

**INDUSTRIAL BUTTERFLY BACKDRAFT DAMPER**

The Model I-900 is a heavy duty flanged frame style industrial backdraft damper. It is designed to control backflow and provide shut-off in HVAC or industrial process control systems. It is counterbalanced to operate in vertical or horizontal positions.

**RATINGS:**

- Pressure: 10" [254mm] w.g. - differential pressure  
- through 40" [1016mm]
- 8" [203.2mm] w.g. - differential pressure  
- through 48" [1219.2mm]
- 5" [127mm] w.g. - differential pressure  
- through 60" [1524mm]

Velocity: 5000 fpm laminar flow  
3000 fpm turbulent flow

Temperature: 250° F [121.11° C]

**STANDARD CONSTRUCTION:**

- Flange: Angle Rings
- Blades: Aluminum 11 ga. through 24" [609.6mm]  
8 ga. through 50" [1270mm]  
6 ga. through 60" [1524mm]
- Spring Hinges: Painted steel with S.S. inner tension spring (adjustable)  
sizes 6"-14" [152.4-355.6mm] dia. (single blade w/ one hinge)
- Finish: Zinc Rich Gray Primer
- Other: Rubber Bumpers

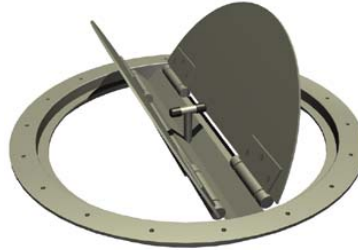
**OPTIONS:**

- Stainless steel construction (304 S.S. Only)
  - Aluminum construction (w/ 304 S.S. Hinges)
  - Omit bolt holes
- Reinforcement over 24" [609.6mm]

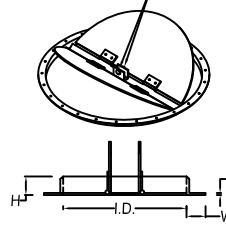
**Balancing Instructions:**

- See Decals (on each side of damper)
  - Assist to Open
  - Assist to Close
- See 4 slots in angle ring side of damper.
  - Two per side
- Use 5/32" hex wrench to adjust  
To relieve pressure, please depress spring with hex wrench. (clockwise adds more torque) (do not exceed six ratchet clicks)

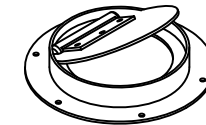
Damper begins to open at \_\_\_\_\_ w.g.  
(please specify, additional charge may apply)  
Not Ideal for Pressure below 2" [50.8mm]



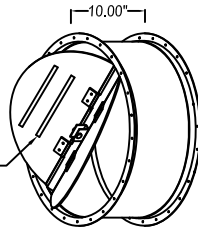
rubber bumpers



**Model I-900-F**

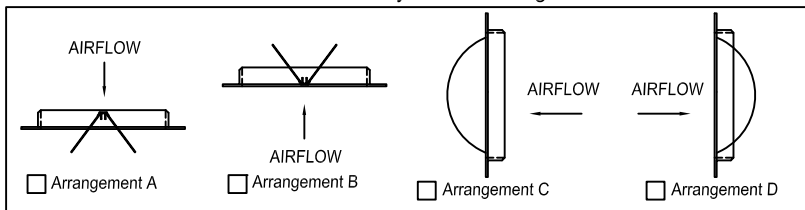


**Model I-900-F (single blade sizes 6"-14")**



**Model I-900-DF (double flanged)**

Please Verify air flow arrangement:



