

# 50SERIES Motors

Quick & easy instructions for **mechanical** 50SERIES motors

## Setting up your blind motor

| Setting                                            | Steps                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Setting the upper &amp; lower travel limits</b> | <b>Setting the Upper limit</b> <ol style="list-style-type: none"> <li>1. On the motor press the Up button to the limit you require. When it is necessary to increase the upward distance, use a special adjustment lever to rotate the white worm towards the “+” direction, operate the motor to the desired upper position, immediately stop rotating the white worm and press Stop once to set the upper limit.</li> </ol>   |
|                                                    | <b>Setting the Lower limit</b> <ol style="list-style-type: none"> <li>2. On the motor press the Down button to the limit you require. When it is necessary to increase the downward distance, use a special adjustment lever to rotate the red worm towards the “+” direction, operate the motor to the desired lower position, immediately stop rotating the white worm and press Stop once to set the lower limit.</li> </ol> |

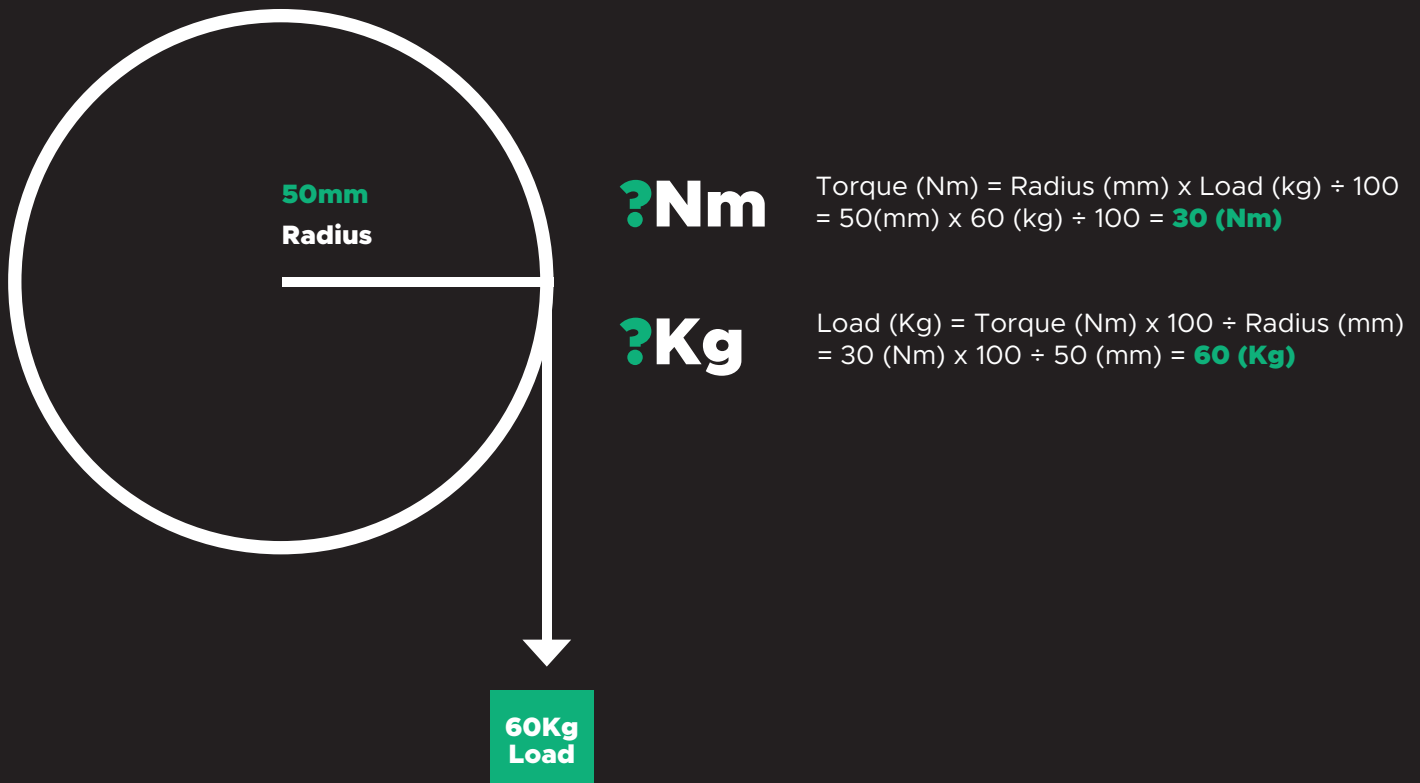
## Troubleshooting

| Issues                                                                 | Possible Causes                        | Solution                                                          |
|------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------------------------|
| <b>The Motor has no response</b>                                       | Power failure or incorrect connection. | Double check power and cable connection, follow the instructions. |
| <b>The motor doesn't run or starts to slowly or makes a load noise</b> | Connection or overload.                | Check connections.                                                |
|                                                                        | Incorrect installation or overload.    | Check installation or overload.                                   |
| <b>The motor stops during the going up or down</b>                     | The motor has reached the lower limit. | Adjust the new lower limit.                                       |
|                                                                        | Running time has exceeded 4 mins.      | Consult the sales team for more information.                      |

## Deciding the correct Nm and Torque

**When choosing the right roller door motor for blinds (or roller shutters), it's important to calculate two key parameters:**

1. Torque (in Newton-meters, Nm) – this determines the motor's ability to rotate the blind with enough force.
2. Lifting capacity (usually in kg) – this indicates how much weight the motor can lift, which must match or exceed the weight of your blind.



Calculation in diagram based on Newton's Law.  
(1 inch = 25.4mm | 1 pound = 0.454Kg)

1. Measure the Load of the Blind (Kg) - You need to know the total weight that the motor must lift. This includes the curtain (slats/material), the bottom bar and any additional accessories mounted on the shaft.
2. Measure the radius of the roller tube (not diameter), in millimetres (mm). This is the distance from the centre of the shaft to the point where the force is applied (typically where the blind rolls onto the shaft).
3. To calculate torque, use the following calculation: Radius x Load ÷ 100 = Torque.
4. To calculate lifting capacity, use the following calculation: Torque x 100 ÷ Radius = Lifting Capacity.