Wireless tubular motor

FRM60M10

> **Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock!**

> Temperature at mounting location: -20°C up to +60°C.
> Storage temperature: -25°C up to +70°C.
> Relative humidity: annual average value <75%.

Wireless tubular motor 230V/115W for steel shafts SW60, torque 10Nm, speed 14/min, with adapter set, bearing and whisper mode. The wireless tubular motor has a total length of 466mm. The motor is fitted with blind protection and a noiseless soft brake.

- Smart force measurement
- Blind protection up/down and free travel (torque shut-off)
- Adjustable release
- End positions can be adjusted through the assembly cable
- Noiseless soft brake
- Protection class IP44

The convenient tap technology permits the teach-in of up to 32 wireless universal pushbuttons, wireless direction pushbuttons, wireless central control pushbuttons and wireless window/door contacts.

Bidirectional wireless switchable.

Repeater function (1- or 2-level) activatable.

Wireless pushbuttons can be taught in with either the functions 'Up-Stop-Down-Stop' as universal pushbuttons as well as a wireless pushbutton as direction pushbutton with press top for 'Up' and bottom for 'Down'. Press briefly to stop the movement.

A universal pushbutton or direction pushbutton starts **'Slow travel'.** Press and hold the wireless pushbutton (>2 seconds).

When controlled via the Smart Home control unit (Safe 5, MiniSafe, Wibutler, Mediola …), use the 'Up' and 'Down' travel commands and specify an exact position. Since the wireless tubular motor signals its exact position after each travel, even when travel is triggered by wireless pushbutton, the position is always displayed correctly in the central control unit. When the top and bottom end positions are reached, the position is synchronised automatically.

If a **wireless window/door contact** is taught-in, a lockout protection is set up if the window or door is open, which prevents central down and down commands from the smart home control unit.

Start-up:
Make sure that you install and connect the device properly as described in the **elero** operating instructions.

It is vital to adjust the top and bottom end positions using the **elero** installation cable (not part of the scope of supply); see the elero operating instructions.

Attention! After setting the end positions, the connection for radio operation must be changed:
1. Connect the cable wires up **and** down (black and brown) together to phase L (outer conductor).
2. Switch on the supply voltage.
   The motor hums and drives up and down.
The motor is in radio mode.

Start asynchronous teach-in mode:
After switching on the power supply, tap an unknown wireless pushbutton briefly twice (>1 second) and once long (<2 seconds) within 5 minutes.

All connected wireless tubular motors start asynchronous travel.

Select a wireless tubular motor for teach-in:

Immediately after the start of travel (Up or Down), tap an unknown wireless pushbutton twice briefly (double-click). Travel is interrupted briefly for confirmation and is then continued to the end. The wireless pushbutton is flagged for teach-in.

Immediately after start of travel in the opposite direction, tap the opposite pushbutton on the same wireless pushbutton twice briefly (double-click). The wireless pushbutton was taught in as a direction pushbutton and asynchronous travel of this wireless tubular motor ends immediately.

A double-click at any other (invalid) time deletes the flag.

All other wireless tubular motors continue asynchronous travel.

Now you can select the next wireless tubular motor for teach-in.

If you press any already known wireless pushbutton, the asynchronous teach-in mode ends immediately.

The asynchronous teach-in mode ends automatically after 4 minutes.

Activate teach-in mode (unlock):
Tap a wireless pushbutton which is already taught in (not the central control pushbutton) briefly 4 times and once long (<2 seconds).

Teach-in standby is indicated by a short 'Down, Stop' signal.

End teach-in mode (lock):
Tap a wireless pushbutton which is already taught in (not the central unit control pushbutton) briefly 3 times and once long (<2 seconds).

Locking is indicated by two 'Down, Stop' signals.

Teach in Smart Home central unit directly:
If no universal pushbutton or direction pushbutton is taught in to the wireless tubular motor, the motor sends an MSC telegram containing its ID immediately after the power supply is switched on.

You can then teach in a Smart Home central unit **directly.**

When you teach in a Smart Home central unit, the wireless tubular motor sends a confirmation telegram.

Otherwise, nothing can be taught in.

Teach in sensors:
1. Activate teach-in mode.
Universal pushbutton: tap briefly 3 times;
Direction pushbutton: tap briefly 4 times; Top 'Up' and bottom 'Down' direction pushbuttons and 'Stop' in each case;
Direction pushbuttons are completely taught in automatically by pressing top or bottom.
Central control pushbutton Up: tap briefly 5 times;
Central control pushbutton Down: tap briefly 6 times;
Window contact FTK, FTKB: (EEP: D5-00-01) and FTKE: Briefly close and open window 4 times;
(close -> open -> close -> open -> close -> open -> close -> open window)
Wireless window handle sensor FFG7B: (EEP: A5-14-09)
Wireless window/door contact FTKB-hg: (EEP: A5-14-0A)
Smart Home central unit: (EEP: A5-3F-7F)
When the central control unit is taught in, confirmation telegrams are enabled and sent automatically. Teach-in mode is then locked automatically.

