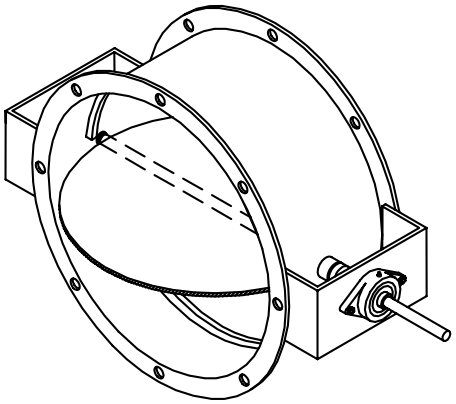
DEPENDABLE PRODUCTS SINCE 1955

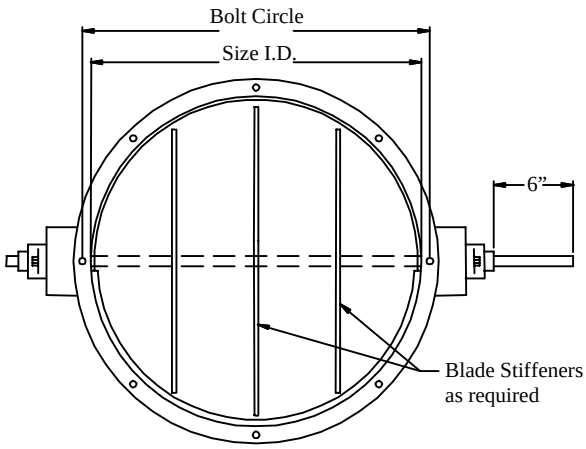
Heavy Duty High Pressure Round Damper – Model HTR-5

Design Features –High pressure industrial round control damper provides 40" W. G. maximum static pressure.

STANDARD CONSTRUCTION

FRAME
Steel channel, dimensions vary according to size, see chart below
BLADES
Steel, with stiffeners, dimensions vary according to size, see chart below
BLADE AXLES & BEARINGS
AXLE – Continuous steel shaft
BEARING – 2-bolt flange on standoff bracket with packing gland
BLADE STOP
1/2" x 1/2" steel
MAXIMUM VELOCITY & STATIC PRESSURE
7000 FPM @ 40" W. G.
MIN. & MAX. TEMPERATURE
-40^0 F to 250^0 F – Standard
-400° F to 750°F (optional) clearance between blade & frame will be increased
MAXIMUM SIZE
72" Diameter
MINIMUM SIZE
4" Diameter
FINISH
Aluminum paint
ACTUATOR
None (see optional construction)





OPTIONAL CONSTRUCTION

SPECIFIED MATERIAL – Available in stainless steel
FINISH – Air-dry primer, polyurethane, epoxy, or enamel. Baked epoxy or enamel. For industrial special purpose coating, please consult Dowco.
BOLT HOLES – Based on standard bolt circles available
SEALS - Silicone blade edge seal secured with 12 ga. 1-1/2 ring bolted to blade
ACTUATORS – Manual, Electric, or Pneumatic.

SPECIAL PURPOSE CONSTRUCTION

For higher temperatures and velocities, please consult Dowco.

Size I. D.	Frame Depth & Web Thickness	Flange	Blade Thickness	Axle Diameter	Maximum Static Pressure	Maximum Velocity
4" to 6"	6" x 1/8"	1-1/4" x 1/8"	1/4"	1/2"	40" wg.	7000 fpm
>6" to 11"	9" x 1/8"	1-1/4" x 1/8"	1/4"	3/4"	40" wg.	7000 fpm
>11" to 14"	9" x 1/8"	1-1/2" x 1/8"	1/4"	1"	40" wg.	7000 fpm
>14" to 24"	9" x 3/16"	1-1/2" x 3/16"	1/4"	1"	40" wg.	7000 fpm
>24" to 32"	12" x 1/4"	2" x 1/4"	1/4"	1-1/2"	40" wg.	7000 fpm
>32" to 44"	12" x 1/4"	2" x 1/4"	1/4"	2"	40" wg.	7000 fpm
>44" to 48"	12" x 1/4"	2" x 5/16"	1/4"	2-1/2"	40" wg.	7000 fpm
>48" to 52"	12" x 5/16"	2" x 5/16"	3/8"	2-1/2"	40" wg.	7000 fpm
>52" to 72"	12" x 5/16"	2-1/2" x 5/16"	3/8"	3"	40" wg.	7000 fpm

