Keeping the World Flowing
for Future Generations

GT Range

Rack and pinion actuators for rotary valve control

GT range pneumatic rack and pinion actuators have been proven over a 30-year history of service in hundreds of thousands of installations, encompassing a variety of diverse applications.

Features and Benefits

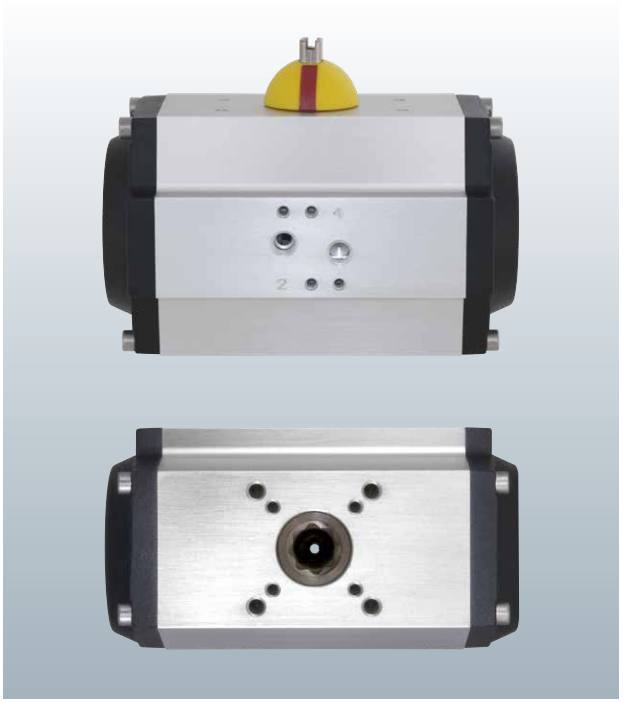
- Single- and double-acting pneumatic piston actuators (rack and pinion)
- Standard 90° rotation (120°, 180° and 240° upon application)
- All models incorporate an anti-blowout design
- Torque: 2.4 to 15,300 Nm (21 to 135,400 lbf.in)
- Air pressure: 2 to 10 bar (29 to 145 psi)
- Supply: Filtered air ISO 8573-1:2010
- High- and low-temperature versions
- Anodised aluminium body (Stainless Steel or epoxy paint finish options)
- Anti-corrosion materials and treatment options
- Valve mounting kits and declutchable manual gear overrides available
- NAMUR accessory mounting
- ISO 5211 valve mounting dimensions

Design Flexibility

GT Range actuators include a wide range of body sizes available in both double-acting and spring-return configurations. Units can be easily changed from one to the other – even in the field.

With superior design, material specification, manufacturing precision, and an industry-best global sales and service support network, Rotork GT range actuators are the wisest choice for any rack and pinion valve actuation requirement.

Rotork can provide a variety of additional services including application engineering, installation and retrofit, as well as maintenance and repair by factory-trained service personnel.



GT Range

High-performance quarter-turn / rotary pneumatic actuators

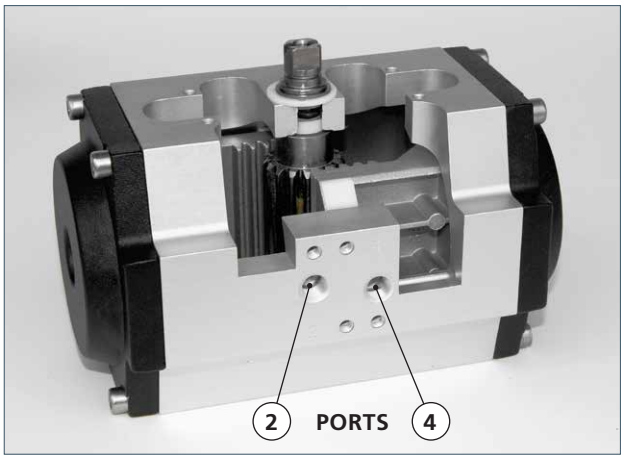
Assembly Configurations

The graphics below show the relative orientation of the piston and pinion for each configuration, as viewed from the top side of the actuator. In the descriptions that follow, that perspective is assumed. Pinion rotation is indicated for each as CW (clockwise) or CCW (counter-clockwise).

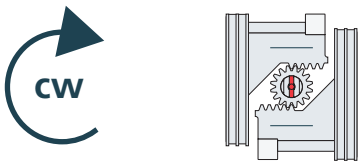
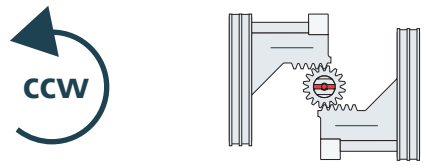
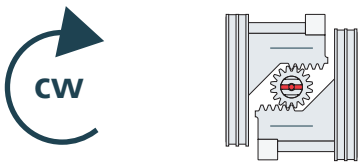
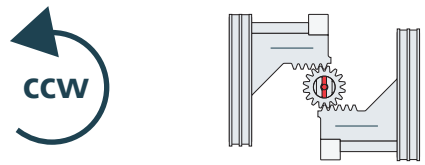
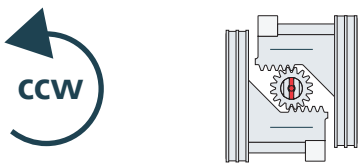
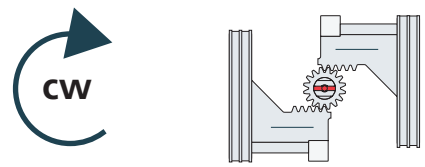
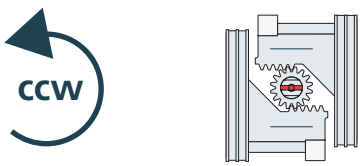
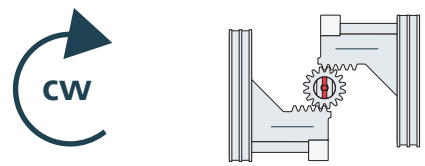
Port 2 is connected to the inboard side of the pistons. Pressurising Port 2 will force the pistons out until they reach the travel stops. The direction of pinion rotation is determined by the assembly configuration. Venting is through Port 4.

Port 4 is connected to the outboard side of the pistons. Pressurising Port 4 will force the pistons in until they reach the travel stops (if the actuator is so equipped as they're optional). The direction of pinion rotation is determined by the assembly configuration. Venting is through Port 2.

Note that on spring-return actuators, as with double-acting, pressurising Port 2 will move the pistons out. When Port 2 is depressurised, spring force will move the pistons in. Venting is through Port 4. Port 4 is not to be pressurised on spring-return actuators.



Consult the GT Range Installation and Commissioning Manual or Rotork for detailed connection and operation information.

STYLE	PORT 4 (OUTBOARD) PRESSURISED *Shown at end of stroke*	PORT 2 (INBOARD) PRESSURISED *Shown at end of stroke*
A STANDARD		
B OPTIONAL		
C OPTIONAL		
D OPTIONAL		

For detailed GT Range information refer to PUB110-019.

Contact us now

mail@rotork.com
www.rotork.com

PUB110-023-00
Issue 05/26