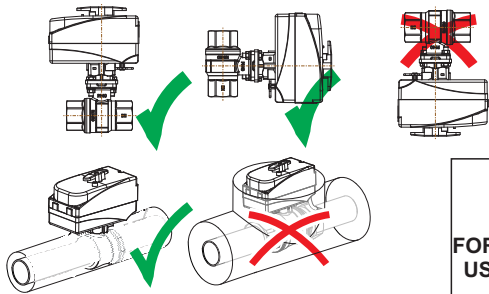


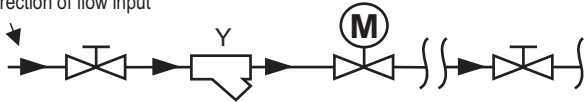
Installation position



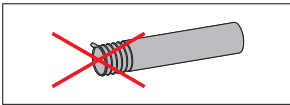
Do not mount actuator under pipes fittings and other valves due to possible leakage of water. The installation site has to be frost-proof and the protection of the device from chemicals, paints, detergents, solvents and their vapours and environmental influences must be guaranteed.

Installation recommendation for valves

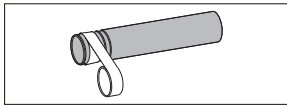
Direction of flow input



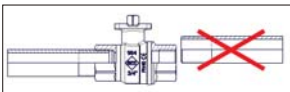
Installation of the pipe and ball valve



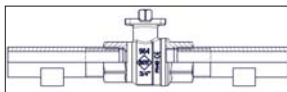
Ensure that the pipe ends are well treated and without scraps.



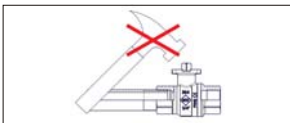
Do not put more than necessary sealing material on the pipe threads.



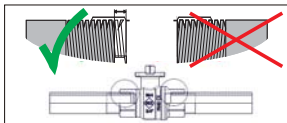
The connection pipes must be placed on the same axis and should be straight between them.



To avoid bending, the pipes must be substained.

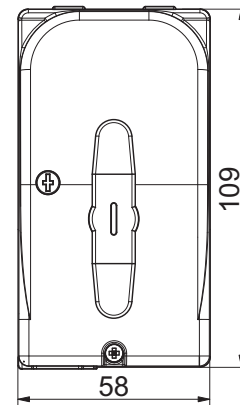
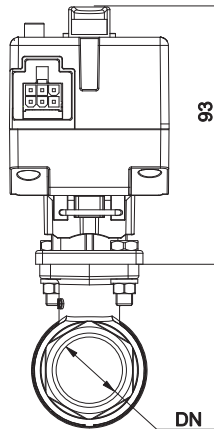
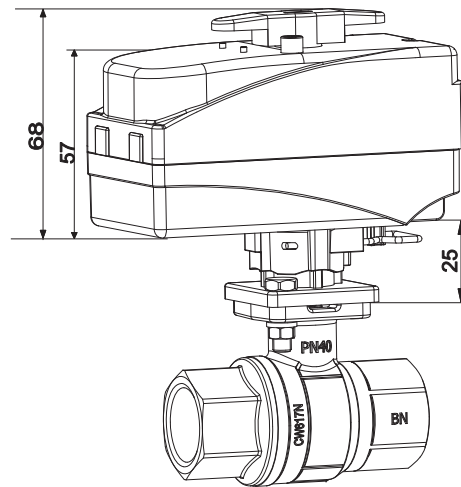


Avoid any damage to the valve because problems with sealing can occur.

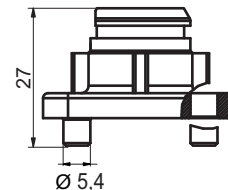
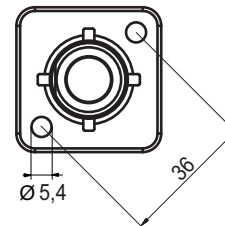
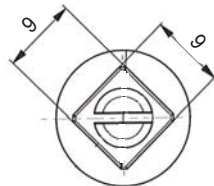


Ensure that the pipe is not screwed to the end of the thread.

Dimensions



Dimensions for ISO 5211 valves F03/9mm



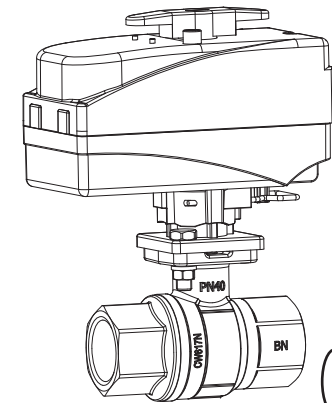
FIRST®

EMV 110..9Gxx-M/K EMV 110..99xx-M/K

Actuators S9000 2P ND with 2-way ISO valves (ICA adapter)

2-point control

1 / 0



ΔP<3 bar
+2..+110°C

Product designation: **EMV 110 .. 9 X X X - X**

Series

9000

Actuator type

G=with relay module, with manual control
9=with relay module, without manual control

Rotation time

N=12s/90°
3=30s/90°

Voltage

0=230 VAC
3=24 VAC

Connection type

M=Molex connection
K=cable

English

Information



FIRST d.o.o

Koroška cesta 56, 3320 Velenje,
Slovenia

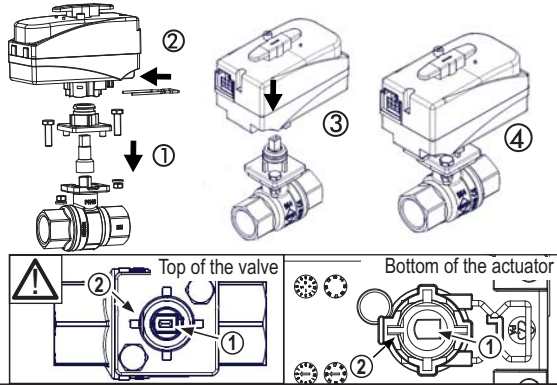
tel: ++386 (0)3 898 35 00

fax: ++386 (0)3 898 35 35

info@first.si, <http://www.first.si>

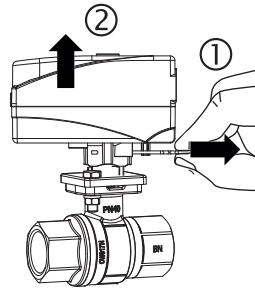
Assembly of the actuator on the valve

Actuator can be installed only in one position. Easy and fast installation of actuator on the valve with single push - CLIP system.



