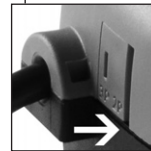


SINTESE

ROTARY ACTUATOR FOR BALL VALVES

USE

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



“ALL IN ONE” SELECTOR

The “ALL IN ONE” system allows you to select the 2-point or 3-point electrical control directly during installation, using a special selector located on the actuator.

KEY FEATURES

- position indicator
- opening auxiliary microswitch
- fast push connection with **SINTESE** ball valve range
- 2-point / 3-point / “ALL IN ONE” electrical control
- manual operation

SINTESE

TECHNICAL FEATURES	SINTESE	
Power supply	230V 50/60 Hz • 24V 50/60 Hz • 110V 50/60 Hz *	
Electric control	2-point	3-point
Operation	ON/OFF	ON/OFF • Modulating
Operating time (90°)	45 sec • 35 sec • 15 sec	35 sec • 15 sec • 120 sec
Feeder cable	Length 80 cm	
Torque	8 Nm **	
Rotation angle	90°	
Input power	3,9 VA	
Power output of the outlet phase to grey wire	1A, resistive	
Power output of the extra micro switch	1 A, resistive; 250 V	
Position indicator	Rotating arrow	
Maximum noise (at 1 m 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	
Outlet shell material	Polyamide PA 6, 30% fiberglass	
Maintenance	None	
Certification	CE	

* 110 V versions are available on request • ** in the 15 second version the torque is 5 Nm

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

Piloting	Operating time	Code
2-POINT 24V 50/60Hz	15 sec	SR2421BA
	45 sec	SR2421U
3-POINT 24V 50/60Hz	15 sec	SS2421BA
	35 sec	SS2421B
	120 sec	SS2421BC2
ALL IN ONE • 2/3 POINT 24V 50/60Hz	35 sec	SY2421B

Piloting	Operating time	Code
2-POINT 230V 50/60Hz	15 sec	SR2221BA
	45 sec	SR2221U
3-POINT 230V 50/60Hz	15 sec	SS2221BA
	35 sec	SS2221B
	120 sec	SS2221BC2
ALL IN ONE • 2/3 POINT 230V 50/60Hz	35 sec	SY2221B



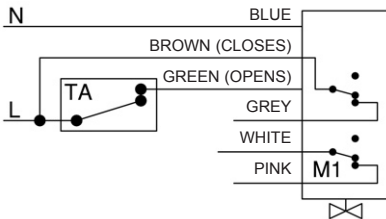
SINTESI

ROTARY ACTUATOR FOR BALL VALVES

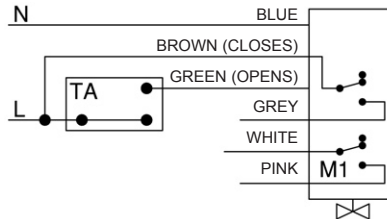
ELECTRICAL CONNECTIONS

2-POINT CONTROL - ON/OFF (SWITCH) • One electric control can activate several actuators.

OPENING POSITION



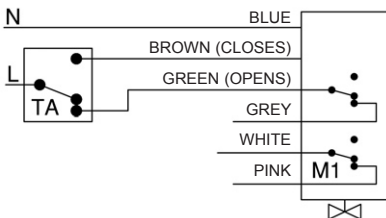
CLOSING POSITION



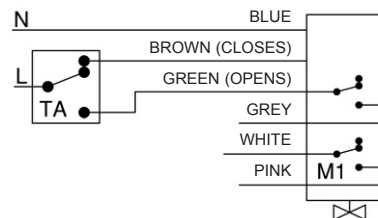
- GREY = OUTLET PHASE WITH OPEN VALVE
- TA = ROOM THERMOSTAT
- M1 = EXTRA MICROSWITCH FREE IN OPENING POSITION

3-POINT CONTROL - ON/OFF (DIVERTER) • Each actuator must be operated by a single electric control.

OPENING POSITION



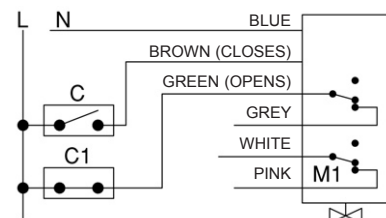
CLOSING POSITION



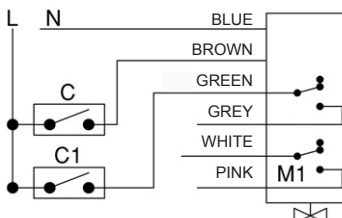
- GREY = OUTLET PHASE WITH OPEN VALVE
- TA = ROOM THERMOSTAT
- M1 = EXTRA MICROSWITCH FREE IN OPENING POSITION

3-POINT CONTROL - MODULATING • Each actuator must be operated by a single electric control.

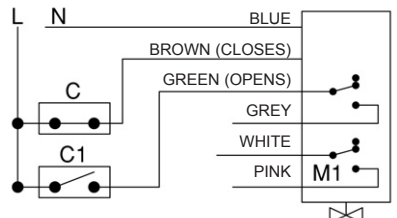
OPENING POSITION



INTERMEDIATE POSITION



CLOSING POSITION



- GREY = OUTLET PHASE WITH OPEN VALVE
- M1 = EXTRA MICROSWITCH FREE IN OPENING POSITION
- C = CLOSE CONTROL
- C1 = OPEN CONTROL

2/3-POINT "ALL IN ONE" ELECTRICAL CONTROL

The "ALL IN ONE" **SINTESI** version allows you to select the 2-point or 3-point electrical control using a special selector.



