

Application

Model SMDR-501 is round smoke damper with low leakage. The SMDR-501 is qualified to 4,000 fpm (20.3 m/s) and 4 in. wg (1 kPa) for operational closure in emergency smoke control situations, for use in HVAC system applications.

Ratings

UL 555S Leakage Rating

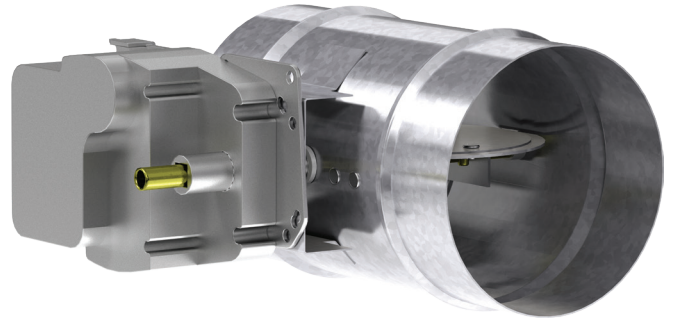
Leakage Class: I

Operational Rating: Actual ratings are size dependent

Velocity: Up to 4000 fpm (20.3 m/s)

Pressure: Up to 4 in. wg (1 kPa)

Temperature: Up to 350°F (177°C) - depending upon the actuator



* The diameter dimension furnished approximately 1/8 in (3mm) undersize.

Construction

	Standard	Optional
Frame Material	Galvanized steel	-
Frame Material Thickness	20 ga. (1 mm)	16 ga. (1.5 mm)
Blade Material	Double skin galvanized steel	-
Blade Material Thickness	14 ga. (2mm) equivalent	-
Blade Seal	Silicone	-
Axle Bearings	Bronze	316SS
Axle Material	1/2 in. (13 mm) plated steel	-



See complete marking on product.

UL 555S Classification
R13317

Model SMDR-501 meets the requirements for smoke dampers established by:

National Fire Protection Association

NFPA Standards 92, 101 & 105

International Building Codes (IBC)

Size Limitations

Diameter	Minimum	Maximum
in. (mm)	6 (152)	24 (610)

Options

- Electric actuators to accomplish smoke management and system functions
- OCI (Open Closed Indication switches)
- Smoke Detectors

Document Links



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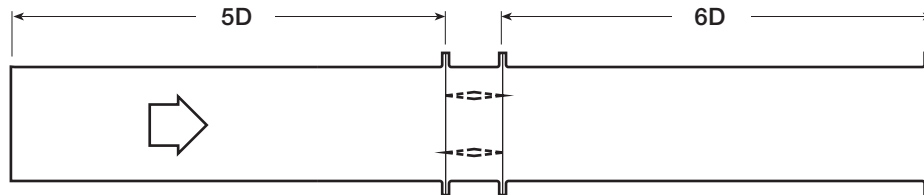
Pressure Drop

This pressure drop testing was conducted in accordance with AMCA Standard 500-D using the configuration shown. All data has been corrected to represent standard air at a density of .075 lb/ft³(1.201 kg/m³).

Actual pressure drop found in any HVAC system is a combination of many factors. This pressure drop information along with an analysis of other system influences should be used to estimate actual pressure losses for a damper installed in a given HVAC system.

AMCA Test Figures

Figure 5.3 Illustrates a fully ducted damper. This configuration has 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.



VELOCITY VS. PRESSURE DROP

