

SINTESI DC FAST

ROTARY ACTUATOR FOR BALL VALVES WITH DIRECT CURRENT SUPPLY

USE

- zone heating / cooling systems
- HVAC
- domestic water systems
- systems using alternative energy
- thermal solar systems with suitable valve body
- household automation systems



MAIN FEATURES

- DC power supply 12V and 24V
- electrical on / off control 2 points and 3 points
- fast actuation times (3 or 5 sec/90°)
- micro auxiliary switch on opening
- push-to-close coupling on **SINTESI** range ball valves
- manual operation

SINTESI
DC FAST

TECHNICAL FEATURES	SINTESI DC FAST	
Power supply	24V DC± 10%	12V DC ± 10%
Absorption at nominal torque	0.3 A	0.4 A
Maximum consumption	0.8 A	1.1 A
Functioning	ON / OFF	
Electric control	ALL IN ONE 2 / 3 Points	
Power cable	80 cm	
Electrical position feedback	Additional microswitch with clean opening contact (C-NO)	
Electrical capacity of supplementary microswitch	1 A resistive	
Angle of rotation	90°	
Operating times (90° rotation)	5 sec • 3 sec	
Nominal torque	8 Nm (5 sec) • 5 Nm (3 sec)	
Visual position indicator	Rotating arrow	
Installation	Indoor, protected from frost	
Ambient operating temperature	+5°C ...+50°C	
Ambient humidity	Max. 95% RH, no condensation	
Degree of protection	IP54	
Insulation degree	III	
Outer shell material	Polyamide PA 6, 30% fibreglass	
Maximum noise (at a 1 m distance)	60 dB (A)	
Storage and transport conditions	- 40°C... +80°C, RH max 95% - no condensation	
Required maintenance	none	
Certification	CE	

Notes and Warnings The device was 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 fields of application without prior written authorisation from the Comparato technical department.

VERSIONS

Power supply	Operating time	Code
24V DC	3 sec	SY2421DCT
	5 sec	SY2421DCC
12V DC	3 sec	SY2521DCT
	5 sec	SY2521DCC



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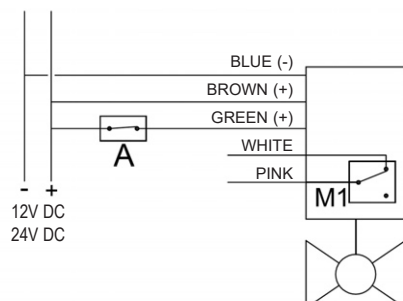
SINTESI DC FAST

ROTARY ACTUATOR FOR BALL VALVES WITH DIRECT CURRENT SUPPLY

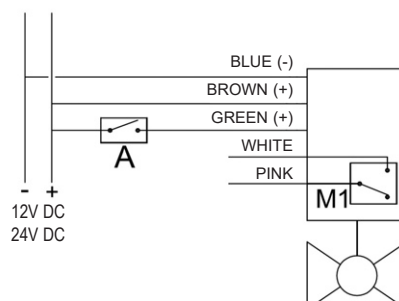
ELECTRICAL CONNECTIONS

2-POINT CONTROL - ON/OFF (SWITCH) - Several actuators can be operated by a single control

OPEN POSITION (90°)



CLOSED POSITION (0°)

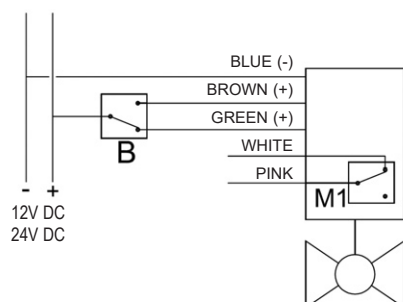


A : Switch-type control

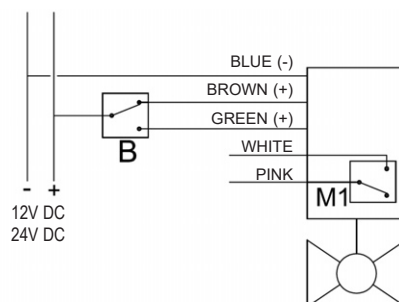
M1 : Extra microswitch free in opening position (C - NO)

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

OPEN POSITION (90°)



CLOSED POSITION (0°)



B : Diverter-type control

M1 : Extra microswitch free in opening position (C - NO)

NOTE: Do not plan to reverse the control during normal operation. If it becomes necessary to reverse the direction of rotation before the end position (0° or 90°) is reached, provide a power or control interruption (brown and green wires) of at least 1 second before applying the new control.