After a sensor is taught in, it is confirmed by a brief 'Down, Stop' signal; teach-in mode remains active for a further 2 minutes.

To prevent unintentional teach-in, the teach-in mode is automatically blocked 2 minutes after the last teach-in, if an universal pushbutton, direction pushbutton or a Smart Home control unit is already taught-in. This is indicated by two short 'Down, Stop' signals.

You can teach in unencrypted and encrypted sensors.

Teach in encrypted sensors (max. 16 devices):
1. Activate teach-in mode if required.
2. Activate sensor encryption within 2 minutes.
3. Then teach in the encrypted sensor as described in 'Teach in sensors'.

With encrypted sensors, use the 'rolling code', i.e. the code changes in each telegram, both in the transmitter and in the receiver.

If a sensor sends more than 50 telegrams when the actuator is not enabled, the sensor is no longer recognised by the enabled actuator and you must repeat teach-in as 'encrypted sensor'. It is not necessary to repeat the function teach-in.

Completely erase memory content (restore as-delivered state):
1. Switch the power supply on and off.
2. Tap a wireless pushbutton which is already taught in (not the central control pushbutton) briefly 8 times and once long (<2 seconds).
   Erase is indicated by a short 'Down, Stop' signal.

Clear single wireless pushbuttons
1. Activate teach-in mode.
2. Tap 3 times briefly (<1 second) in succession then press long (>2 seconds, <5 seconds).

Clear is indicated by two brief 'Down, Stop' signals.

Provided a universal pushbutton, direction pushbutton or Smart Home control unit is already taught in, teach-in mode ends immediately.

Otherwise, teach-in mode ends after a time of maximum 2 minutes.

Clear single wireless window/door contacts
1. Activate teach-in mode.
2. Close the window 3 times briefly (<2 seconds) in succession then close long (>4 seconds, <7 seconds).

Clear is indicated by two short 'Down, Stop' signals.

Provided a universal pushbutton, direction pushbutton or Smart Home control unit is already taught in, teach-in mode ends immediately.

Otherwise, teach-in mode ends after a time of maximum 2 minutes.

Enable/disable confirmation telegrams:
1. Switch the power supply on and off.
2. Tap a wireless pushbutton which is already taught in (not the central control pushbutton) briefly 7 times and once long (<2 seconds). On is indicated by two short 'Down, Stop' signals.

   Off is indicated by one short 'Down, Stop' signal.

The repeater function is only required if the structural conditions provide uninterrupted reception or the distance between the wireless pushbutton and the receiver is too far.

If 1-Level mode is active, sensors only receive and check wireless signals and then retransmit them at full transmit power. Wireless signals from other repeaters are ignored to reduce the data volume.

If 2-Level mode is active, wireless signals of 1-level repeaters are processed in addition to the wireless signals of sensors. A wireless signal can then be received and amplified a maximum of two times.

Switch on repeater:
1. Activate teach-in mode or switch the power supply off/on.
2. **1-Level mode;** within 30 seconds, tap an already taught-in wireless push-button (not a central control pushbutton) 6 times briefly and twice long (>2 seconds).

   'Level 1' is indicated by 2 short 'Down, Stop' signals.

   2-Level mode; within 30 seconds, tap an already taught-in wireless push-button (not a central control pushbutton) 6 times briefly and 3 times long (>2 seconds).

   'Level 2' is indicated by 3 short 'Down, Stop' signals.

Switch off repeater:
1. Activate teach-in mode or switch the power supply off/on.
2. Within 30 seconds, tap a wireless pushbutton which is already taught in (not the central control pushbutton) briefly 6 times and once long (<2 seconds).

   'Repeater off' is indicated by a short 'Down, Stop' signal.

Show repeater status:
1. Teach-in mode may not be active; if necessary, lock teach-in mode.
2. Tap a wireless pushbutton which is already taught in (not the central control pushbutton) briefly 6 times and once long (<2 seconds).
- 'Repeater off' is indicated by a short 'Down, Stop' signal.
- 'Level 1' is indicated by 2 short 'Down, Stop' signals.
- 'Level 2' is indicated by 3 short 'Down, Stop' signals.

EnOcean wireless

Frequency	868.3 MHz
Transmit power	max. 10 mW

Hereby, Eltako GmbH declares that the radio equipment type FRM60M10 is in compliance with Directive 2014/53/EU.
The full text of the EU declaration of conformity is available at the following internet address: eltako.com

Must be kept for later use!