

## ELECTRIC QUARTER-TURN ACTUATORS

FNW offers electric actuators for quarter-turn valves such as ball, plug, and butterfly valves. Actuators can be supplied with numerous options including, but not limited to, electro-mechanical brakes (200E and larger), auxiliary position switches, feedback potentiometers, 4-20mA and 0-10Vdc positioners, alternate motor voltages, spring return action, and explosion proof housings. Contact FNW with your specific application needs.

### Standard Features

#### FNW 100E, 200E, 300E, & 400E

- -40°F to 150° Temperature Range (Optional heater required below 0°F)
- CSA Certified Nema 4 Enclosure
- Single 1/2" NPT Conduit Entry
- 300 Series Stainless Steel Output Drive
- 300 Series Stainless Steel Captive Enclosure Fasteners
- ISO Standard Bolting and Drive Dimensions
- Friction Brake Standard
- Non-Declutching Manual Override (400E has Declutching Manual Override Hand Wheel)
- Dome Position Indicator
- Permanently Lubricated
- Mountable in Any Position
- Thermally Bonded Polyester Powder Coated

#### FNW 600E, 1000E, & 1600E

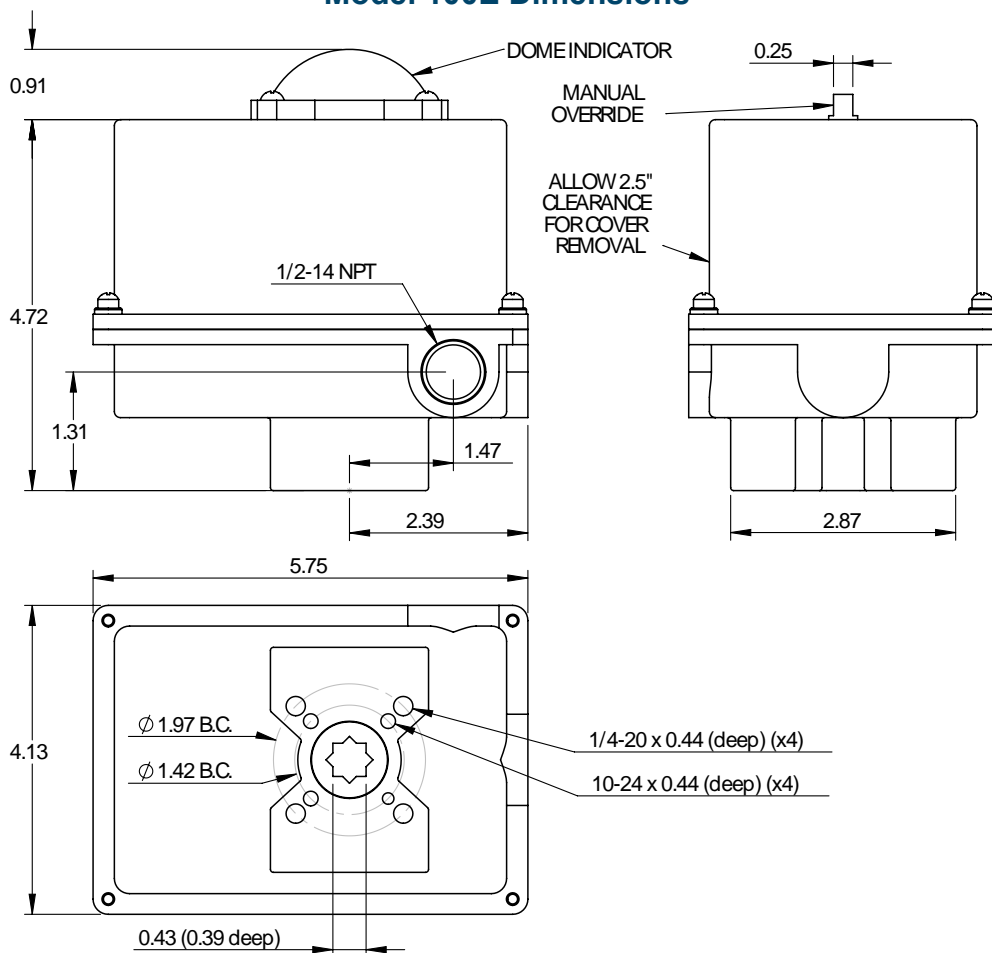
- -40°F (with Standard Heater Activated) to 140° Temperature Range
- CSA Certified Enclosure Conforms to Nema 1, 2, 3, 3R, 4, 4X, and 12
- Motor Thermal Overload Protection
- Dual 1/2" NPT Conduit Entries
- Heater & Thermostat
- Hardened Steel Spur Gear and Output Drive
- Captive Hex Head Enclosure Fasteners
- ISO Standard Bolting and Drive Dimensions
- Declutching Manual Override with Indicator
- Permanently Lubricated
- Mountable in Any Position
- Polyester Coated



