

ROTOTEMP

FIRST CONSTANT TEMPERATURE CONTROLLER

with Quick fit system for 3-way rotary valves

FIRST®



FIRST ROTOTEMP, are constant temperature controllers designed for operating 3-way rotary mixing valves with quick fit system (DN 15 - DN 32).

- The FIRST ROTOTEMP controllers have defined direction of rotation (90° rotating angle).
- Actuators have LED temperature display and knob for adjusting desired temperature.
- Actuators have DIP switches for setting different functions of the actuator.

OPERATION

ROTOTEMP is an constant temperature controller with VF sensor and adjustable temperature setting. It is designed for operating 3-way rotary mixing valves. FIRST ROTOTEMP controllers allow easy installation with quick fit system.

Actuators are available in 230V AC 50 Hz with adapter and are supplied with a 1.7m attached connection cable. Actuator can be manually operated with handle and button on the cover. Actuator can be optionally fixed to the valve with additional screw.

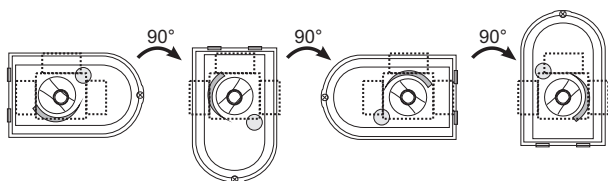
ROTOTEMP actuators are recommended for: maintaining a constant temperature in boiler heating circuit (protection against condensation), use in under floor heating applications, industrial processes, heat accumulators and in domestic hot water systems or swimming pools (individual systems, SPA, public swimming pools).

MAINTENANCE

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

INSTALLATION POSITION

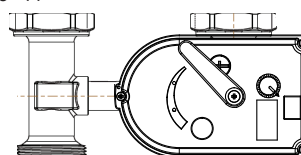
Actuator can be rotated on the valve body to fit different installation layouts. ROTOTEMP actuator with FMV 130 valves.



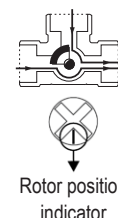
TECHNICAL DATA: ACTUATOR

| | |
|------------------------|---|
| Supply voltage: | 230 VAC 50Hz (with adapter), 24 VAC 50Hz (without adapter) |
| Rotation time: | 105s/90°. |
| Power consumption: | 7,5 VA (operation), 0 VA (stand by) |
| Max. Torque: | 8 Nm |
| Protection class: | II |
| Enclosure rating: | IP44 (Cable connection), |
| Connection: | cable 1,7 m, 2 x 0,75 mm ² |
| Direction of rotation: | defined 90° angle |
| Manual operation: | knob on the actuator cover |
| Position indicator: | mechanical, on the actuator cover |
| Media temperature: | +5°C..+110°C |
| Ambient temperature: | 0°C..+55°C |
| Storage temperature: | -10°C..+70°C |
| Humidity: | 0%..80% R.H. (non condensed) |
| Sensor type: | KTY 81-210PVC |
| Temperature ranges: | (0-100°C, 60-85°C, 20-70°C, 25-45°C) |

COMP-MOD actuator with FMV H-151 valves for mixing applications.



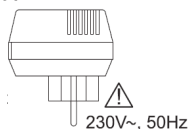
MIXING APPLICATION



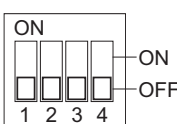
ELECTRICAL CONNECTION

POWER SUPPLY; for Rototemp constant temperature controller.

The regulator is attached to a 230VAC/24VAC adapter that allows connection to the network 230V, 50Hz. When the connection is done, the regulator is ready for use. Because the regulator does not content a fuse it is necessary to ensure protection against the plug adapter.



DIP SWITCHES; for setting different functions of the actuator.



- DIP 1** - Setting direction of valve opening.
- DIP 2, 3** - Different temp. areas according to your application.
- DIP 4** - Reaction factor x1/x10.

SUITABLE VALVES

FMV 131



FMV 132



FMV 133



FMV H-151



QUICK FIT SYSTEM

Compact design of the valve allows for easy tool access when assembling and disassembling the valve. Quick fit system allows for easy installation of the actuator on the valve body.



CE In accordance with PED, LVD, RoHS2, EMC

FIRST®

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Let First be your first choice.



