

Valve Automation Solutions



Valve Actuation - Rotary

Cowan has built an international reputation on the quality of our products and their performance for the world's most challenging environments.



E²H90 Series ESD Valve Rotary Electro-hydraulic Actuator

Self-contained E2H
Torques: Up to 2,650,000 in-lbs
On/Off Service
Fail Last, Fail Close, or Fail Open
Spring-return available

Stand Temp: -40°C to 70°C



E2H-ESD ESD Valve Rotary Electrohydraulic Actuator

Self-contained E2H - Direct drive.
3,000,000.00 Lbs-in Hydraulic output. 306,000.00 Lbs-in Spring output. On/Off Service. Fail Last, Fail Close, or Fail Open. Standard (-20C to +40C) ; High (-20C to +55C) ; Low (-40C to +40C).
Certified SIL 3 Capable



CSY Series Pneumatic Rotary Actuators

Double-Acting or Spring-Return
Torques up to 2,500,000 in-lb
Operating Pressure: 40–100 PSIG
Low Temp: -40°C to 80°C

Stand Temp: -20°C to 80°C

High Temp: -20°C to 120°C



CGO Series Gas/Oil Rotary Actuators

Electronic Line Break Protection
Torques up to 4,000,000 in-lbs
Supply Pressure: 5– 150 Bar
Suitable for Rotary (Quarter-Turn) valves. Linear design also available.

Valve Actuation - Linear

Cowan has built an international reputation on the quality of our products and their performance for the world's most challenging environments. Ask about our SIL 3 capabilities.



A Series
Pneumatic Valve Actuators
Double-Acting
Bore size: 4" to 42"
Piston rod diameter: 1" to 5½"
Thrust: Up to 425,000 lbs
Low Temp: -54°C to 90°C
High Temp: -10°C to 200°C



AS Series
Spring-Return
Pneumatic
Valve Actuators
Fail-Close or Fail-Open
Thrust: Up to 72,000 lbs
Larger sizes available
3 week quick-ship option
Low Temp: -54°C to 90°C
High Temp: -10°C to 200°C



AT Series
Pneumatic Modulating
Valve Actuators
with Integral Position
Transducer
Double-Acting or Spring-Return
Bore Size: 5" to 42"
Piston rod diameter: 1" to 5½"
Thrust: Up to 425,000 lbs
Low Temp: -40°C to 90°C
Stand Temp: -20°C to 90°C



MS Series
Hydraulic Spring-Return
Fail-Open or Fail-Close
Bore size: 1½" to 14"
Piston rod diameter: 1" to 7½"
Thrust: Up to 72,000 lbs
Low Temp: -54°C to 60°C
High Temp: -29°C to 205°C



ML Series: 3,000 psi
Hydraulic Valve Actuators
Double-Acting or Spring-Return
Bore Size: 1½" to 20"
Piston Rod Diameter: ¾" to 10"
Thrust: Up to 1.5 Million lbs
Low Temp: -54°C to 60°C
High Temp: -29°C to 205°C



P & V Series
High Pressure Air
& Direct Gas Actuators
250 to 1200 psi Supply
Bore Size: 6" to 24"
Strokes up to 36"
Thrust: Up to 750,000 lbs
NACE available for Sour direct gas



E²H Series
Electro-Hydraulic Linear
Valve Actuators
On/Off or Modulating Service
Stroke Range: Up to 36"
Thrust: Up to 125,000 lbs
Fail Last, Fail Close, or Fail Open
Low Temp: -50°C to 25°C
High Temp: -15°C to 40°C

Solutions for Demanding Applications:
Harsh Environments
Corrosion-Resistant
Submersible
High Speed and More!



CDA Series
Diaphragm Actuators
Direct or Reverse Acting Styles
Effective Diaphragm Area: Up
to 217 in²
Stroke: up to 4.00"
Thrust: Up to 13,000 lbs
Pressure Rating: Up to 60 psi
Fail-Close or Fail-Open
Stand Temp: -40°C to 70°C



C6A Series
API 6A Hydraulic Actuators
250 to 1200 psi Supply
Nominal Pressure: 3000 psi/
5000 psi
Closing Time: ≤ 5s
Stand Temp: -40°C to 70°C

cowan dynamics

Over 50 years experience in international industrial markets

Mounting & Control Solutions

We offer a wide range of options to facilitate both the valve adaption and the valve operation process.

C-PAC Module®: Cowan Pneumatic Actuator Control

Revolutionize the way you configure actuator pneumatic controls.



