

# Speed Controlic - asfa-Pneumatic actuator with a controlled Quick-opening

## Task definition

In power plants and in the chemical industry are pneumatic control actuators needed for some kinds of valves, which can make, apart from the normal controls, a controlled quick-opening to each position value between 0 and 100% within less than 0.5 sec., e.g. for all kinds of bypass stations (HP, MP or LP).

With conventional pneumatic components (pneumatic positioner, solenoid valves, volume booster) these parameters can't to be realized. On the one hand not by using a 3/2 way solenoid valve with adjusting positioner because of the compressibility of air or on the other hand not by using a positioner (possible with volume booster) because of the too slow stroke time.

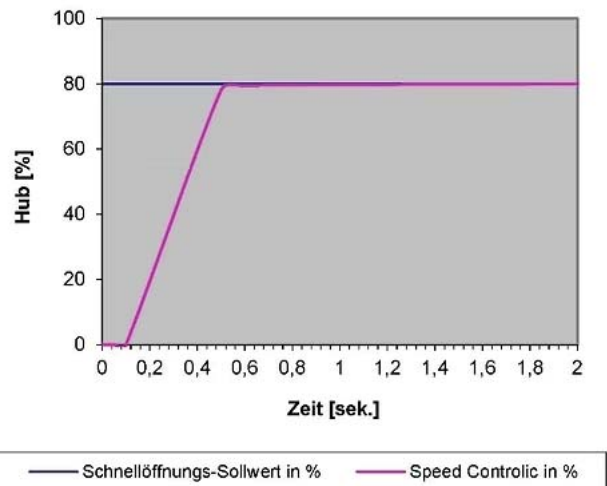
## The Innovation: **Speed Controlic**

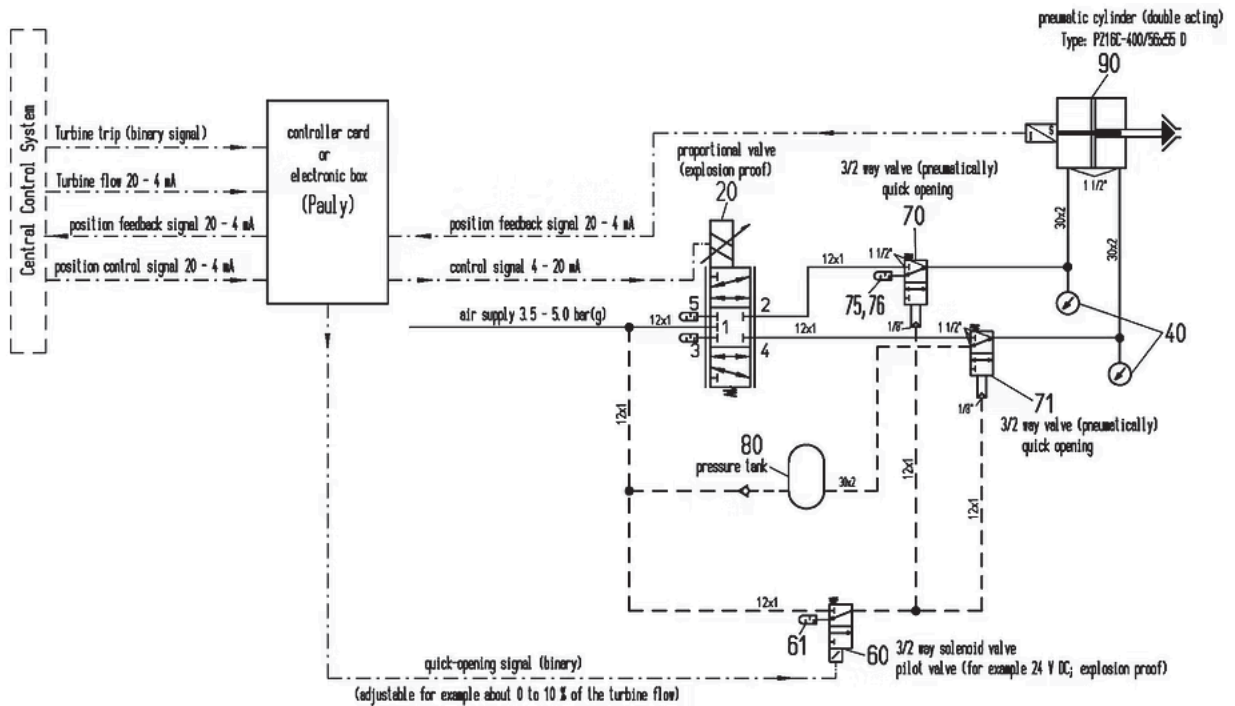
Since the applications specified before were not sufficient for the task definition, a solution on electronic basis was looked for and found:

The new pneumatic actuator **SpeedControlic** (developed by the **asfa-Antriebssysteme**), which combines the speed and accuracy of an electronic control in interaction with a proportional valve in itself and leads to the specified result (see beside standing diagram).

The most important component of the pneumatic actuator Speed Controlic is the electronic control, in which all adjustments and adjusting can be made on the respective application, which are then converted with the proportional valve and the 3/2 way solenoid valve. This gives the desired result (see below standing schematic).

The SpeedControlic can be performed with or without explosion protection.





## Speed Control

### Execution:

- for the controlling of a pneumatic piston cylinder
- Electronics (Speed Control) and pneumatic actuator without explosion protection
- Floor-mounted rack with mounted cabinet with the electronics (Speed Control) built into the door and the pneumatic control built inside



## Speed Controlic

### Execution:

- for the controlling of a pneumatic actuator for a HP Bypass Valve
- Electronics (Speed Controlic) and pneumatic actuator with explosion protection (EExd protection)
- Floor-mounted rack with a mounted cabinet (on the left side) and inside mounted pneumatic control system as well as a flameproof encapsulated housing (on the right side) with the built-in electronics (Speed Controlic)

