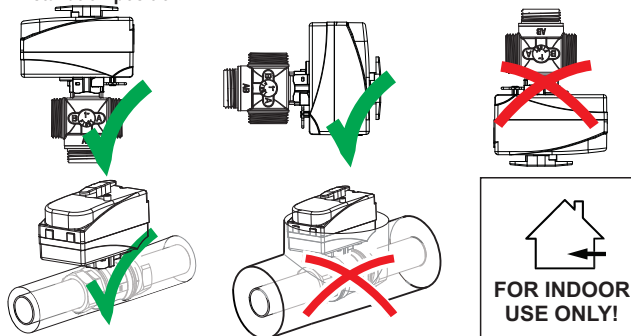


EMV 110..9Gix-M/K EMV 110..99ix-M/K

Actuators S9000 2P ND with
FDV 530C valves

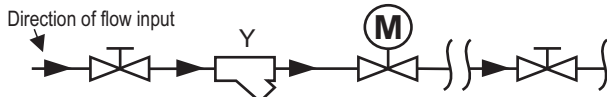
Installation position



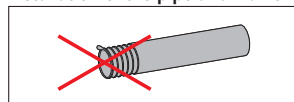
Do not mount actuator under pipes fittings and other valves due to possible leakage of water. The installation site has to be frost-proof and the protection of the device from chemicals, paints, detergents, solvents and their vapours and environmental influences must be guaranteed.

Installation recommendation for valves

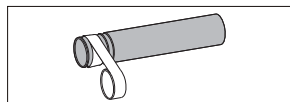
Direction of flow input



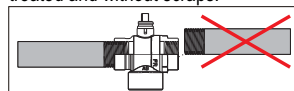
Installation of the pipe and valve



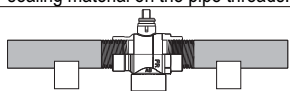
Ensure that the pipe ends are well treated and without scraps.



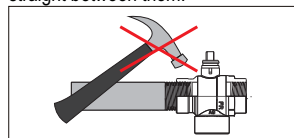
Do not put more than necessary sealing material on the pipe threads.



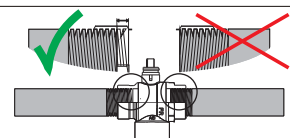
The connection pipes must be placed on the same axis and should be straight between them.



To avoid bending, the pipes must be substained.



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

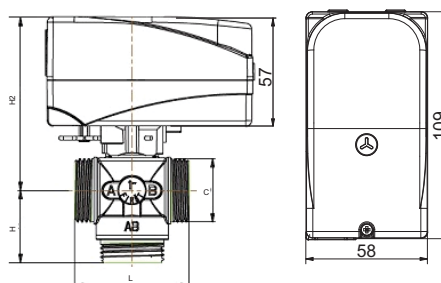
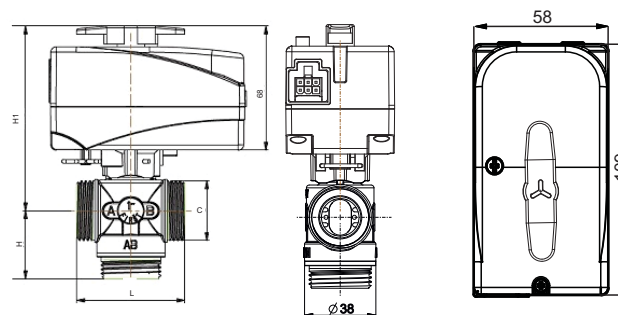


Ensure that the pipe is not screwed to the end of the thread.

Maximum screwing torque of the connecting pipes into valves

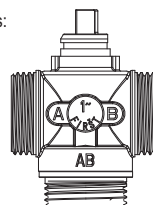
| | DN 20 | DN 25 |
|-----------------------------|---|----------|
| External threads | 40 Nm | 55 Nm |
| Compression fittings | 40/60 Nm | 60/80 Nm |
| | Number of turns to tight with tool after tightening by hand | |
| | 1/2-3/4 | 1/2-3/4 |

Dimensions:



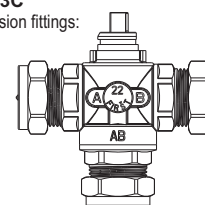
FDV 532C

External threads:
G1"
G 5/4"



FDV 533C

Compression fittings:
CPF 22
CPF 28



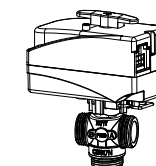
| Title | C | L (mm) | H (mm) | H1 (mm) | H2 (mm) | KVS (m ³ /h) | Weight (kg) |
|-----------------------|-------|--------|--------|---------|---------|-------------------------|-------------|
| S9Gi0-M/K 532C G1" | G1" | 60 | 38 | 103 | / | 8 | 0,63 |
| S9Gi0-M/K 532C G 5/4" | G5/4" | 74 | 43 | 103 | / | 8 | 0,78 |
| S9Gi0-M/K 533C CPF=22 | 22 | 80 | 45 | 103 | / | 8 | 0,78 |
| S9Gi0-M/K 533C CPF=28 | 28 | 80 | 49 | 103 | / | 8 | 0,89 |
| S99ix-M/K 532C G1" | G1" | 60 | 38 | / | 90 | 8 | 0,63 |
| S99ix-M/K 532C G 5/4" | G5/4" | 74 | 43 | / | 90 | 8 | 0,78 |
| S99ix-M/K 533C CPF=22 | 22 | 80 | 45 | / | 90 | 8 | 0,78 |
| S99ix-M/K 533C CPF=28 | 28 | 80 | 49 | / | 90 | 8 | 0,89 |

