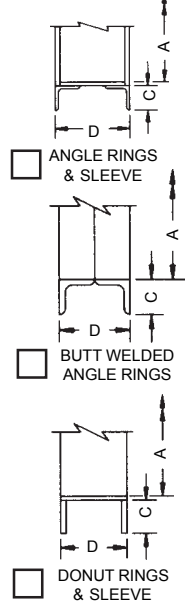


NOTE
DAMPERS ARE CONSTRUCTED PER THE STANDARD SPECIFICATIONS UNLESS OTHERWISE SPECIFIED ON DAMPER SCHEDULE OR MODIFIED DAMPER SHEET

OPTIONAL FRAME STYLES



ABI Item No.	Quantity	"A" Inside Frame Diameter	"C" Flange Width	"D" Frame Depth	Frame GA./Thk.	Sleeve GA./Thk.	Flange GA./Thk.	Blade GA./Thk.	Axle Diameter	Manual Quad Type 1 or 2	EPT Seal	Bar Stop / Seal	"E"	"F"	"M"	Straddle Vert. Centerline	On Vertical Centerline	REMARKS

Special Actuator:

Special Finish:

AC-561 STANDARD SPECIFICATIONS

- FRAME: 8" x 1-1/2" x 10 GA ROLLED STEEL CHANNEL THRU 25" DIAMETER.
10 x 2 x 10 GA ROLLED STEEL CHANNEL, 25" THRU 60" DIAMETER.
- SLEEVE: (USED WITH OPTIONAL FRAMES)
14 GA. STEEL THRU 48" DIAMETER
12 GA. STEEL, 48" + THRU 60" DIAMETER
- BLADE: 10 GA. STEEL, WELDED TO AXLE, THRU 48" DIAMETER WITH STEEL REINFORCING ANGLES AS REQUIRED.
3/16" THK. STEEL, WELDED TO AXLE, 48" THRU 60" DIAMETER WITH STEEL REINFORCING ANGLES AS REQUIRED.
- AXLE: 1/2" DIAMETER STEEL FULL LENGTH THRU 24" DIAMETER
3/4" DIAMETER STEEL FULL LENGTH 24" + THRU 48" DIAMETER
1" DIAMETER STEEL FULL LENGTH 48" + THRU 60" DIAMETER
- BEARINGS: OIL IMPREGNATED BRONZE WITH STAINLESS STEEL THRUST WASHERS
- STOPS: 1/2" DIAMETER STEEL PIN
- SEALS: (OPTIONAL, SEE SCHEDULE)
- FINISH: ONE (1) COAT ABI STANDARD PRIMER.
- ACTUATOR: EXTENDED SHAFT WITH LEVER ARM (SHIPPED LOOSE) IS STANDARD. (SEE SCHEDULE FOR OPTIONS)

NOTES

- MAX. TEMP. = 250°F WITHOUT SEALS AND 150°F WITH SEALS.
- DAMPERS ARE FOR CLEAN AIR USE ONLY.
- REFERENCE DWG. #AC-56-6 FOR STANDARD MOUNTING HOLE PATTERNS.

PROJECT: _____
 LOCATION: _____
 ARCHITECT: _____
 ENGINEER: _____
 CONTRACTOR: _____
 PO NUMBER: _____
 DATE: _____

abi air balance

AMCA MEMBER

A Mestek Company

450 Riverside Drive. • Wyalusing, PA 18853
 Phone: 570-746-1888 • Fax: 570-746-9286
 www.air-balance.com

TORQUE: The torque required to operate a control damper is the greatest torque value that the damper will see in operation. The tables below give torque values for various face velocities, differential pressures, and sealing requirements. The torque required for a damper without seals is the torque due to velocity. The torque required for a damper with seals is the torque due to velocity, differential pressure or sealing the damper, whichever is greater.

TORQUE:				
FACE VELOCITY TORQUE		DIFFERENTIAL PRESSURE TORQUE WITH BAR SEALS ONLY		EPT SEALING TORQUE ONLY
DIAMETER	IN. LBS.	IN. LBS.		IN. LBS.
12	20	8		12
18	65	15		25
24	160	30		45
30	310	45		70
36	535	63		100
42	850	85		135
48	1270	115		180
54	1805	145		225
60	2480	175		280
These values are based on 3900 fpm face velocity. Use multiplier chart below for other face velocities.		These values are based on 5 in. wg. Use multiplier chart below for other differential pressures.		These values are based on the use of EPT wedge seals.
FACE VELOCITY FPM	MULTIPLIER	DIFFERENTIAL PRESSURE IN. WG.	MULTIPLIER	
3500	.805	4	.800	
3000	.592	3	.600	
2500	.411	2	.400	
2000	.263	1	.200	
1500	.148			
1000	.066			

LEAKAGE: Values expressed in SCFM			
DIAMETER	BAR SEALS	EPT SEALS	NO SEALS
12	40	9	215
18	60	12	325
24	75	15	435
30	95	19	545
36	115	22	655
42	135	25	770
48	150	28	880
54	175	35	1640
60	195	40	1825
Above values are based on 1 in. wg. differential pressure; for differential pressures other than 1 in. wg. (not exceeding 5 in. wg.), use the following multiplier chart below:			
DIFFERENTIAL PRESSURE IN. WG.	MULTIPLIER		
2	1.41		
3	1.73		
4	2.00		
5	2.23		

PRESSURE DROP: In inches of water		
Values are in accordance with AMCA 500; fig. 5.3		
DIAMETER	NO SEALS	BAR SEALS
12	.132	.348
18	.114	.207
24	.108	.168
30	.114	.153
36	.108	.132
42	.108	.132
48	.114	.132
54	.108	.126
60	.108	.126
Above values are based on 3900 fpm velocity. Use multiplier chart below for other velocities.		
FACE VELOCITY (FPM)	MULTIPLIER	
3500	.805	
3000	.592	
2500	.411	
2000	.263	
1500	.148	
1000	.066	