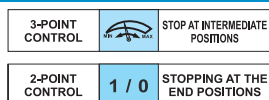


# S2000 2P/3P

FIRST ELECTRIC ACTUATORS EMV 110

for 2-way and 3-way valves

FIRST®



ISO 5211



FIRŠT actuators EMV 110, series S2000, are 3-point or 2-point actuators designed for operating 2-way, 3-way valves from DN 32 - DN 50.

- The FIRŠT S2000 actuators have defined direction of rotation (90° and 180° angle).
- Actuators are available with cable and with manual control handle.
- Recommended for diverting and on/off applications.

## OPERATION

EMV 110 is an electric actuator designed for operating 2-way and 3-way valves. Actuators are controlled by 2-point SPST signal with relay module or 3-point SPDT signal. Actuators allow high regulating accuracy and easy installation with different mounting systems.

Actuators are available in 230 VAC 50 Hz or 24 VAC 50 Hz and are supplied with a 1,5m attached connection cable. Actuator can be manually operated with a tool and button on the cover. Actuators are recommended for diverting applications with 3-way FBV 930 valves and on/off applications with 2-way FBV 820 valve. Actuators can also be used with 2-way and 3-way ISO 5211 valves.

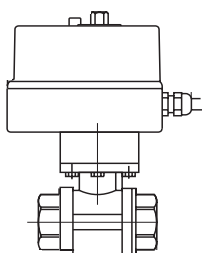
Actuator usage offers many possibilities in heating systems (solar, remote, house-heating), sanitary water applications, hot blast heating, cooling systems, swimming pools, chemical and process industry, petrochemical industry, alternative heating and agricultural purposes.

## MAINTENANCE

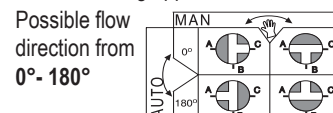
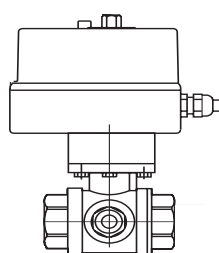
Actuator requires no maintenance. The installation of suitable stainer is recommended.

## INSTALLATION POSITION

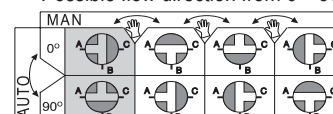
S2000 actuators with FBV 820 valves for on/off application.



S2000 actuators with FBV 930 valves for diverting applications.

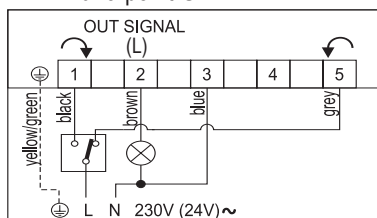


Possible flow direction from 0°- 90°

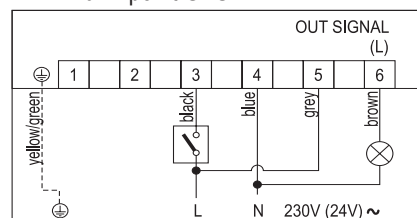


## ELECTRICAL CONNECTION

EMV110..3-point SPDT



EMV110..2-point SPST



## SUITABLE VALVES

FBV 820



FBV 930



ISO VALVE  
(2-way / 3-way)



CE In accordance with PED, LVD, RoHS2, EMC

FIRST®

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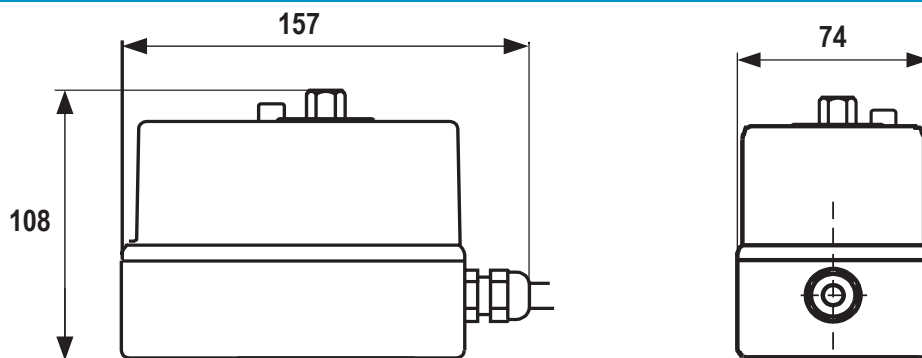
www.first.si  
Let Firš be your first choice.



