

Application and Design

The VCDR-53 series is a round control damper intended for application in low to medium pressure and velocity systems.

Ratings

Pressure: 4.0 in. wg (996 Pa) - pressure differential.

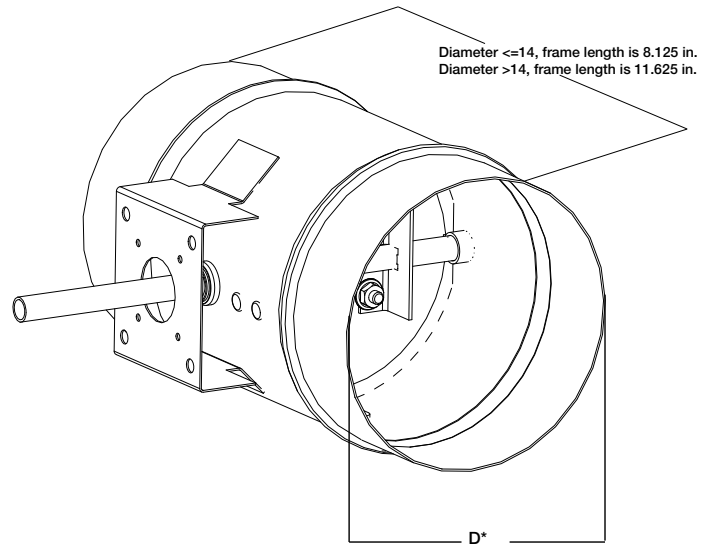
Velocity: 3000 fpm (15.2 m/s)

Leakage: 4 cfm/ft² @ 1 in. wg (73 cmh/m² @ 249 Pa)

Temperature: 250°F (121°C)

Construction	Standard	Optional
Frame Material	Galvanized Steel	304SS
Frame Thickness	20 ga. (1mm)	16 ga. (1.5mm) 14 ga. (2mm)
Blade Material	Double skin galvanized steel	304SS
Blade Seal	EPDM	Silicone
Axle Bearings	Bronze	304SS
Axle Material	Plated Steel	304SS
Paint Finishes	-	Baked Enamel, Epoxy, Hi Pro Polyester, Industrial Epoxy, Permatector

Diameter	Minimum	Maximum
in. (mm)	4 in. (102)	24 in. (610)



*D dimension furnished approximately 1/8 in. (6mm) undersize.

Features

- Wide range of electric and pneumatic actuators available. Factory installation available.

Leakage Data

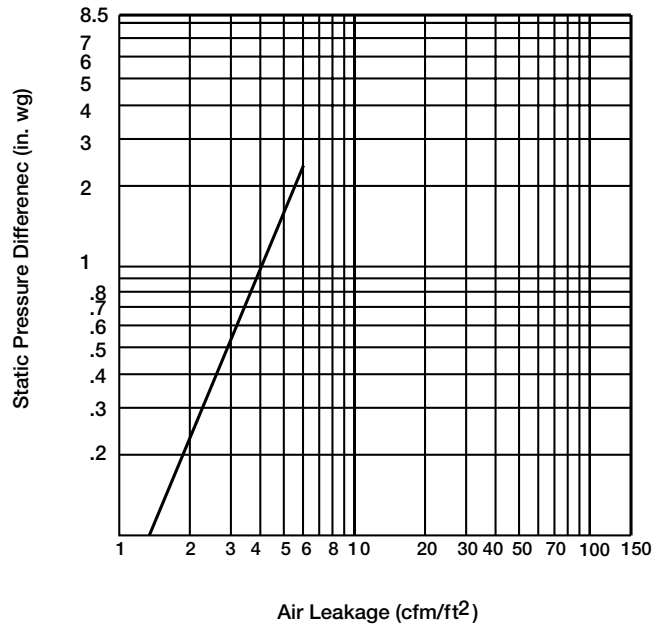
Leakage testing was conducted in accordance with AMCA Standard 500-D and is expressed as cfm/ft² of damper face area. All data has been corrected to represent standard air at a density of 0.075 lb/ft³ (1.201 kg/m³).

Specifications

Round control dampers meeting the following specifications shall be furnished and installed where shown on plans and/or as described in schedules. Dampers shall consist of a 20 ga. (1mm) galvanized steel frame, blades fabricated from double skin galvanized steel, 1/2 in. (13mm) dia. plated steel axles turning in stainless steel bearings, and EPDM blade seals. Damper manufacturer's printed application and performance data including pressure, velocity and temperature limitations shall be submitted for approval showing damper suitable for pressures to 4.0 in. w.g. (996 Pa), velocities to 3000 fpm (15.2 m/s) and temperatures to 250°F (121°C). Testing and ratings to be in accordance with AMCA Standard 500-D.

Basis of design is Greenheck model VCDR-53.

Leakage
24 in. (610mm) Diameter Damper
VCDR-53



NOTE: Temperatures in excess of 250°F (121°C) require special consideration.