ELECTRICAL CONTROL CORRESPONDENCE • Visual position indicator

OPEN POSITION (90°)



CLOSED POSITION (0°)



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



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SINTESI DC FAST

ROTARY ACTUATOR FOR BALL VALVES WITH DIRECT CURRENT SUPPLY

COUPLING SEQUENCE TO BALL VALVES WITH FAST PUSH CONNECTION



MOTORISED VALVE SEALING WITH LEAD

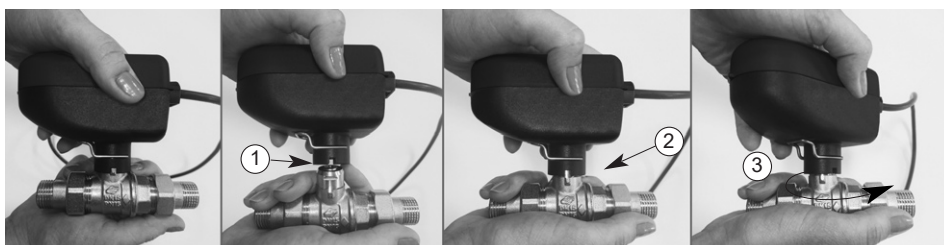


By means of special seals (not included), it is possible to seal the motorised valve with lead, in order to prevent the actuator to be removed from the ball valve.

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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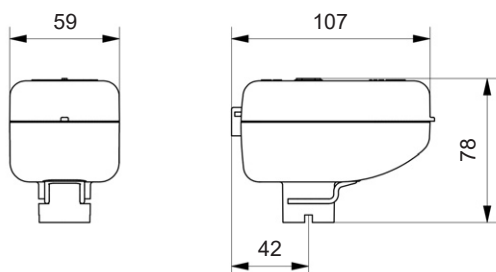
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SINTESI DC FAST

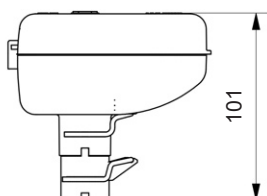
ROTARY ACTUATOR FOR BALL VALVES WITH DIRECT CURRENT SUPPLY

OVERALL SIZE

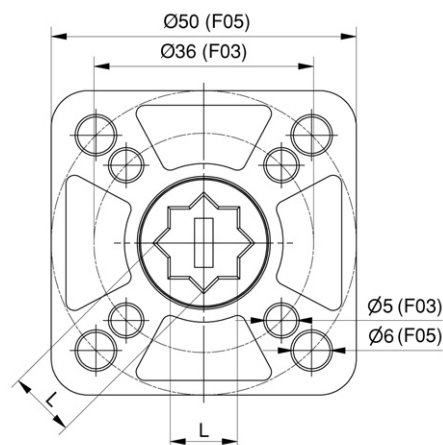
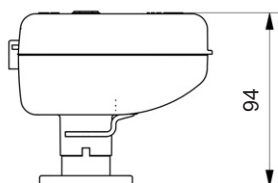
ACTUATOR



SPACER • code DISN04



ISO 5211 CONNECTION KIT • code AIST01



ISO Connection	L
F03	9 *
F05	11

* : with supplied reduction

EXAMPLE OF SPECIFICATIONS

SINTESI DC FAST actuator electric ALL IN ONE 2/3 points ON/OFF, 1 additional micro free in opening, torque: 8 Nm, power supply: 24V DC \pm 10%, operating time: 5 sec / 90°, operating angle: 90°, degree of protection: IP54, for ball valve: 2 - 3-way / 6-way / by-pass, connection to the ball valve via Sintesi fast push connection.

Brand: **COMPARATO**

Code: **SY2421DCC**



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SINTESI DC

ROTARY ACTUATOR FOR BALL VALVES WITH DIRECT CURRENT SUPPLY

USE

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

MAIN 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° rotation)	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

* 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 12V DC	60 sec 120 sec	SDC52T060 SDC52T120
0° - 45° - 90° 12V DC	60 sec 120 sec	SDC53T060 SDC53T120

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



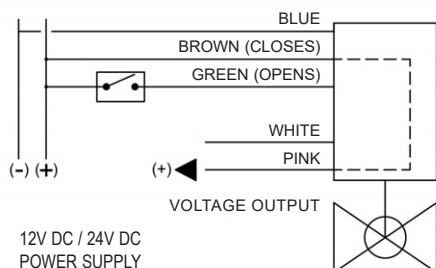
SINTESI DC

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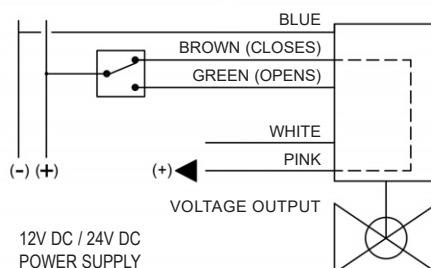
ELECTRICAL CONNECTIONS

2-POINT / 3-POINT VERSION

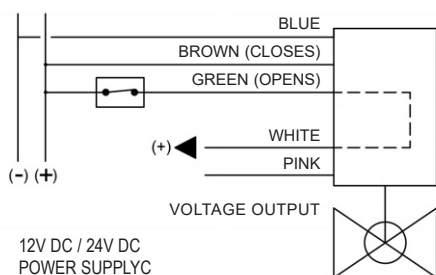
2-POINT - CLOSING POSITION (0°)



