LIMIT SWITCH

LIMIT SWITCH

SOLENOID VALVE

Z0* – GAS-TIGHT DAMPERS

FOR CAPTURING THE END POSITIONS (OPEN AND/OR CLOSED) OF DAMPERS AND PROVIDING THE CONTROL INPUT SIGNAL FOR PNEUMATIC ACTUATORS

Limit switches for gas-tight shut-off dampers, solenoid valves for gas-tight shut-off dampers with pneumatic actuators

- Limit switches for capturing the end positions of gas-tight shut-off dampers
- Solenoid valve to provide the control input signal for NAK-P
- Different opening and closing times can be set using throttle valves (at least 2 s)

Application

Application

- Limit switches for capturing the end positions (OPEN and/or CLOSED) of gas-tight shut-off dampers
- Electric signals of limit switches are integrated with system control
- Solenoid valve to provide the electric control input signal for double acting pneumatic actuators

TECHNICAL INFORMATION

Function, Technical data

Functional description

The actuator moves the blades of a gas-tight shut-off damper into OPEN or CLOSED position.

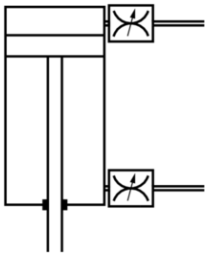
The easiest way to generate the control input signal is electrically, using solenoid valves.

Different opening and closing times can be set using throttle valves.

Double acting pneumatic actuators

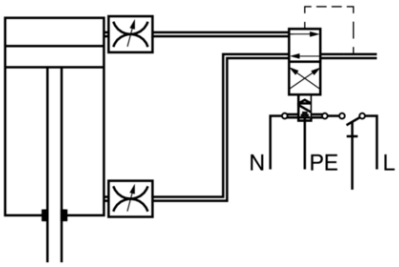
The shut-off damper is opened and closed with compressed air. For this purpose, the actuator has two tube connections. Compressed air is applied to one tube connection while the other connection remains open such that the air can escape from the corresponding chamber of the actuator. For the other direction of rotation, the process is reversed.

Control of a double acting pneumatic actuator without a solenoid valve



Compressed air connection (operating pressure 6 bar)

Control of a double acting pneumatic actuator with a solenoid valve



Compressed air connection (operating pressure 6 bar)

Limit switch

Type of contact	1 NC contact, 1 NO contact, double throw
Switch rating	15 AC, 6 A, 230 V AC
Service life	10^7 switching cycles
Cable gland	PG13.5
IEC protection class	II (protective insulation)
Protection level	IP 66
EC conformity	EMC to 2004/108/EU, low voltage to 2006/95/EU
Operating temperature	−20 to 80 °C

Solenoid valve 5413, 230 V

Supply voltage	230 V AC ± 10 %, 50/60 Hz
Power rating	2 W
Pressure range	6.0 bar
Flow rate Q Nn	900 l/min
Compressed air	Neutral media such as compressed air containing oil or oil-free compressed air
Air connection	G 1/4"
IP 65 connector	2508, to DIN 43650, type A
Protection level	With IP 65 connector
EC conformity	EMC according to 2004/108/EC
Weight	0.4 kg

Variants

Any attachments are defined with the order code of the gas-tight shut-off damper.

Limit switch
Application

- Limit switch
- Volt-free contacts for signalling or activating switch functions

Solenoid valve
Application

- Solenoid valve 5413 Namur 230 V, with connector

Parts and characteristics

- Supply voltage 230 V DC ± 10 %
- Control input signal: Supply voltage on/off
- IP 65 connector

Attachments for gas-tight shut-off dampers NAK-H, NAK-E, NAK-E1

Order code detail	Limit switch
Z01	1, damper CLOSED
Z02	1, damper OPEN
Z03	2, damper OPEN and CLOSED

Attachments for gas-tight shut-off dampers NAK-P

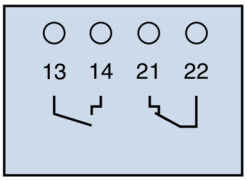
Order code detail	Solenoid valve	Limit switch
Z04	1	–
Z05	1	1, damper CLOSED
Z06	1	1, damper OPEN
Z07	1	2, damper OPEN and CLOSED

Limit switch

Solenoid valve

Electrical connection

Terminal connections



13, 14: NO contact
21, 22: NC contact