

S9000 - 2P ND

FIRST ELECTRIC ACTUATORS EMV 110

with Clip system for 2-way and 3-way valves

FIRST®

| | | |
|-----------------|-------|-----------------------|
| 2-POINT CONTROL | 1 / 0 | STOP AT END POSITIONS |
|-----------------|-------|-----------------------|



FIRST actuators EMV 110, series S9000 2P ND, are 2-point control actuators designed for operating 2-way and 3-way valves with clip system (DN 15 - DN 32).

- The FIRST S9000 2P ND actuators have not defined (ND) direction of rotation with range of 60° or 90°.
- Actuators are available with cable or molex connection with or without manual control handle.
- Recommended for diverting and on/off applications.

OPERATION

S9000 2P ND is an electric actuator designed for operating 2-way and 3-way valves. Actuators are controlled by 2-point SPST signal with built-in relay module. FIRST S9000 2P ND actuators allow high regulating accuracy and easy installation with one-click CLIP system.

Actuators are available in 230 VAC 50 Hz or 24 VAC 50 Hz and are supplied with a 1m attached connection cable or Molex connector. Actuator can be manually operated with handle and button on the cover.

Actuators S9Gi0 (8s/60°) are recommended for diverting applications with FDV 530C valves and actuators S9GN0 (12s/90°) are recommended for on/off applications with FBV 200C valves from DN15 to DN32.

Anti blocking function provides that in case of blockade the motor changes its direction. Because of that feature, the motor is able to save itself from stopping.

MAINTENANCE

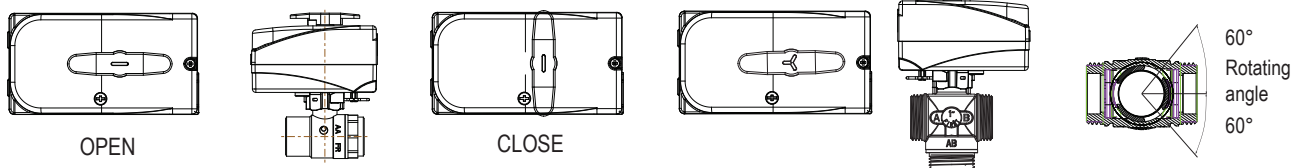
Actuator requires no maintenance. The installation of suitable strainer is recommended.

INSTALLATION POSITION

Actuator can be installed only in one position.

S9GN0 with FBV 200C valves for on/off applications.

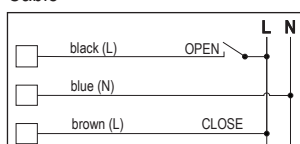
S9Gi0 with FDV 530C valves for diverting applications.



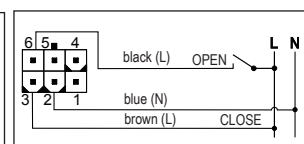
ELECTRICAL CONNECTION

2-point control SPST.

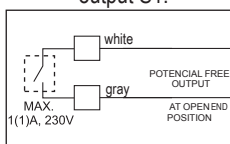
Cable



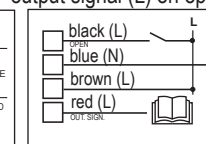
Molex



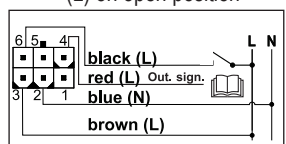
Option1: Potential free output S1.



Option 2 (cable): with output signal (L) on open



(Molex): with output signal (L) on open position



SUITABLE VALVES

FBV 200C



FDV 530C



CLIP SYSTEM

Compact design of the valve allows easy assembling and disassembling. Clip system allows easy installation of the actuator on the valve body with single click, without any tools.



Available as zone unit: S9000-200C, Available as zone unit: S9000-530C

CE In accordance with PED, LVD, RoHS2, EMC

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Let First be your first choice.



