![BREL-motors - Automation for curtains, blinds and awnings]

BREL motors is part of:

BREL nederland b.v.

Manual Brel 22 mm 5V electronic radio motor with pullcord

Type MLE22

Read the manual before you begin the installation. If these instructions are not followed, this may lead to defects and injury in which warranty can't be claimed.

warning:

Children cannot recognize the dangers of electrical equipment and may therefore not work with it.
It is important to follow this instruction for your own safety.

1. Do not operate the motor in humid surroundings.
2. The motor must be installed correctly.
3. Keep the antenna in a good condition and do not shorten. The antenna should not come into contact with other metal parts otherwise it will reduce the effect.
4. The motor must be protected from direct moisture influences.

Functions remote control

Up • ∧
Stop • —
Down • ∨
Channel- C-   Channel+ C+
Programm-button P2

Works with all BREL transmitters:

DC-90   DC-92   DC-94   DC-1017   DC-305   DC-306   DC-313   DC-458   DC-920   DC-2700   DC-2702   DC-2705   DC-229   DC-230   DC-559   DC-409   DC-661   DC-115A

Technical data of the motor   MLE22-0.5

- Motor voltage: **DC 5V 2A**
- Power: **6 W**
- Torque: **0.5 Nm**
- Speed: **21 rpm**
- Amperage: **0.70 A**
- Moisture and dust: **IP20**
- Storage capacity is up to 20 channels:
- Working temperature of the motor:
    - Heavy use: -10℃ tot +40℃
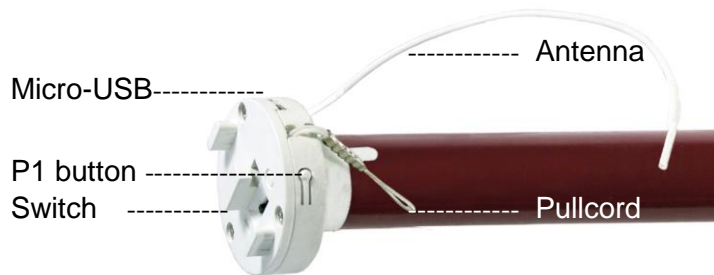   - Normal use: -20℃ tot +70℃

433MHz

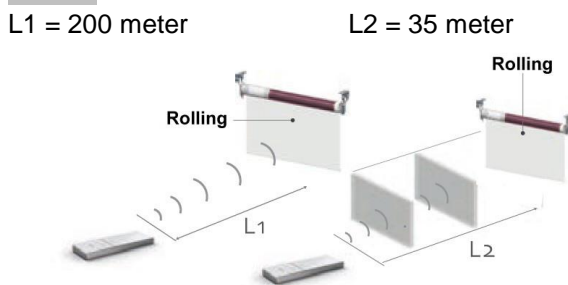**To charge the MLE22, use a charger with micro-USB plug.**
The battery is full when the light stops flashing and lights up green continuously.
The battery is empty when the light is flashing red.

Functions

Micro-USB------------

------------ Antenna

P1 button -------------
Switch -----------

------------ Pullcord

Reach

L1 = 200 meter   L2 = 35 meter

Rolling

Rolling

L_1 L_2

Installing the motor

Attach the crown and wheel to the motor and place the clip on the shaft of the motor so that the wheel
is fixed to the motor.
Install the motor with the motorbracket on the product and take care that it is secured.
Place the motor in the tube of the roller/shutter.

(These assemblies are usually already done in the factory)