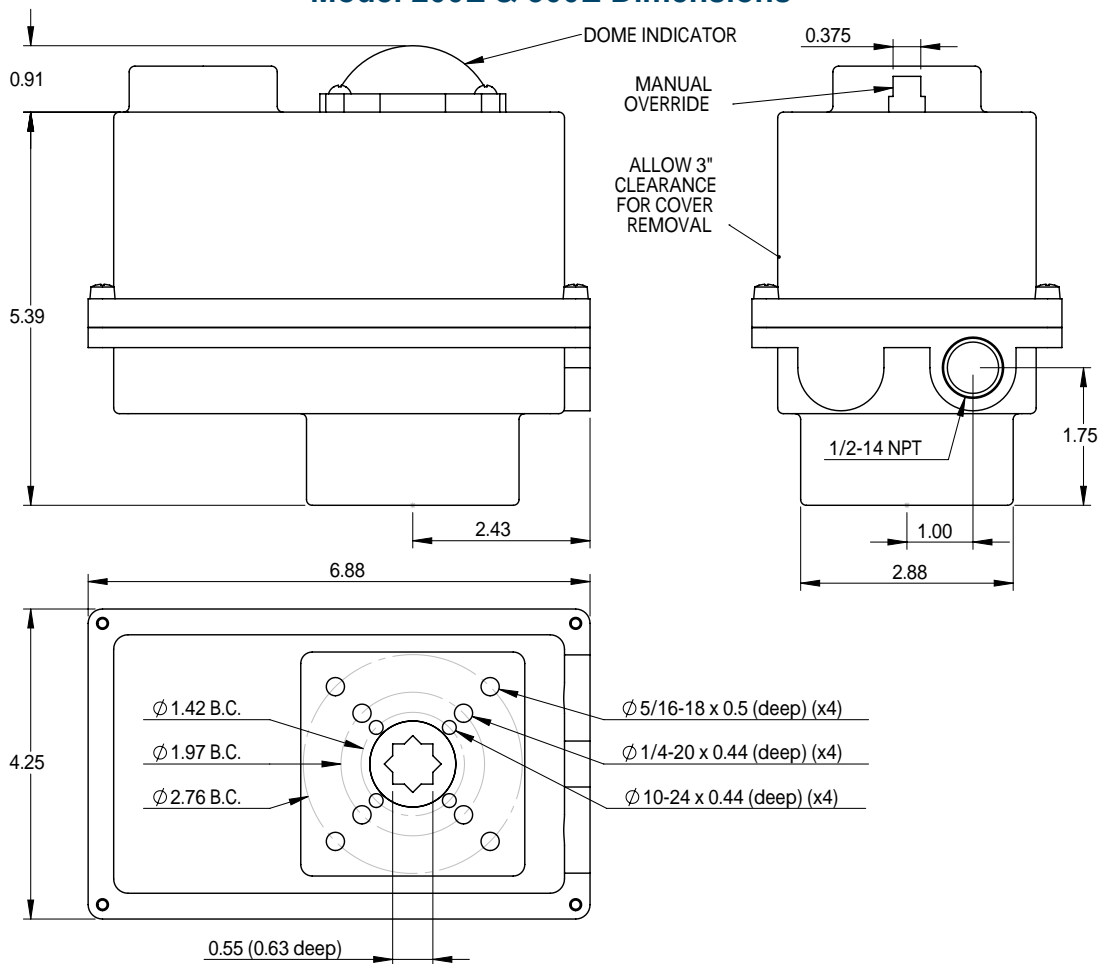
### Standard Specifications

Standard Specifications	Model Number						
	100E	200E	300E	400E	600E	1000E	1600E
Output Torque (In-Lbs)	100	200	300	400	600	1000	1600
Cycle Time (Seconds)	2.5	5	5	10	15	15	30
Duty Cycle (120VAC)	25%	25%	25%	25%	30%	100%	100%
Lock Rotor Current (Amps)	0.55A	0.75A	0.99A	0.75A	0.57A	0.69A	0.35A
Weight (Lbs)	6	10	10	18	18	18	18

