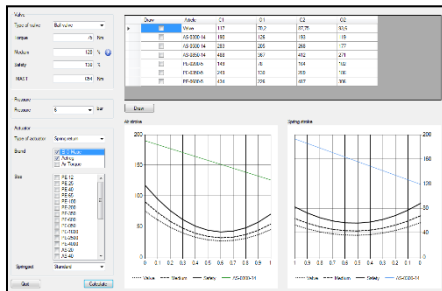


## Standard conditions for determining & calculating (pneumatic) actuators for valves

Determining the correct actuator size for a certain valve is essential for the correct operation of an assembly, and SODECO takes great care in sizing actuators correctly.



At SODECO, the actuator sizing is done with the help of a calculation program, based on the available working conditions.

When looking at the actual working conditions, we add extra safety coefficients to compensate for circumstances which can increase or decrease the operating torque of the actuator. This allows us to make sure that the chosen actuator always delivers enough torque.

When the actual working conditions are incomplete or unknown, we assume the following standard working conditions :

- Fluid :** standard (cfr. clean water)
- Temperature :** standard (-25°C<T<+200°C)
- Fluid viscosity :** standard (cfr. clean water)
- Operating frequency :** standard (no long standstills/multiple operations each day)
- Available air pressure :** 6 bar

For sizing, we take the basic breakaway torque the manufacturer provides us for the chosen seat material, at maximum  $\Delta p$  of the valve and for the manufacturers' standard working conditions (usually water at 20°C), unless indicated otherwise.

SODECO applies a 30% safety margin as standard, for both single acting and double acting actuators.

For single acting actuators, we always assume the normally closed version (NC), unless the normally open version (NO) is specifically requested. As standard, the single acting actuators are calculated and delivered with the standard spring sets.

The standard sizing does not account for cavity fillers or other options which increase the operating torque.

**Disclaimer :**

*SODECO takes great care in calculating the correct actuator and cannot be held responsible for oversized or undersized actuators caused by working conditions which are unknown to us.*