



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.

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

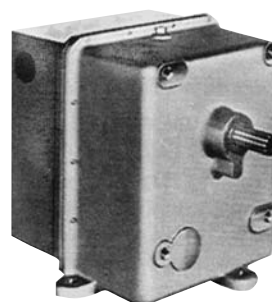
90° (180° optional with 180° slidewire kit). Clockwise rotation (reversible) when power is applied.



EMP-4..-5

- **-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)



EMP-9...

Electric Actuators



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

(1) Can be used a 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 locatedon the outside of the case.

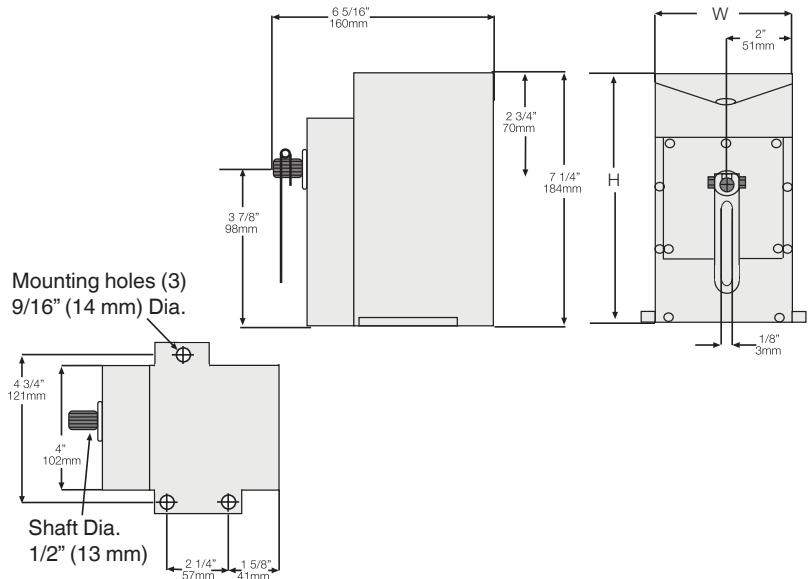
(3) SPDT switch may be set to operate at any point in the stroke (Ratings 120 VAC, 5.8 A inductive 12 A non-inductive.)

(4) Requires 3/4 crankarm (Part# 43202)

Models suitable for 50 Hz available upon special request

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

* 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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