

Pneumatic Lock-up Valve

Type 3709



Application

Pneumatic lock-up valve for shutting off the signal pressure line of pneumatic actuators

The pneumatic lock-up valve shuts off the signal pressure line either when the air supply falls below an adjusted value or upon complete air supply failure. This causes the actuator to remain in its last position.

Versions

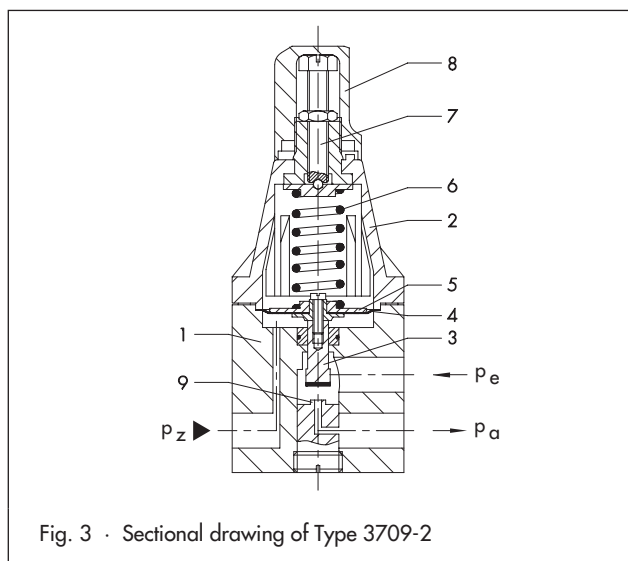
Type 3709-1 (Fig. 1) · Lock-up valve for direct attachment to Type 476x, Type 376x and Type 373x Positioners.

Designed for linear actuators and rotary actuators according to VDI/VDE 3845, fixing level 1 (not in combination with Types 4708-53/-54/-63 Supply Pressure Regulators).

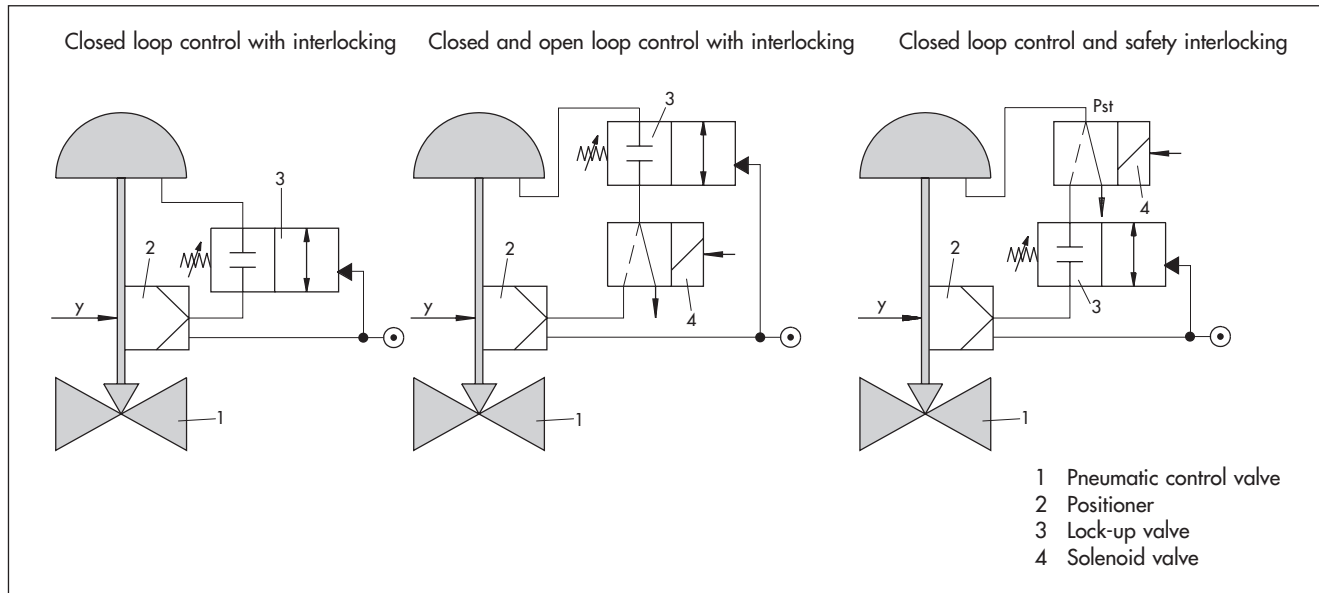
Type 3709-2 (Fig. 2) · Lock-up valve for arbitrary installation in the signal pressure line.

Principle of operation (Fig. 3)

The supply air produces a force on the diaphragm (4) which is balanced by the spring (6). When the force produced on the diaphragm is greater than the spring force, input and output are connected, i.e. the signal pressure supplied by the positioner is transmitted unobstructed to the actuator. When the supply air pressure falls below the adjusted value, the spring force dominates, and the spring (6) moves the plug (3) fully into the seat (9). As a result, the pressure in the actuator is blocked.



Typical applications



Technical data

Connections	¼ NPT or G ¼
Supply air	Max. 12 bar
Signal pressure	Max. 6 bar
K _{vS} coefficient	Approx. 0.2
Set point range	Continuously adjustable from 0 to 6 bar
Recommended setting	≥ 0.2 bar above required signal pressure, min 1.6 bar
Permissible ambient temperature	-25 ... 80 °C Extended range on request
Weight, approx.	0.4 kg
Materials	
Housing	Die-cast aluminum, plastic-coated Stainless steel on request
Cover	Ultramid
Diaphragm	CR (chloropene rubber with fabric)
Diaphragm plate	Aluminum

Ordering text

Pneumatic Lock-Up Valve Type 3709- ...

Attached to Positioner Type ...

Connections ¼ NPT or G ¼

Specifications subject to change without notice.

Dimensions in mm

