

BDR2 ROUND BACKDRAFT DAMPER

The BDR2 was developed in response to industry requirements for a round backdraft damper with low leakage and easy to install in round spiral ductwork. The specially designed blades with closing spring insure a tight seal to minimize back flow through the damper. Ruskin's exclusive blade hinge design has no frame penetrations to allow air leakage out of the duct. Integral rolled blade stop insures correct installation of blade seal and positioning of blades in the damper.

STANDARD CONSTRUCTION

FRAME

20 gage (1.0) galvanized steel up to 24" (610) diameter, 11" (279) long.

BLADES

.016 thick (0.40) aluminum.

BLADE STOP AND AXLE KEEPER

20 gage (1.0) galvanized.

BLADE SEAL

Vinyl foam.

AXLES

3/16" dia. (4.8) plated steel.

FINISH

Mill galvanized frame, mill finished blades.

DAMPER SIZES

(D Diameter) 6", 7", 8", 9", 10", 12", 14", 16", 18", 20", 22", 24" (152, 178, 203, 229, 254, 304, 356, 406, 457, 508, 559, 610).

MAXIMUM VELOCITY

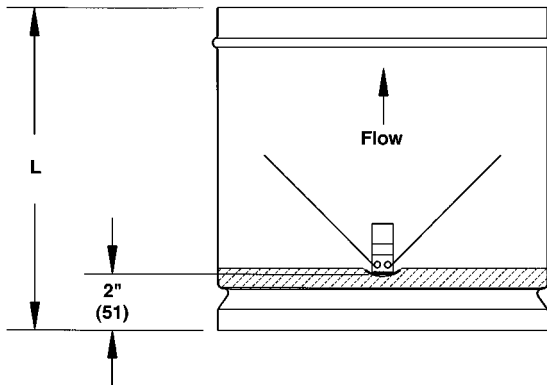
2000 FPM.

MAXIMUM SYSTEM PRESSURE

2" w.g. (0.49 KPA)

TEMPERATURE LIMITS

-40°F (-40°C) to 180°F (80°C).



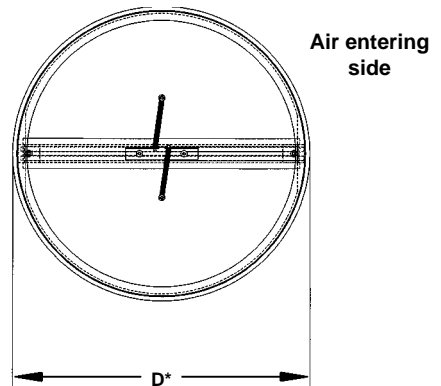
Dimensions in parentheses () indicate millimeters.

*Unit is furnished approximately 1/8" (3) smaller than given opening dimensions.

SUGGESTED SPECIFICATION

Furnish and install, at locations on plans or in accordance with schedules, dampers meeting the following specifications:

Dampers shall be of the two-blade design with separate axles. Blades shall be retained in closed position with tensioned spring. Spring shall be easily field adjustable for any orientation mounting. Spring adjustment will allow for field setting of pressure to open damper. Frame shall include rolled stiffener beads to allow easy sealing to spiral ductwork joints. Dampers shall include vinyl foam blade seal. Frames shall have no holes or openings to allow air through damper frame. Damper shall in all respects be equivalent to Ruskin model BDR2.



Damper can be used for vertical and horizontal air flow conditions.

VARIATIONS

- 304 Stainless Steel construction.

DIAMETER (D*)	"L"
6" (152) through 9" (229)	6" (152)
Over 9" (229) through 16" (406)	10" (254)
Over 16" (406) through 24" (610)	14" (356)

QTY.	D* DIA.	VARIATIONS
JOB		LOCATION
CONTRACTOR		

PERFORMANCE DATA

Leakage for a 6" (152) diameter unit at the following static pressure.

STATIC PRESSURE	LEAKAGE IN CFM. PER SQUARE FOOT
1.0	8.7
1.5	11.0
2.0	10.6
2.5	11.6
3.0	13.0

VELOCITY vs. PRESSURE DROP

Pressure drop is for 6" (152) and 24" (610) diameter units.

