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## CDRS15 ROUND CONTROL DAMPER

## **APPLICATION**

Ruskin CDRS15 is a low leak, true round control damper that easily installs in spiral ductwork. The CDRS15 Class 2 leakage is less than 20 cfm per square foot at 4" w.g.

## STANDARD CONSTRUCTION

## **FRAME**

20 gauge (1.0) galvanized steel up to 22" (559) diameter, 6" (152) deep.

#### **BLADE**

14 gauge (2.0) galvanized steel.

#### **SEAL**

Full circumference.

## **AXLE**

1/2 " (13) diameter.

## **BEARING**

Extended bearing surface on frame for long life.

#### **CONTROL SHAFT**

Axle extends 6" (152) beyond frame exterior.

#### **DAMPER SIZES**

Minimum 4" (102). Maximum 22" (559).

## MAXIMUM VELOCITY

3000 FPM (15.2 m/s).

## **TEMPERATURE RATING**

-20°F to 158°F (-29°C to 70°C).

## **OPTIONS**

- · Stainless steel construction
- · Factory hand quads
- · Factory installed electric and pneumatic actuators.
- Actuator mounting bracket

# SUGGESTED SPECIFICATION

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 gauge (1.0) galvanized steel frame, blades fabricated from 14 gauge (2.0) galvanized steel, 1/2" (13) diameter plated steel axles turning in extended bearing surface for long life. Blade seal shall provide leakage of less than 20 cfm per sq. ft. at 4 inches water gauge. 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. (996Pa), velocities to 3000 fpm (15.2 m/s) and temperatures to 158°F (70°C). Testing and ratings to be in accordance with AMCA Standard 500-D. Basis of design is Ruskin model CDRS15.

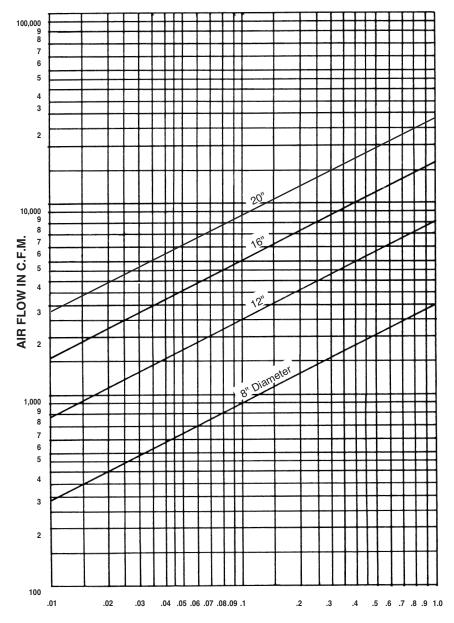
#### NOTES:

- 1. Dimensions in parenthesis ( ) indicate millimeters.
- Dampers furnished approximately 1/8" (6) smaller than given diameter.



CDRS15

# STATIC PRESSURE DROP CHART



# **TORQUE REQUIREMENTS**

DIMENSION D (Diameter)	MIN. IN. LBS. TORQUE AT 2" w.g. OR LESS STATIC PRESSURE
4" (102)	10 (1.1 N/m)
5" (127)	10 (1.1 N/m)
6" (152)	10 (1.1 N/m)
7" (178)	10 (1.1 N/m)
8" (203)	10 (1.1 N/m)
9" (229)	10 (1.1 N/m)
10" (254)	10 (1.1 N/m)
12" (305)	10 (1.1 N/m)
14" (356)	10 (1.1 N/m)
16" (406)	10 (1.1 N/m)
18" (457)	92 (1.1 N/m)
20" (508)	100 (1.1 N/m)
22" (559)	108 (1.1 N/m)

# DETERMINING STATIC PRESSURE DROP

To determine static pressure drop through an open damper, enter the Damper Pressure Drop chart from the left side. Given the CFM of air flow through the damper, follow the CFM line to the diagonal line with the damper size required, then down to the static pressure drop of the unit.

#### Example:

The pressure drop of an 8" damper with 700 CFM flow is .06 inches w.g.

