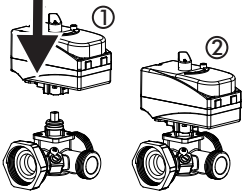


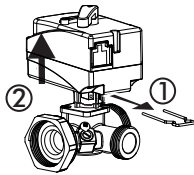
Assembly of the actuator on the valve

Easy and fast installation of actuator on the valve with single push - CLIP system.



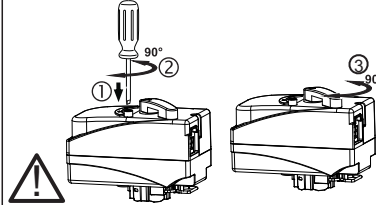
Disassembly of the actuator from the valve

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



Manual operation: Only for EMV110.. 9Fx7

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

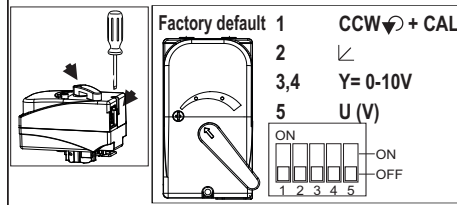


Note:

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

Parameter setting using DIP switches

DIP switches are located inside actuator. To open the actuator it is necessary to loosen the screws on the cover (1x), and remove handle.



1. Direction of rotation:

- CCW ↺ / CW ↻ calibration: DIP 1 CCW ↺ + CAL.
- CCW ↺ - opening to the right
- CW ↻ - opening to the left

During changing position of DIP1 is performed calibration proces. The actuator turns into left and right position. During proces leave the button for manual control in position AUTO!

2. Control signal: direct/inverse

DIP	↙	↘
2	OFF	ON

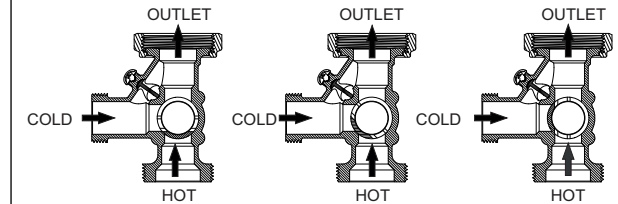
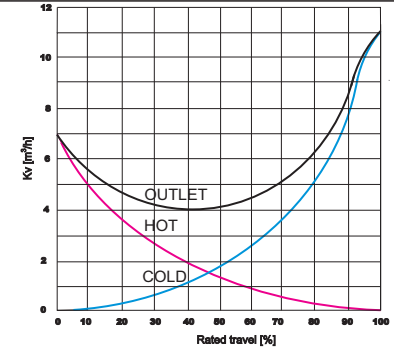
3.4. Range settings

DIP	0,16-9,84V 0-20mA	2-9,84V 4-20mA	0,16-4,88V	5,12-9,84V
3	OFF	OFF	ON	ON
4	OFF	ON	OFF	ON

5. Y-Control signal U(V)/I(mA)

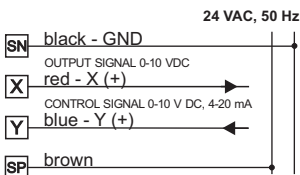
DIP	U(V)	I(mA)
5	OFF	ON

Equal percentage flow characteristics

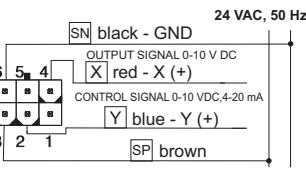


Electrical connection

EMV 110..9xx7-K, Cable connection



EMV 110..9xx7-M, Molex connection



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.



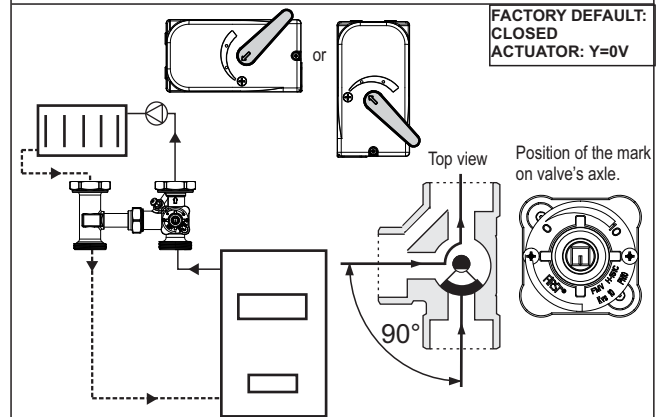
Switch off power supply before making electrical connections or servicing to prevent electrical shock and equipment damage!

Technical data

Supply voltage	24V AC, 50Hz
Running time	EMV 110 9xX7 (9xVx, 9xTx, 9xSx, 9xEx, 9xRx,) V=20s/90°, T=40s/90°, S=55s/90°, E=80s/90°, R=110s/90°
Power consumption	3,5 VA at 24 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 9xx7-K: Cable l=1 m (4 x 0,5 mm²) EMV 110 9xx7-M: Molex connection
Rotation direction	defined CW/CCW 90° (selectable by controller (DIP))
Manual control	with handle - EMV 110..9Fx7 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

Valve characteristics	H-151C
Nominal diameter	DN25
Connections	G1 1/2-(G-external thread-ISO228-1) Rp1 1/2(internal thread-EN10226-1)
Fluid	water, glycol <50%, not aggressive fluids The use is not allowed for flammable liquids, combustible gases or explosive liquids! Water quality as per VDI 2035.
Fluid temperature	+2°C...+110°C
Nominal pressure	PN10
Max. differential pressure	1 bar
Materials	
Valve body	Brass, CW617N
Shaft and rotor	Brass, CW617N
Bushing	PTFE
O-rings	EPDM, FKM

Position indication and flow direction



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 and 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.