2-point control

1 / 0

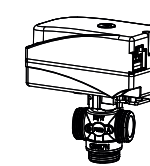
EMV 110..9Gix-M

With handle, Molex connection



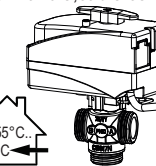
EMV 110..99ix-M

Without handle, Molex connection



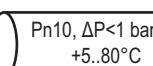
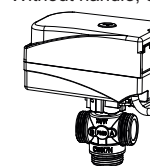
EMV 110..9Gix-K

With handle, cable connection



EMV 110..99ix-K

Without handle, cable connection



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

Series

9000

Actuator type

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

Rotation time

i=8s/60°

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

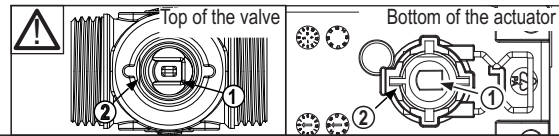
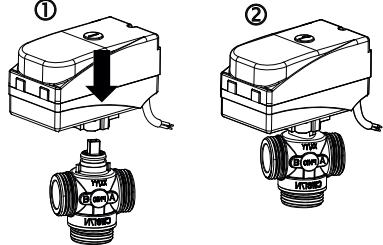
tel: ++386 (0)3 898 35 00

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

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

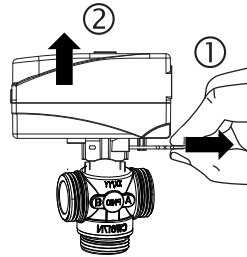
Assembly of the actuator on the valve

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



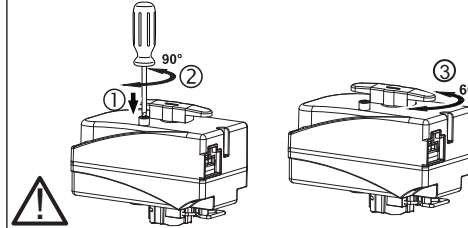
Disassembly of the actuator from the valve

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



Manual operation: Only for EMV110..9Gix

1. With screwdriver push the button down.
2. Turn the screwdriver for 90°.
3. Turn the handle of actuator for 60°.

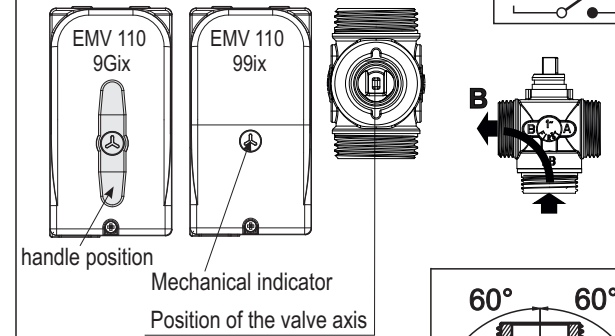


Note:

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

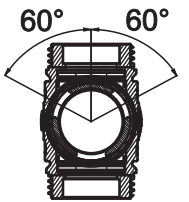
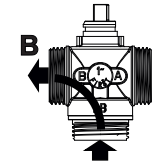
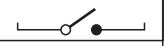
Valve: OPEN B



FACTORY DEFAULT:

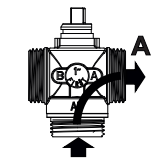
B - open

Control signal



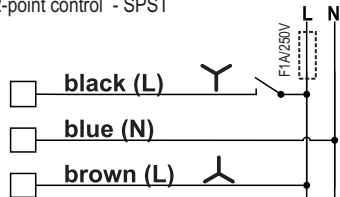
Angle of rotation

Control signal

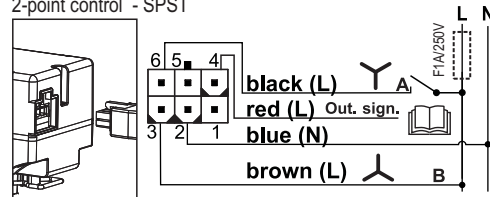


Electrical connection

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



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



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



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.

Technical data

| | | |
|----------------------|--|------------------------------|
| Supply voltage | EMV 110 9xx0 230 VAC, 50Hz | EMV 110 9xx3 24 VAC, 50Hz |
| Running time | EMV 110 9xix = 8s/60° | |
| 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 60°/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 | |

Diverting valve

| | FDV 532C | FDV 533C |
|----------------------------|--|---|
| Pipe connection thread | M/M external threads (G 1") (G 5/4") | C/C compression fittings (CPF - 22mm) (CPF - 28mm) |
| Fluid | water, glycol <50%, The use is not allowed for flammable liquids, combustible gases or explosive liquids! Water quality as per VDI 2035. | |
| Fluid temperature | +5°C...+80°C *with optional SCA adapter from -15°C ...+80°C | |
| Nominal pressure | PN10 | |
| Max. differential pressure | 1 bar | |
| Materials | | |
| Valve body | Brass, CW617N | |
| Seals | PTFE, NBR | |
| Rotor | PPS | |