

# **Automation Capabilities**





### SUMMARY OF CAPABILITIES

AUTOMATION

Crane Energy Flow Solutions® provides a variety of valve automation products, including pneumatic and electric actuators, and gives you a single source for automated valve packages. Our team of actuation experts can help you solve your valve and actuation adjustment and control needs.

### ACTUATORS

#### **PNEUMATIC (REVO)**

- Rack and Pinion
  - Size Range: 1/4" 48"
  - Torque: 30 in-lb to 107,531 in-lb
  - Spring Return (CW, CCW)
  - Double Acting
  - Direct Mount
  - Bracket Mount
  - Special Configurations
- Scotch Yoke
  - Size Range: 6" 48"
  - Torque Range: 12,581 in-lb to 6,000,000 in-lb
  - Bracket Mount
  - Double Acting
  - Spring Return

#### ELECTRIC

- Size Range: 1/4" 16"
- Torque: 347 in-lb to 17,359 in-lb
- Temperature: -13°F to +131°F (-25°C to +55°C)
- AC Voltage: 24,120 or 229 1 phase
- DC Voltage: 12 or 24
- Certifications: CSA-NRTL/C
- Direct Mount to Center Line Valves
- Special Configurations
- On-off or Modulating Service

#### INSTRUMENTATION

#### SOLENOIDS

- 3- and 4-way Configurations
- NEMA, UL, FM and Explosion Proof

#### LIMIT SWITCHES

Economy, Conventional and Explosion Proof

#### POSITIONERS

- Pneumatic, Electric Versions Available
- Explosion Proof

#### SPECIAL APPLICATIONS

- Speed Control
- Emergency Shut Down
- Manual Override



CRANE Air







#### **PNEUMATIC ACTUATORS**

ACTUATION



## RACK & PINION AND SCOTCH YOKE

Downtime means lost profits, so reliable automation is a key to maintaining optimum performance. Crane's pneumatic actuators offer a number of features to assure reliable operation including a patented three-point guiding system and high precision machining for exceptionally close tolerances. These actuators can mount directly to Center Line valves, eliminating the added cost of a separate bracket and mounting kit.

#### FEATURES

- Aluminum alloy construction provides superior corrosion resistance and durability
- Available in single- and double-acting models
- Twelve sizes available with torques ranging from 30 in-lb to 107,531 in-lb (12 Nm to 4000 Nm)
- Precision machining for tight tolerances to minimize gear backlash
- Standard NAMUR accessory interfaces
- ISO 5211 mounting flange

#### SPECIFICATIONS

Pressure: 40 psi to 120 psi (2.75 bar to 8.27 bar) Temperature: -4°F to 176°F (-20°C to +80°C) Materials: Housing – aluminum alloy

Shaft – hard anodized aluminum alloy Finish: Two-component polyurethane Lifespan Standards: Minimum of 500,000 cycles Quality Assurance: DIN ISO 9001/EN 29001 Mounting Flange: ISO 5211 Drive Connection: ISO 5211 (DIN 3337 optional) Solenoid Connection: VDI/VDE 3845 (NAMUR) Positioner, Limit Switch Connections: VDI/VDE 3845 (NAMUR)

#### **INSTRUMENTATION OPTIONS**

Solenoids Limit Switches Positioners Special Applications

#### **ELECTRIC ACTUATORS**

ACTUATION





### **ELECTRIC ACTUATORS**

With nearly maintenance-free operation, the Crane 44000 electric actuator is ideal for small to medium diameter valves in high frequency applications. These actuators allow precise positioning of the valve and provide modulating service as well as on/off. Maintenance is simplified because no lubrication service or changing of brakes is required. The Crane 44000 actuator mounts directly to Center Line valves and mounting to Flowseal valves is accomplished by using a separate mount kit.

#### FEATURES

- Compact and lightweight
- Available for on/off or modulating duty
- All circuitry encapsulated to protect against moisture, heat and vibration
- Instantaneous motion stop circuit (modulating version) eliminates hunting and overrun and guarantees 250 steps over entire 90° range
- Self-locking final reduction worm gear holds last position if power is lost
- Valve position indicator built into actuator
- Maintenance-free design

#### **COMMON SPECIFICATIONS**

Power: 120 VAC (±10%) Temperature: -13°F to +131°F (-25°C to +55°C) Housing: NEMA 4/4X Speed Range: 13-50 sec./90° (depending on model) Condensation Protection: Space heater equipped

#### **ON/OFF MODEL SPECIFICATIONS**

Torque Range: 347 in-lb to 17,360 in-lb Duty Rating: 50-100% (depending on model)

#### MODULATING MODEL SPECIFICATIONS

Torque Range: 347 in-lb to 17,360 in-lb Output Shaft Resolution: Over 1/250 for 0°-90° (Max. 1/400) Duty Rating: 50-100% (depending on model)

#### STANDARDS

Quality Assurance: ISO 9001 Electrical Safety: CSA C/US and CE Enclosure: UL50 Type-4, 4X

#### INSTRUMENTATION OPTIONS

Solenoids Limit Switches Positioners Special Applications

#### INSTRUMENTATION

ACTUATION

### SOLENOIDS

- 3-way
- 4-way
- UL Listed
- FM Approved/Cenelec
- NEMA
- Explosion Proof





# LIMIT SWITCHES

#### **CLS Series**

- Economical Resin Housing (CCR Series)
- Stainless or Epoxy Coated Aluminum (CCA Series)
- Explosion Proof Housing (CXA Series)
- Visual and Remote Indication
- 2-wire ASi Interface
- NEMA 4, 4X Class I Division 2
- ATEX, Cenelec, UL and CUL Certifications
- Mechanical or Inductive Proximity Switches
- Wireless, Dribble Control Options

### POSITIONERS

#### C100 Series – Positioners for Revo

- Single Cast Aluminum Housing for All Types
  - Pneumatic (C100P)
  - Electro-pneumatic (C100E)
  - Explosion Proof (C100EX)
- Powder-polyester Coated Housing
- Stainless Steel, Retained Fasteners
- NEMA 4X and IP66 Protection
- Available Drives: NAMUR, 1/2" Square and Others
- Maintenance-friendly Pilot Valve
- Simple Calibration External Zero Adjustment







# **Energy Flow Solutions**

# **Contact Information**

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# **CRANE Energy Flow Solutions®**

brands you know...technology you want ... solutions you need



Ball, Check, Corrosion Resistant Gate and Globe Valves



Lined Check and Resilient Seated Butterfly Valves



Ball, Bronze, Butterfly, Cast Steel, and Iron Valves

# DUO-CHEK<sup>®</sup> UNI-CHEK<sup>®</sup>





High Performance and Metal Seated Butterfly Valves



Ball, Bronze, Butterfly, Cast Steel, and Iron Valves



ARMATUREN Valve System Solutions, Highly Engineered Specialty Valves

# NOZ-CHEK<sup>®</sup> COMPAC-NOZ<sup>®</sup>

Nozzle-Type, Severe Service Check Valves



High Pressure and Severe Service Valves



Ball, Bronze, Butterfly, Cast Steel, and Iron Valves



Cast Steel Valves

# VALVE SERVICES

Certified Valve Repair Services

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