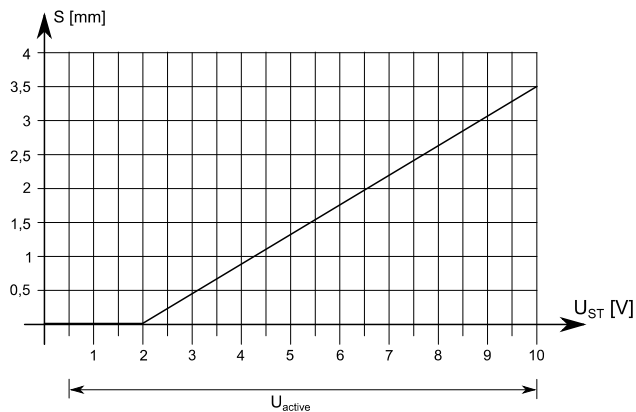


THERMAL ACTUATOR AA5014

AA5014 thermal actuators are designed for controlling control valves in HVAC automation systems. The thermal actuator is controlled by 0...10 Vdc control signal according to the following figure.



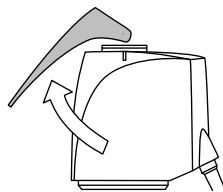
S = stroke
 U_{ST} = control signal
 U_{active} = active control signal range

When the control signal is under 0.5 V, the actuator moves to stand-by mode for 20 minutes to ensure fast response time. After the stand-by mode the actuator moves to power saving mode.

The actuator calibrates automatically when power is switched on for the first time. The actuator calibrates also when the control signal is over 2 V for 24 hours.

During the calibration cycle, the actuator is driven to closed position and is kept closed for 20 seconds. The actuator returns to the control signal position after the calibration.

By removing the actuator cover, you can prevent unauthorized removal of the AA5014 actuators.



NOTE: Do not use ammoniac materials or glues near the AA5014 thermal actuators.

AA5014 thermal actuators are mounted to the NV2 control valves by using a VA 80 adapter ring. Special adapter rings are also available for other valve manufacturers' valves.

AA5014 thermal actuators are delivered in "First open" status which leaves the valve a bit open after actuator assembly. This allows the system filling and flushing even if the control system is not yet functioning. The actuator set to normal operation after the actuator is connected to the supply voltage for at least 6 minutes. You cannot activate the "First open" function again.



Technical data:

Supply	24 Vac (20...33 V)
Power consumption	2 W
Operating current	83 mA
Start-up current	250 mA (max. 2 minutes)
Force	95...105 N
Control signal	0...10 Vdc
Control range	2...10 V
Stroke	3.5 mm
Running time	approx. 30 s/mm
De-energized position	closed (NC)
Mounting	by using an adapter ring (sold separately)
Ambient temperature	0...60 °C
Housing	IP54, polyamide

Wiring:

Blue	0 V
Black	24 V
Red	0...10 V

Ordering guide:

Model	Product number	Description
AA5014	1210050	thermal actuator 0...10 V, NC, removable cable (sold separately)
BA-ALL.5.3.01	1220031	removable cable, 1 m
BA-ALL.5.3.02	1220032	removable cable, 2 m
BA-ALL.5.3.03	1220033	removable cable, 3 m
BA-ALL.5.3.04	1220034	removable cable, 4 m
BA-ALL.5.3.05	1220035	removable cable, 5 m
BA-ALL.5.3.10	1220036	removable cable, 10 m
BA-ALL.5.3.15	1220037	removable cable, 15 m
BA-ALL.5.3.20	1220038	removable cable, 20 m

Products fulfill the requirements of directive 2004/108/EC and are in accordance with the standards EN61000-6-3 (Emission) and EN61000-6-2 (Immunity).