



DESCRIPTION

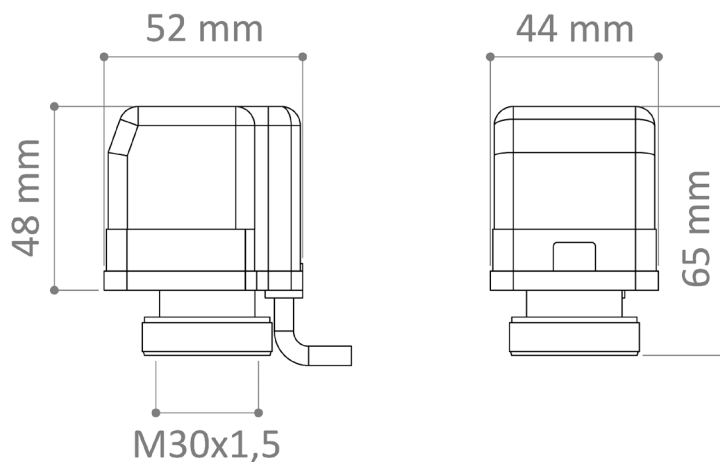
MT54102

Thermoelectric actuator 115 V AC ON/OFF N.C. (Normally Closed). Thanks to the included adapter OA7010 it can be installed on the following products:

- Pettinaroli’s radiator valves with thermostatic option (M28x1,5)
- Pettinaroli’s brass, plastic and stainless steel manifolds (M28x1,5)
- Pettinaroli’s pressure independent control valves series 91, 91/1 and 91X (all sizes) and series 92, 92/1 and 92X (up to 1850 l/h size)

In addition, it can also be used to drive 2, 3 and 4 ways control valves series 662, 663, 664, 662/2, 663/3. In this case the OA7010 adapter must not be used. The valves already have the M30x1,5 connection.

DIMENSIONS



TECHNICAL FEATURES

Type	ON/OFF – N.C.	Ambient temperature	-5 °C / 50 °C
Operating voltage	115 V AC± 15% - 50/60 Hz	Type of protection	IP54 / Class II
Maximum inrush current	200 mA for 500 ms	Weight	190 g
Maximum stroke	4 mm	Color	White
Operating power	2,5 W	Connecting cable type	2 x 0,5 mm ² (H05V2V2-F)
Opening/closing time	3 min	Connecting cable length	1 m
Actuating force	115 N	Position indicator	Red
Medium temperature	-5 °C / 100 °C	Material of the actuator	Fire retardant
Storage temperature	-20 °C / 65 °C	Included adapter	OA7010

The MT54102 thermoelectric actuators are used to control the flow of the heat transfer fluid as a function of the ambient temperature. The installation requires the device to be connected to a dedicated electrical control capable of activating or not its opening (e.g. thermostat). If the installer needs additional control (e.g. pump activation) as a function of the actuator status (open/closed), the use of a relay is recommended.

The actuators MT54102 are N.C. so, on the de-energized state, they will close from the hydraulically point of view; the actuator could be connected to a “voltage free” room thermostat. For further information please refer to the "WIRING DIAGRAMS" chapter.

The actuator incorporates an M30x1,5 connection nut. Depending on the type of valve considered, it may be necessary to use the adapter **OA7010** which is supplied in pair with the actuator.



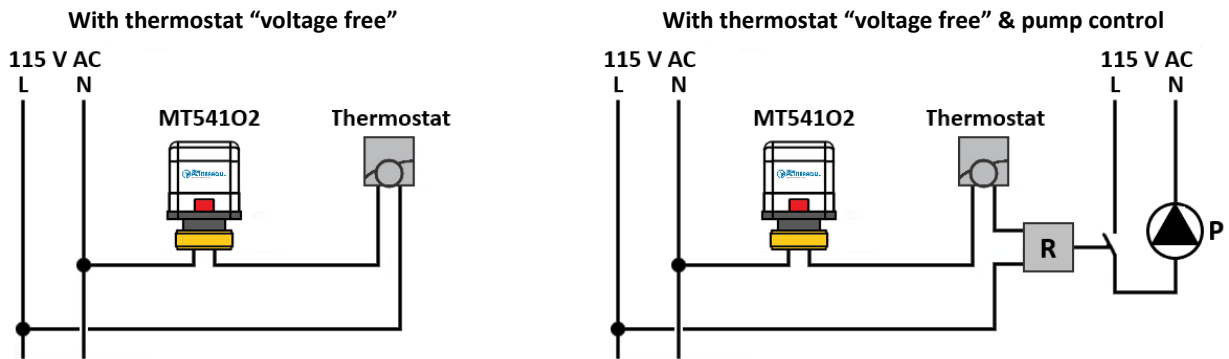
Adapter **OA7010**

APPROVALS



WIRING DIAGRAMS

The electrical wiring can vary depending on the type of installation:



L	N	R	P
Line	Neutral	Relay	Pump

INSTALLATION NOTES



Fig.1

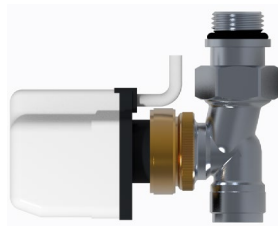


Fig.2



Fig.3

- The actuator should be installed as shown in **Fig.1** and **Fig.2**. The upside down installation shown in **Fig.3** might compromise the functioning of the product and be dangerous from the electrical point of view;
- The thermoelectric actuators MT54102 are normally closed (N.C.) so, on the de-energized state, they will close from the hydraulically point of view. This means that, with no power, the stem will be fully extended which could make it difficult to position the actuator on the valve. In order to avoid this problem it is possible to power the actuator: in this way the stem will be retracted so it will be very easy to place the actuator on the valve. After that, power can be turned off again;
- Tighten the connecting ring by hand only. No not use any tools.

CHARACTERISTIC CURVE

On the diagram below is represented the characteristic curve for the actuator MT54102 115 V AC ON/OFF N.C.