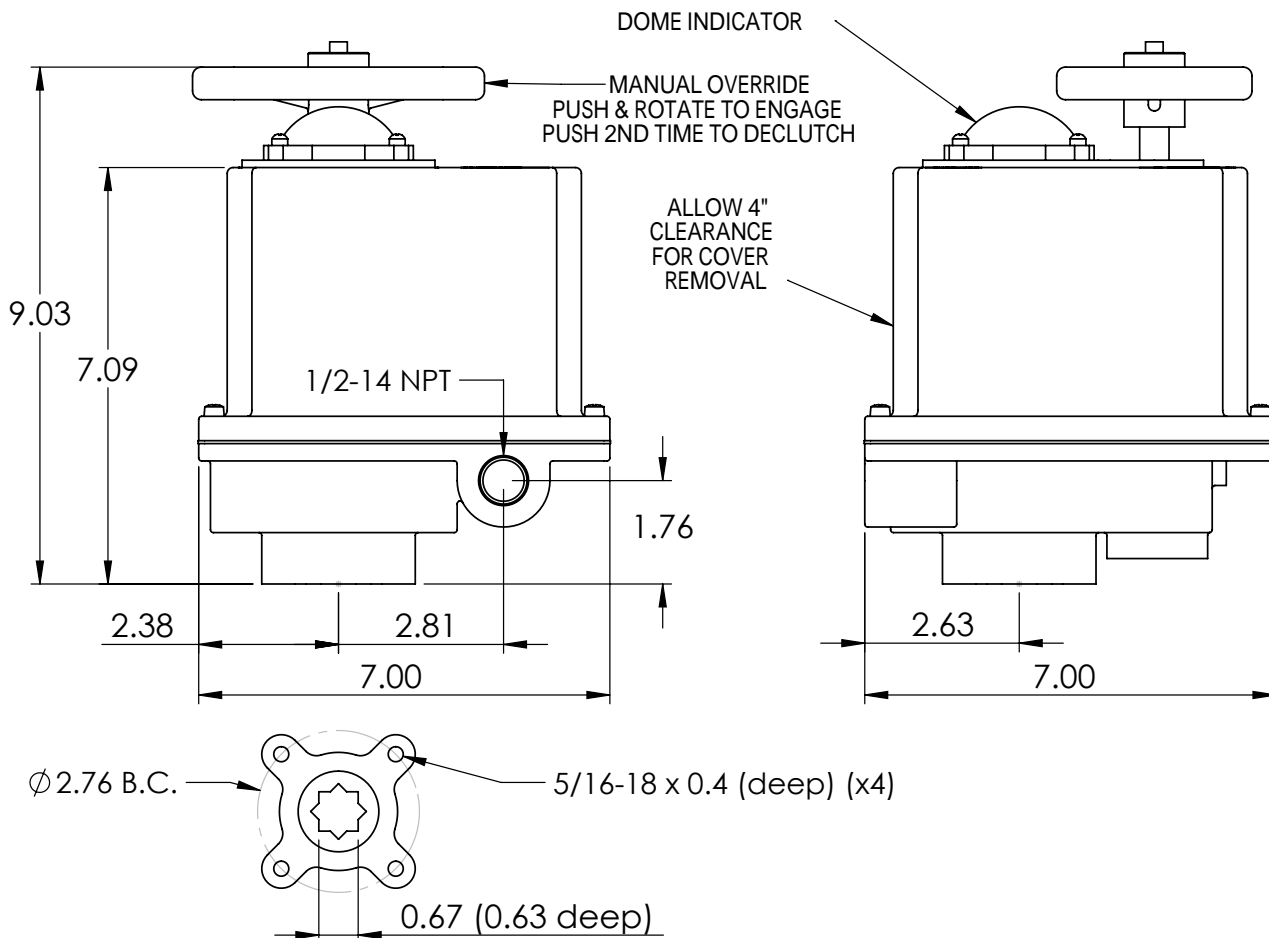
### Model 100E Dimensions



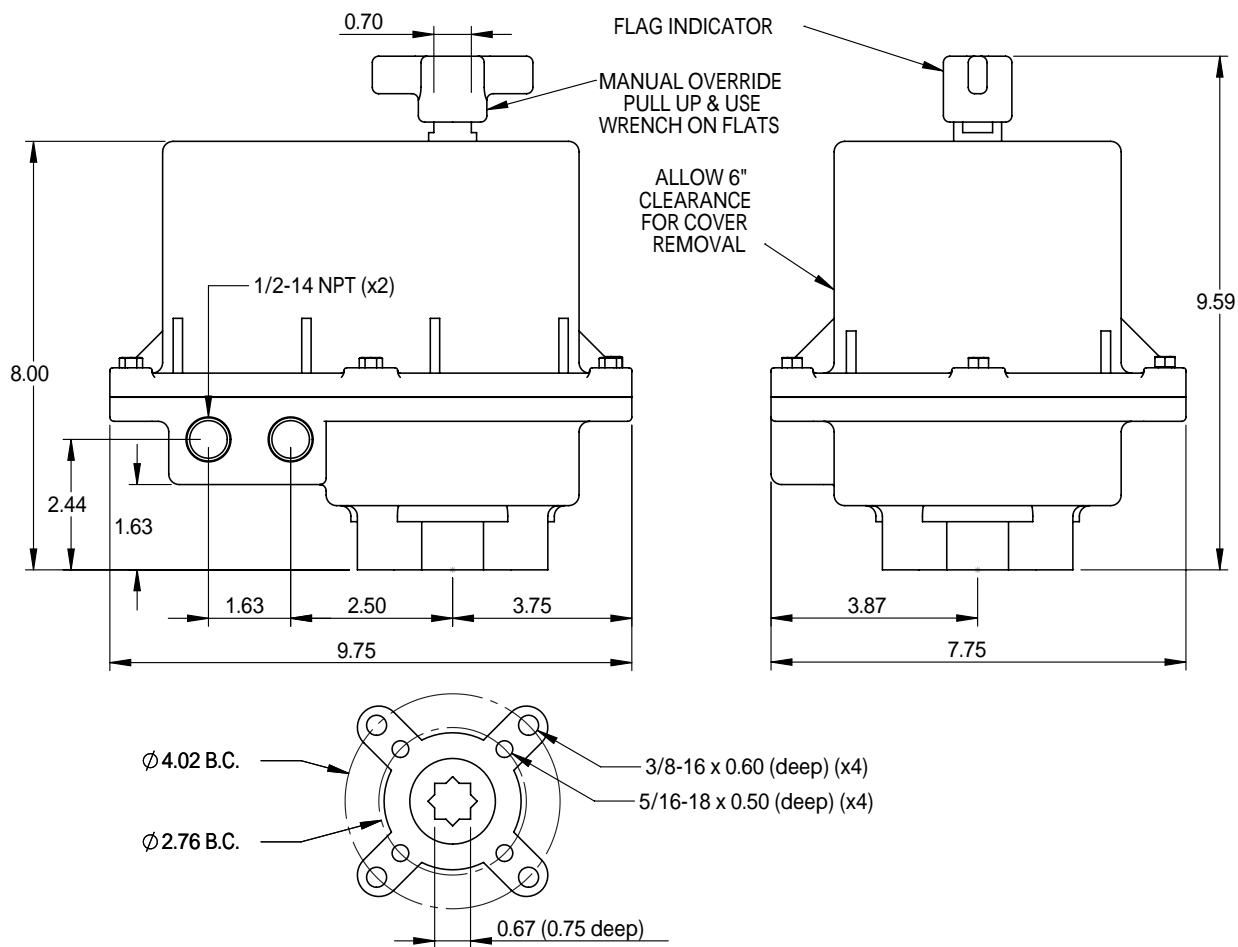
