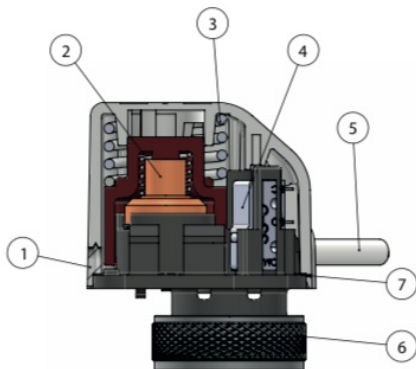
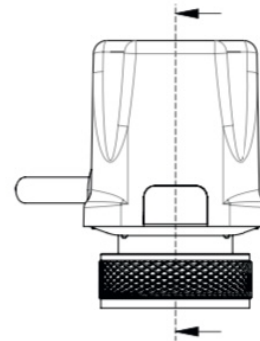


22CX



Features

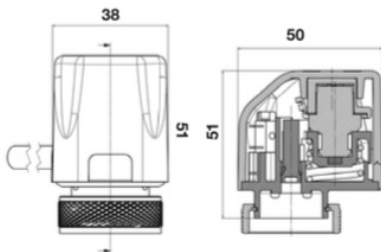
1. Transparent zone
2. Wax thermostatic element
3. Opposing spring
4. Electrical microswitch (4 wire)
5. Electrical wiring
6. Ring Nut M30x1,5
7. O-Ring



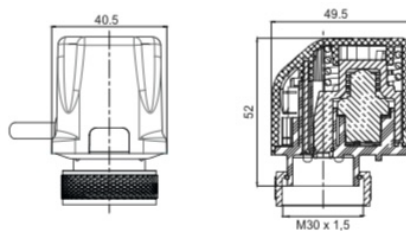
Normally closed

Overall dimensions (mm)

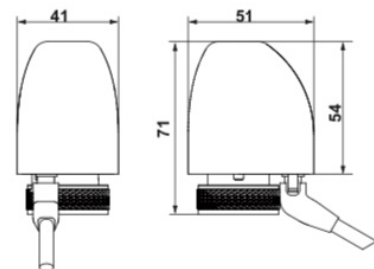
22C



22CX-22CX5



26LC



Specification text

22C Series

Electrothermal actuator **22C Series** WATTS brand ON/OFF action, compatible with radiator valves, fan coil valves and manifolds. Hood in self-extinguishing polymeric material. Nickel-plated brass nut M30 x 1.5. Version NC or NO. Version with 230Vac or 24Vac/dc with 2 or 4 wires with auxiliary micro-switch. Stroke: 3.5 mm. Degree of protection IP44 in vertical position. Compliant with LVD 2014/35/UE, EMC 2014/30/UE. Approved TÜV.

22CX Series

Electrothermal actuator **22CX Series** WATTS brand ON/OFF action, compatible with radiator valves, fan coil valves and manifolds. Hood in self-extinguishing polymeric material. Nickel-plated brass nut M30 x 1.5. Version NC or NO. Version with 230Vac or 24Vac/dc with 2 or 4 wires with auxiliary micro-switch. Stroke: 3.5 mm. Degree of protection IP54. Compliant with LVD 2014/35/UE, EMC 2014/30/UE. Approved TÜV.

22CX5 Series

Electrothermal actuator **22CX5 Series** WATTS brand ON/OFF action, compatible with radiator valves, fan coil valves and manifolds. Hood in self-extinguishing polymeric material. Nickel-plated brass nut M30 x 1.5. Version NC. Version with 230Vac or 24Vac/dc with 2 or 4 wires with auxiliary micro-switch. Stroke: 5 mm. Degree of protection IP54. Compliant with LVD 2014/35/UE, EMC 2014/30/UE. Approved TÜV.

26LC Series

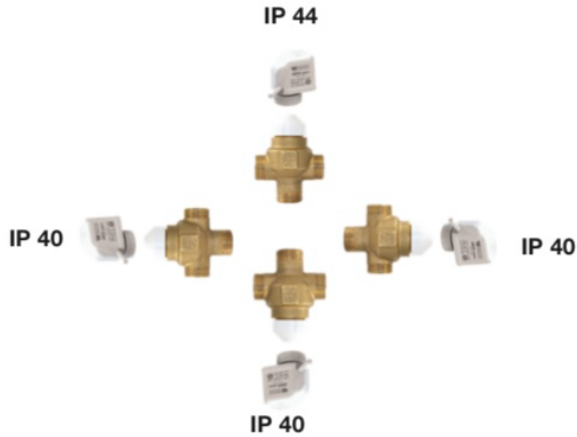
Electrothermal actuator **26LC WATTS Series** WATTS brand ON/OFF action, compatible with radiator valves, fan coil valves and manifolds. Hood in self-extinguishing polymeric material. Nickel-plated brass nut M30 x 1.5. NC Version. Version 230 Vac or 24 Vac with 2 or 4 wire with an auxiliary microswitch. Stroke: 3.5 mm. Cable with anti-jamming system. Visual inspection of LED operating status. Degree of protection IP64. Compliant with LVD 2014/35/UE, EMC 2014/30/UE. Approved TÜV.

