

Actuator Type C 90° - Technical Data, Summery



TruTorq actuators are pneumatic quarter turn actuators based on double rack and pinion design. The C-type actuator is also available in half turn execution (180°).

The C-type 90° actuator is generally recommended to "small" Butterfly valves, Ball valves and Plug valves.

Data for C-Type actuators with movement 0 - 90°

Material, standard (outside)

- Anodized Aluminum, Black
- CNI, Chemically Nickel/PTFE Impregnated for increased corrosion resistance
- · Other treatments upon request

Movement

- 0° to 90°
- Controlled adjustment of + 5°, Open position
- Option DA: Controlled adjustment of +5°, Closed position

End Stop Adjustment

Single End Stop Adjustment, Open position, located in the End Cap

Sizes

• 2, 4, 8, 12, 20, 35, 55, 250 and 400

Torque

Linear torque, ie a Double Acting (DA) Actuator has the same rack power over the entire movement

Torque Output, Double Acting (DA) at 6 bar/80 psi

- 20 to 597 Nm and 2648 to 4803 Nm
- 166 to 4742 in.lbs and 21480 to 38971 in.lbs

Torque Output, Spring Return (SR) at 6 bar/80 psi

- 7 to 211 Nm and 1212 to 1888 Nm
- 59 to 1716 in.lbs and 10728 to 16711 in.lbs



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Operating Pressure

- DA: 2-10 bar / 30-145 psi
- SR: 2-10 bar / 30-145 psi. When the Actuators will be used at Operating pressures below 5.5 bar / 79.8 psi, we recommend that you contact your TT distributor.

Drive Medium

- Standard: Air (Dry or Lubricated) or inert gases (non-dangerous fluids)
- Options (require rebuilding): Oxygen, Hydraulic Oil or Water

Temperature Range, Standard execution (Buna Nitrile, NBR O-seals)

- 30° to + 80°C
- 22° to + 175°F

Temperature Range, High temperature (Viton O-seals)

- - 20° to + 140°C
- - 4° to + 284°F

Stroke, Double Acting (DA)

Looking at the front of the Actuator, Port A is on the left side and Port B is on the right Port A: Air to Open (Anti-clockwise) Port B: Air to Close (Clockwise)

Stroke, Spring Return (SR)

Port A: Air to Open (Anti-clockwise, compressing springs) Port B: Breading Port Setting from factory: Fail Close (FC), clockwise closing. To change to Fail Open (FO): see separate instructions

Drive shaft

Stardrive shaft tailored to international standard for square-section shafts

Standard Connections

Solenoid valves – Namur Fitting accessories – ISO 5211, DIN 3337, Namur Stardrive shaft – ISO 5211 (90°), DIN 79 (45°), Namur

Lubricants, recommended

Springs and piston rack segments: Statoil Molyway LI 712 or similar O-rings and plastic parts: Statoil Uniway LIX 42PA or similar

Standards and Certificates

The Actuators are designed to and in compliance with several different standards. They also have different types of certificates, see separate information.