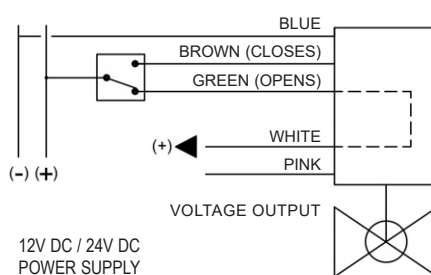
3-POINT - CLOSING POSITION (0°)



2-POINT - OPENING POSITION (90°)



3-POINT - OPENING POSITION (90°)



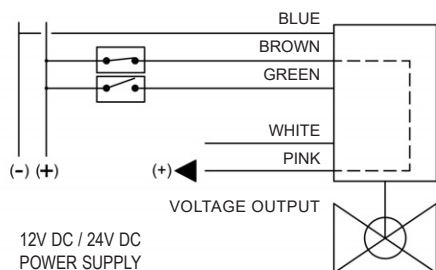
**CLOSING
POSITION (0°)**



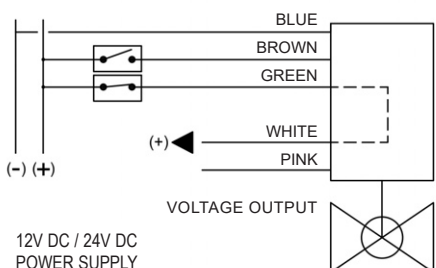
**OPENING
POSITION (90°)**

0° - 45° - 90° VERSION

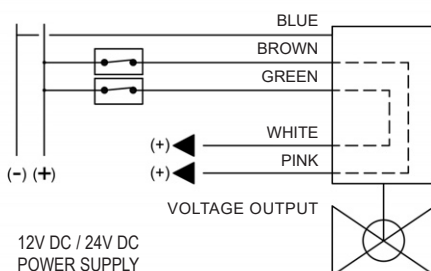
CLOSING POSITION (0°)



OPENING POSITION (90°)



INTERMEDIATE POSITION (45°)



**INTERMEDIATE
POSITION (45°)**

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



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SINTESI DC

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COUPLING SEQUENCE TO BALL VALVES WITH FAST PUSH CONNECTION



MOTORISED VALVE SEALING WITH LEAD

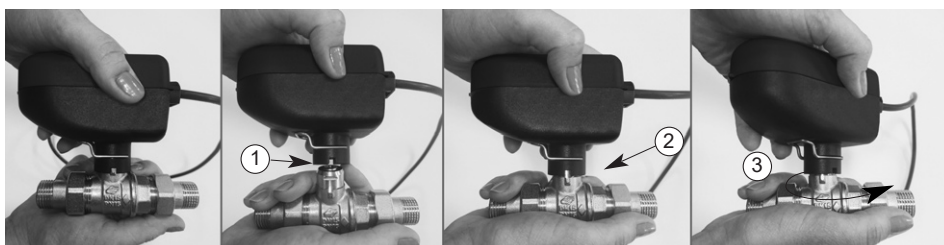


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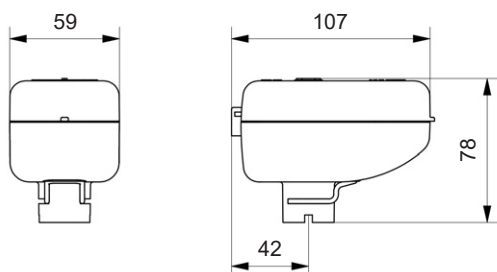
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SINTESI DC

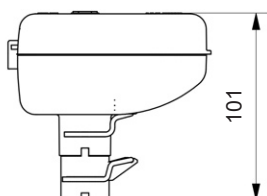
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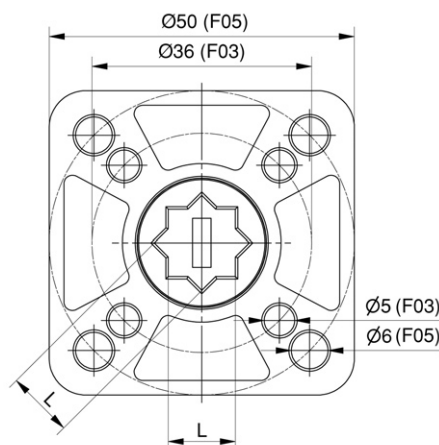
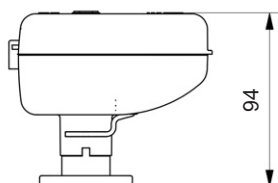
ACTUATOR



SPACER • code DISN04



ISO 5211 CONNECTION KIT • code 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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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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