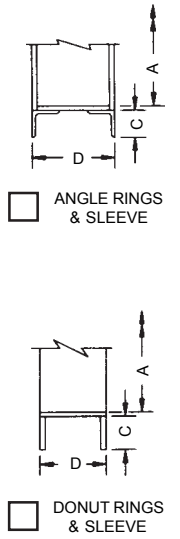


OPTIONAL FRAME STYLES



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

ABI Item No.	Quantity	"A" Inside Frame Diameter	"D" Frame Depth	Sleeve GA./Thk.	Blade GA./Thk.	Manual Quad	EPT Seal	Bar Stop / Seal	"E" Diameter	Bolt Circle	"F" Holes Required	"M" Dia Holes	Straddle Vert. Centerline	On Vertical Centerline	REMARKS

Special Actuator:

Special Finish:

AC-561 STANDARD SPECIFICATIONS

- FRAME:** FRAME DEPTHS AND FLANGE WIDTHS VARY, MIN. 11 GAUGE STEEL BUTT WELDED ANGLES. (SEE DRAWINGS #AC-56-7 FOR STANDARD ANGLE SIZES AND FRAME DEPTHS)
- SLEEVE:** 16 GAUGE STEEL. (USED WITH OPTIONAL FRAME)
- BLADE:** 14 GAUGE STEEL, WELDED TO AXLE
- AXLE:** 1/2" DIAMETER STEEL FULL LENGTH
- 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)

PROJECT: _____

LOCATION: _____

ARCHITECT: _____

ENGINEER: _____

CONTRACTOR: _____

PO NUMBER: _____

DATE: _____

NOTES

- MAX. TEMP. = 250°F WITHOUT SEALS AND 150°F WITH SEALS.
- DAMPERS ARE FOR CLEAN AIR USE ONLY.
- REFERENCE DWG. #AC-56-7 FOR STANDARD MOUNTING HOLE PATTERNS.

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 with out 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.
3-1/16	10	N/A		10
4-1/16	10	N/A		10
5-1/16	10	N/A		10
6-3/32	10	N/A		10
7-1/8	10	10		10
8-1/8	10	10		10
9-1/8	10	10		10
10-1/8	11	10		10
11-1/8	15	10		10
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
3-1/16	N/A	4	55
4-1/16	N/A	5	73
5-1/16	N/A	5	90
6-3/32	N/A	6	110
7-1/8	24	6	129
8-1/8	28	7	145
9-1/8	31	7	165
10-1/8	33	8	183
11-1/8	36	8	200
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
3-1/16	.323	N/A
4-1/16	.222	N/A
5-1/16	.184	N/A
6-3/32	.168	N/A
7-1/8	.153	.279
8-1/8	.146	.222
9-1/8	.139	.203
10-1/8	.132	.193
11-1/8	.132	.176
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	