



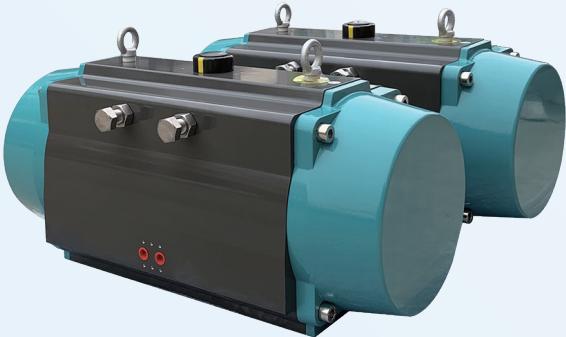
Design and Features

As early as 2003, we started manufacturing ACHEM C series pneumatic actuators in partnership with Allied Flow Control Co. in USA. After 15 years of production and improvement, C series pneumatic actuator has become a high-quality classic product in ALPHA-ACHEM group. The actuator features a top mount multifunction indicator and open-close stops adjustment as a standard. In addition, the state-of-the-art engineering design has allowed us to reduce the size of the actuator without losing any torque. Up to now, C series pneumatic actuator has successfully got the approvals of CE, SIL3, IECEx and ATEX. Here are the product features and working conditions.



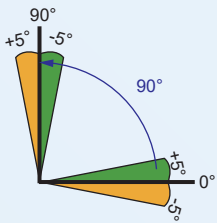
1. Specification and Output Torque

C series pneumatic actuator has 17 specifications and the model is C-40, C-52, C-63, C-75, C-83, C-92, C-270, C-300, C-350 and C400 respectively. Double acting and spring return is available for the actuator. The double acting actuator's output torque range is from 11.9Nm to 8140Nm at 5 bar and the spring return actuator's output torque (fail to closed) range is from 4.3Nm to 4199Nm.

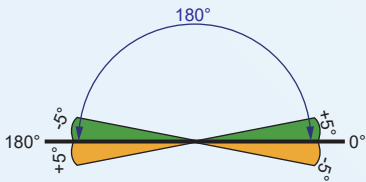


2. Travel Stroke and it's adjusting

- 1) Standard stroke: 0°~ 90° with +/-5° adjustment at 0°(Closed) and 90°(Open) stops.
- 2) Large stroke: 0°~ 180° with +/-5° adjustment at 0°(Closed) and 180°(Open) stops. The open stop at 100°, 120°, 130°, 140°, 150°, 160° or 170° also is available for optional.



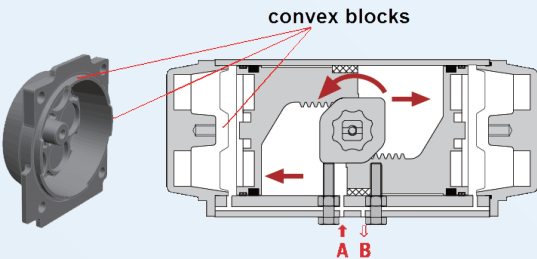
Standard stroke

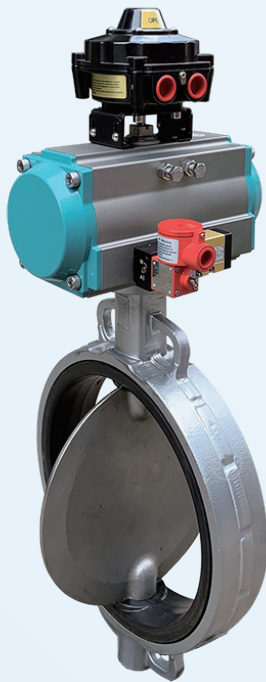


Large stroke

3. Safety Limiter

The safety limiter of the C series actuator is achieved by four small convex block on the end cap which can ensure that the meshing motion of piston and pinion is always in a safe state (Maximum rotary travel ≤100° for standard stroke)





4. Namur Interface (VDI/VDE 3845, BS EN15714-3:2009(E))

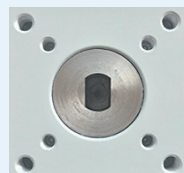
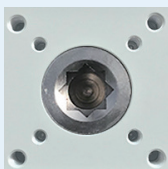
- 1) Top Namur interface design ensures the convenient and standardized assembly installation for accessories, such as the limit switch box, position sensors and positioner.
- 2) Solenoid valve Namur interface design are available for pressure connection with NAMUR solenoid valve or inline solenoid valve directly.

5. Valve Mounting (Flange dimensions)

The valve mounting dimensions on C series actuator fully comply with the international standard of ISO5211:2001(E). The British system mounting pattern is available for choice.

6. Driving mode

This actuator is able to offer double square, double D or keyed (FK) female driving mode for a number of different new or existing valve stem configurations.



7. Material, Coating and working atmosphere

The body and the end-cap of the actuator are made of extruded aluminum and die-casting aluminum respectively. Hard anodized coated for the body and anodized + polyester coated for the end-cap are standard coating for D series actuator. The nickel phosphorus or PTFE coated are optional for use in a harsh environment.



Hard anodized body + polyester coated end-caps

Nickel phosphorus coated

PTFE Coated