

P&V SERIES

**Double-Acting High-Pressure & Direct
Gas Pneumatic Valve Actuators**

Designed & engineered for severe-service applications

- **Thrusts up to 750,000 lbs**
- **Up to 1200 PSI Rated Pressure**
- **NACE Materials Available for
Direct Gas Applications**



P SERIES 250 PSI High Pressure Actuator

Design & Materials



Piston Packing
Nitrile U-Cup standard for long service life
High and Low Temp optional

High-Strength Composite Barrel
Light-weight, low-friction and corrosion-resistant.

Gland Packing
Nitrile U-cup standard
High or low temp optional

Rod Wiper
To prevent contamination inside the cylinder for long seal life. High or low temp optional

Cartridge Bushing
Allows for quick and easy rod seal replacement without disassembling the actuator

** For dimensional information click here:
[P Series Brochure](#)

Material Breakdown	STANDARD	Corrosion Resistant
Head & Cap	Aluminum (4"-6") & Steel (7" and above)	SS 316
Barrel	Aluminum	SS 316
Piston	Aluminum (4"-6") & Steel (8" and above)	Aluminum (4"-6") & Steel (8" and above)
Piston Rod	SAE 1045	SS 316
Gland	SAE 660	Delrin
Tie Rod 4" - 6"	C12L14	SS 316
Tie Rod 8" & Above	Stressproof	SS 17 - 4 PH

Temperature Ratings	
Low Temp. Seals	-54 C to 90 C
Standard Seals	-20 C to 104 C
High Temp. Seals	-10 C to 200 C

- Thrust: up to 80,000 lbs
- Bore size: 4" - 14"
- Configuration: Single-Stage and Tandem
- Stroke Range: Up to 144"
- Pressure Rating: 250 psi
- Rod Size: 1" to 3 1/2"
- End Cap & Mid-Position Trunnions available for damper pivot applications

Add-Ons

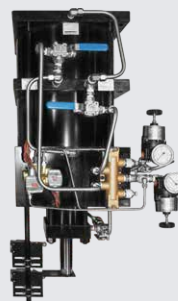


Manual Overrides

Manual override options are available.

Hydraulic manual override with indicator

Automation Packages



Integration of Control

Accessories:
Solenoid Valves
Pilot Valves
Quick Exhausts
Positioners

Position Feedback:

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

Ask about Cowan's new C-PAC Manifold solution!

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 Stops:

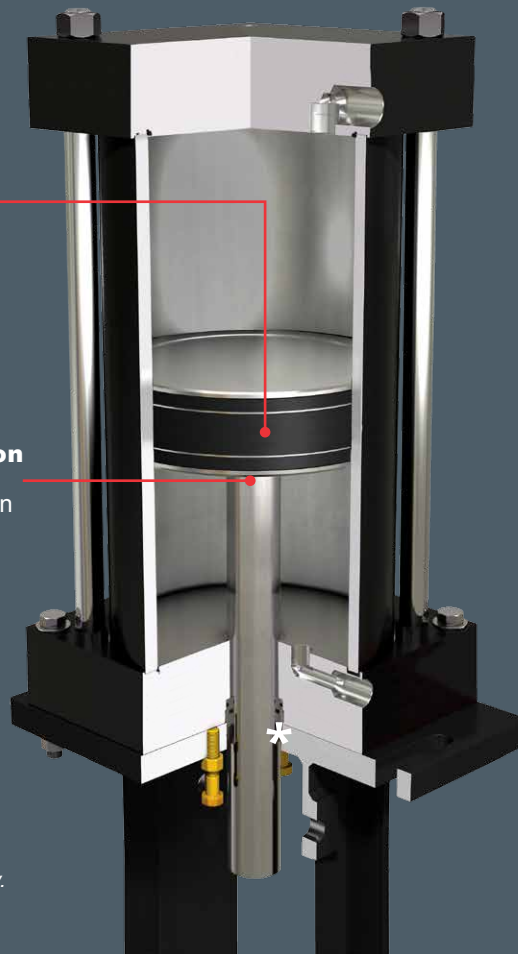
to limit stroke for position-seated or limited-travel applications. Ensures valve reaches positive sealing every time without damage to valve internals

**Consult factory for other options*

V SERIES 1200 PSI Direct Gas Actuator Design & Materials

High Strength Nylon Wear Rings
BZ-PTFE for high temp version

High Strength Piston
to rod joint featuring oversized threads. Piston is secured to piston rod with mechanical pin.



Temperature Ratings	
Low Temp. Seals	-54 C to 90 C
Standard Seals	-20 C to 104 C
High Temp. Seals	-10 C to 200 C

Material Breakdown	STANDARD
Head & cap	Machined Steel
Barrel	Honed Seamless Steel Tubing *Optional Chrome Plating available
Piston	Ductile Iron
Piston rod	1045
Gland	SAE 660 Bronze
Tie Rod	Stress-proof Steel

*NACE Materials Available for Sour Gas Service

- Thrust: up to 750,000 lbs
- Bore size: 4" - 24"
- Stroke Range: Up to 36"
- Pressure Rating: 1,200 psi
- Rod Size: 1 3/4" to 8"

Gland Seal Configuration



Triple Seal Gland Standard

Gland Bushing: Cartridge type, no special tools required for removal

Buffer Seal: Protects primary seal from pressure spikes. PTFE for low friction and long service life.

Primary Seal: Heavy Duty Polyurethane "U"-cup for excellent seal ability and long service life.

Encased Rod Wiper: Rugged wiper deflects contamination away for the rod seals for long service.

** For dimensional information contact factory.

Related materials

Visit our website to download or request a printed catalogue.



Solutions Include:

Valve Actuators

Fail-Safe Systems

Digital Process Control Panels

Pneumatic Process Control Panels

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