

Motorised Brass Ball Valves

Full bore nickel plated brass ball valve mounted onto a COMPARATO SINTESI electric actuator. Designed for use on domestic heating and water control systems.



The SINTESI actuator is available in the following versions.

Uni/Bidirectional: Actuator rotates bi-directionally through 90°.

The patented design enables a unidirectional motor to achieve bi-directional operation.

Bi-directional: Actuator rotates bi-directionally through 90° using the twin motor design. This unit is also suitable for modulating duty.

Both versions are available in:

3-Point wiring: Without relay

2-Point wiring: With relay

Quick guide to the SINTESI Range

Brass Ball Valves

Sizes: 1/2", 3/4" & 1"

Connections: BSP

2 Way Male-Male

2 Way Male-Female

3 Way Male-Male-Male

By-Pass Male x Four

2 Way 90° Male - Female

Actuators

Motors: Unidirectional or Bidirectional

Voltages: 230V & 24V 50Hz

Operating torque/speed

8 Nm  90° 45 sec

5 Nm  90° 10 sec

Power Consumption:

3.8 VA (230V 50Hz)

5.2 VA (24V 50Hz)

Auxiliary Micro Switch:

1A, Resistive

Ingress Protection: IP54

Ambient Temperature:

-10°C to 50°C max



2 Way



3 Way



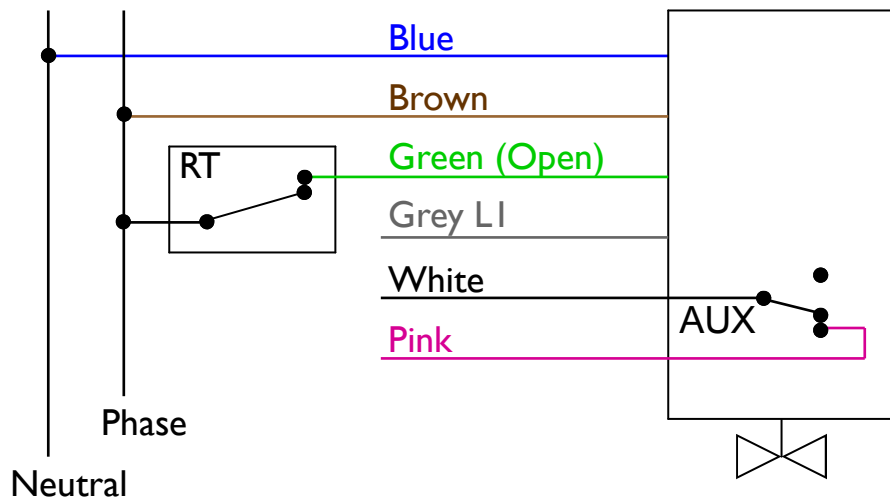
By-Pass



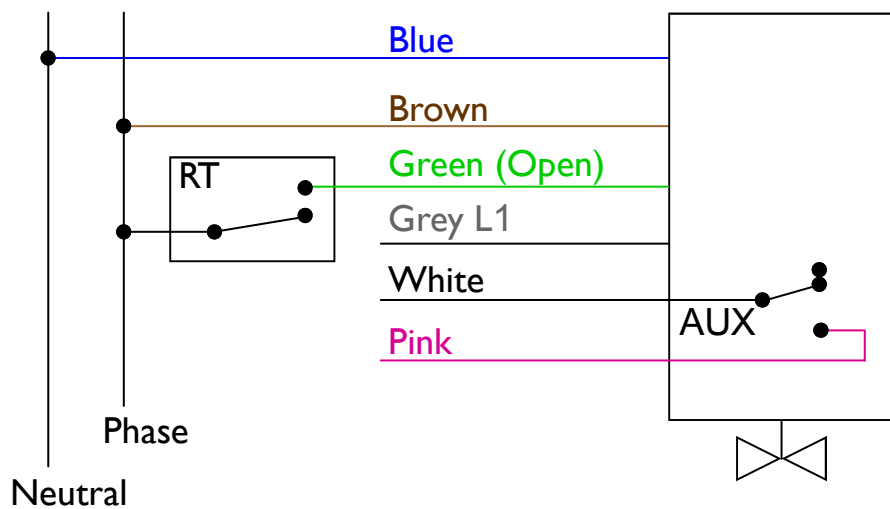
2 Way 90°

ACTUATOR WITH RELAY— 2 POINT WIRING

OPEN



CLOSED

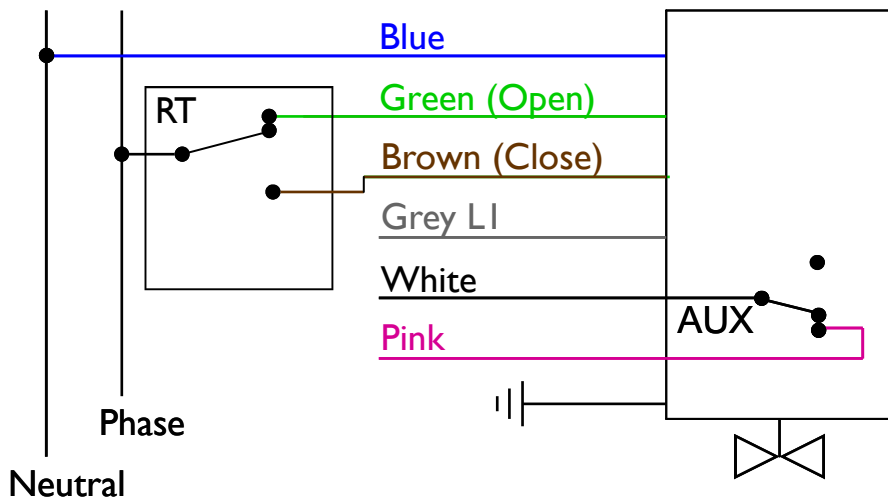


RT = Room Thermostat

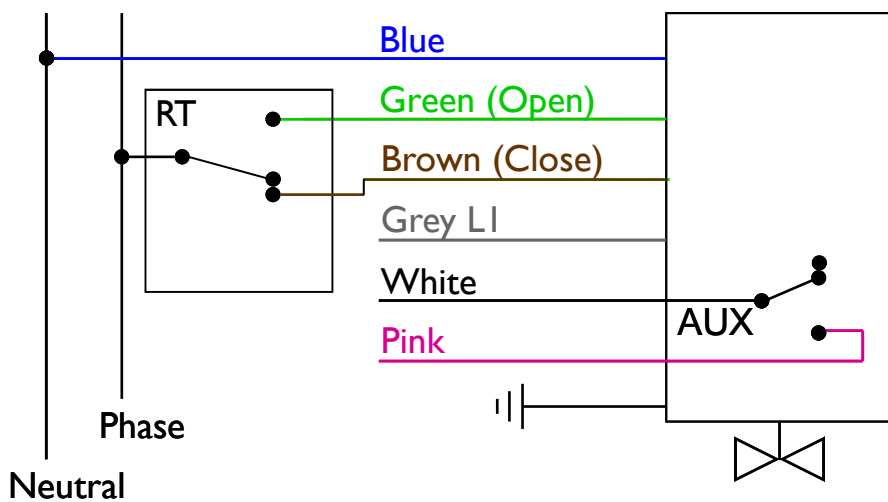
AUX = Auxiliary Micro Switch

ACTUATOR WITHOUT RELAY— 3 POINT WIRING

OPEN

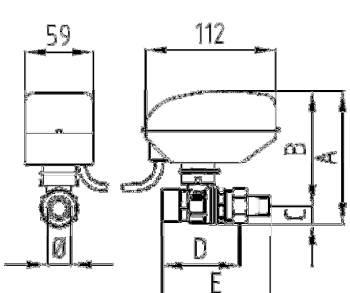
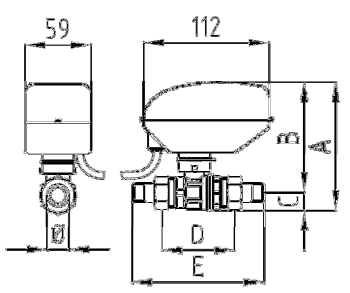
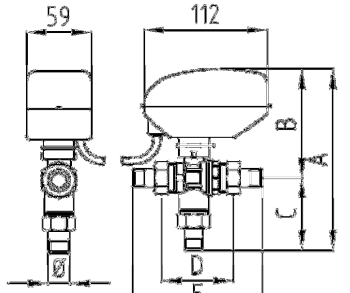
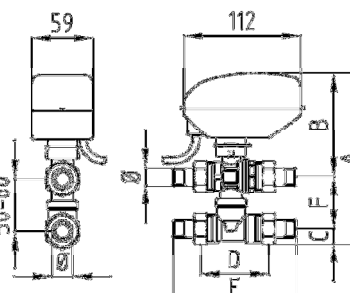
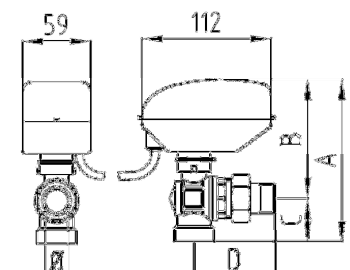