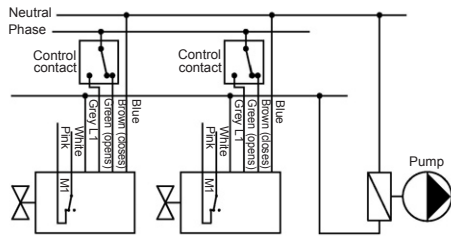
NOTE: The connection of the feeder cable should be made inside a branch box with at least an IP54 protection.



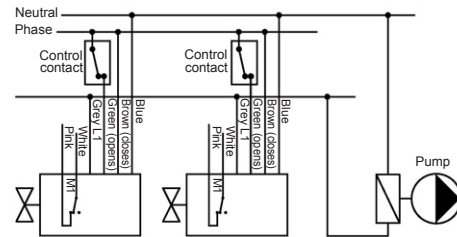
SINTESI

ROTARY ACTUATOR FOR BALL VALVES

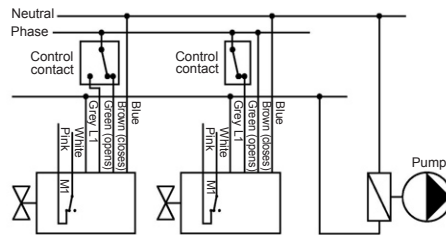
EXAMPLES OF ELECTRICAL CONNECTIONS



M1 EXTRA MICROSWITCH FREE IN OPENING POSITION
Connection of the pump stop with two 3-point actuators



M1 EXTRA MICROSWITCH FREE IN OPENING POSITION
Connection of the pump stop with two 2-point actuators

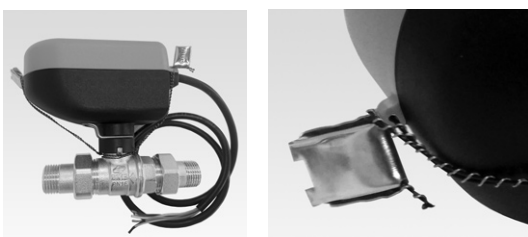


M1 EXTRA MICROSWITCH FREE IN OPENING POSITION
Connection of the pump stop with a 3-point actuator and a 2-point actuator

COUPLING SEQUENCE TO BALL VALVES WITH FAST PUSH CONNECTION



MOTOIRISED VALVE SEALING WITH LEAD

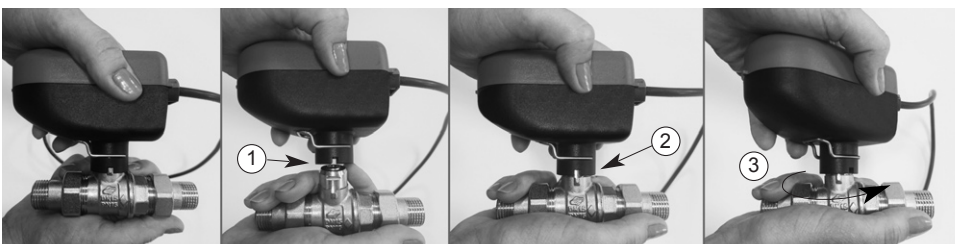


By means of special seals (not included), it is possible to seal the motorised valve with lead, in order to prevent the actuator to be removed from the ball valve.

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.

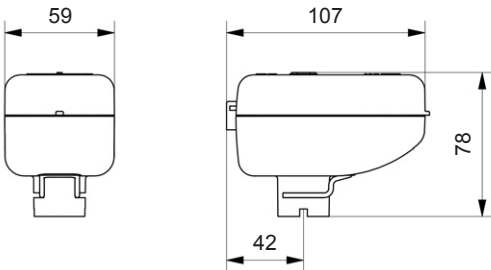


SINTESI

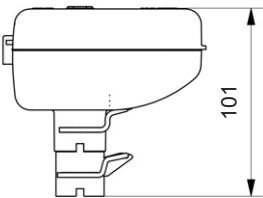
ROTARY ACTUATOR FOR BALL VALVES

OVERALL SIZE

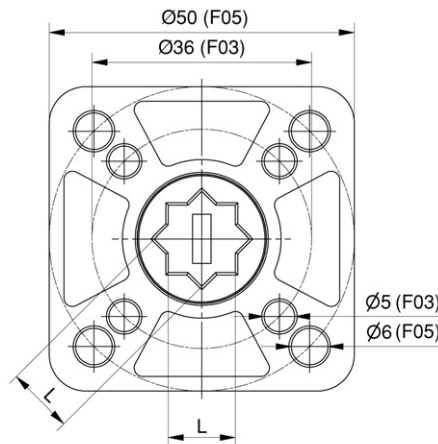
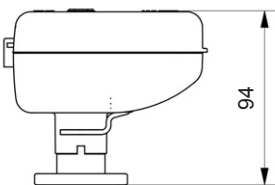
ACTUATOR



SPACER • cod. DISN04



ISO 5211 CONNECTION KIT • cod. AIST01



ISO Connection	L
F03	9
F05	11

EXAMPLE OF SPECIFICATIONS

SINTESI actuator with 2-point ON/OFF electric control, 1 additional microswitch free in opening position, torque: 8 Nm, power supply: 230V 50/60 Hz, operating time: 45 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: **SR2221U**

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