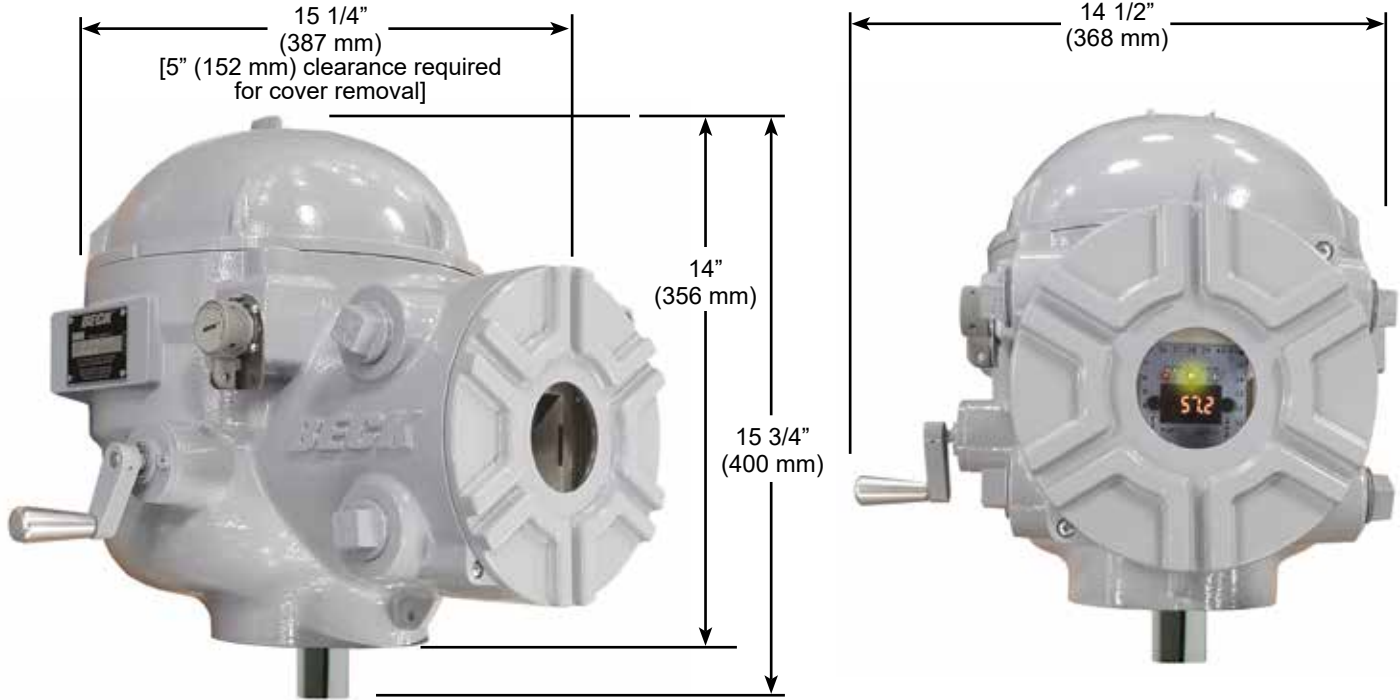


**57-109**

**Beck's NEW High Performance, 1/4-Turn Valve Actuator ...**



**All the advantages of a Beck electric actuator and much more ...**

Beck actuators are the ideal solution for industrial valve control. They provide excellent control—positioning accurately to 0.1 degree—and solve the problems inherent to all other actuator technologies including traditional electric actuators, pneumatic actuators and hydraulic actuators. Beck actuators require virtually no maintenance and they position consistently over time and regardless of load. They require a minimum of power to operate and there are no duty limitations to worry about because Beck actuators will not overheat or burn-out. All Beck actuators are capable of continuous duty with no modulation or runtime limitations, operating 24/7 regardless of service. If you need an actuator to modulate, or simply open and close a valve, a Beck actuator will perform year-after-year.

The new Group 57 rotary valve actuator is no exception. It maintains all the Beck advantages, but goes even further. The Group 57 adds features and capabilities designed to meet the requirements found in many remote and hazardous locations like wellhead and pipeline valves in the oil and gas industry. New features and advantages include:

- **The ability to run on 12–48 Vdc power**, making them ideal for use with solar panel operation.
- **Class I, Division 1, Groups B, C & D hazardous location ratings.**
- **Built-in electric fail-safe capability** with optional, internal ultra-capacitor backup power.
- **Fast stroking speeds (9 seconds for 90°)** for applications with fast open or close requirements.
- **Simple and flexible valve mounting options** including compliance with the ISO 5211 Part-turn Actuator Mounting Standard or custom hardware to fit virtually any valve.
- **Space efficient packaging** making it easier to fit on valves in any orientation.

If you have valve application requirements, contact a Beck sales or application engineer for more information. Whether your need is low voltage, hazardous rating, or fast speed, Beck can help. We always provide the unmatched control and reliability that our customers have come to expect from Beck.

**ELECTRIC ACTUATORS FOR INDUSTRIAL PROCESS CONTROL**

## FEATURES / SPECIFICATIONS

### Power

- 12–30 Vdc (native standard)
- 12–48 Vdc extended DC range with optional power conditioner
- 120, 208, 240, 380, 415, 480 & 575 Vac available as options
- 100–264 Vac with optional universal power supply (late availability)

### Torque Output

120 lb-ft (162.7 N•m)

### Stroke Timing

9 seconds per 90° (configurable for slower speeds)

### Positioning Resolution (Minimum Step Size)

0.1°

### Weight

Approximately 59 lbs. max.

### Certifications

- Ordinary & Hazardous Locations: Class I, Division 1, Groups B, C & D
- Enclosure ratings: Type 4X; IP66 / IP68 at 3 meters for 48 hours

### Environmental Temperature Rating

-50°C to 85°C (-58°F to 185°F) (may vary depending on options)

### Control Input

4–20 mA signal or ac/dc pulses

### Communication Interfaces

HART and Modbus RTU (standard), Modbus TCP (Ethernet) (optional)

### Configuration Options

Local pushbuttons, RS-232 Serial command port, Device Description (DD) based HART tools, HART DTM for PactWare FDT 1.2 and Modbus Configuration Registers

### Modulation Duty

100% continuous duty with no limitations

### Mounting Orientations

Actuator may be mounted in any orientation without restrictions

### Manual Operation

Hand crank (no power required) and Handswitch (power required)

### Switches and Relays

(2) cam-operated over-travel protection switches (standard); Up to (4) Form C auxiliary, cam-operated switches (optional); (2) Programmable SPST relays (standard) or (2) DPDT (optional); SPST status relay (standard)

### Wiring and Termination

Easy access, screw-type terminals accept up to 12 AWG wire

### Hard Stops

Internal, fixed (standard); External adjustable hard stops (optional)

### Status Indications

- Configurable position status LED's (red, green and yellow) visible through optional terminal compartment window
- Digital numeric LED position display (optional)

### External Position Feedback Signal

4–20 mA or 1–5 Vdc signal (standard)

### Backup Power Supply (Optional)

An internal backup supply utilizing ultra-capacitors to provide “go-to-position” response upon power loss; maximum operating temperature limitations apply

### Valve Mounting Hardware (Optional)

ISO 5211 compatible hardware or custom hardware



Under the cover of the  
Group 57 Actuator

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COMMUNICATION PROTOCOL



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7/20  
Rev. 2.8