

S9000 - 3P MIX

FIRST ELECTRIC ACTUATORS EMV 110

with Clip system for 3-way and 4-way rotary valves



FIRST actuators EMV 110, series S9000 3P MIX, are 3-point actuators designed for operating 3-way and 4-way rotary valves with clip system (DN 15 - DN 32).

- The FIRST S9000 3P MIX actuators have defined direction of rotation (90° rotating angle).
- Actuators are available with cable or Molex connection with or without manual control handle.
- Recommended for mixing and diverting applications.

OPERATION

S9000 3P MIX is an electric actuator designed for operating 3-way and 4-way rotary valves. Actuators are controlled by 3-point SPDT signal. Actuators are also available with 2-point control signal. FIRST S9000 3P MIX actuators allow high regulating accuracy and easy installation with one-click CLIP system.

Actuators are available in 230 V AC 50Hz or 24 V AC 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 S9FR0- 3P MIX are recommended for mixing or diverting applications with FMV 130C valves from DN15 to DN 32 and for mixing applications with FMV H-151C and FMV 140C valves.

MAINTENANCE

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

TECHNICAL DATA: ACTUATOR

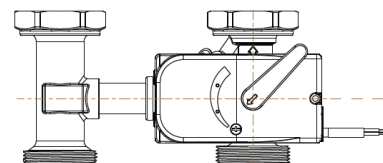
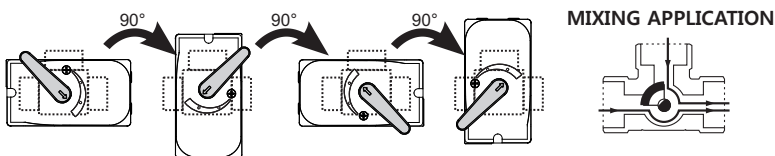
Control:	3-point SPDT
Supply voltage:	230 VAC 50Hz / 24 VAC 50Hz
Rotation time:	20s/90°, 40s/90°, 55s/90°, 80s/90°, 110s/90°, 220s/90°
Power consumption:	5 VA (operation), 0 VA (stand by)
Max. Torque:	5 Nm
Protection class:	II
Enclosure rating:	IP40 (Molex), IP44 (Cable connection), IP44 (specially sealed Molex cable)
Connection:	cable 1 m, 3 x 0,75 mm ² / Molex connector
Direction of rotation:	CW/CCW defined 90° angle
Manual operation:	with or without handle and button on the cover
Position indicator:	handle with position indicator / position indicator
Media temperature:	+2°C..+110°C (With optional SCA adaptor -15°C to +125°C, briefly up to +150°C)
Ambient temperature:	0°C..+55°C
Storage temperature:	-10°C..+70°C
Humidity:	0%..80% R.H. (non condensed)

INSTALLATION POSITION

Actuator can be rotated on the valve body to fit a number of installation layouts.

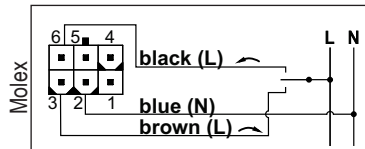
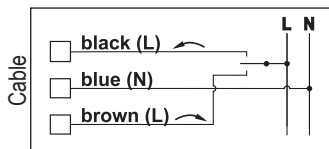
S9FR0-MIX with FMV 130C valves for mixing applications.

S9FR0-MIX with FMV H-151C for mixing applications.

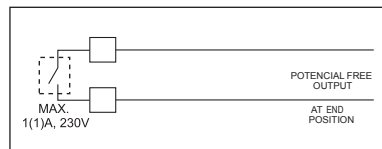


ELECTRICAL CONNECTION

3 point control SPDT.



Optional: Potential free output S1.



SUITABLE VALVES

FMV 130C



FMV H-151C



FMV 140C



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 rotary unit:
S9000-MIX

Available as rotary unit:
S9000-MIX H

CE In accordance with PED, LVD, RoHS2, EMC



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Let First be your first choice.



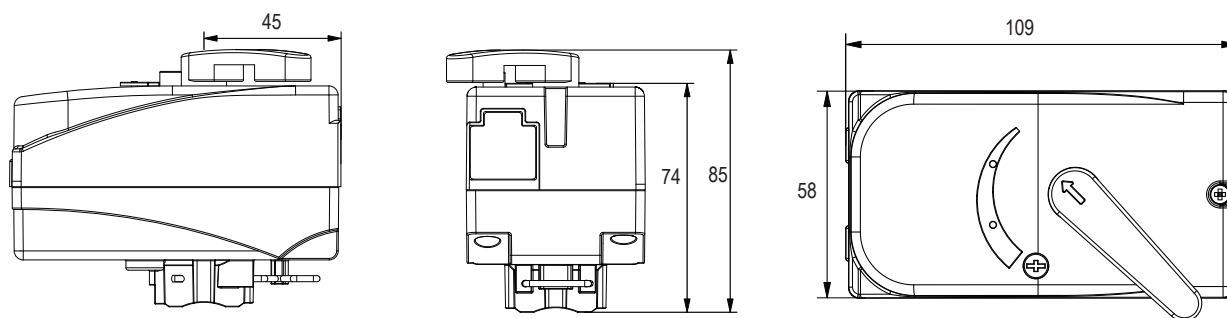
S9000 - 3P MIX

FIRŠT ELECTRIC ACTUATORS EMV 110

with Clip system for 3 way and 4-way rotary valves

S9000 3P MIX,

actuator with manual control handle - S9FR0

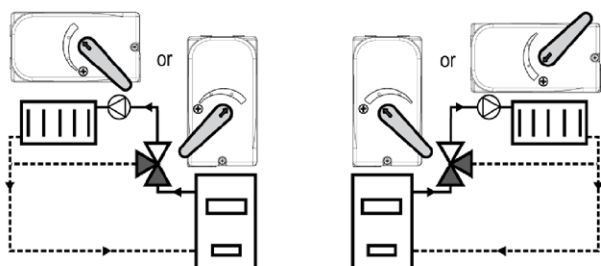


S9000 3P MIX, for 3-way rotary valves (90° rotation)

Code	Type	Voltage	Rotation time	Control signal	Connection	Max. torque [Nm]	Weight [kg]	Price (€)
14424	S9FR0-M 3P MIX	230 VAC 50 Hz	110s/90°	3-point SPDT	Molex	5	0,33	
14134	S9FR0-K 3P MIX	230 VAC 50 Hz	110s/90°	3-point SPDT	Cable	5	0,48	

Installation examples

Actuator S9FR0 with FMV 130C valves (mixing applications).



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
- **Control signal:** optional 2-point control
- **Connection:** Molex connector (IP40) and optional specially sealed Molex cable (IP44) or cable - (IP44).
- **Different running times:** 20s/90°, 40s/90°, 55s/90°, 80s/90°, 110s/90°, 220s/90°.
- **Solar/cooling adapter:** Heat barrier for protection of the actuator in solar or cooling systems.
- **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