During programming the motor; the following must be done within 10sec.
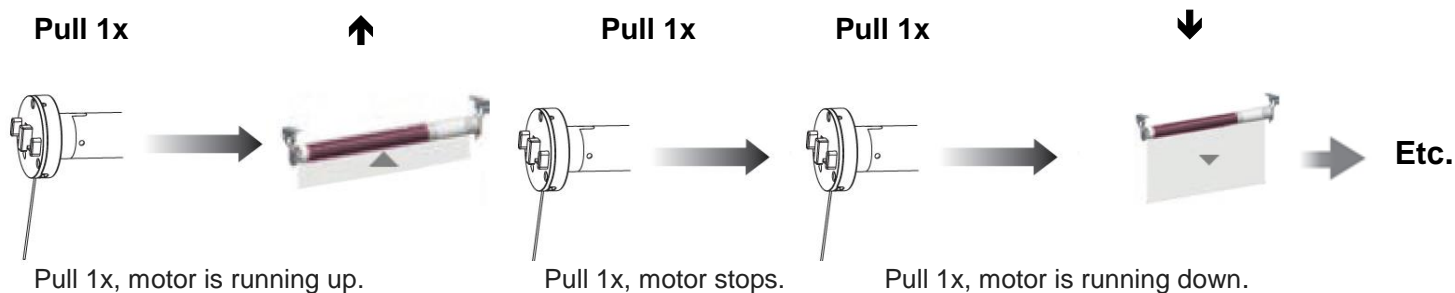After 10 sec. the motor will quit the programming mode.

T < 10S

FUNCTIONS WITH PULLCORD

Step 1   Set the switch on the motor to 1

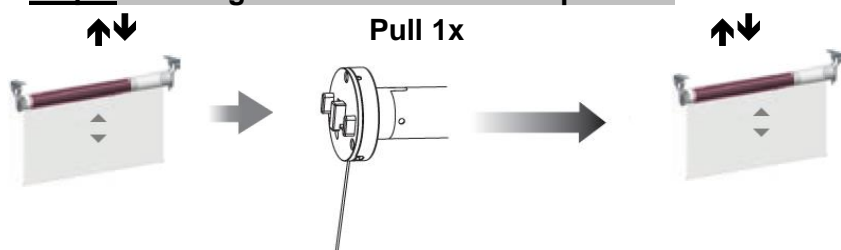**If no end positions are set, the motor is in pulse setting.**

Set up pullcord motor

Pull 1x   ↑   **Pull 1x**   **Pull 1x**   ↓   **Etc.**

Pull 1x, motor is running up.   Pull 1x, motor stops.   Pull 1x, motor is running down.

If there is no limit and you continue to pull the pullcord, the motor will continue to run until you release.

Step 2   Setting top/bottom position

↑   **1x P1**   ↓   **1x P1**   **OK**

Go to the desired   Press **P1** until   Go the desired   Press **P1** until   Top and bottom position is **OK**.
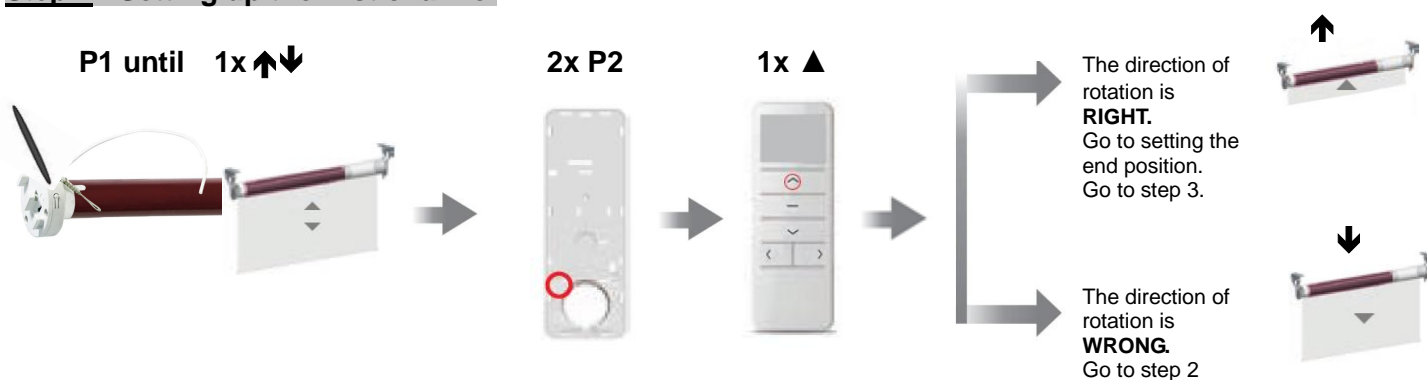top position.   motor moves.   bottom position.   motor moves.

Step 3   Setting the desired third limit position

Go to the desired
third limit position.   Hold the cord until the motor moves up and down.

