Sizing & Selecting Actuators

Step #1: Determine if louver has 4” or 6” wide blades.
Step #2: Calculate the total linear (running) feet of actuator rod (LFAR - See Below)
Step #3: Apply any applicable De-Rate adjustments.
Step #4: Make selection that satisfies the actuator rod calculations.
Step #5: Call Airtech (918.241.0264) with any questions or for assistance

Louvers with 6” blades

Total Louver Width	Number of Actuator Rod(s)
0” thru 70”	1
>70” thru 140”	2
>140” thru 210”	3

Number of actuator rods x louver length (or height) = Total linear feet of actuator rod

Louvers with 4” blades

Total Louver Width	Number of Actuator Rod(s)
0” thru 59”	1
>59” thru 118”	2
>118” thru 177”	3

Number of actuator rods x louver length (or height) = Linear feet of actuator rod (LFAR)

IMPORTANT NOTES:

1. Always include sum of all LFAR for all louvers attached to actuator.
2. For 540, 740, 742 and 743 Series louvers
   a. The maximum allowable total torque tube length is 20 feet.
   b. The maximum allowable distance from actuator to end of torque tube is 12 feet.
3. For 300, 500, 700, 900 Series louvers
   a. The maximum allowable torque tube length is 30 feet.
   b. The maximum allowable distance from actuator to end of torque tube is 20 feet.
4. De-Rate Requirements
   a. 5% actuator capacity de-rate for a single Jack-Shaft Mount
   b. 25% actuator capacity de-rate for double Jack-Shaft linkage connections
   c. 10% actuator capacity derate for drive losses when extended connecting linkages are used.

LFAR capacities – per actuator type - are shown:

Horizontal Louvers		
	LFAR (Linear Feet Actuator Rod)	
Actuator	4" Blade	6" Blade
Durastroke 60	17	20
Durastroke 65	8	10
Durastroke 120	33	50
Durastroke 125	17	25
Johnson 4073	11	16
Johnson 3153	23	34
Johnson 3244	35	53
Durastroke 1000 Series	80	120
Fisher 656-30	33	50
Fisher 656-40	120	180

Vertical Louvers		
	LFAR (Linear Feet Actuator Rod)	
Actuator	4" Blade	6" Blade
Durastroke 60	14	17
Durastroke 65	7	9
Durastroke 120	28	43
Durastroke 125	14	21
Johnson 4073	9	14
Johnson 3153	20	29
Johnson 3244	30	45
Durastroke 1000 Series	68	102
Fisher 656-30	28	43
Fisher 656-40	102	153