

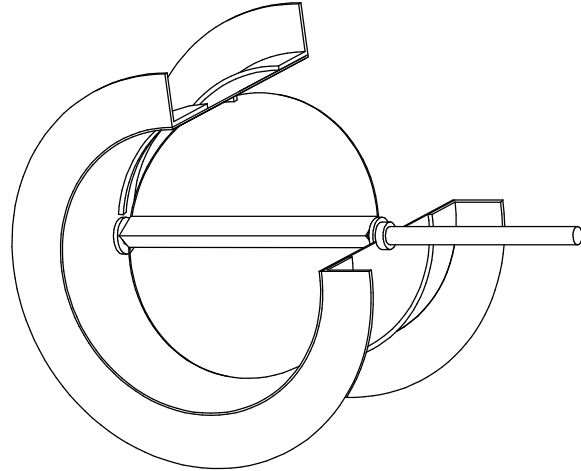
ARROW

ROUND INDUSTRIAL DAMPER FOR PROCESS CONTROL

MODEL 580-R

THE CONSTRUCTION DESCRIBED BELOW IS CONSERVATIVE. THERE ARE APPLICATIONS WHERE THIS DESIGN MAY BE USED IN SIZES THAT CAN OPERATE SATISFACTORILY WHEN STATIC PRESSURES ARE ABOVE 15 INCHES.

FOR PERFORMANCE DATA
SEE REVERSE SIDE



INSIDE DIAMETER		FRAME		BLADE THK.	SHAFT DIA.
ABOVE	THROUGH	DEPTH	FLANGES		
6"	12"	10" GA.	1 1/4" x 1 1/4" x 1/8" FOR 6" TO 11" DIA. 1 1/2" x 1 1/2" x 1/8" FOR 12" DIA.	12 GA.	1/2"
12"	24"	10" GA.	1 1/2" x 1 1/2" x 1/8" FOR 12" - 15" DIA. 1 1/2" x 1 1/2" x 3/16" FOR 16" - 24" DIA.	10 GA. TO 36" DIA.	3/4"
24"	48"		2" x 2" x 3/16" 25" - 48" DIA		10 GA. W/ (2) GUSSETS 37" - 48" DIA

OPTIONAL EXTRAS

CONSTRUCTION MAY BE WITH OTHER THAN STANDARD MATERIALS WHEN REQUIRED TO MEET SPECIAL CONDITIONS AS TEMPERATURE, PRESSURE, VELOCITY, SYSTEM ENVIRONMENT OR OTHER SPECIFICATIONS.

LISTED BELOW ARE SOME OPTIONS USED FOR THE MORE COMMON TYPES OF APPLICATIONS.

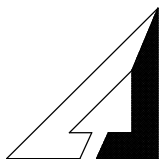
1. STAINLESS STEEL
2. STUFFING BOXES AND REPLACEABLE PACKING
3. BALL BEARINGS
4. PAINTED FINISHES
5. PERIMETER HOLES - ONE FLANGE
6. PERIMETER HOLES - BOTH FLANGES
7. OTHER MATERIALS
8. LOW LEAKAGE SEAL SYSTEMS

STANDARD SPECIFICATIONS

- 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.
- BEARING: SINTERED STAINLESS STEEL FLANGED SLEEVE PRESSED IN THE FRAME.
- STOP: 1/4" x 1/4" METAL BAR FOR SIZES UP TO 12" DIA.
1/4" x 1/2" METAL BAR BEYOND 12" DIA. TO 48" DIA.
SHALL BE WELDED TO INTERIOR PERIMETER OF SLEEVE.
- OPERATOR: EXTENDED SHAFT 6" LONG BEYOND FRAME FLANGES.
- FINISH: MILL/GALVANIZED/ZINC RICH TOUCH UP.
- MINIMUM: 6" DIAMETER.
MAXIMUM: 48" DIAMETER.
- MAXIMUM TEMPERATURE: 250°F. CONSULT FACTORY FOR HIGHER TEMPERATURE REQUIREMENTS.



