RUSKIN®

3900 Dr. Greaves Rd. • Kansas City, MO 64030 • (816) 761-7476 • FAX (816) 765-8955

MODELS CDR25 AND CDO25
ROUND AND OVAL CONTROL DAMPERS

APPLICATION

CDR25 and CDO25 dampers are round and oval volume control dampers. **They are designed to be installed inside duct work rather than flange mounted.** They can be equipped with blade seals if positive shut off is required.

STANDARD CONSTRUCTION

FRAME

Dampers under 6" (152) – 2" x 12 gage (50 x 2.8) steel.
Dampers over 6" (152) through 12" (305) – 2" x 1/2" x 14 gage (50 x 13 x 1.9) steel channel.
Dampers above 12" through 24" (305 x 610) – 2" x 1/2" x 1/8" (50 x 13 x 3) steel channel.
Dampers above 24" (610) through 40" (1016) – 2" x 1" x 3/16" (50 x 25 x 5) steel channel.
Dampers above 40" (1016) through 48" (1219) – 2 1/2" x 1 1/2" x 1/4" (64 x 38 x 6) steel channel.

BLADE

Without Seals
Dampers 18" (457) and under – 12 gage steel (2.8) steel.
Dampers above 18" (457) – 10 gage steel (3.4) steel.
With Seals
Dampers 40" (1016) and under – 2 pieces of 18 gage steel.
Dampers above 40" (1016) – 10 gage with retainer ring.

AXLE

All axles to extend 6" (152) beyond damper frame.
Dampers 24" (610) and under – 1/2" (13) diameter plated steel.
Dampers above 24" (610) through 40" (1016) – 3/4" (19) diameter plated steel.
Dampers above 40" (1016) through 48" (1219) – 1" (25) plated steel.

BEARINGS

Stainless steel sleeve pressed into frame.

FINISH

Aluminum paint.

MAXIMUM TEMPERATURE

250°F (121°C).

MINIMUM SIZE

CDR25 – 4" (102) diameter.
CDO25 – 6" (152) diameter.

MAXIMUM SIZE

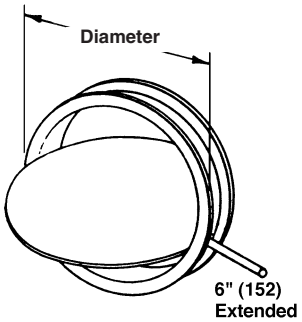
CDR25 – 48" (1219) diameter.
CDO25 without center mullion – 36" (914) wide x 24" (610) high.
CDO25 with center mullion – 72" (1829) wide x 24" (610) high.

OPTIONS

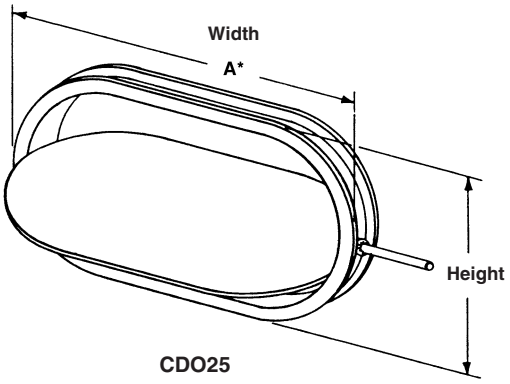
- Neoprene blade seal. Maximum temperature 250°F (121°C).
- Silicone blade seal. Maximum temperature 400°F (204°C).
- 304 stainless steel construction.
- 316 stn. stl. construction.
- 3/4" (19) axle under 24" (610).

NOTES

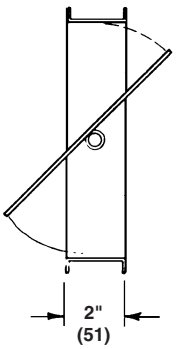
Dimensions in parenthesis ( ) indicate millimeters.
Units furnished 1/8" (3) smaller than given opening dimensions.

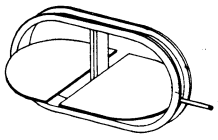


CDR25



CDO25





CDO25 with Center Mullion
(Typical when A Dimension exceeds 36" [914])

PERFORMANCE DATA

CDR25 AND CDO25 PERFORMANCE DATA						
Damper Width Inches	Maximum System Pressure	Maximum System Velocity	Leakage w/o seals*		Leakage with seals*	
			% of Max. Flow	CFM/ Sq. Ft.	% of Max. Flow	CFM/ Sq. Ft.
48” (1219)	4.0” w.g.	2500 FPM	21.5	539	.40	10.0
40” (1219)	4.0” w.g.	2500 FPM	14.5	364	.38	9.42
36” (914)	4.0” w.g.	2500 PM	13.1	328	.34	8.50
24” (610)	6.0” w.g.	4000 FPM	5.5	219	.14	5.65
12” (305)	8.0” w.g.	4000 FPM	2.7	109	.07	2.83
6” (152)	10.0” w.g.	4000 FPM	1.4	55	.04	1.41

* Leakage information based on pressure differential of 1’ w.g. tested per AMCA Std. 500.

Dimensions in parentheses ( ) indicate millimeters.

SUGGESTED SPECIFICATION

Furnish and install, at locations shown on plans, or in accordance with schedules, control dampers that meet the following minimum construction standards. Damper(s) shall be of the butterfly type consisting of a circular blade mounted to a shaft. Inside frame surface shall be clean and smooth with only blade pin stop projection. Frame shall support damper blade and maintain shape for installation inside duct.

Leakage through damper in the closed position shall not exceed 3 cfm per inch of circumference for units 40" (1016) and under at 1" (25) sp. Leakage through damper with factory mounted blade seal shall not exceed 0.15 cfm per inch of blade circumference at 1" (25) sp. Material thickness shall be equivalent to Ruskin model CDR25 or CDO25 standard construction.

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