**DIMENSIONS CHART**

Inside Diameter	H	W	T
6-3/16 [157.16mm]	1-1/4 [31.75mm]	1-1/4 [31.75mm]	1/8 [3.2mm]
7-3/16 [182.56]	1-1/4 [31.75]	1-1/4 [31.75]	1/8 [3.2]
8-3/16 [207.96]	1-1/4 [31.75]	1-1/4 [31.75]	1/8 [3.2]
9-3/16 [233.36]	1-1/4 [31.75]	1-1/4 [31.75]	1/8 [3.2]
10-3/16 [258.76]	1-1/4 [31.75]	1-1/4 [31.75]	1/8 [3.2]
11-3/16 [284.16]	1-1/4 [31.75]	1-1/4 [31.75]	1/8 [3.2]
12-3/16 [309.56]	1 1/2 [38.1]	1 1/2 [38.1]	1/8 [3.2]
13-3/16 [334.96]	1 1/2 [38.1]	1 1/2 [38.1]	1/8 [3.2]
14-3/16 [330.36]	1 1/2 [38.1]	1 1/2 [38.1]	1/8 [3.2]
15-3/16 [385.76]	1 1/2 [38.1]	1 1/2 [38.1]	1/8 [3.2]
16-3/16 [411.16]	1 1/2 [38.1]	1 1/2 [38.1]	3/16 [4.76]
17-3/16 [436.56]	1 1/2 [38.1]	1 1/2 [38.1]	3/16 [4.76]
18-3/16 [461.96]	1 1/2 [38.1]	1 1/2 [38.1]	3/16 [4.76]
19-3/16 [487.36]	1 1/2 [38.1]	1 1/2 [38.1]	3/16 [4.76]
20-3/16 [512.76]	1 1/2 [38.1]	1 1/2 [38.1]	3/16 [4.76]
21-3/16 [538.16]	1 1/2 [38.1]	1 1/2 [38.1]	3/16 [4.76]
22-3/16 [563.56]	1 1/2 [38.1]	1 1/2 [38.1]	3/16 [4.76]
23-3/16 [588.96]	1 1/2 [38.1]	1 1/2 [38.1]	3/16 [4.76]
24-3/16 [614.36]	1 1/2 [38.1]	1 1/2 [38.1]	3/16 [4.76]
25-3/16 [639.76]	2 [50.8]	2 [50.8]	3/16 [4.76]
26-3/16 [655.16]	2 [50.8]	2 [50.8]	3/16 [4.76]
27-3/16 [690.56]	2 [50.8]	2 [50.8]	3/16 [4.76]
28-3/16 [715.96]	2 [50.8]	2 [50.8]	3/16 [4.76]
29-3/16 [741.36]	2 [50.8]	2 [50.8]	3/16 [4.76]
30-3/16 [766.76]	2 [50.8]	2 [50.8]	3/16 [4.76]
31-3/16 [792.16]	2 [50.8]	2 [50.8]	3/16 [4.76]
32-3/16 [817.56]	2 [50.8]	2 [50.8]	3/16 [4.76]
33-3/16 [842.96]	2 [50.8]	2 [50.8]	3/16 [4.76]
34-3/16 [868.36]	2 [50.8]	2 [50.8]	3/16 [4.76]
35-3/16 [893.76]	2 [50.8]	2 [50.8]	3/16 [4.76]
36-3/16 [919.16]	2 [50.8]	2 [50.8]	3/16 [4.76]
37-3/16 [944.56]	2 [50.8]	2 [50.8]	3/16 [4.76]
38-3/16 [969.96]	2 [50.8]	2 [50.8]	3/16 [4.76]
39-3/16 [995.36]	2 [50.8]	2 [50.8]	3/16 [4.76]
40-3/16 [1020.76]	2 [50.8]	2 [50.8]	3/16 [4.76]
41-3/16 [1046.16]	2 [50.8]	2 [50.8]	3/16 [4.76]
42-3/16 [1071.56]	2 [50.8]	2 [50.8]	3/16 [4.76]
43-3/16 [1096.96]	2 [50.8]	2 [50.8]	3/16 [4.76]
44-3/16 [1122.36]	2 [50.8]	2 [50.8]	3/16 [4.76]
45-3/16 [1147.76]	2 [50.8]	2 [50.8]	3/16 [4.76]
46-3/16 [1173.16]	2 [50.8]	2 [50.8]	3/16 [4.76]
47-3/16 [1198.56]	2 [50.8]	2 [50.8]	3/16 [4.76]
48-3/16 [1223.96]	2 [50.8]	2 [50.8]	3/16 [4.76]
49-3/16 [1249.36]	2 [50.8]	2 [50.8]	3/16 [4.76]
50-3/16 [1274.76]	2 [50.8]	2 [50.8]	3/16 [4.76]
51-3/16 [1300.16]	2 [50.8]	2 [50.8]	3/16 [4.76]
52-3/16 [1325.56]	2 [50.8]	2 [50.8]	3/16 [4.76]
53-3/16 [1350.96]	2 [50.8]	2 [50.8]	3/16 [4.76]
54-3/16 [1376.36]	2 [50.8]	2 [50.8]	3/16 [4.76]
55-3/16 [1401.76]	2 [50.8]	2 [50.8]	3/16 [4.76]
56-3/16 [1427.16]	2 [50.8]	2 [50.8]	3/16 [4.76]
57-3/16 [1452.56]	2 [50.8]	2 [50.8]	3/16 [4.76]
58-3/16 [1477.96]	2 [50.8]	2 [50.8]	3/16 [4.76]
59-3/16 [1503.36]	2 [50.8]	2 [50.8]	3/16 [4.76]
60-3/16 [1528.76]	2 [50.8]	2 [50.8]	3/16 [4.76]

**Model I-900**

Job Name: \_\_\_\_\_

Location: \_\_\_\_\_

Architect: \_\_\_\_\_

Engineer: \_\_\_\_\_

Contractor: \_\_\_\_\_

DRAWN BY: CLJ	DATE: 6-1-99	REV. DATE: 4-7-14
REV. NO. 21	APPROVED BY: BGT	DWG. NO.: <b>F-25</b>