To go to the third limit position, tighten the cord until the motor starts running.
To remove / change the third limit position, the same procedure must be repeated at the position of the third limit position.

FUNCTIONS WITH REMOTE CONTROL

Step 1   Setting up the first channel

The direction of
rotation is
RIGHT.
Go to setting the
end position.
Go to step 3.

The direction of
rotation is
WRONG.
Go to step 2

.
Briefly press and release the **P1** button,
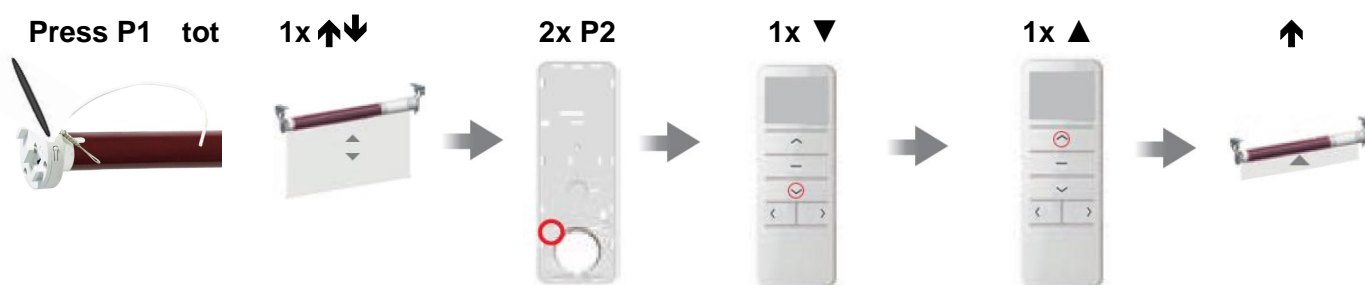until the motor moves back and forth.

Press 2x on the **P2** button.
Each time you press the
button, it moves momentarily.

Press the button **up**.
The motor moves.

With the above action you will delete all channels in memory and the final setting.

Step 2   Change direction

If the direction is right, skip step 2 and proceed to step 3.

Briefly press and release the **P1** key,
until the motor moves back and forth.

Press 2x on the **P2** button.
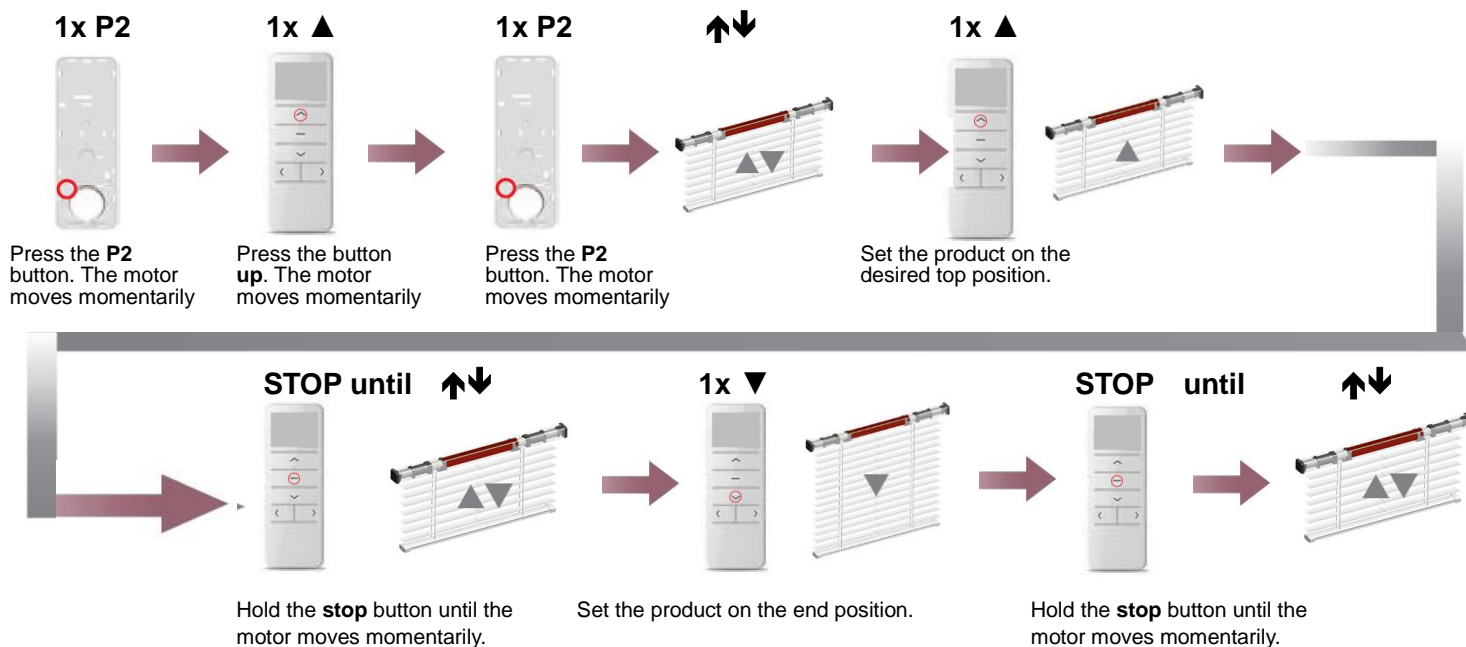Each time you press the
button, it moves momentarily.

