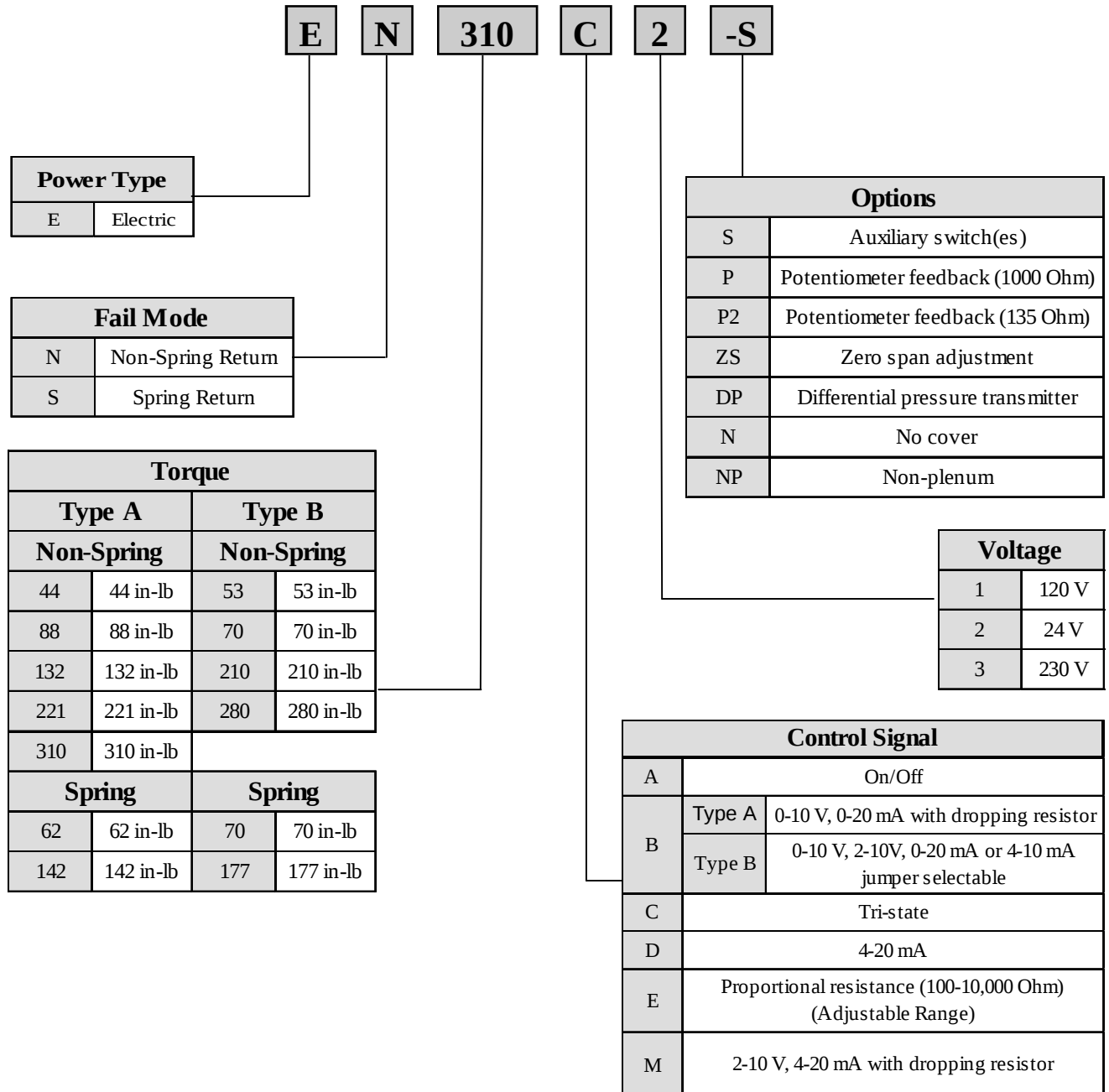




How to Select the Commercial Electronic Actuator Part Number



Note:

- See Actuator Selection Chart to confirm combinations.