ACTUATORS

VALVES

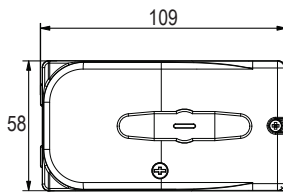
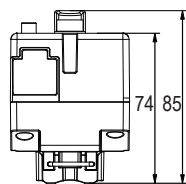
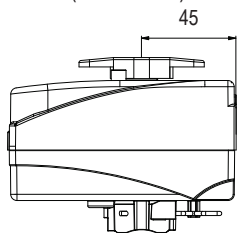
HEATING CONTROLLERS

S9000 - 2P ND

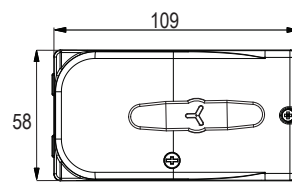
FIRST ELECTRIC ACTUATORS EMV 110

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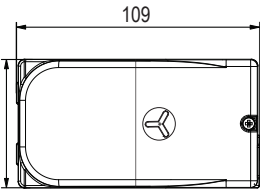
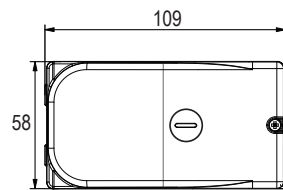
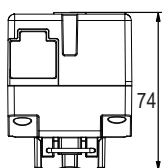
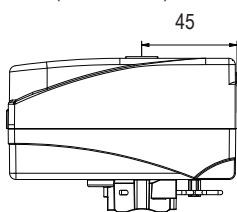
Actuator with manual control handle (90° rotation) - **S9GN0**



Actuator with 60° rotation and with control handle - **S9Gi0**



Actuator without manual control handle (90° rotation) - **S99N0**



Actuator with 60° rotation and without control handle - **S99i0**

S9000 2P ND, for vertical 3-way rotary valves (60° rotation)

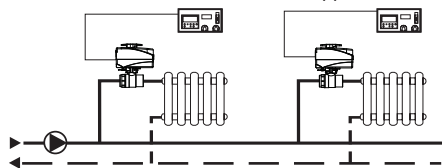
| Code | Type | Voltage | Rotation time | Control signal | Connection | Max. torque [Nm] | Weight [kg] | Price (€) |
|-------|---------------|---------------|---------------|----------------|------------|------------------|-------------|-----------|
| 14115 | S9Gi0-M 2P ND | 230 VAC 50 Hz | 8s/60° | 2-point SPST | Molex | 5 | 0,33 | |
| 14116 | S9Gi0-K 2P ND | 230 VAC 50 Hz | 8s/60° | 2-point SPST | Cable | 5 | 0,48 | |
| 14113 | S99i0-M 2P ND | 230 VAC 50 Hz | 8s/60° | 2-point SPST | Molex | 5 | 0,33 | |
| 14114 | S99i0-K 2P ND | 230 VAC 50 Hz | 8s/60° | 2-point SPST | Cable | 5 | 0,48 | |

S9000 2P ND, for 2-way valves (90° rotation)

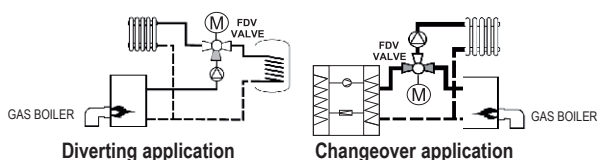
| Code | Type | Voltage | Rotation time | Control signal | Connection | Max. torque [Nm] | Weight [kg] | Price (€) |
|-------|---------------|---------------|---------------|----------------|------------|------------------|-------------|-----------|
| 14003 | S9GN0-M 2P ND | 230 VAC 50 Hz | 12s/90° | 2-point SPST | Molex | 5 | 0,48 | |
| 14004 | S9GN0-K 2P ND | 230 VAC 50 Hz | 12s/90° | 2-point SPST | Cable | 5 | 0,33 | |
| 14001 | S99N0-M 2P ND | 230 VAC 50 Hz | 12s/90° | 2-point SPST | Molex | 5 | 0,33 | |
| 14002 | S99N0-K 2P ND | 230 VAC 50 Hz | 12s/90° | 2-point SPST | Cable | 5 | 0,48 | |

Installation examples

FBV 200C valves with actuator S9GN0 for on/off applications.



FDV 530C valves with actuators S9Gi0



Features and options

- **Auxiliary switch:** one potential free auxiliary switch in the end position of the actuator is available as an option.
- **Power supply:** 230V 50Hz or 24V 50Hz
- **Connection:** Molex connector (IP40) and optional specially sealed Molex cable (IP44) or cable (3x0,75mm² l=1m)- (IP44).
- **Different running times:** 8s/60°, 12s/90°, 30s/90° (on special request)
- **Solar/cooling adapter:** Heat barrier for protection of the actuator in solar or cooling systems.
- **Output signal (L):** at end position.
- **Manual control handle:** with or without manual control handle

DIFFERENT OPTIONS

- Solar/ cooling adapter.



- Special molex IP44 connector



- Without manual control handle



- With cable connection



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