

## Motorised actuator for hydraulic balancing MSA 10 DT



### Benefits

- First Open function
- Automatic thermal hydraulic balancing
- High-precision valve control
- Ideal for new buildings and renovations
- Suitable for heating and cooling
- Probe position detected automatically, therefore impossible to confuse



### Application

Actuator for automatic hydraulic balancing and energy-saving operation of surface heating systems. Suitable for controlling the hot water valves in distribution manifolds such as heating/cooling circuit manifolds ProCalida® MC, EF, VA and IN. The actuators convert the electrical signal received from room or timer thermostats into a valve stroke to control the set temperature via the flow rate. The adaptive PID control algorithm of the continuous controller controls the flow rate based on the measure flow and return temperatures for hydraulic balancing.

The actuator is factory-opened (First Open function) so that the stroke valves at the heating circuit manifold remain open during initial commissioning. This facilitates mounting as well as filling and flushing of the system since, at this point in time, the control system is usually not yet operative. The First Open function (FO) is automatically disabled as soon as the actuator is electrically controlled. The FO function can be re-enabled via a reset.

### Versions

	Part no.
Motorised actuator MSA 10 DT AC 230 V	79540
Motorised actuator MSA 10 DT AC/DC 24 V	79541

Blue part no. = in-stock items

### Description

Motorised, actuator with temperature-dependent control, with First Open and Re-Open function, LED indicator and two probe cables. Direct connection to the valve or upper part of the valve with union nut. Control via the supply voltage (230 V / 24 V) of the control terminal bar. MSA automatically detects which probe is used as the flow or return probe.



## Technical specifications

### Functions

First-open function (can be re-enabled),  
Closing point detection by homing movement during initial activation

### Operating mode

Closed when de-energised (NC)  
Condition as delivered: Open

### Control stroke

4.5 mm

### Closing dimension

10.5 mm

### Actuating force

110 N

### Connection

Union nut M30 x 1.5 mm (Brass, nickel-plated)

### Housing

Degree of protection: IP 54 (EN 60529)

Cap: White

### Cable

White

Length 0.9 m

### Temperature probes

Fastening by means of pipe clip, cannot be confused

Cable length 0.4 m

### Operating temperature range

Operation: Max. 50 °C (at valve)

Ambient: 0/50 °C

Storage: -25/+60 °C

Ambient humidity: < 85 % r.F., Non-condensing

### Supply voltage

AC 230 V or AC/DC 24 V

### Control voltage

AC/DC 24 V

### Power input continuous operation

AC 230 V: < 1 W

AC/DC 24 V: < 0.5 W

### Protection class

AC 230 V: II (EN 60730-1)

AC/DC 24 V: III (EN 60730-1)

### Dimensions (H x W x D)

95.3 x 37.8 x 53.2 mm

### Weight

200 g

## Technical drawings

### Dimensions (in mm)