# S2000 2P/3P

## FIRŠT ELECTRIC ACTUATORS EMV 110

for 2-way and 3 way valves

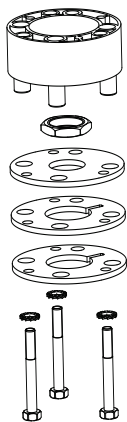


**S2000**, for 2-way and 3-way valves (90°)

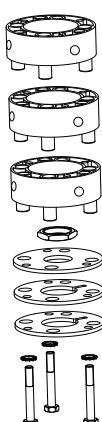
Code	Type	Voltage	Rotation time	Control signal	Connection	Max. torque [Nm]	Weight [kg]	Price (€)	
20037	EMV 110 2410 - 2w	230 VAC 50 Hz	105s/90°	3-point SPDT	Cable	25	1,30		2-Way valves
20040	EMV 110 2413 - 2w	24 VAC 50 Hz	105s/90°	3-point SPDT	Cable	25	1,30		
20035	EMV 110 2310 - 2w	230 VAC 50 Hz	105s/90°	2-point SPDT	Cable	25	1,30		
20046	EMV 110 2313 - 2w	24 VAC 50 Hz	105s/90°	2-point SPDT	Cable	25	1,30		
20048	EMV 110 2410 - ISO	230 VAC 50 Hz	105s/90°	3-point SPDT	Cable	25	1,30		3-Way valves
20038	EMV 110 2410 - 3w	230 VAC 50 Hz	105s/90°	3-point SPDT	Cable	25	1,30		
20041	EMV 110 2413 - 3w	24 VAC 50 Hz	105s/90°	3-point SPDT	Cable	25	1,30		
20044	EMV 110 24G0 - 3w	230 VAC 50 Hz	210s/180°	3-point SPDT	Cable	25	1,30		
20045	EMV 110 24G3 - 3w	24 VAC 50 Hz	210s/180°	3-point SPDT	Cable	25	1,30		

### Explosive scheme

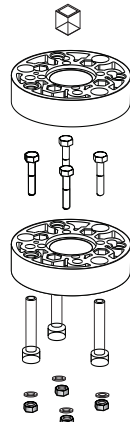
Explosive scheme of adapter set for FBV 820/930 valves.



Explosive scheme of the Cooling adapter set for FBV 820/930 valves.



Explosive scheme of Adapter set 820 ISO5211 for ISO valves.



### Features and options






- **Control:** 2- point SPST or 3-point SPDT
- **Different running times:** 105s/90°, 210s/180°.
- **Power supply:** 230VAC/50Hz or 24VAC/50Hz
- **Output signal (L):** at end position.

### Adapter set

- The valve holder for **FBV 820/930** (code 130039)
- The valve cooling adapter set for **FBV 820/930** (code 132006)
- Adapter set 820-ISO 5211 F03/F04/F05,(11/9 mm) (code 58045)



### DIFFERENT OPTIONS

<p><b>EMV 110 - Series 820</b> Electric motor actuated ball valve - <b>Adapter set:</b> FBV 820/930</p> 	<p><b>EMV 110 - Series 930</b> 3-way, T-shaped ball valve-horizontal version - <b>Adapter set:</b> FBV 820/930</p> 	<p><b>EMV 110 - Series 820 HL</b> 2-way, ball valve for cooling systems - <b>Cooling adapter set:</b> FBV 820/930</p> 	<p><b>EMV 110 - Series 930 HL</b> 3-way, T-shaped ball valve-horizontal version - <b>Cooling adapter set:</b> FBV 820/930</p> 	<p><b>Adapter set 820-ISO 5211</b> for 2-way / 3-way ISO valves, F03/F04/F05,(11/9 mm)</p> 
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