STANDARD MATERIALS AND CONSTRUCTION

FRAME: Fabricated steel channel. Channel depth equal to blade diameter

of 10" and less.

BLADE: Single thickness with reinforcing gussets welded to blade parallel

to air flow as required.

SHAFT: Plated steel continuous length welded to blade.

BEARINGS: Sintered stainless steel flanged sleeve, pressed into the frame.

STOP: ¼" x ¼" metal bar for sizes up to 12" dia. ¼" x ½" metal bar above 12" dia. to 48" dia. Shall be welded to interior perimeter of

sleeve.

OPERATOR: Extended shaft 6" long beyond frame flanges.

FINISH: Mill, galvanized with zinc rich touch up.

TEMP. LIMIT: 250°F

Consult the factory for temperature limits over 250°F.

OPTIONS

Materials - stainless steel, extruded aluminum, and others Stuffing boxes and replaceable packing

Ball bearings

Finishes - Acrylic, baked enamel, etc. Perimeter holes: one flange or two flanges

Low leakage seal systems



1. 1/4" nominal deduction will be made to the opening size given.

2. Construction may be with other materials when required to meet special conditions, such as: temperature, pressure, velocity, system environment, or other specifications.

3. Approximate shipping weight is 5 lbs./in. of inside diameter.

DAMPER SIZES

Inside [Diameter	eter Frame		Blade	Shaft
Above	Through	Depth	Flanges	Thickness	Diameter
6"	12"	10 GA.	1½" x 1½" x ½" for 6" to 11" dia. 1½" x 1½" x ½" for 12" dia.	12 GA.	1/2"
12"	24"	10" 10 GA.	1½" x 1½" x ½" s 1%" for 12" to 15" dia. 1½" x 1½" x ¾6" for 16" to 24" dia.	10 GA. to 36" dia.	3/,"
24"	48"	10 GA.	2" x 2" x 3/16" for 25" to 48" dia.	10 GA. w/ (2) gussets 37" to 48" dia.	1"

The construction described above is conservative. There are applications where this design may be used in sizes that can operate satisfactorily when static pressures are above 15 inches.

Item #	Qty	Damper Size I.D.	Tag	ging	F	Remarks		Union Made
Arch. /	Eng.:		EDR:		ECN:		Job:	
Contr	actor:							
Pr	oject:		Date:		DWN:		DWG:	

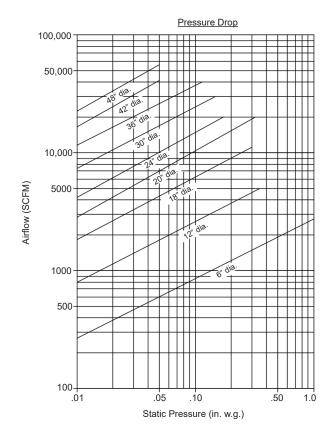
PRESSURE AND VELOCITY LIMITATIONS

The model AC580 damper has been designed to operate satisfactorily within the limits shown below. Consult the factory when applications exceed the limits shown.

Air Leakage (Total CFM)

Damper Diameter	Max System Static Pressure	Max System Velocity
6" to 12"	12"	6000 FPM
13" to 24"	10"	6000 FPM
25" to 36"	8"	5000 FPM
37" to 48"	8"	4000 FPM

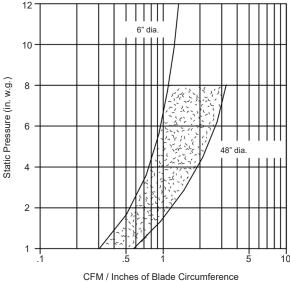
Damper performance for pressure drop and air leakage is based on AMCA Standard 500 using fig. 5.3 (damper installed with duct upstream and downstream for pressure drop) and fig. 5.4 for air leakage. Static pressure and CFM are corrected to .075 lbs./cu.ft. air density.



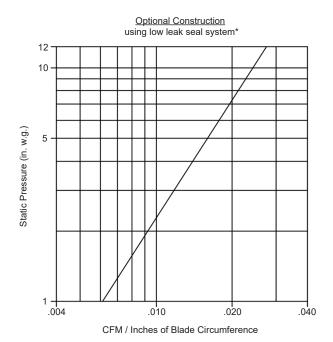
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AIR LEAKAGE CHARTS

Standard Construction using metal bar stop 6" dia



Leakage results shown are based on tests using various damper sizes. The shaded area between the graph lines indicate normal expected leakage range for a standard damper operating conditions and sizes.



* Low Leakage seal system consists of: rubber seal bolted to blade, stuffing box with packing gland material, and outboard bearing.