Press the button **down**.
The motor moves.

Press the button **up**.

The product will now go **up**.
Reading the first transmitter
has been completed. You
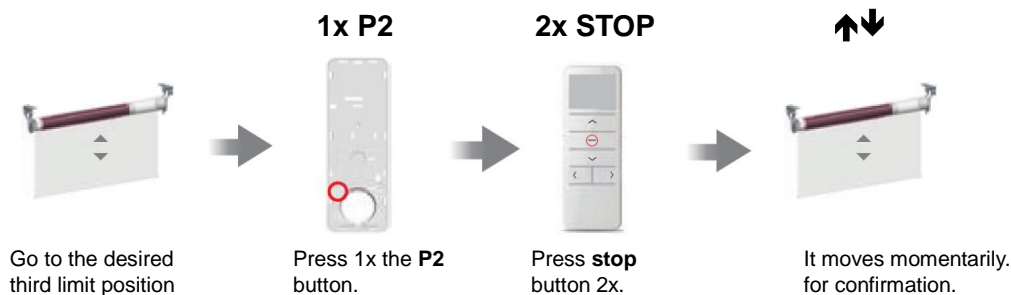can now proceed with
setting the end limits.

Step 3   Setting the end limits

If no limit positions are set, the motor will only move in the pulse setting.

1x P2   **1x ▲**   **1x P2**   **↑↓**   **1x ▲**

Press the **P2** button. The motor moves momentarily

Press the button **up**. The motor moves momentarily

Press the **P2** button. The motor moves momentarily

Set the product on the desired top position.

STOP until ↑↓   **1x ▼**   **STOP until**   **↑↓**

Hold the **stop** button until the motor moves momentarily.

Set the product on the end position.

Hold the **stop** button until the motor moves momentarily.

Step 4   Setting third limit position

If you press the stop button for more than 3 seconds, the motor will move from any position to the third limit position.
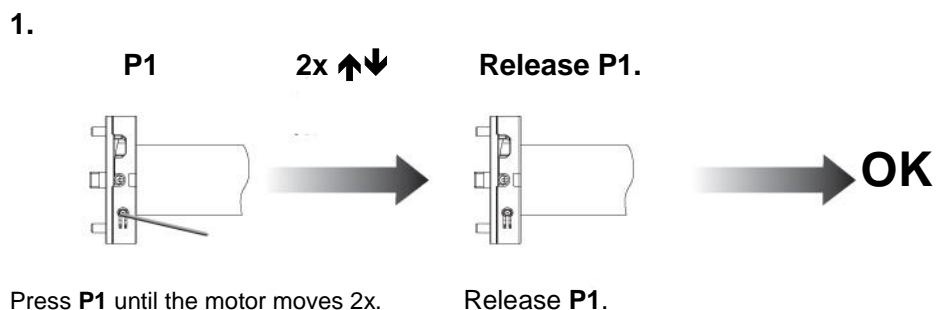
1x P2   **2x STOP**   **↑↓**

Go to the desired third limit position

Press 1x the **P2** button.

