

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		
Actuator	LFAR (Linear Feet Actuator Rod)	
	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		
Actuator	LFAR (Linear Feet Actuator Rod)	
	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