Maintenance

Do not remove the cable. Opening the **22C, 22CX, 22CX5, 26LC Series** actuator will cause irreparable damage to the device. Faulty actuators must be replaced as complete sets.

Warning 22C Series.

The actuator has an degree of protection IP44 in vertical position.



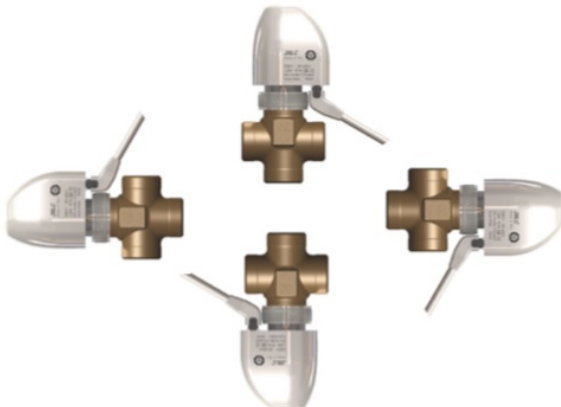
Warning 22CX, 22CX5 Series.

IP54 is installed in any position respect to the valve body.



Warning 26LC Series.

Protection class IP64 allows to install the 26LC in any position respect to the valve body.

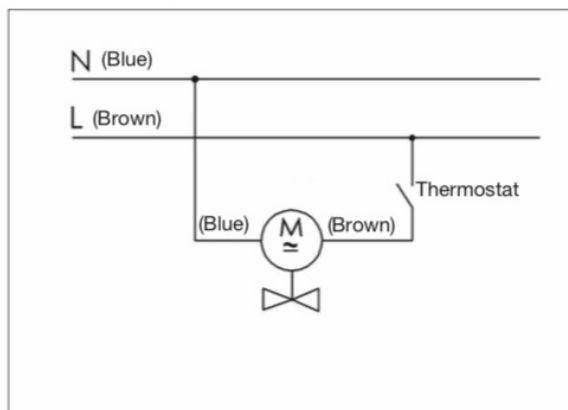


The removable cable allows easy mounting, maintenance and replacing. Pull the connector pressing the safety latch to take it out from the socket.

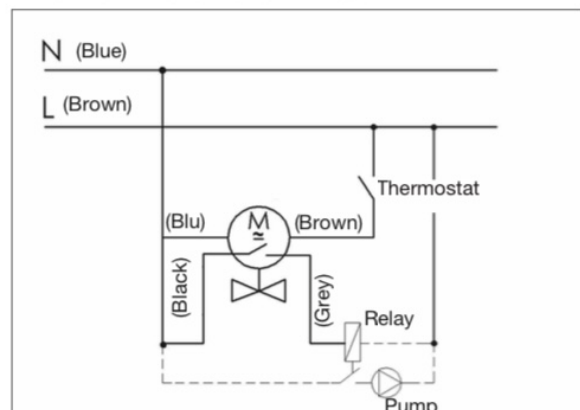


Electrical wire connections

22C-22CX-22CX5-26LC 2-wires



22C-22CX-22CX5-26LC 4-wires



Application

The electrothermic actuators **22C, 22CX, 22CX5, 26LC Series** are used for ON/OFF control of the heat emission of terminal control units in heating and air conditioning systems, through an electric signal transmitted by a thermostat.

The use of electrothermic actuators instead of pure thermostatic actuators allows remote control. The room thermostat or control component controlling the system can be positioned in the most suitable point of each room to provide regulation and wired back to the electrothermic control head.

Operation

Operation of the electrothermic actuators **22C, 22CX, 22CX5, 26LC Series** is powered by on a wax thermostatic element assembled into in the actuators and activated by a PTC thermistor against a signal sent by a room thermostat or timing thermostat.

