



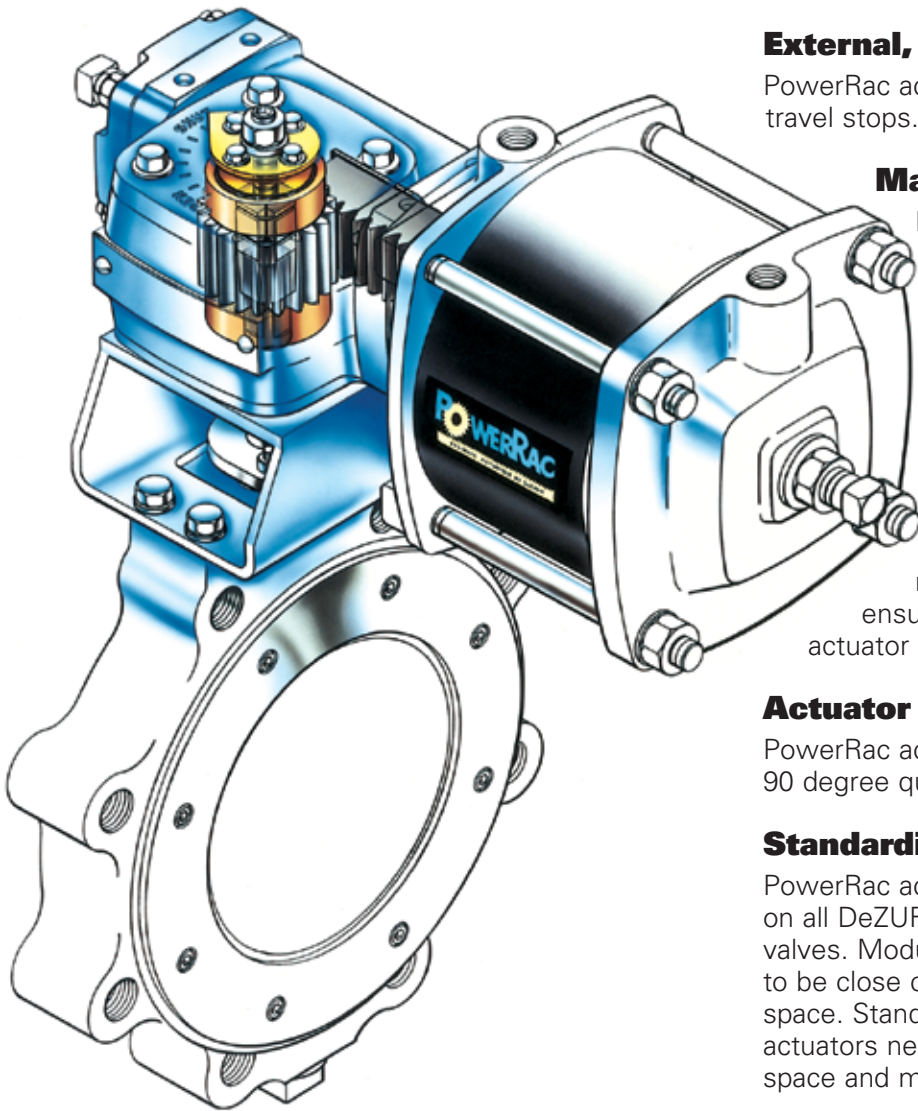
DeZURIK POWERRAC® CYLINDER ACTUATORS



Design & Construction

PowerRac® actuators are designed for all quarter turn valves. They feature a time and application proven rack and pinion system for converting linear motion to rotary. PowerRac actuators feature a high opening torque, necessary for on-off applications, and they also maintain high operating torque throughout the full stroke, important on modulating service.

A unique externally adjustable internal coupling between the valve shaft and the actuator drive allows a factory assembled and tested actuator to be close coupled to the valve and still provide a tightly clamped drive connection.



Modular Design

All PowerRac actuators are completely assembled, tested and ready for installation from the factory. Their modular design makes disassembly and assembly easy during routine maintenance or should inspection be required.

Enclosed Construction

PowerRac actuators are enclosed and sealed to protect internal parts from grit, moisture and corrosive contaminants. All actuators are permanently lubricated for smooth, efficient operation. They feature a cast iron housing and fiberglass cylinder for excellent corrosion resistance and long life.

