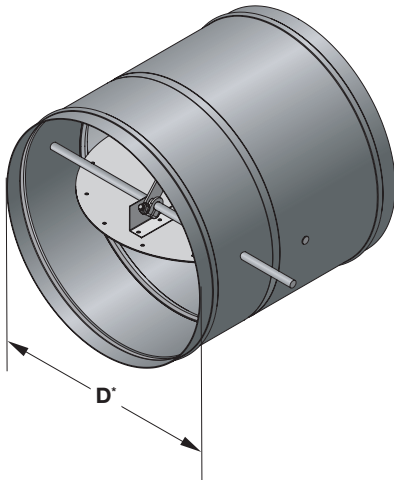




FSD-125R
(standard)

*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).

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: 1/2" (13) diameter plated steel hex, $D < 8"$ (203), 3/4" (19), $D \geq 8"$ (203)

Linkage: In the air-stream

Bearings: Bronze oilite, sleeve-type

Seal: Silicone blade edge seal

Actuator: 120 VAC, power-open, spring-close, external mount

Fire Closure Device: HS-10 (electric actuators)
PFV (pneumatic actuators)

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

Minimum Size: 6" Ø (152 Ø)

Maximum Size: 24" Ø (610 Ø)

The FSD-125R combination fire smoke damper employs a single round blade for point-of-origin control of fire and smoke in static and dynamic smoke management 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 FSD-125R, standard construction, is qualified to 2,000 fpm (10.2 m/s) and 4 in. wg. (1.0 kPa) at 250° F (121°C). Optional construction is qualified to 3,000 fpm (15.3 m/s) and 4 in.wg. (1.0 kPa) at 350° F (177°C) and may be installed in vertical walls or partitions, or horizontally in floors or assemblies with fire resistance ratings up to 2 hours.

Ratings

UL 555 Fire Resistance Rating: 1-1/2 Hour (vertical and horizontal)

UL 555S Leakage Class: 1 [8 cfm/sq.ft. @ 4 in.wg.]
[(0.04 m³/s/m² @ 1.0 kPa)]

Maximum Dynamic Closure Velocity: 3,000 fpm (15.3 m/s)

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

Maximum Temperature: 350° (177°C)

Listings

UL 555 and 555S: R14981

CAN/ULC S112 and CAN/ULC S112.1 listing: R14981

CSFM listing: 3225-1404:109 and 3230-1404:111

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

■ **Alternate actuator:** ■ 24 VAC ■ 230 VAC ■ Pneumatic

■ **DRS-30 — Two-temperature fire closure device**
(Includes actuator with auxiliary switches)

■ **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) ■ 250°F (121°C)
■ 350°F (177°C)

■ **Remote control stations:**
■ RCP-1 (single) ■ RCP-1K (single, key controlled)
■ RCP-1M (single, momentary switch)

■ **Type - 304 stainless steel construction**

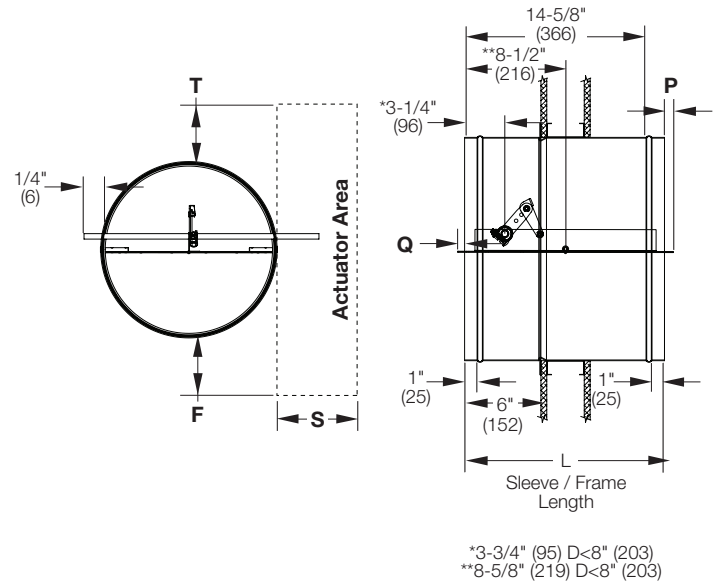
NOTE: Dimensions in parentheses () are millimeters.
Information is subject to change without notice or obligation.
csairproducts.com

Actuator and Sleeve Dimensional Data

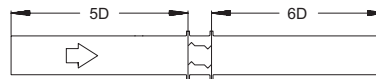
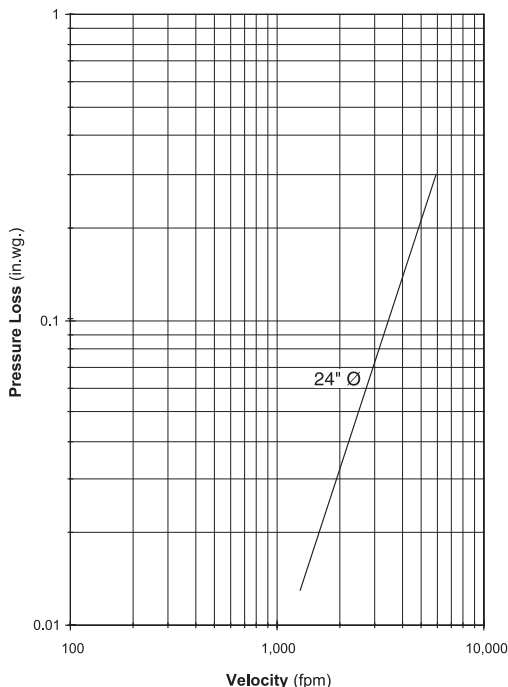
FSD-125R

1-1/2-Hour fire • **UL Class 1**
Combination Fire-Smoke Damper • Round Blade

	Actuator Model						
	Damper Height	FSLF120 FSLF24	FSNF120 FSNF24	GGD221 GGD121	ML4115 ML8115	331-4826	331-2998
F	6"	3-1/2"	5"	7"	3-1/2"	8"	12"
	8"	2-1/2"	4"	6"	2-1/2"	6"	10"
	10"	2-1/2"	3"	5"	2-1/2"	5"	9"
	12"	2-1/2"	2-1/2"	4"	2-1/2"	4"	8"
	14"	2-1/2"	2-1/2"	3"	2-1/2"	3"	7"
	16"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	6"
	18"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	5"
	20"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	4"
T	22"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	3"
	24"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"
S	All	0"	0"	0"	0"	0"	0"
P	6-14"	0"	0"	0"	0"	6-1/2"	8-3/4"
	16"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
	18"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"
	20"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"
	22"	3-1/2"	3-1/2"	3-1/2"	3-1/2"	3-1/2"	3-1/2"
	24"	4-1/2"	4-1/2"	4-1/2"	4-1/2"	4-1/2"	4-1/2"
Q	6-16"	0"	0"	0"	0"	0"	0"
	18"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
	20"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"
	22"	2-1/4"	2-1/4"	2-1/4"	2-1/4"	2-1/4"	2-1/4"
	24"	3-1/4"	3-1/4"	3-1/4"	3-1/4"	3-1/4"	3-1/4"



Pressure Drop Performance Data



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.

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.