DATE	ARCHITECT / ENGINEER			CUSTOMER
PROJECT				
ITEM	QTY	W	H	DESCRIPTION

DEPENDABLE PRODUCTS SINCE 1955

SAFE-AIR/DOWCO

Engineering and General Offices

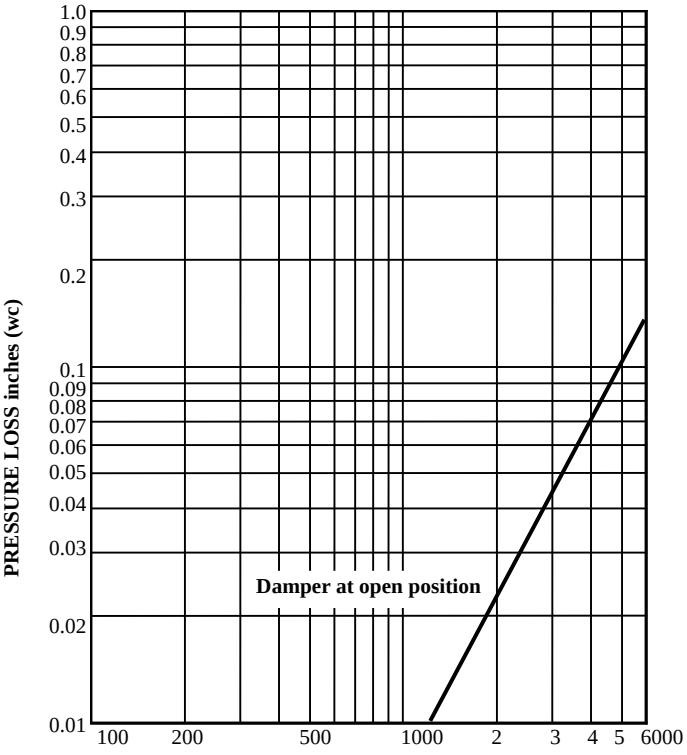
1855 South 54th Avenue, Cicero, Illinois 60804

Phone 708-652-9100 FAX 708-652-9158

HTR-5 PERFORMANCE

All tests performed at an independent laboratory and based on AMCA standards for air performance.

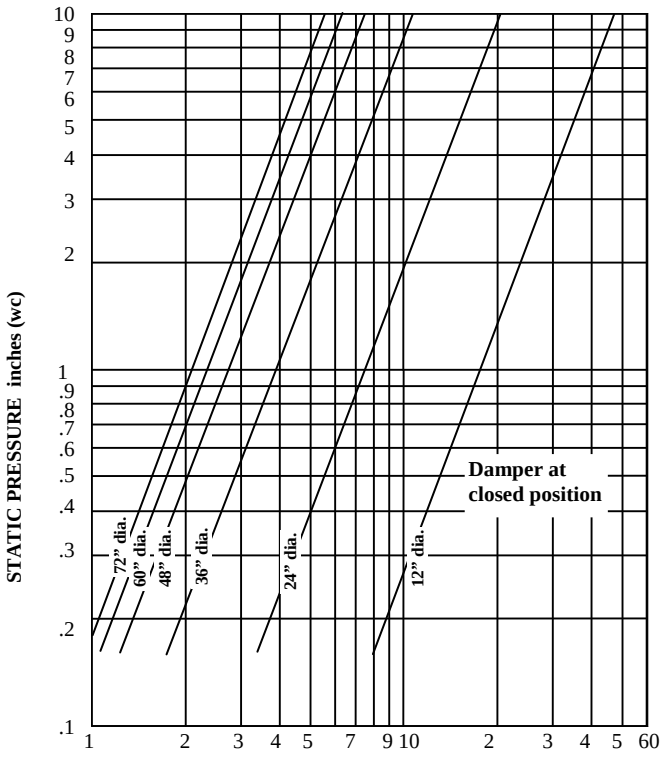
AIR PERFORMANCE



FACE AREA VELOCITY (fpm)

24" diameter sample tested per AMCA Std. 500, Figure 5.3

AIR LEAKAGE



LEAKAGE PER SQ. FT. OF FACE AREA (cfm)

STANDARD BOLT HOLE PATTERN FOR HEAVY DUTY ROUND DAMPERS				
Order Size (Inches)	Flange (F)	Bolt Size (Diameter)	Number of Holes	Bolt Cirle Factor
4 to 5	1"	9/32"	6	1-5/16"
6	1-1/4"	9/32"	6	1-5/16"
7	1-1/4"	3/8"	6	1-1/2"
8	1-1/4"	3/8"	6	1-9/16"
9	1-1/4"	7/16"	6	1-5/8"
10	1-1/4"	7/16"	6	1-13/16"
11	1-1/4"	7/16"	6	1-3/4"
12 to 18	1-1/2"	7/16"	8	2"
19 to 22	1-1/2"	7/16"	12	1-3/4"
23 to 24	1-1/2"	7/16"	12	1-7/8"
25	1-1/2"	7/16"	16	1-7/8"
26 to 36	2"	7/16"	16	2-3/8"
37 to 50	2"	7/16"	24	2-3/8"

- Actual I. D. Size = Order Size + 1/8"
- Actual O. D. Size = Actual I. D. Size + (F x 2)
- Bolt Circles = Order Size + Bolt Circle Factor

Bolt holes start perpendicular to blade axles (12 o'clock)

Size Diameter	Leakage Performance Per SF. of Face Area	
	Leakage w/seals (CFM)	Leakage w/out seals (CFM)
72"	2.1	9.44
60"	2.27	11.12
48"	2.76	13.52
36"	3.92	17.16
24"	7.88	26.26
12"	18.92	61.78

Based on 1" w. g. static pressure