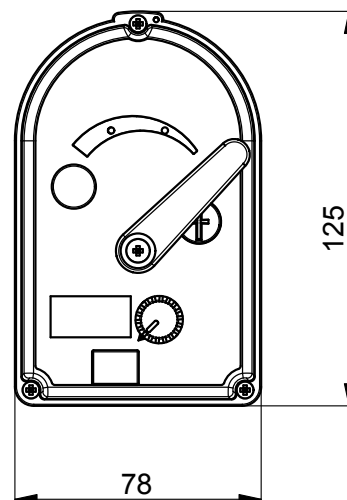
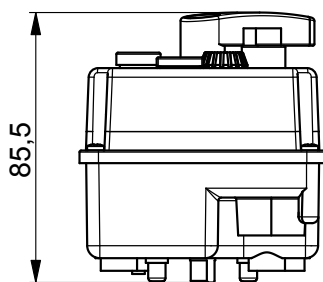
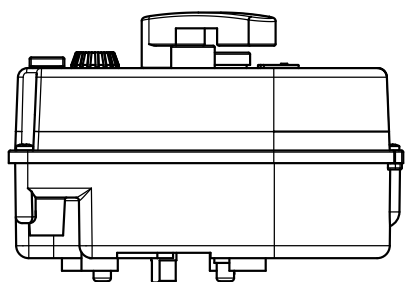
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ROTOTEMP

actuator with manual control handle.

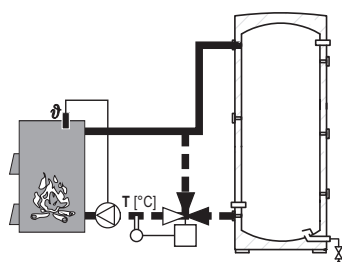


ROTOTEMP, for 3-way rotary valves

| Code | Type | Voltage | Rotation time | Control signal | Connection | Max. torque [Nm] | Weight [kg] | Price (€) |
|-------|----------|---------------|---------------|----------------|------------|------------------|-------------|-----------|
| 21146 | ROTOTEMP | 230 VAC 50 Hz | 105s/90° | | Cable | 8 | 1,34 | |

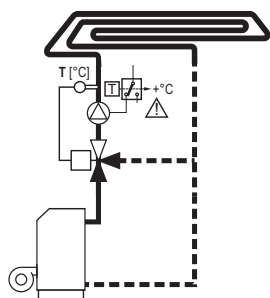
Installation examples

Example 1:



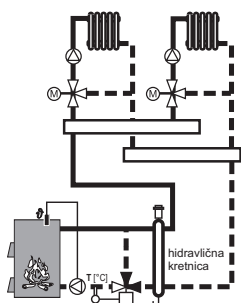
Maintains a constant temperature (protection) of the return flow of water boilers using solid or liquid fuels in combination with a hopper.

Example 2:



Maintains a constant temperature of heating water.

Example 3:

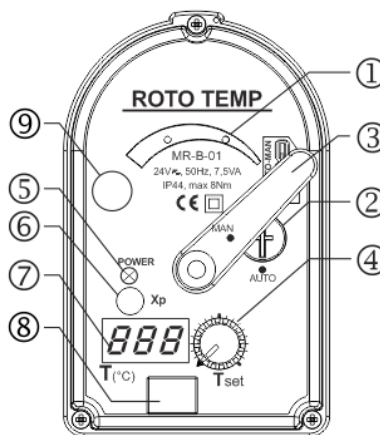


Maintains a constant temperature of the boiler (protection against condensation) and direct connection to the heating system

Features and options

- **Sensor type:** KTY 81-210PVC, length 1.5m, 6mm diameter, length 40mm
- **DIP switches:** (with them inside the actuator it is possible to set the following parameters):
 - Direction of rotation (CCW (inverse) /CW (direct)) + recalibration
 - Different temperature ranges depending on the application (0-100°C, 60-85°C, 20-70°C, 25-45°C).
- **Reaction factor:** - x1 : slower actuators response on changes.
- x10 : quicker actuators response on changes.

Description of the front panel of regulator



1. Mechanical indicator
Indicator can be set according to the mixing valve assembly
2. Button for manual/auto control
3. Handle for manually controlling the actuator, which also serves for the indication position of the valve
4. Button for adjusting the required temperature.
5. LED indication of:
 - Flash: 1 time per second- actuator calibration 2 times per second- too low voltage
 - ON: normal operation switches for setting the parameters
6. Accessible place for Xp parameter settings
7. LED screen for displaying current/set temperature
8. Accessible place for DIP switches for setting the parameters
9. The screw access cover for screwing actuator to the mixing valve.