

Electric Actuators



Karl Dungs, inc. actuators are designed to operate dampers, butterfly valves and similar devices. Models are available for a variety of torques from 16 in. lb. to 450 in. lb. and control methods including two-position, position proportioning with slide-wire feedback, potentiometer proportioning and current-to-position proportioning.

All models are UL listed and CSA Certified.



EMA-4..

EMA-...

- Two position, spring return.

90° & 180° Clockwise rotation when power is applied, actuator returns counter-clockwise to 0° on power interruption.

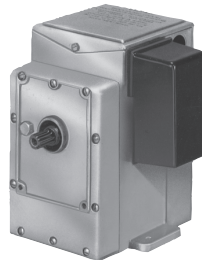


EMP-4..-1

EMP-...

- **4..-1:** Position Proportioning 100 Ohm Slidewire Feedback.

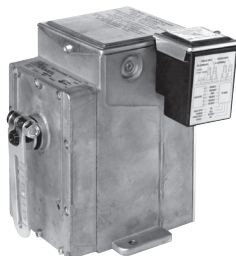
90° (180° optional with 180° slidewire kit). Rotation when power is applied.



EMP-4..-2

- **4..-2:** Potentiometer Slaved Proportioning, 100-1000 Ohm, Slidewire Feedback

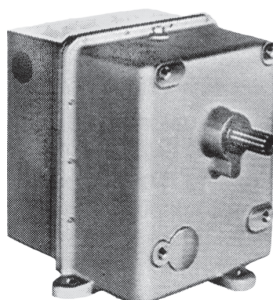
90° (180° optional with 180° slidewire kit). Rotation when power is applied.



EMP-4..-5

- **4..-5:** Proportioning, 4-20 mA Input; NEMA Type 4

90° (180° optional with 180° slidewire kit). Clockwise rotation (reversible) when power is applied.



EMP-9...

- **-9...:** Position Proportioning 100 Ohm Slidewire Feedback.

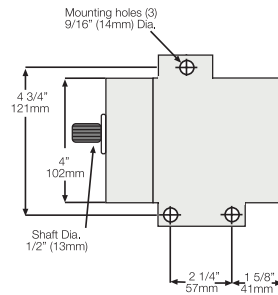
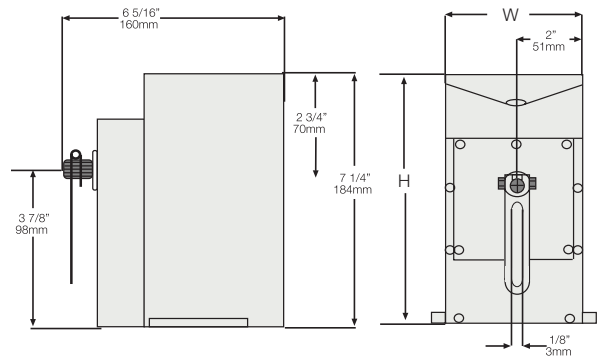
90° (180° optional with 180° slidewire kit). Rotation when power is applied. Optional 4-20 mA Input with CP 8391-703 (part # 43118-4)

Model	Part Number	Voltage	Stroke	Timing (seconds)	Torque	Electrical	Includes		Ambient Temp (F)	
						Amps	Aux. Switch (3)	Crank Arm	Min.	Max.
Two Position										
EMA-405-0-0-1	43117	110-120VAC/60Hz	180	20	16	0.40	No	Yes	-40	+135
EMA-405-1-0-1	43117-1	110-120VAC/60Hz	90	10	16	0.40	No	Yes	-40	+135
EMA-418	43119	110-120VAC/60Hz	180	20	60	0.90	No	Yes	-40	+135
EMA-418-2	43119-1	110-120VAC/60Hz	90	10	60	0.90	No	Yes	-40	+135
Position proportioning with 100 Ohm slidewire feedback										
EMP-423-1 (1)	43158	110-120VAC/60Hz	90	12	60	0.65	Yes	Yes	-40	+135
EMP-424-1 (1)	43032	110-120VAC/60Hz	90	12 (2)	60	0.65	Yes	Yes	-40	+135
EMP-453-1 (1)	43033	110-120VAC/60Hz	90	40	220	0.65	Yes	Yes	-40	+135
EMP-454-1 (1)	43087	110-120VAC/60Hz	90	40 (2)	220	0.65	Yes	Yes	-40	+135
EMP-9430	43211	110-120VAC/60Hz	90	20	550	1.80	Yes	No (4)	-40	+130
EMP-9630	43215	110-120VAC/60Hz	90	33	1100	1.80	Yes	No (4)	-40	+130
EMP-9830	43201	110-120VAC/60Hz	90	57	1300	1.80	Yes	No (4)	-40	+130
Potentiometer slaved proportioning with 100-1000 Ohm slidewire feedback										
EMP-423-2	43158-2	110-120VAC/60Hz	90	12	60	0.65	Yes	Yes	+30	+135
EMP-424-2	43032-2	110-120VAC/60Hz	90	12 (2)	60	0.65	Yes	Yes	+30	+135
EMP-453-2	43033-2	110-120VAC/60Hz	90	40	220	0.65	Yes	Yes	+30	+135
EMP-454-2	43087-2	110-120VAC/60Hz	90	40 (2)	220	0.65	Yes	Yes	+30	+135
Proportioning, 4-20 mA input										
EMP-423-5	43158-6	110-120VAC/60Hz	90	12	60	0.65	Yes	Yes	-40	+135
EMP-424-5	43032-6	110-120VAC/60Hz	90	12 (2)	60	0.65	Yes	Yes	-40	+135
EMP-453-5	43033-6	110-120VAC/60Hz	90	40	220	0.65	Yes	Yes	-40	+135
EMP-454-5	43087-6	110-120VAC/60Hz	90	40 (2)	220	0.65	Yes	Yes	-40	+135

- (1) Can be used as two position if internal slidewire is not connected.
 - (2) Timing can be increased (slower rotation) up to approximately ten times this rating by turning a slotted adjustment screw located on the outside of the case.
 - (3) SPDT switch may be set to operate at any point in the stroke (Ratings 120 Vac, 5.8A inductive, 12A non-inductive.)
 - (4) Requires 3/4 crankarm (Part# 43202)
- Models suitable for 50Hz available upon special request

Model	Dimension in Inches				Shipping Weight
	W	L	H	Shaft Dia.	
EMA-405-0-0-1	4	5 5/8	5-3/4	1/2	8 .lbs
EMA-405-1-0-1					
EMA-418					
EMA-418-2					
EMP-423-1	4	5-3/8	7	1/2	8 .lbs
EMP-424-1					
EMP-453-1					
EMP-454-1					
EMP-423-2	4*	5-3/8	7	1/2	11 .lbs
EMP-424-2					
EMP-453-2					
EMP-454-2					
EMP-423-5	4**	5-3/8	7	1/2	12 .lbs
EMP-424-5					
EMP-453-5					
EMP-454-5					
EMP-9430	9-1/2	10-1/2	9-9/16	3/4	30 .lbs
EMP-9630					
EMP-9830					

*For EMP-2 add 1 1/2" to width to accommodate side box
 ** For EMP-5 add 2" to width to accommodate side box



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