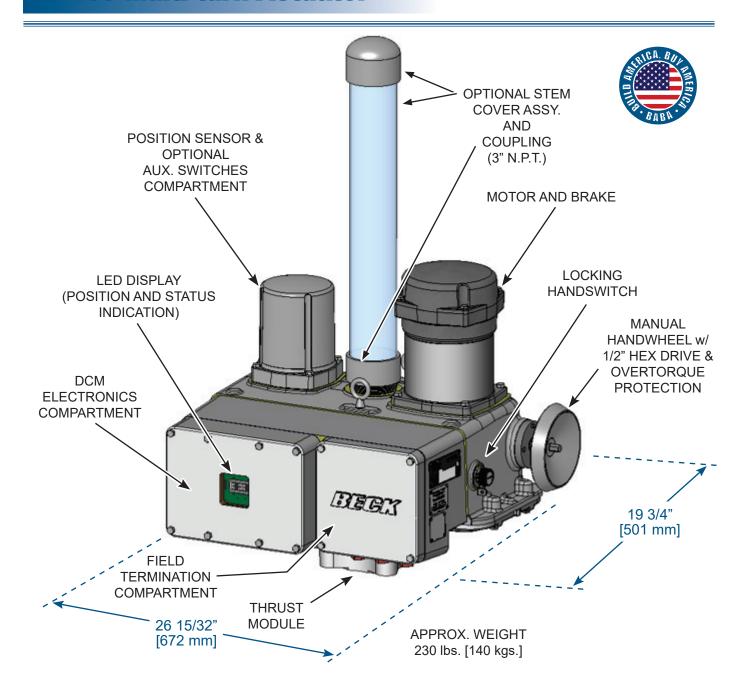
#### An ISO 9001 company



## 88-109 Multi-turn Actuator



# The 88-109 is not just another electric actuator. Here are a few design details that set the 88-109 apart from typical multi-turn electric actuators...

- A non-intrusive Wi-Fi interface eliminates custom apps, software and proprietary handhelds
- A "no burn-out", permanent magnet motor that has no duty limitations and won't overheat
- A >90% efficient spur gear train that eliminates inefficiencies and wear of typical worm gear designs
- Permanent grease lubrication that eliminates oil leaks, mounting restrictions and PM
- Programmable torque and stall protection that eliminates problematic torque switches
- The motor starts at full torque so there is no need for "hammer blow"

### Beck 88-109 Multi-turn Actuator

Beck's new 88-109 Multi-turn Actuator is perfect for rising and non-rising stem gate applications. Additionally, when coupled with a  $\frac{1}{4}$ -turn gearbox, it is a compact and cost-effective solution for large butterfly and other 1/4-turn valves. Like all Beck actuators, the 88-109 is simple to use and virtually maintenance-free.

### **Specifications & Standard Features**

- Power: 480 Vac, 3 phase, 50/60 Hz, 5A max.
- *Torque rating:* 125 lb-ft (169 N•m)
- Output shaft speed: 60 RPM max., configurable to any speed from 10% to 100% of maximum
- Max. output shaft travel: 4000 revolutions
- Duty rating: 100% w/o limitation 60 starts/minute or continuously running at rated torque load
- Max. valve stem pass-through: Up to 2" (larger shafts require an external gearbox)
- Temperature rating: -40°F to 158°F (-40°C to 70°C)
- Environmental rating: NEMA 4X, IP66, IP68 (3 meters for 48 hours)
- Relays: Three field-programmable relays for system status and/or position indication
- Mechanical position switches (optional): Four cam-operated, adjustable SPST switches
- Control interfaces:
  - Discrete pulse control via 24 Vdc dry contacts or 120 Vac inputs
  - 4-20 mA Demand signal
  - Modbus RTU (Modbus TCP is optional)
- External Position Feedback signal: 4-20 mA
- Local indications:
  - Alphanumeric LED position display
  - o Red, yellow & green discrete LEDs for indication of status conditions or position
- Local electrical control: Five-position, lockable Handswitch with aux. status contact (closed-in-AUTO)
- Local manual control: Handwheel includes ½" hex drive with mechanical over-torque protection
- Thrust module: FA14 or FA16 mounting pattern
- Configuration interfaces: Wi-Fi, HART, Serial Command Port, Push Button, and Modbus