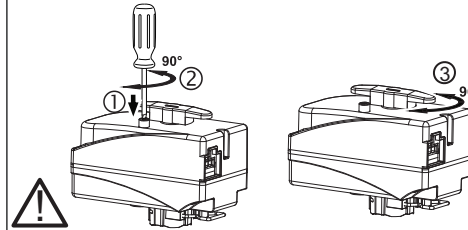
Disassembly of the actuator from the valve

First pull out the spring, then lift the actuator from the valve.



Manual operation: Only for EMV110.. 9Gxx

1. With screwdriver push the button down.
2. Turn the screwdriver for 90°.
3. Turn the handle of actuator for 90°.

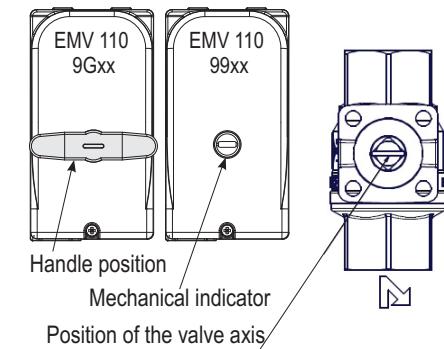


Note:

When the operation button for manual operating is in MAN position, actuator stays in permanent position irrespective of control signal.

Position indication and flow direction

Valve: CLOSED



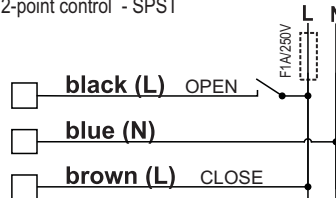
FACTORY DEFAULT:
NC - normally closed

Control signal

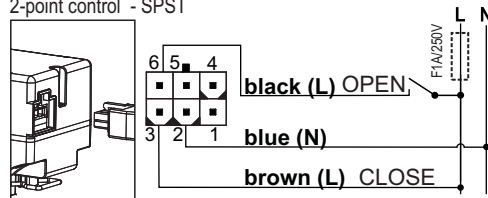


Electrical connection

EMV 110..9xxx-K, Cable connection
2-point control - SPST



EMV 110..9xxx-M, Molex connection
2-point control - SPST



WARNING

- The actuator must be protected by a fuse 1A.
- It is not allowed to open the actuator housing!
- The actuator must be electrically connected in accordance with technical norms.
- Observe the correct connection voltage!
- Installers, and users are responsible for the safe and proper installation / operation of the actuator.



Switch off power supply before making electrical connections or servicing to prevent electrical shock and equipment damage!

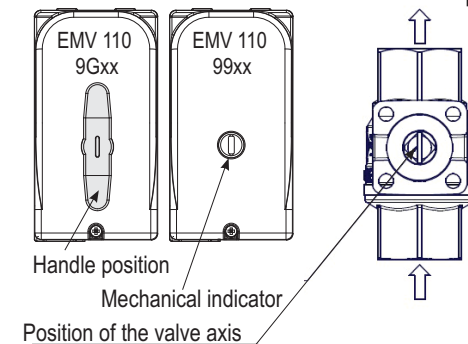
Technical data

Supply voltage	EMV 110 9xx0 230 VAC, 50Hz	EMV 110 9xx3 24 VAC, 50Hz
Running time	EMV 110 9xNx = 12s/90° (only DN 15, 20 and 25) EMV 110 9x3x = 30s/90°	
Power consumption	9VA at 230 VAC	
Torque	Max 5 Nm	
Protection class	II □	
Degree of protection	Cable connection: IP44 Molex connection: IP40 (IP44 only with special connector-by special request)	
Connection	EMV 110 9xxx-K: Cable l=1 m (3 x 0,75 mm ²) EMV 110 9xxx-M: Molex connection	
Rotation direction	undefined CW/CCW 90°/360°	
Manual control	with handle - EMV 110..9Gxx only	
Position indicator	mechanical indicator/handle on the cover	
Ambient temperature	0°C...+55°C	
Relative Humidity	0..80% r.H Non-condensing	
Storage temperature	-10°...+70°	
Maintaining	maintenance free	

Ball valve 2-way ISO 5211 valves F03 9mm from DN 15 to DN 25

Fluid temperature +2°C...+110°C

Valve: OPEN



Control signal



Safety information:



- Before installation wash pipes, sealing material must not go inside the valve
- During installation, avoid soldering or welding near the valve
- Any deterioration or destruction of any part of the valves shall result in the need to replace the complete valve: alterations to any part of the complete valve shall result in the valve no longer being in compliance with the performance requirements of this document.
- Place of assembly must be protected against frost, the device must be protected from chemicals, paints, detergents, solvents and their vapors and other environmental influences (vibration).
- All installations should be performed in accordance with existing local installation regulations end codes of practice where they exist.
- It's imperative to follow the installation instructions of the valve manufacturer.
- If the valve is installed in the heating installation the water quality in the system has to comply with the VDI 2035 requirements.