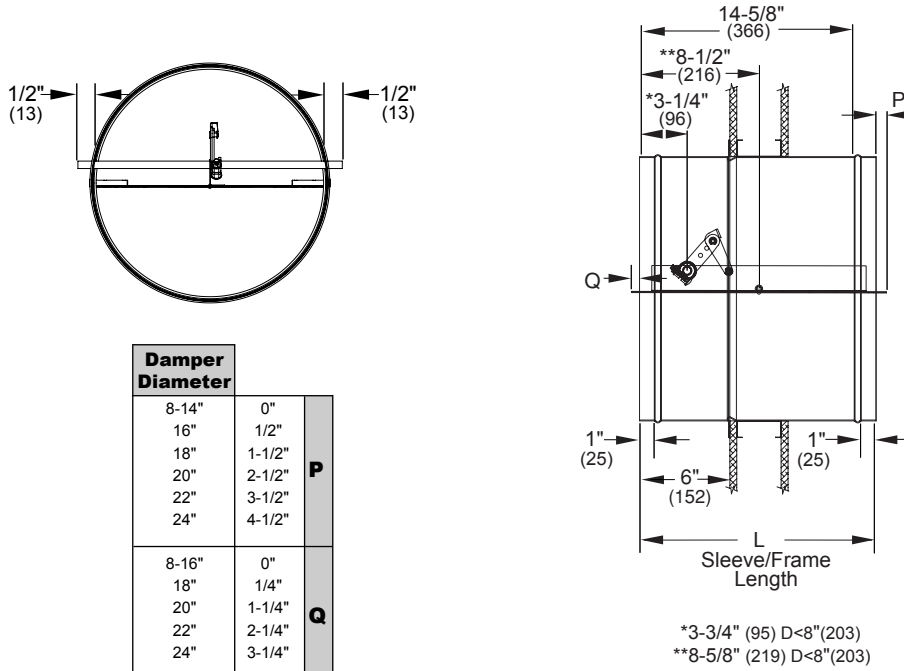
Meets Building Code Standards: IBC, NBC, NFPA, SBC and UBC



Model FD-125R
(standard)

*Damper dimensions furnished approximately 1/8" (3) undersize. Outside diameter including reinforcing beads is approximately D + 1/8" (3), and at axle center line diameter including axle heads is approximately D + 3/8" (10).

Actuator and Sleeve Dimensional Data



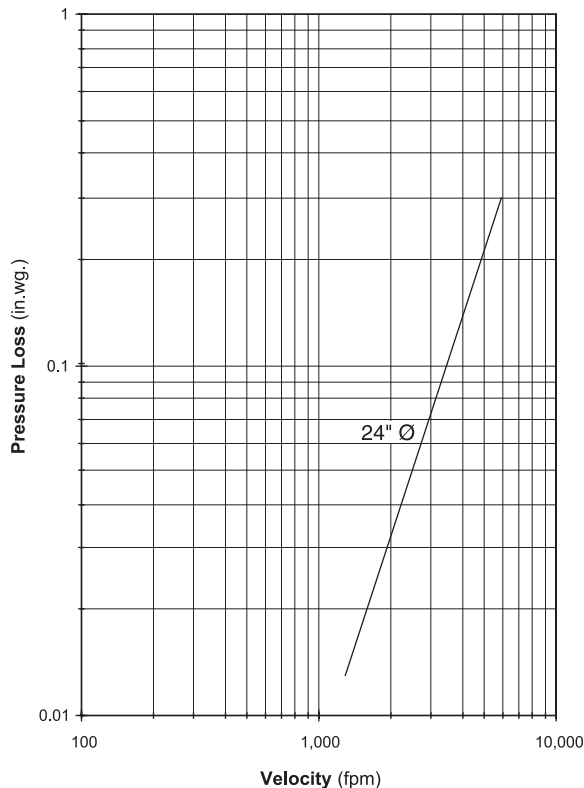
The drawings illustrate the position of the damper as supplied from the factory within a standard length sleeve/frame.

The standard mounting locations provide enough space for installation of retaining plates and duct connections.

Note: See Installation Instructions for complete installation details.

Pressure Drop Performance Data

Pressure drop testing was performed in accordance with AMCA Standard 500-D. 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.



Ducted Inlet and Outlet

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