Commercial Actuator Selection Chart – Non-Spring Return

Actuator Model	24 VAC Power Input	Control Signal								Position Feedback		Torque						Aux. Switches	Self-Adaptive **
		On/Off	Tri-State Floating	0 to 10 VDC 0 to 20 mA*	4 to 20 mA	0 to 20 V Phasecut	0 to 135 Ohm	Pulse Width Modulation (PWM)	Starting Point & Span Adjust. (zero & span)	0 to 10 VDC	Resistive 0-1000 Ohm	44 in-lb	88 in-lb	132 in-lb	177 in-lb	221 in-lb	310 in-lb	Built-in Auxiliary Switches, (-S) only	
EN44B2(-S)	•			•		5	5	5		•		•						•	•
EN44B2-ZS(-S)	•			•	6				•	•		•						•	
EN44C2-NP	•	2	•									•							
EN44C2(-S)(-P)	•	2	•								3	•						•	
EN88B2(-S)	•			•		5	5	5		•			•					•	•
EN88B2-ZS(-S)	•			•	6				•	•			•					•	
EN88C2(-S)(-P)	•	2	•								3		•					•	
EN132B2	•			•		5	5	5		•				•					•
EN132B2-ZS-S	•			•	6				•	•				•				•	
EN132C2(-S)(-P)	•	2	•								3			•				•	
EN221B2(-S)	•			•		5	5	5		•						•		•	
EN221B2-ZS(-S)	•			•	6				•	•						•		•	
EN221C2(-S)	•	2	•													•		•	
EN177D2(-S)	•				•										•			•	
EN310B2(-S)	•			•		5	5	5		•							•	•	
EN310B2-ZS(-S)	•			•	6				•	•							•	•	
EN310C2(-S)	•	2	•								3						•	•	

Notes:

* Requires 500 ohm resistor.

** **Caution:** When self-adaptive feature is turned on, the actuator will re-calibrate after a power failure or electrostatic discharge (ESD) at levels of 2 kv and above. This can take up to 5 minutes.

2 Can be wired for two-position control using a Form C relay.

3 (-P) option includes potentiometer feedback

5 Peripheral options are available for specialty signals such as PWM, 0-135 ohm and 0-20 V phase cut.

6 "-ZS" version can be calibrated to 2 to 10 V. With the addition of a 500 ohm (1 %, 1/4 W) resistor, it is compatible with 4 to 20 mA.

- Most assemblies are available with an optional weathershield, or NEMA 4/4X type enclosure.

- (-S) indicates built-in auxiliary switch.



Commercial Actuator Selection Chart – Spring Return

Actuator Model	Power Input		Nominal Spring Return Time (Sec) - Maximum	Control Signal							Position Feedback			Torque		Aux. Switches	Self-Adaptive**
	24 VAC	120 VAC		On/Off	Tri-State Floating	0 to 10 mA 0 to 20 mA*	2 to 10 VDC 4 to 20 mA*	0 to 20 V Phasecut Pulse Width Mod. PWM	0 to 135 Ohm	Starting Point & Span Adjust.	0 to 10 VDC	2 to 10 VDC	Resistive (-P) 0-1000 Ohm	62 in-lb	142 in-lb	Built-in Auxiliary Switches (-S) only	
ES62A2(-S)	•		60	•										•		•	
ES62A1(-S)		•	60	•										•		•	
ES62B2(-S)	•		60			•		2	2		•			•		•	
ES62B2-ZS(-S)	•		60			•	4			•	•			•		•	
ES62C2(-S)(-P)	•		60		•							3		•		•	
ES62M2	•		60				•					•		•			
ES62M2-S	•		60				•					•		•		•	
ES142A2(-S)	•		30	•											•	•	
ES142A1(-S)		•	30	•											•	•	
ES142A3(-S)	230 VAC		30	•											•	•	
ES142B2(-S)	•		30			•		2	2		•				•	•	
ES142B2-ZS(-S)	•		30			•	4			•	•				•	•	
ES142C2(-S)(-P)	•		30		•							3			•	•	
ES142M2	•		30				•				•	•			•		•
ES142M2-S	•		30				•				•	•			•	•	•

Notes:

- * Requires a 500 ohm (1 %, 1/4 W) resistor.
- ** **Caution:** When self-adaptive feature is turned on, the actuator will re-calibrate after a power failure or electrostatic discharge (ESD) at levels of 2 kv and above. This can take up to 5 minutes.
- 2 Peripheral options are available for specialty signals such as PWM, 0-135 ohm and 0-20 V phase cut.
- 3 (-P) option includes potentiometer feedback.
- 4 "-ZS" version can be calibrated to 2 to 10 V. With the addition of a 500 ohm (1 %, 1/4 W) resistor it is compatible with 4 to 20 mA.
- Most commercial assemblies are available with an optional weathershield, or NEMA 4/4X type enclosure.
- (-S) indicates built-in auxiliary switch.
- 230 VAC available for ES142A3(-S) actuator only.