Press **stop** button 2x.

It moves momentarily. for confirmation.

To remove the third limit position, you must go to the third position and repeat above action.

Additional settings

Option A   Reset all

P1   **3x ↑↓**   **Release P1**

OK

Press **P1** until the motor moves 3x.

Release **P1**.
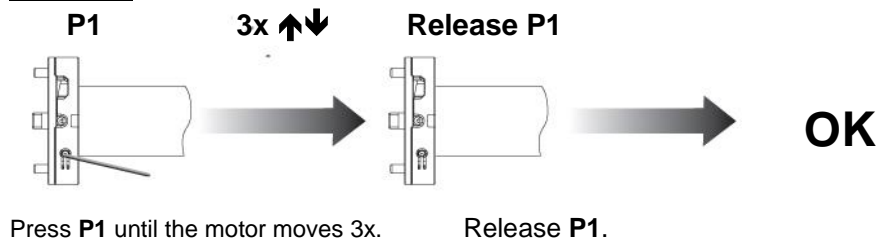
Option B   Delete limit position

1.

P1   **2x ↑↓**   **Release P1.**

OK

Press **P1** until the motor moves 2x.

Release **P1**.

2.

1. **Deleting the end position can also be done as follows:**

   When step 1, setting up the first channel also the limit setup will be removed.

2. **1 x P2**   **1x ▼**   **1x P2**

The end positions are now removed
from the memory of the motor.
You can now re-read the end position.

Press **P2** button 1x.   Press the button **down**.   Press **P2** button 1x.

Option C   Teaching multiple transmitters (Up to 20 transmitters per receiver)

2x P2   **1x P2**

Go to existing channel / transmitter **a**.
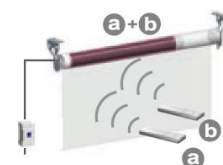
Press **P2** button 2x
of the existing
channel / transmitter **a**.

Go to new channel or transmitter **b**/
(to remove channel / transmitter)
Press 1x **P2** button of the new
channel or transmitter **b**.

Programming the new
transmitter/channel is ready.

To delete one channel , you must repeat the above operation.

Option D   Delete all

1x P2   **1x STOP**   **1x P2**
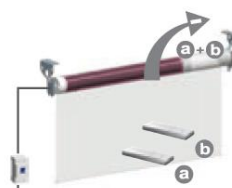
Press P2 button 1x   Press stop button 1x   Press P2 button 1x   All channels are removed

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Option E   Pulse setting

1x P2   **1x ▲**   **1x ▼**

OK

Press P1 button 1x   Press up button 1x   Press down button 1x

To remove the pulse setting, repeat the above operation.

Option F   Teach in new transmitter while maintaining final settings.
Only possible if the final setting is set.

Press P1   **until**   **1x ↑↓**   **▲ ▼ simultaneously**   **↑↓**

Hold down the P1 key
Shortly. Then let go.

The motor moves up
and down.

Push up and down at the same time
until the motor moves up and down.

Option G   Speed control

- Increase the speed of the motor

- Reduce the speed of the motor

1x ▲   +   1x STOP simultaneously ↑↓

1x ▼   +   1x STOP simultaneously ↑↓

OK

OK

Push up and stop simultaneously, until the motor moves.

Press down and stop simultaneously, until the motor moves.

If the motor is not moving, it is already in the highest or lowest speed.
There are 3 different speeds; Namely: 24 rpm→ 1x↑↓   -   28 rpm→ 2x↑↓   -   32 rpm→ 3x↑↓

Option H   Adjusting the top position

1x ▲   **↑**   **▲▼ simultaneously**   **↑**   **STOP until ↑↓**

OK

Go to the already set top position.

Press simultaneously the button up
and the down button until the motor moves.

The motor moves up and down.
Go to the new upper position.

Hold the stop button until the
motor moves momentarily.

Adjusting the bottom position

1x ▼   **↓**   **▲▼ simultaneously**   **↓**   **STOP until ↑↓**

OK

Go to the already set bottom position.

Press simultaneously the button down
and the up button until the motor moves.

The motor moves up and down.
Go to the new upper position.

Hold the stop button until the
motor moves momentarily.