**Compact. Versatile. Simple.
Cost Effective**

- Cut down on reworking the “same-but-different” configuration every time
- Contains every foreseeable pathway for fail close, fail open, fail last and fail lock configurations

ZE-ESD Module

ESD Hydraulic manual system

- Automatic Emergency Shutdown
- ESD electric or pressure pilot signal
- Hydraulic manual pressurization
- Operating hydraulic normal pressure 1,500 psig
- To be used with our series of rotary or linear actuators



Conventional Actuator Control Solutions

Conventional actuator control solutions are also available.



Site installation example of all accessories integrated with the CPAC Module.

- Solenoid Valves
- Pilot Valves
- Quick Exhausts

Position Feedback:

- Limit switches and position sensors
- Field-adjustable for open and close indication.
- Analog and digital feedback

Mounting Kits: ISO, MSS, & Customized Patterns Available

Cowan valve mounting kits can be designed for any linear valve. Mounting kits available in steel and stainless steel construction.



Anti-Rotation Torque Arm:
Maintains constant alignment between valve stem and cylinder piston-rod
Compatible with rotary type switch boxes and beacons

Field-adjustable travel stop:
to limit stroke for position-seated or limited-travel applications.
Ensures valve reaches positive sealing every time without damage to valve internals

Manual Overrides

Manual override options are available.

Hydraulic manual override with indicator



Screwjack with handwheel

A2A Booster: 250 psi Dual-Stage High-Output Pneumatic Booster

Ratios 2:1, 3:1, and 4:1
125 psi max inlet pressure
250 psi max outlet pressure
Low Temp: -48°C to 60°C



Fail-Safe Systems and Control Panels

We offer a wide range of valve automation control options including control panels, PLC panels and fail-safe systems.

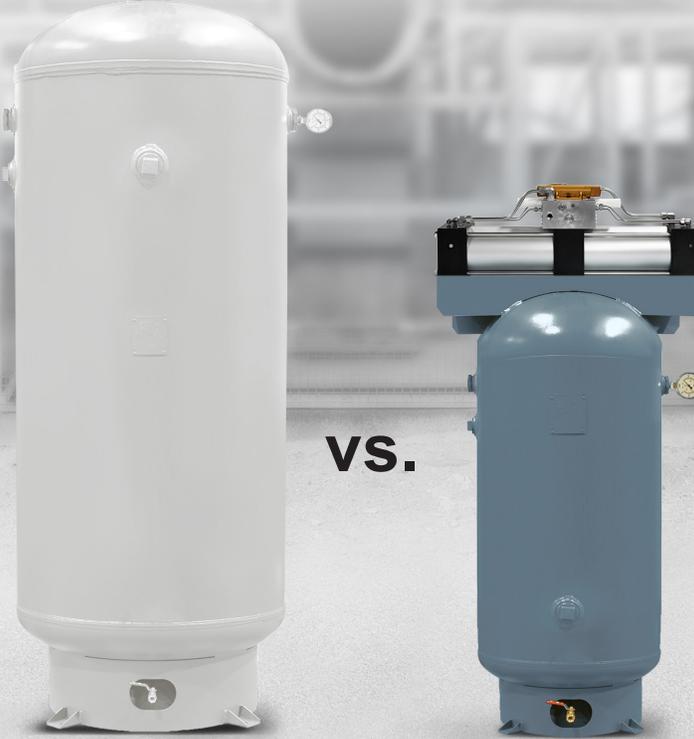
Do more with less

A²A Systems are significantly smaller and lighter than a conventional air tank system. Below is an example of how air-assisted fail-safe systems which use Cowan's A²A pneumatic booster provide a more economical solution than a conventional air tank fail-safe system.

Example:

Conventional System

- 785 lbs
- 400 gallon tank
- 30"x30" footprint
- 20" Bore pneumatic valve actuator



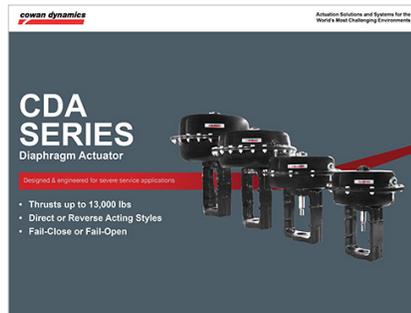
- upto **85%** Smaller
- upto **45%** Lighter
- upto **40%** Cost Savings

The A²A System

- 430 lbs
- 60 gallon tank
- 20"x20" Footprint
- 16" Bore pneumatic valve actuator

Related materials

Visit our website to download or request a printed catalogue.



For sales and technical information,
Contact us at:

Head Office/Factory:

6194 Notre Dame West
Montreal, Quebec H4C 1V4
TOLL-FREE: 855-341-3415
info@cowandynamics.com

f /cowandynamics

in /company/cowan-dynamics

You Tube /cowandynamics