### Model 200E & 300E Dimensions



### Model 400E Dimensions

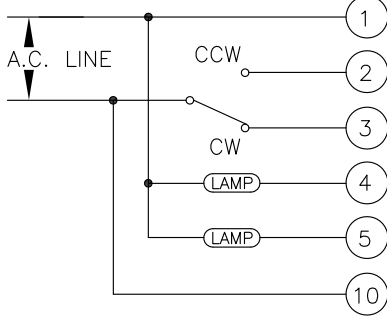


### Model 600E to 1600E Dimensions



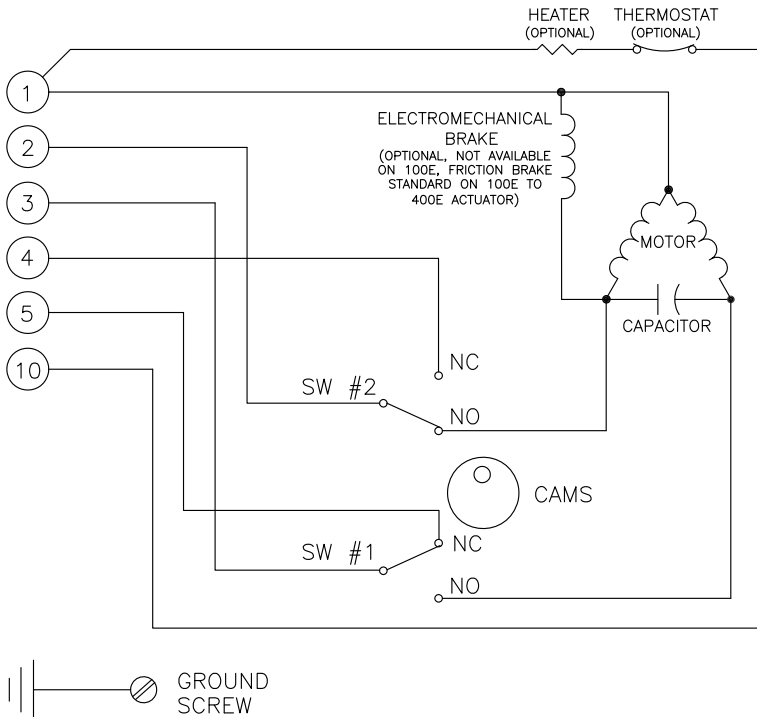
## Model 100E to 400E Standard Wiring Diagram

