# SINTESIDO

## ROTARY ACTUATOR FOR BALL VALVES WITH DIRECT CURRENT SUPPLY

### USE

- zone heating / cooling systems
- HVAC
- drinking water systems
- systems using alternative energy
- thermal solar systems, with suitable ball valve
- household automation systems

## **KEY FEATURES**

- 12V and 24V direct current supply
- ON/OFF 2-point or 3-point electrical control
- electrical control (0° 45° 90°) for 6-way valves
- open and close feedback signal
- fast push connection with the SINTESI ball valve range
- manual operation



| TECHNICAL FEATURES                 | SINTESI DC   |  |
|------------------------------------|--|--|
| Power supply                       | 12V DC • 24V DC ± 10%                                |  |
| Power consumption during operation | 2 W  |  |
| Power consumption during standby   | 0,3 W  |  |
| Feeder cable                       | Length 80 cm   |  |
| Nominal torque                     | 5 Nm   |  |
| Maximum torque                     | 8 Nm   |  |
| Command                            | 2-point and 3-point ON/OFF • 0° - 45° - 90°          |  |
| Position feedback                  | Opening, closing or intermediate position            |  |
| Maximum feedback current           | 50mA (resistive load)                                |  |
| Operating angle                    | 95°  |  |
| Operating time (90°)               | 24V: 30 sec • 60 sec • 120 sec 12V: 60 sec • 120 sec |  |
| Maximum noise (at 1 m distance)    | 40 dB(A)   |  |
| Position indicator                 | Rotating arrow                                       |  |
| Installation                       | Indoor, protected from frost *                       |  |
| Operational room temperature       | +5°C+50°C  |  |
| Ambient humidity                   | max 95% RH, no condensation                          |  |
| Protection degree                  | IP54   |  |
| Insulation degree                  | III  |  |
| Outlet shell material              | Polyamide PA 6, 30% fiberglass                       |  |
| Maintenance                        | None   |  |
| Certification                      | CE   |  |

 $<sup>^{\</sup>star}\,$  the actuator must be installed indoors and far from the direct sunlight

Notes and Warnings: The device is designed to be used in heating systems, cooling systems, ventilation systems and - in general - in civil installations with features corresponding to the above-mentioned specifications. It can not be used outside the intended application field.

## **VERSIONS**

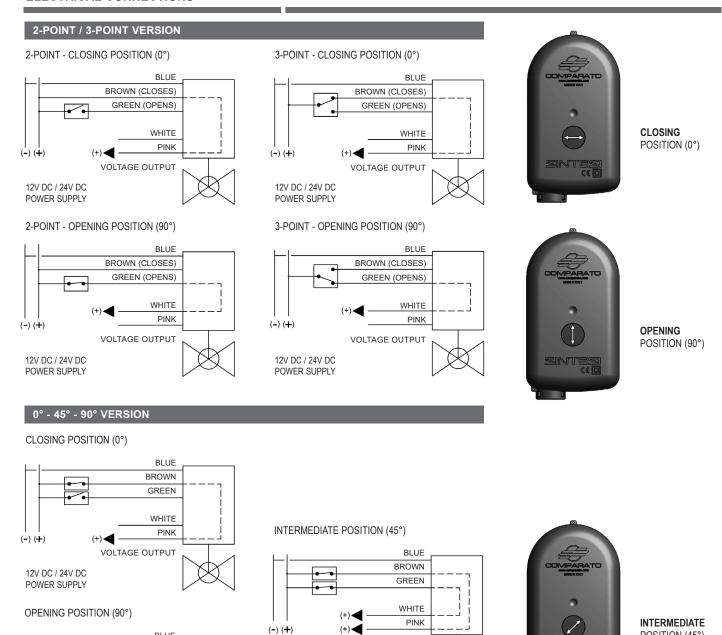
| Command        | Operating time | Code      |
|----------------|----------------|-----------|
| 2 / 3 POINTS   | 60 sec         | SDC52T060 |
| 12V DC         | 120 sec        | SDC52T120 |
| 0° - 45° - 90° | 60 sec         | SDC53T060 |
| 12V DC         | 120 sec        | SDC53T120 |

| Command                  | Operating time              | Code                                |
|--------------------------|-----------------------------|-------------------------------------|
| 2 / 3 POINTS<br>24V DC   | 30 sec<br>60 sec<br>120 sec | SDC42T030<br>SDC42T060<br>SDC42T120 |
| 0° - 45° - 90°<br>24V DC | 30 sec<br>60 sec<br>120 sec | SDC43T030<br>SDC43T060<br>SDC43T120 |



## ROTARY ACTUATOR FOR BALL VALVES WITH DIRECT CURRENT SUPPLY

## **ELECTRICAL CONNECTIONS**



NOTES • The connection of the power cable should be made inside a branch box with at least an IP54 protection.

12V DC / 24V DC

POWER SUPPLY

BLUE

BROWN

GREEN

WHITE PINK

VOLTAGE OUTPUT

(-) (+)

12V DC / 24V DC POWER SUPPLY



**VOLTAGE OUTPUT** 

POSITION (45°)

# SINTESIDO

ROTARY ACTUATOR FOR BALL VALVES WITH DIRECT CURRENT SUPPLY

## COUPLING SEQUENCE TO BALL VALVES WITH FAST PUSH CONNECTION



## MOTORISED VALVE SEALING WITH LEAD



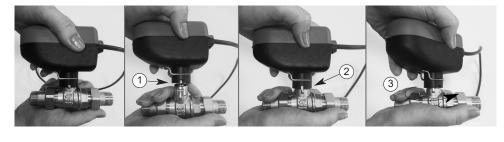


By means of special seals (not included), it is possible to seal the motorised valve with lead, in order to prevent the actuator to be removed from the ball valve.

## MANUAL OPERATION

In case of need, it is possible to open/close the ball valve manually, as follows:

- 1. Release the actuator from the ball valve;
- 2. Insert the actuator in the body of the valve, without pressing it;
- 3. Proceed with the desired manual activation, using the actuator as a knob.



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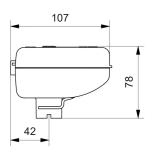


## ROTARY ACTUATOR FOR BALL VALVES WITH DIRECT CURRENT SUPPLY

### **OVERALL SIZE**

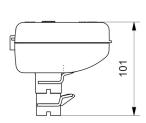
## **ACTUATOR**





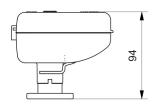


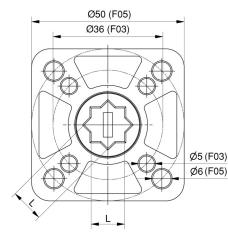
## SPACER • cod. DISN04





## ISO 5211 CONNECTION KIT • cod. AIST01





| ISO Connection | L  |
|----------------|----|
| F03            | 9  |
| F05            | 11 |

## **EXAMPLE OF SPECIFICATIONS**

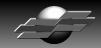
SINTESI DC actuator with 2-point and 3-point ON/OFF electric control, voltage feedback in open and close position, nominal torque: 5 Nm, power supply: 12V DC, operating time: 60 sec / 90°, operating angle: 90°, degree of protection: IP54, for ball valve: 2-way / 3-way / 6-way / by-pass, connection to the ball valve via Sintesi fast push connection.

Brand: COMPARATO Code: SDC52T060



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# HYDROTHERMAL SYSTEMS

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