

# EMV 110 602/1590 B

## FIRŠT ELECTRIC ACTUATORS EMV 110

motorized ball valve with a battery support operation

FIRŠT®

2-POINT CONTROL	1 / 0	STOPPING AT THE END POSITIONS
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FIRŠT actuators, series EMV 110 602/1590 B is used in system, where in case of power failure opens/closes ball valve. It can be used as safety element in various systems. Valves are available in (DN 20 - DN 32).

- Manual ball valve opening/closing possibility.
- Setting the position of the ball valve in case of power failure - open/closed.
- Sound signaling possibility - additional connection of beeper.

### OPERATION

When the Firšt EMV 110 602/1590 B actuator is plugged in a electrical voltage it goes automatically in home position - closed (default or factory setting). In case of power failure the actuator is using battery power to open the valve. The actuator also has an output, which can be used for acoustic signaling in case of power failure (beeper 4-7 VDC - uses battery power). However, this shortens battery life.

### MAINTENANCE

Actuator requires battery change on every 2 years. The installation of suitable strainer is recommended.

### CERTIFICATES

FIRŠT valves series 600 are suitable for use in drinking water installations. All 600 series valves are ACS and WRAS certified.



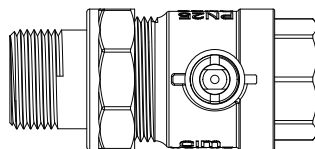
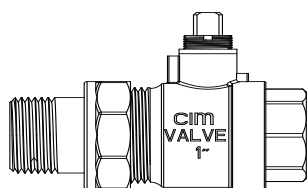
### TECHNICAL DATA: ACTUATOR

Control:	2-Point control
Supply voltage:	230 VAC 50Hz / battery power supply 4xLR6-1.5V/AA (alkaline Duracell MN1500 batteries)
Rotation time:	25s/90°
Max. Torque:	8 Nm
Protection class:	I
Enclosure rating:	IP55 (Cable connection),
Connection:	cable 1.5 m, 3 x 0,75 mm <sup>2</sup>
Direction of rotation:	Defined
Manual operation:	yes
Position indicator:	on the valve holder
Ambient temperature:	0°C..+55°C
Storage temperature:	-10°C..+70°C
Humidity:	0%..80% R.H. (non condensed)

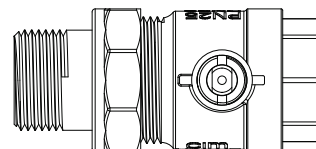
### VALVE CHARACTERISTICS

Connections: internal thread  
 Medium: water, nonaggressive fluid, air, glycol < 50%  
 Medium temperature: +5°C...110°C  
 Working pressure: max.16bar  
**Material:**  
 Valve body: brass CuZn40Pb2 Ni  
 Ball: brass CuZn40Pb2 Cr

### WORKING WAY OF THE VALVE



OPEN



CLOSE

### SUITABLE VALVES



FBV 602



FBV 603

### FLEXIBLE HOLDER SYSTEM

Flexible holder for valve allows manual operation of valve without handle and allows indication of position on the valve holder.

**CE** In accordance with PED, LVD, RoHS2, EMC



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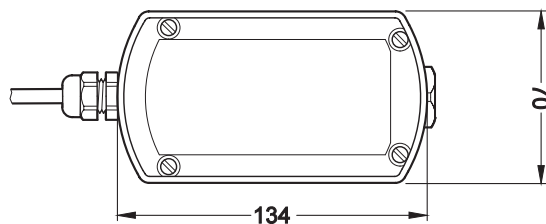
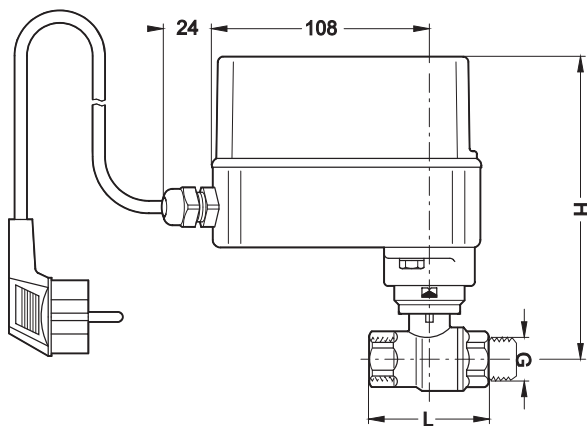
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# EMV 110 602/1590 B

## FIRST ELECTRIC ACTUATORS EMV 110

programmable motorized ball valve



### EMV 110 602/1590 B, for 2-way valves

Code	Type	Voltage	Rotation time	Connection	Max. torque [Nm]	Weight [kg]	Price (€)
10447	EMV 110 602/1590-3/B DN20	230 VAC, 50 Hz	25s/90°	Cable	8	0,81	
10448	EMV 110 602/1590-4/B DN25	230 VAC, 50 Hz	25s/90°	Cable	8	0,97	
10449	EMV 110 602/1590-5/B DN32	230 VAC, 50 Hz	25s/90°	Cable	8	1,24	

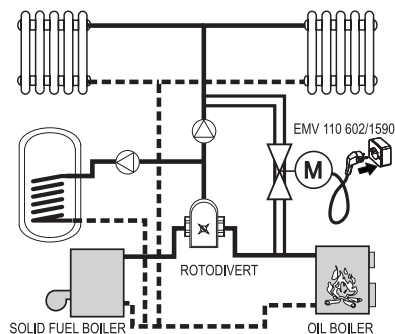
### FBV 602, valve with Internal threads

Type, DN	H	L	Kvs	Weight [kg]
FBV 602, DN20	152	57	41	1,10
FBV 602, DN25	163	68	68	1,30
FBV 602, DN32	173	81	123	1,50

### Installation examples

#### SOLID FUEL BOILER:

In case of power failure it opens the flow, which passes all control elements. The installation must be executed properly, that it allows water circulation in the system.



### Features and options

- Battery power supply - 4x LR6-1.5V/AA-(alkaline Duracell MN1500 batteries that are inserted in the actuator)
- Long lifespan and operation reliability

#### PROTECTION OF ELEMENTS OF THE SYSTEM:

In case of power failure it closes return line, thus prevents overheating of heat exchanger.