### OPTIONAL FIELD WIRING REFERENCE ONLY - NOT SUPPLIED



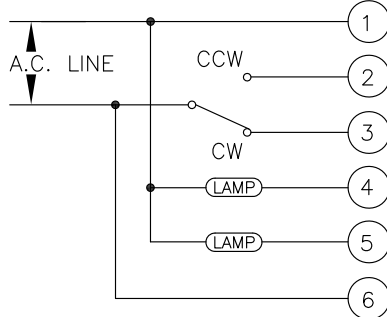
- NOTES:
1. OPTIONAL FIELD WIRING IS SHOWN FOR REFERENCE ONLY AND IS NOT SUPPLIED WITH THE ACTUATOR.
  2. ALWAYS VERIFY SPECIFIC ACTUATOR WIRING TO SPECIFICATIONS BEFORE INSTALLING.
  3. ROTATION IS VIEWED FROM ABOVE THE ACTUATOR.
  4. SWITCHES CONFIGURED FROM BOTTOM TO TOP (i.e. - SW#1, BOTTOM, SW#2 NEXT, ETC.
  5. CAUTION: ELECTRICAL OPERATION OF THE ACTUATOR MUST BE MADE THROUGH AN INDIVIDUAL SINGLE POLE CONTROL SWITCH IN ORDER TO ISOLATE THE UNUSED MOTOR WINDINGS.
  6. CAUTION: WIRING DIAGRAMS CAN VARY. CONSULT DOCUMENTATION PACKED WITH ACTUATOR.
  7. WIRING DIAGRAM ILLUSTRATES ACTUATOR IN THE FULL CW POSITION.
  8. THIS WIRING DIAGRAM IS FOR STANDARD 120VAC ACTUATORS, FNN MODELS 100E TO 400E.

### ACTUATOR WIRING



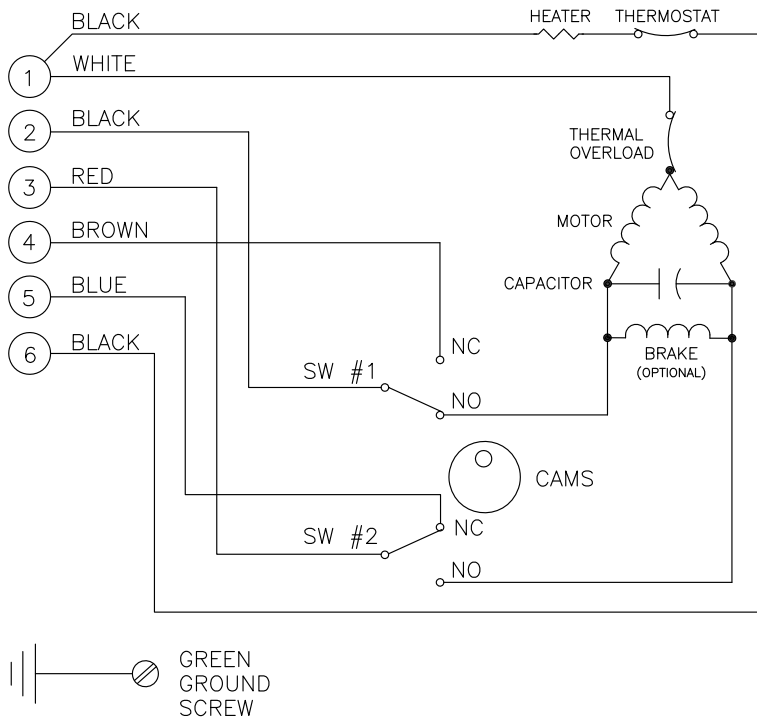
## Model 600E to 1600E Standard Wiring Diagram

### OPTIONAL FIELD WIRING REFERENCE ONLY - NOT SUPPLIED



- NOTES:
1. OPTIONAL FIELD WIRING IS SHOWN FOR REFERENCE ONLY AND IS NOT SUPPLIED WITH THE ACTUATOR.
  2. ALWAYS VERIFY SPECIFIC ACTUATOR WIRING TO SPECIFICATIONS BEFORE INSTALLING.
  3. ROTATION IS VIEWED FROM ABOVE THE ACTUATOR.
  4. THERMAL OVERLOAD SHOWN, RESETS AUTOMATICALLY.
  5. SWITCHES CONFIGURED FROM BOTTOM TO TOP (i.e. - SW#1, BOTTOM, SW#2 NEXT, ETC.
  6. CAUTION: ELECTRICAL OPERATION OF THE ACTUATOR MUST BE MADE THROUGH AN INDIVIDUAL SINGLE POLE CONTROL SWITCH IN ORDER TO ISOLATE THE UNUSED MOTOR WINDINGS.
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### ACTUATOR WIRING



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