

Application

CD-25R low leakage control dampers employ a sturdy round frame and a single round blade for automatic air control and manual balancing in medium to high pressure and velocity applications.

Standard Construction

Frame: 12" × 20 ga. (305 × 1.0) galvanized steel.

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

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

Bearings: Synthetic

Seals: Polyethylene blade edge seals.

Control Shaft: 1/2" × 3" (13 × 76) round drive axle.

Minimum Size: 6" Ø (152 Ø)

Maximum Size: 24" Ø (610 Ø)

Options

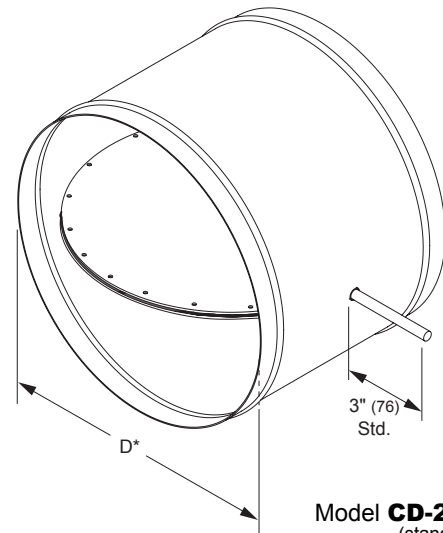
- Factory installed external mount actuator:
 - Manual locking quadrant (supplied loose).
 - 24 VAC 120 VAC 230 VAC
 - Pneumatic Modulating
- Actuator Mounting Bracket.
- Actuator/Quadrant standoff bracket - accommodates up to 1" (25) thick insulated duct.
- Stainless steel oilite bearings.
- Type-304 stainless steel construction.

Ratings

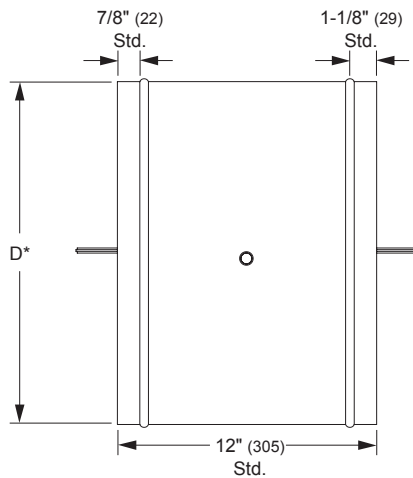
Damper Diameter	Maximum System Pressure	Maximum System Velocity
6" (152)	10.0 in. wg. (2.5 kPa)	4000 fpm (20.4 m/s)
12" (305)	8.0 in. wg (2.0 kPa)	4000 fpm (20.4 m/s)
18" (457)	6.0 in. wg (1.5 kPa)	3500 fpm (17.8 m/s)
24" (610)	4.0 in. wg (1.0 kPa)	3000 fpm (15.3 m/s)

Maximum Leakage: 5.5 cfm/ft² @ 10 in. wg (0.028m³/s/ m² @ 2.5 kPa)
 5.0 cfm/ft² @ 8 in. wg (0.026m³/s/ m² @ 2.0 kPa)
 3.3 cfm/ft² @ 4 in. wg (0.017m³/s/ m² @ 1.0 kPa)
 1.5 cfm/ft² @ 1 in. wg (0.008m³/s/ m² @ 0.25 kPa)

Temperature: -25°F to 180°F (-32°C to +83°C)



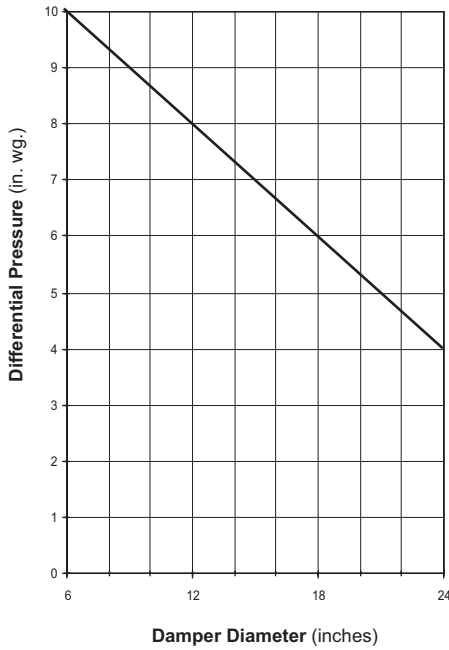
Model CD-25R
(standard)
*Damper dimensions furnished approximately 1/8" (3) undersize.



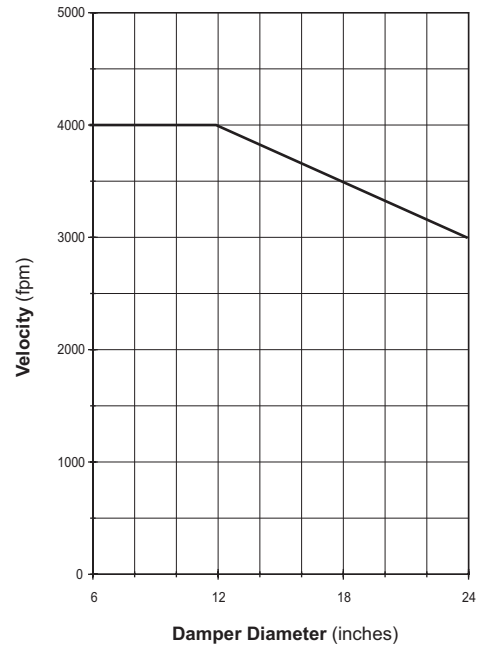
Side View
*Damper dimensions furnished approximately 1/8" (3) undersize.

Airflow Performance Data

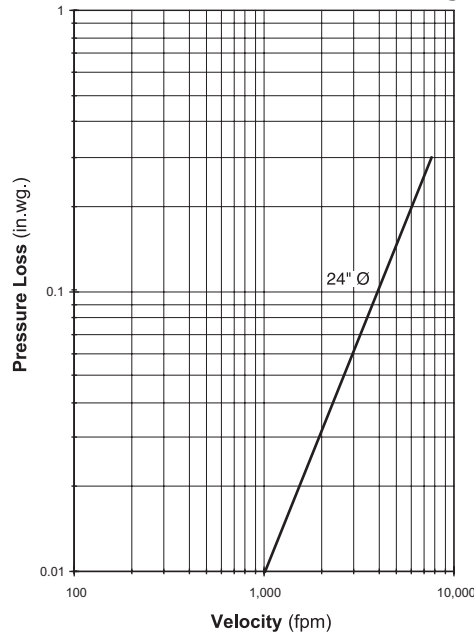
Pressure Limitations



Velocity Limitations



Pressure Loss vs. Velocity



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.