CLOSED



RT = Room Thermostat

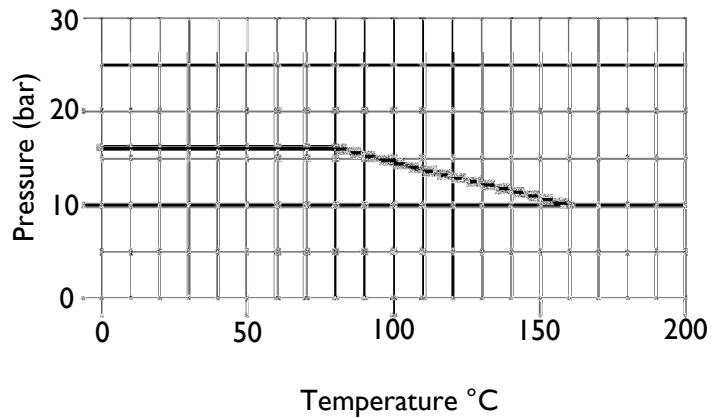
AUX = Auxiliary Micro Switch

MODEL		DN	Ø	A	B	C	D	E	F
 <p>2 WAY Male/Female</p>	15	1/2"	115	99	17	67	93		
	20	3/4"	122	103	19	70	100		
	25	1"	130	106	24	78	112		
 <p>2 WAY Male/Male 2 WAY Male/Male with Regulating Disc</p>	15	1/2"	115	99	17	64	118		
	20	3/4"	122	103	19	67	128		
	25	1"	130	106	24	77	147		
 <p>3 WAY Vertical 3 Port Ball</p>	15	1/2"	164	99	66	64	118		
	20	3/4"	173	103	71	67	128		
	25	1"	207	106	78	77	147		
 <p>BY-PASS</p>	15	1/2"	165 175	99	17	64	118	50	
	20	3/4"	172 182	103	67	67	128	50	
	25	1"	185 190	106	77	77	147	55	
 <p>2 WAY 90°</p>	20	3/4"	141	103	38	70			

TECHNICAL INFORMATION

MODEL	Ø	Kv
2 Way	1/2"	13
	3/4"	17
	1"	32
2 Way with Regulating Disc	1/2"	2
	1/2"	4
2 Way 90°	3/4"	7.9
	1/2"	4.9
3 Way	3/4"	7.3
	1"	16
	1/2"	0.8
By-pass	3/4"	1.9
	1"	2.9

Pressure v Temperature



Kv = m³/hr at 1bar pressure differential

Flow at different pressures can be calculated by multiplying the Kv value by the square root of the pressure differential.

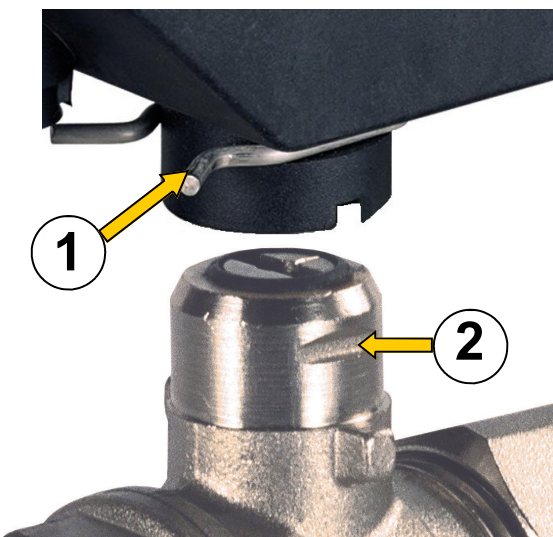
Model	PRESSURES		TEMPERATURE	
	Nominal	Differential	Minimum	Maximum
2 Way	16 bar	16 bar	+ 7°C	+ 100°C
2Way 90°	16 bar	16 bar	+ 7°C	+ 100°C
3 Way	16 bar	16 bar	+ 7°C	+ 100°C
By-pass	16 bar	16 bar	+ 7°C	+ 100°C

MEDIA: Water and fluids compatible with EPDM® and TEFLON®

ACTUATOR—VALVE ASSEMBLY INSTRUCTIONS



Rotate the actuator and ensure the rectangular shaft of the actuator aligns with the groove on the body of the valve. Press the actuator on to the body of the valve until the coupling engages.



COUPLING

1. Coupling Spring
2. Coupling Spring Seat

The 'Coupling Spring' is an integral component of the actuator and **MUST NOT BE REMOVED**