

SINTESI SMART

ROTARY ACTUATOR FOR BALL VALVES WITH PROPORTIONAL CONTROL

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

- powered-on or current mode proportional control
- power supply 24V AC/ DC - 100...240V 50/60Hz
- position feedback 2...10V
- fast push connection with SINTESI ball valve range
- manual operation

TECHNICAL FEATURES	SINTESI SMART
Power supply	12V DC • 24V DC/AC 50/60Hz • 100...240V 50/60Hz
Power consumption during operation	3,5 W
Power consumption during standby	0,3 W
Feeder cable	Length 80 cm
Nominal torque	6 Nm
Maximum torque	8 Nm
Position signal	0-10V DC • 2-10V DC • 0-20 mA • 4-20 mA
Position signal impedance	100 kΩ voltage signal / 500 Ω current signal
Position signal impedance range	-0,5V ... 12V
Dead band on position signal	2%
Position indicator	Rotating arrow
Position feedback signal	DC 2-10V
Maximum position feedback current	1 mA
Operating angle	95°
Operating time (for a 90° rotation)	30 s** • 60 s • 120 s
Positioning accuracy	± 3%
Maximum noise (at 1m distance)	40 dB(A)
Installation	Indoor, protected from frost *
Operational room temperature	+5°C ... +50°C
Ambient humidity	Max 95% RH, no condensation
Protection degree	IP54
Insulation degree	II - double insulation <input type="checkbox"/>
Outlet shell material	Polyamide PA 6, 30% fiberglass
Maintenance	None
Certification	CE

* not available with 12V DC power supply

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.

The actuator must be installed indoors and far from the direct sunlight.



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POWERED-ON piloting	Operating time	Code	CURRENT MODE piloting	Operating time	Code
0 - 10V 24V AC / DC	30 sec 60 sec 120 sec	SM4010F030 SM4010F060 SM4010F120	0 - 20mA 24V AC / DC	30 sec 60 sec 120 sec	SM4020T030 SM4020T060 SM4020T120
2 - 10V 24V AC / DC	30 sec 60 sec 120 sec	SM4210F030 SM4210F060 SM4210F120	4 - 20mA 24V AC / DC	30 sec 60 sec 120 sec	SM4420T030 SM4420T060 SM4420T120

Power supply 100... 240V AC replace the **4** with the **2** in the code - example SM**2**420T030

12V DC power supply replace the **4** with the **5** in the code - example SM**5**420T030

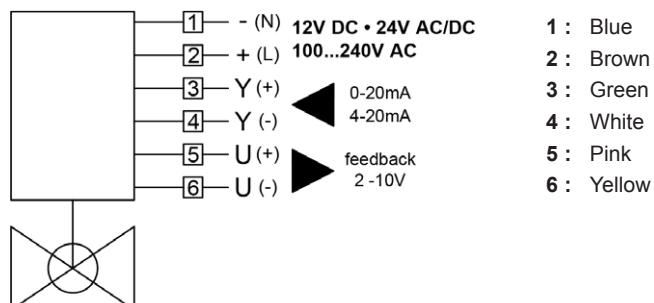
For powered-on piloting versions with double half-wave AC power supply, please contact our technical office

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ELECTRICAL CONNECTIONS

CURRENT MODE PILOTING 0-20mA / 4-20mA

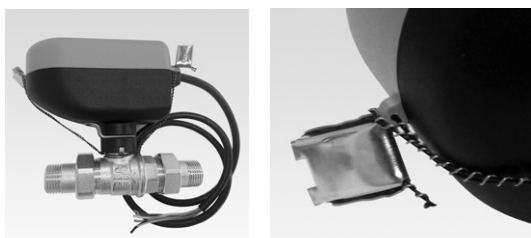


NOTES • The connection of the power cable should be made inside a branch box with at least an IP54 protection.

COUPLING SEQUENCE TO BALL VALVES WITH FAST CONNECTION



MOTOIRISED VALVE SEALING WITH LEAD

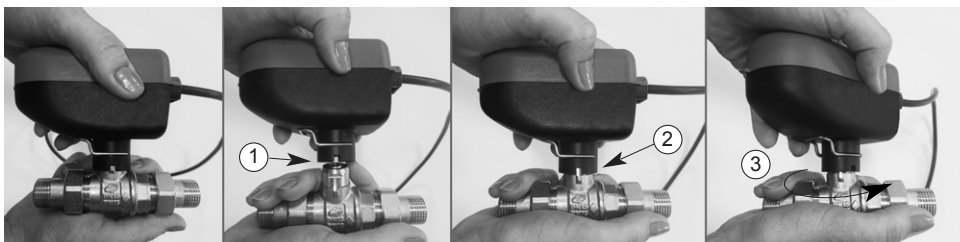


By means of special seals (not included), it is possible to seal the motorised valve with lead, in order to prevent the actuator to be removed from the ball valve.

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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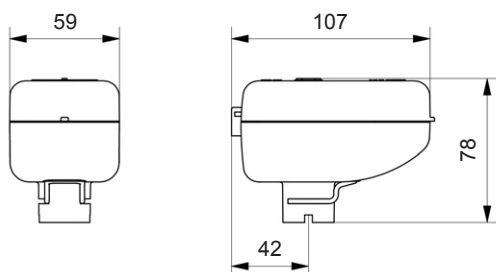
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SINTESI SMART

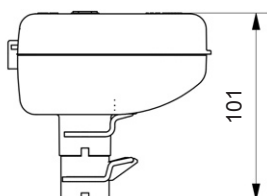
ROTARY ACTUATOR FOR BALL VALVES WITH PROPORTIONAL CONTROL

OVERALL SIZE

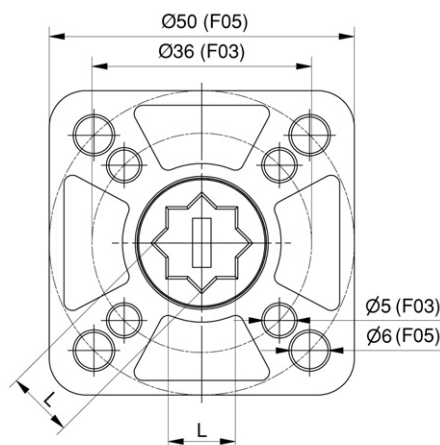
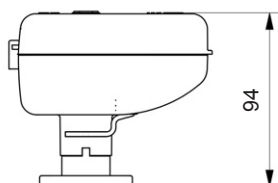
ACTUATOR



SPACER • cod. DISN04



ISO 5211 CONNECTION KIT • cod. AIST01



ISO Connection	L
F03	9
F05	11

EXAMPLE OF SPECIFICATIONS

SINTESI SMART actuator, 0-10V proportional control, 2-10V positioning feedback, maximum torque: 8 Nm, power supply: 24V AC/DC, single half-wave, operating time: 30 sec / 90°, operating angle: 90°, degree of protection: IP54, for ball valve: 2-way / 3-way / 6-way / PICV / by-pass, connection to the ball valve via **SINTESI FAST PUSH CONNECTION**.

Brand: **COMPARATO**

Code: **SM4010F030**

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17014 CAIRO MONTENOTTE (SV) ITALIA VIALE DELLA LIBERTÀ • LOCALITÀ FERRANIA • Tel. +39 019 510.371 - FAX +39 019 517.102

www.comparato.com

e-mail: info@comparato.com

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