External, Adjustable Stops

PowerRac actuators feature external, fully adjustable travel stops.

Maximum Air Pressure

PowerRac actuators are rated for 100 psi maximum operating pressure. Double acting actuators are sized for 60 and 80 psi supply pressures. Spring return actuators are sized for 60 psi supply pressure.

Low Cost Actuator

PowerRac actuators are designed and sized to DeZURIK's line of quarter turn valves. By matching valve torque requirements, each actuator is sized to ensure the lowest cost, most economical actuator is used.

Actuator Mounting

PowerRac actuators can be mounted in any of four 90 degree quadrants for maximum versatility.

Standardized Mounting

PowerRac actuators are designed to be mounted on all DeZURIK quarter turn on-off and control valves. Modular design and compact size allow it to be close coupled to the valve, saving valuable space. Standardized mounting means fewer actuators need to be inventoried, saving inventory space and money.

Throttling Manual Override

As an option, PowerRac actuators are available with a throttling manual override, allowing valve operation in case of system or supply failure.

Accessory Mounting

A standardized accessory bracket allows easy mounting of all commonly used accessories. Accessory options include positioners, airsets, potentiometers, speed controls, position indicating switches and 3-way/4-way solenoid valves.

Valve Position Sensing

PowerRac actuators feature a line of DeZURIK position indicating switches that minimize the required clearance above the actuator and provide a bold, graphic display of valve position. All electrical components are enclosed in an explosion-proof, dust-proof watertight enclosure. The screw-on cover permits easy access for calibration. Switch settings can quickly be adjusted without the use of tools, or fine-tuned to within one degree with a hex driver.



Fail-Safe Operation

For applications, where fail-safe operation is a requirement, PowerRac actuators are available with a spring return option. The spring is caged at the factory for increased safety. Double acting actuators can be converted to spring return action by adding a spring cartridge. Unlike other actuators, adding a spring cartridge to a PowerRac does not reduce the operating torque. For added versatility, action can be changed from fail open to fail closed.

Stainless Steel Fittings & Tube

Piped accessories come standard with rubber hoses and brass fittings. They are also available with 316 stainless steel fittings and tubing.



Direct Mounted Positioner

Positioners are solidly mounted on the actuator housing with a rigid coupler, feeding exact valve position directly to the positioner. No lost motion assures accurate valve positioning.

Positioner options include both pneumatic and electronic signal range, as well as U.L., C.S.A. and European electrical approval ratings. Span and zero adjustments can quickly be made, simplifying calibration and maintenance.



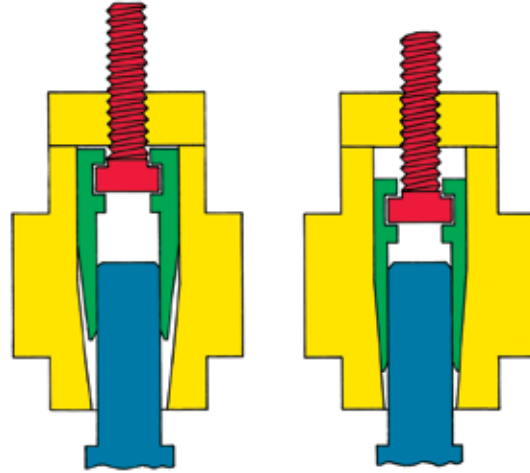
Rack & Pinion Design

The PowerRac actuator features a rugged rack and pinion design with hardened steel gears. Nominal play in the gears combined with a rigid coupling between the valve shaft and positioner drive allows thrust from the cylinder to precisely position the valve on modulating service.



Valve Coupling

A unique internal square collet* clamps the drive pinion to the valve shaft with a single external screw, totally eliminating all backlash in the drive connection. Direct actuator to valve mounting makes the valve/actuator package as compact as physically possible.



* Patent number 5,176,464

Sales and Service

For information about our worldwide locations, approvals, certifications and local representative:

Web Site: www.dezurik.com E-Mail: info@dezurik.com



250 Riverside Ave. N. Sartell, Minnesota 56377 • Phone: 320-259-2000 • Fax: 320-259-2227

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