

# Pneumatic Actuator

## Documentation for vertical pneumatic actuator

The pneumatic actuator is constructed with different cylinder diameters in order to produce the optimum driving torque for every nominal width.

Standard: DN 25 - DN 40 Type 002

DN 50 - DN 63 Type 004

DN 65 - DN 100 Type 006

It is activated by means of air pressure and/or spring power.

The following variations are possible

### L/F Type: (Air/Spring)

- a) Closes by spring power and opens by means of pneumatic drive
- b) Opens by spring power and closes by means of pneumatic drive

### L/L Type: (Air/Air)

- c) Closes and opens by means of pneumatic drive (without pressure spring)
- d) Closes and opens by means of pneumatic drive and, in addition, has a spring as a safety function (This spring can fulfill a closing as well as an opening function).

The standard spring is designed for 6 bar operating pressure. It can, however, be adapted to suit other operating pressures if a customer so requires.

Individual parts are represented in the enclosed drawings.

## Procedure when exchanging individual parts

Safety indication:

- Before commencing work it is absolutely necessary to ensure that there is no medium and no pressure on the actuator.
- The accident prevention regulations are to be strictly observed when working with dangerous materials.
- Repairs are only to be carried out by specially trained personnel.

1. Detach your actuator from the valve and clamp the casing at the lid into the vice with aluminium mould followers.
2. Using suitable tools (e.g. pliers and screw driver), remove the sealing ring.
3. The entire unit can now be removed from the casing (in order to assist the dismantling process you can blow a little air very carefully into the top connection). Caution: The spring is under high prestress.
4. In order to detach the piston and the spring we would recommend the use of a lathe. Fix the lower part of the unit into the jaw chuck (soft mould followers) and press the tailstock spindle against the pistons. Prestress the spring by approx. 5mm.
5. Remove the sealing ring from the plug-type axle using suitable pliers. Afterwards hit gently with a hammer in order to get the axle out of the bore hole with one blow.
6. Turn the tailstock spindle back until the spring becomes unstressed.
7. The individual parts of the actuator can now be taken apart.
8. In order to re-assemble the parts, follow the above procedure in reverse order

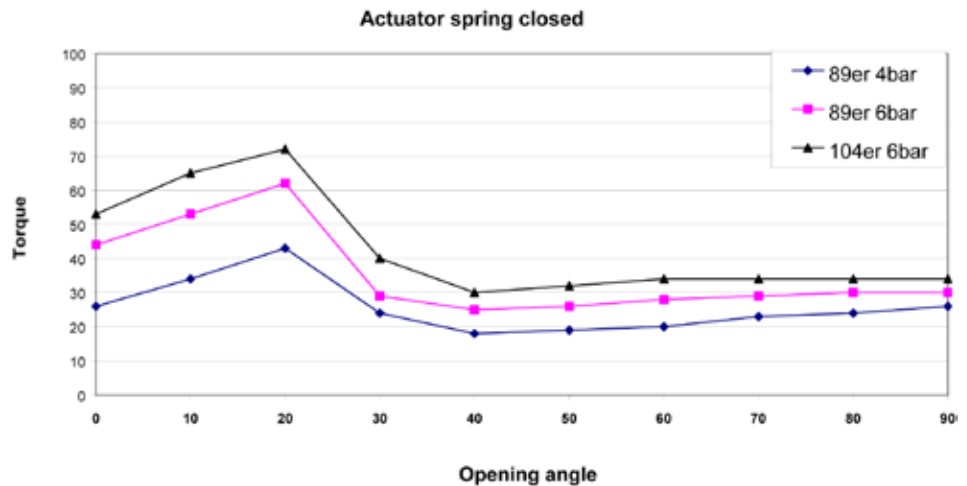
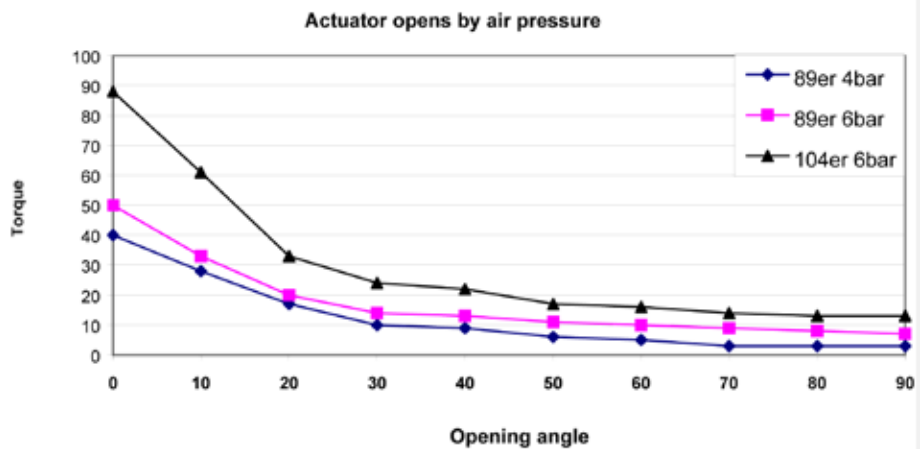
## 2- / 3- way Arc Valves

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## Air consumption in liter by 6 bar

	Type 002 (D=89)	Type 004 (D=104)	Type 006 (D=129)
Opening	1.84	2.59	4.56
Closing	2.52	3.63	7.95

## Torque accordance opening angle



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Südmo North America, Inc. reserves the right to make changes in the technical specifications at any time.

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