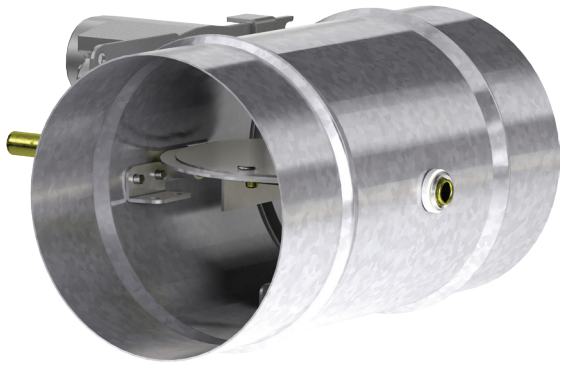
SMDR-501
Round Smoke Damper

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.



* Dimensions (dia.) furnished approximately ⅛ in (3mm) undersize.

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

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	½ in. (13 mm) plated steel	-

See complete marking on product.
UL 555S Classification R13317
CAN/ULC S112.1 Classified Smoke Damper

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

- BACNet test module - 120V or 24V
- Electric actuators to accomplish smoke management and system functions
- OCI (Open Closed Indication switches)

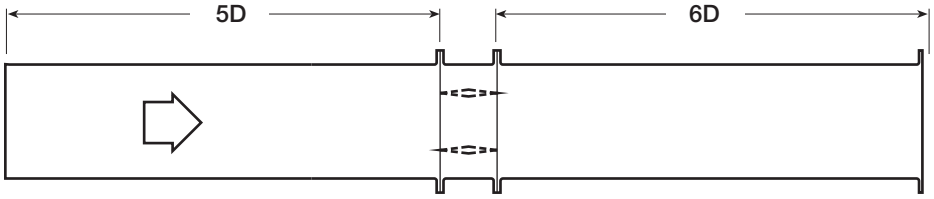
Pressure Drop

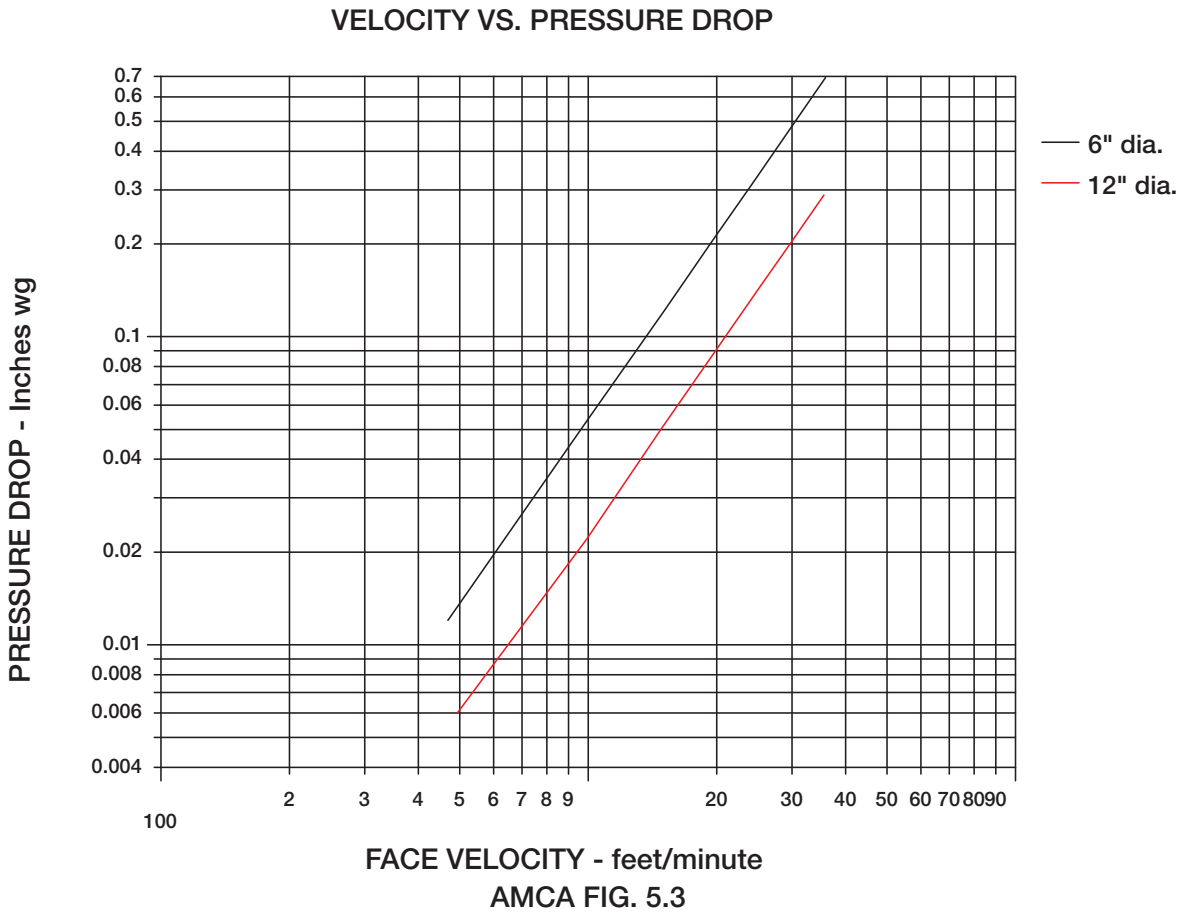
This pressure drop testing was conducted in accordance with AMCA Standard 500-D using the configuration shown. All data has been corrected to represent standard air at a density of .075 lb/ft^3(1.201 kg/m^3).

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.





AMCA FIG. 5.3

Document Links

INSTALLATION

CATALOG

SELECTION GUIDE

WARRANTY

SMDR-501, R8, April 2025