Actuators 1990 — to current day

What is an actuator?

An actuator is an electronic valve control (solenoid) to open or close the flow through a valve. They take a signal from a room thermostat via a control box to effectively switch on the heating in a particular area. If multiple circuits of pipe are in a larger room then they will open and close together from the signal from one thermostat.

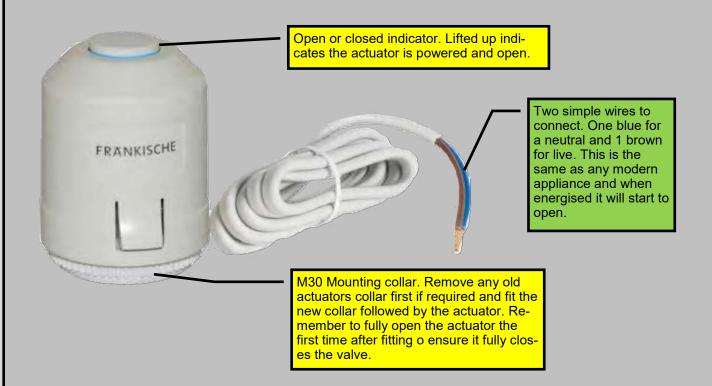
They are as standard from Robbens 230v and normally closed (NC). They are without power closed and the flow through the valve they are fitted to will be stopped. The actuators are supplied these days in a half open state to help make them easier to take on and off during installation. This means once they are fitted they must be fully powered open before they fully close and stop the flow through the valve.

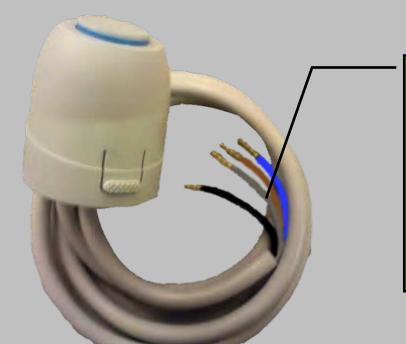
They can come two distinct types for use in different situations. The two wire version and the four wire version. The two wire version is to purely to power up and open the actuator and the four wire version is for situations where a volt free or 230v switch is required to fire a boiler or heat source.

Since Robbens began over 25 years ago 99% of all the actuators we have ever supplied have been 230v, normally closed and the same M30 thread connector. Some actuators, including the current ones have a valve mounting collar that the actuator then clips on to. Older types have a loose silver collar at the base that needs to unscrew t remove the actuator. But please remember all our actuators fit the same M30 thread that we have always used. If you are having trouble fitting a new one that differs from what you had before you must check you have removed the previous models fixing collar and not just the head first.

From about the year 2000 and the introduction of the Robbens system controller all multizone manifolds would have been supplied with two wire actuators and all single zone manifolds would have been supplied with a single four wire actuator. Before that point manifolds were supplied with a mix of two and four wire models. It is essential that you clarify your self what you have on your system with any system not supplied before the year 2000 with out a Robbens system controller.

The Two Wire Actuator:





Four easy to connect wires. One blue for a neutral and 1 brown for live. This is the same as any modern appliance and when energised it will start to open.

The final two wires are either side of a switch (relay). In this case the actuator has a black and grey. The grey would go to a permeant live and the black will become a switch 230v live to fire your heat source. These colours change regularly from the manufacturers and we have seen two black, two greens and black and red over the years. Ultimately the colour of these switch wires doesn't matter as they can be wired either way round and still work without problems.

You must however never mix the brown and blue up as they will always remain the live and neutral to operate the actuator.