UNION MADE



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CONTR. :

PROJECT :

EDR: ECN: JOB:

DATE: DWN.: DWG.:

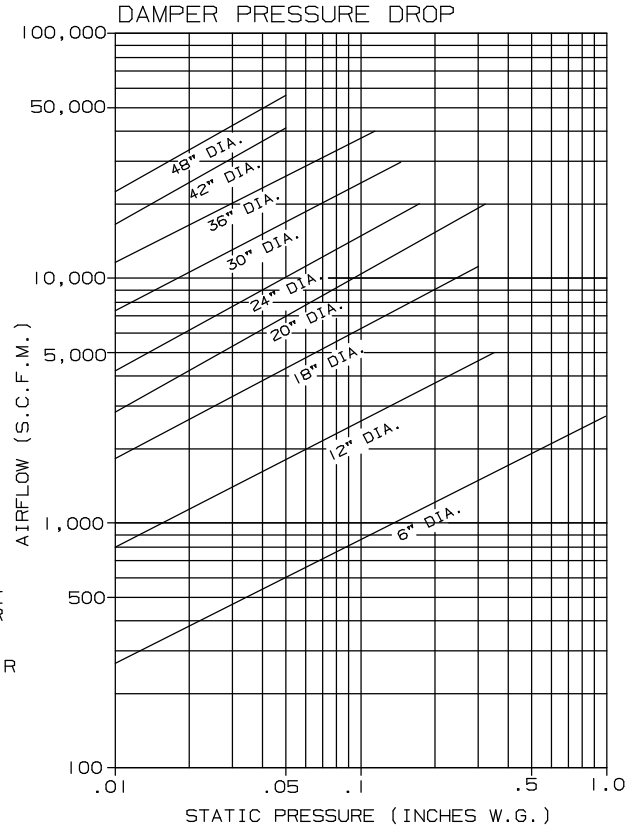
ARROW MODEL 580-R ROUND INDUSTRIAL DAMPER PERFORMANCE DATA

PRESSURE AND VELOCITY LIMITATIONS

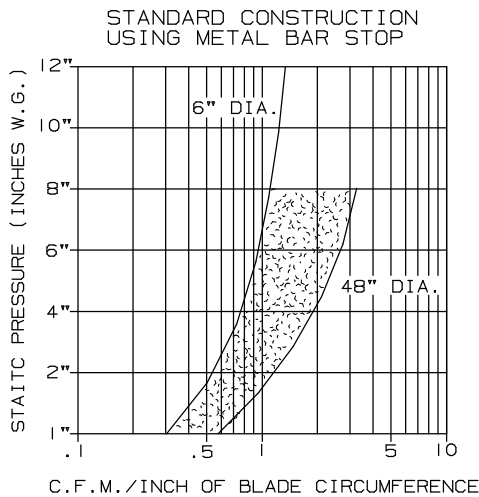
THE MODEL 580-R DAMPER HAS BEEN DESIGNED TO OPERATE SATISFACTORILY WITHIN THE LIMITS SHOWN BELOW. CONSULT THE FACTORY WHEN APPLICATIONS EXCEED THE LIMITS SHOWN.

DAMPER DIAMETER	MAXIMUM SYSTEM STATIC PRESSURE	MAXIMUM SYSTEM VELOCITY
6" - 12"	12"	6000
13" - 24"	10"	6000
25" - 36"	8"	5000
37" - 48"	8"	4000

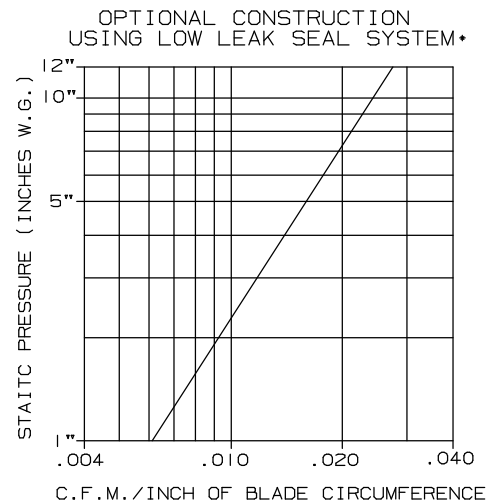
DAMPER PERFORMANCE FOR PRESSURE DROP AND AIR LEAKAGE IS BASED ON AMCA STANDARD 500 USING FIG. 5.3 (DAMPER INSTALLED WITH DUCT UPSTREAM AND DOWNSTREAM FOR PRESSURE DROP) AND FIG. 5.4 FOR AIR LEAKAGE. STATIC PRESSURE AND CFM ARE CORRECTED TO .075 LB./CU.FT. AIR DENSITY.



DAMPER LEAKAGE CHARTS



LEAKAGE RESULTS SHOWN ARE BASED ON TESTS USING VARIOUS DAMPER SIZES. THE SHADED AREA BETWEEN THE GRAPH LINES INDICATE NORMAL EXPECTED LEAKAGE RANGE FOR 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