



Actuator Type E - Technical Data, Summary



TruTorq actuators are pneumatic quarter turn actuators based on double rack and pinion design.

The E-type actuator is generally recommended to “large” Butterfly valves.

Material, standard (outside)

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

Movement

- 0° to 90°

End Stop Adjustment

Double End Stop Adjustments, Open and Closed position, located outside the pressurized zone at the BAK (Body Adaptor Kit)

Over travel

- Open: 3°
- Closed, size 8 and 12: 2°
- Closed, size 20 to 150: 3°

Sizes

- 8, 12, 20, 35, 55, 70, 100 and 150

Torque

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

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

- 90 to 1655 Nm
- 730 to 13425 in.lbs

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

- 32 to 586 Nm
- 257 to 4758 in.lbs

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.



Actuator Type E - Technical Data, Summary

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

Temperature Range, Low temperature

- -45° to +60°C
- -49° to +140°F

Temperature Range, Arctic temperature

- -50° to +60°C
- -58° to +140°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: Exhaust Port

Setting from factory: Fail Close (FC), clockwise closing. To change to Fail Open (FO): see separate instructions

Max number of springs

A Spring Kit consists of 4 outer + 4 inner springs located inside the piston racks. To adjust for different Air Pressure; reduce the number of springs.

Drive shaft

Body Adaptor Kit (BAK): standard square drive – ISO 5211

Common Options: Double D (D-D) or Key drive.

Standard Connections

Solenoid valves – Namur

Fitting accessories – ISO 5211, DIN 3337, Namur

Body Adaptor Kit (BAK) according to agreed execution

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.