When the thermostatic element expands, it supplies the thrust required for the movement of the valve. The 4-wire version is provided with an auxiliary contact for additional features (metering, control of pump, fan or other equipment). The actuator has a transparent zone that allows for checking the status of the actuator (only for **22C, 22CX** and **22CX5 Series**)

Red = valve closed - **Black** = valve open.

About the 26LC Series, for using with devices that have an electrical consumption higher than microswitch limits, use an additional relay. Two LEDs (visible only when lighted) are positioned on top of the actuator: the green LED shows the power supply presence and the blue LED shows when the valve is open.

Installation

Electrothermic actuators **22C, 22CX, 22CX5, 26LC Series** can be selected according to the type of system, installation space and power supply. In systems with 2-way control valves fitted with electrothermic actuators it is advisable to install by-pass valves in (**466 Series** or **USVR Series**) to ensure a minimum recirculation of the mean.

Mounting

To install the actuators follow these steps:

1. remove the protective cap, if present, or handwheel from the valve (or manifold outlet)
2. screw-in the actuator ring nut by hand on the threaded part of the valve body and lock it
3. connect the wires to the power supply
4. insert the plug in the actuator connector (only for **26LC Series**)

Technical features				
	22C	22CX	22CX5	26LC
Action	ON/OFF	ON/OFF	ON/OFF	ON/OFF
Type of movement	Linear	Linear	Linear	Linear
Power supply	230 V a.c. 24 V a.c./d.c. (+10%÷-15%)	230 V a.c. 24 V a.c./d.c. (+10%÷-15%)	230 V a.c. 24 V a.c./d.c. (+10%÷-15%)	24-230 V a.c. (+10%÷-15%)
Frequency	50 ÷ 60 Hz	50 ÷ 60 Hz	50 ÷ 60 Hz	50 ÷ 60 Hz
Power consumption (continuous duty)	1,8 W (230V) 1,6 W (24V)	1,8 W (230V) 1,6 W (24V)	1,8 W (230V-24V)	1,8 W (230V) 1,6 W (24V)
Initial opening time (NC) or closing time (NO) (230V) (Power on) 230V.	75 s.	75 s.	70 s.	75 s.
Final opening time (NC) or closing time (NO) (Power on) 230V.	3 min.	3 min.	5 min.	3 min.
Initial opening time (NC) or closing time (NO) (Power on) 24V.	3 min.	3 min.	95 s.	3 min.
Final opening time (NC) or closing time (NO) (Power on) 24V.	5 min.	5 min.	6 min.	5 min.
Actuator stroke	max 3,5mm	max 3,5mm	max 5mm	max 3,5mm
Auxiliary microswitch not energized (4-pole model)	max 700 (3A) mA - 250 V a.c.	max 700 (3A) mA - 250 V a.c.	max 700 (3A) mA - 250 V a.c.	max 700 (3A) mA - 250 V a.c.
Protection class	IP44 to EN60529	IP54 to EN60529	IP54 to EN60529	IP64 to EN60529
Electrical Protection class	Class II	Class II	Class II	Class II
Pollution rating	Grade 2	Grade 2	Grade 2	Grade 2
Nominal closing force (power OFF)	110 N (±10%) (NC) 80N (±10%) (NO)	110 N (±10%) (NC) 80N (±10%) (NO)	110 N (±10%) (NC)	110 N (±10%) (NC)
Operating temperature range	0÷50°C	0÷50°C	0÷50°C	0÷50°C
Storage temperature limit	-25÷60°C	-25÷60°C	-25÷60°C	-25÷60°C
Fluid temperature limit	110°C	110°C	110°C	110°C
Plastic cover	Polyamide +30F.V. flame retardant RAL 9016	Polyamide +30F.V. flame retardant RAL 9016	Polyamide +30F.V. flame retardant RAL 9016	ABS V0 flame retardant RAL 9016
Electrical cable	2-pole x 0,75mm ² 1m length* 4-pole x 0,75 mm ² 1 m length*	2-pole x 0,5mm ² 1m length*4-pole x 0,5 mm ² 1 m length*	2-pole x 0,5mm ² 1m length*4-pole x 0,5 mm ² 1 m length*	2-pole x 0,5mm ² 1m length*4-pole x 0,5 mm ² 1 m length*
Valve connection	Threaded ring nut M30x1,5	Threaded ring nut M30x1,5	Threaded ring nut M30x1,5	Threaded ring nut M30x1,5

* Special cable length on request

Reliability of the electrothermic actuators **22C**, **22CX**, **22CX5** and **26LC Series** is guaranteed due to 100% testing of the production.