

Automate Your Gate with BENINCA® TECHNOLOGY TO OPEN

# Swing Gates

## Your Complete Help Guide

Proudly Supplied by Arrowhead Alarm Products

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**There are several things to consider when choosing the right swing gate motor for your specific gate (detailed below):**

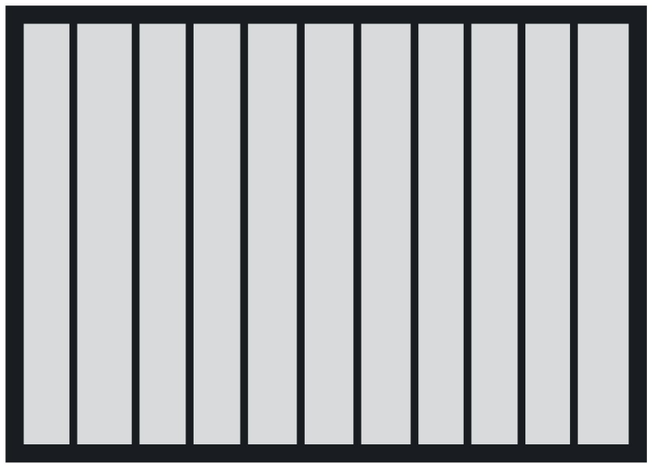
- How long is each gate or gates?
- Is the gate for domestic or commercial use?
- Does the gate have closed panelling (table 1) or open bars (table 2)? For example: Open bar gates may only require a smaller motor as there is not as much wind resistance
- What is the measurement from the motor side of the post to where the hinge is mounted (table 3)? This is very important in choosing the correct motor for the gate
- Is the gate standard swinging or rising hinge? For example: The motor will have to pull the gate up hill in rising hinge applications, therefore will require a more powerfull motor

### Swing gate with closed panels (Table 1)

Requires uprated motor, while also considering gate length

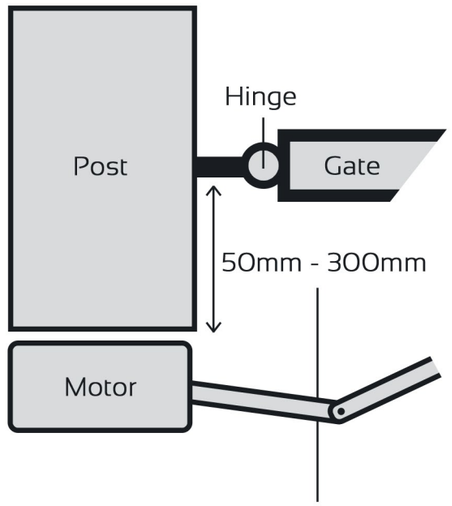
### Swing gate with open bars (Table 2)

Requires standard motor to suit gate length

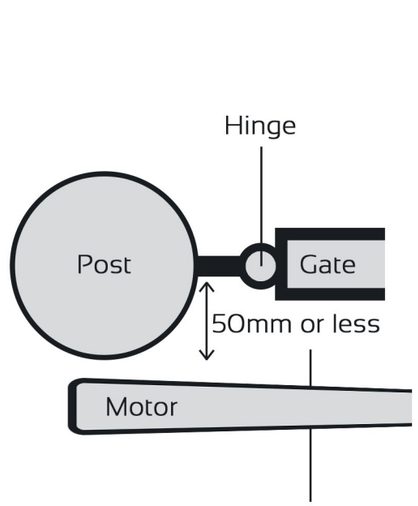


### Gate post - Birds eye view (Table 3)

This measurement will determine which type of motor needs to be used




This application requires an articulated arm actuator
B-PR45E24 Series




This application requires a standard actuator
B-BOB Series

**After these questions are answered, see next page for further details on selecting the correct actuator**

## Optional Extras

**A-PROBE KIT**

Vehicle Detection Device

**PW KEYPAD-XK1**

Access Control Keypad

**E-CON KIT-W**

Colour Video Intercom

**TVT-INTERCOM**

IP Intercom

**DB-D1101V-Flush**

IP Intercom

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See page 1, table 3 for the correct series to suit your gate.

## BOB Series - Open Bar Gates (low wind resistance)

### Gate Maximum Weight

| Gate Length | 200 kg | 250 kg | 300 kg | 350 kg | 400 kg | 450 kg | 500 kg | 600 kg | 700 kg | 800 kg |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,5 m | B-BOB3024 | B-BOB3024 | B-BOB3024 | B-BOB3024 | B-BOB3024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | |
| 1,8 m | B-BOB3024 | B-BOB3024 | B-BOB3024 | B-BOB3024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | |
| 2,1 m | B-BOB3024 | B-BOB3024 | B-BOB3024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | |
| 2,5 m | B-BOB3024 | B-BOB3024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | |
| 3 m | B-BOB3024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | | |
| 3,5 m | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | | | | | |
| 4 m | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | | | | | | |
| 4,5 m | B-BOB5024 | B-BOB5024 | B-BOB5024 | | | | | | | |
| 5 m | B-BOB5024 | B-BOB5024 | | | | | | | | |

BOB Series

See accessories on page 3 for bolt on brackets

## B-PR45E24 Series - Open Bar Gates (low wind resistance)

### Gate Maximum Weight

| Gate Length | 150 kg | 200 kg | 250 kg | 280 kg | 300 kg | 350 kg | 400 kg | 500 kg | 600 kg |
|---|---|---|---|---|---|---|---|---|---|
| 1 m | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 |
| 1,5 m | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 |
| 1,8 m | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 |
| 2,1 m | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | |
| 2,5 m | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | | |
| 3 m | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | | | |
| 3,5 m | | | | | | | | | |
| 4 m | | | | | | | | | |

B-PR45E24

Note: Articulated arm sold separately - Part number: B-DU.E2

## BOB Series - Closed Panel Gates (high wind resistance)

### Gate Maximum Weight

| Gate Length | 200 kg | 250 kg | 300 kg | 350 kg | 400 kg | 450 kg | 500 kg | 600 kg | 700 kg | 800 kg |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,5 m | B-BOB3024 | B-BOB3024 | B-BOB3024 | B-BOB3024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | | |
| 1,8 m | B-BOB3024 | B-BOB3024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | | | |
| 2,1 m | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | | | | |
| 2,5 m | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | | | | | |
| 3 m | B-BOB5024 | B-BOB5024 | B-BOB5024 | B-BOB5024 | | | | | | |
| 3,5 m | B-BOB5024 | B-BOB5024 | | | | | | | | |
| 4 m | B-BOB5024 | | | | | | | | | |
| 4,5 m | | | | | | | | | | |
| 5 m | | | | | | | | | | |

BOB Series

See accessories on page 3 for bolt on brackets

## B-PR45E24 Series - Closed Panel Gates (high wind resistance)

### Gate Maximum Weight

| Gate Length | 150 kg | 200 kg | 250 kg | 280 kg | 300 kg | 350 kg | 400 kg | 500 kg | 600 kg |
|---|---|---|---|---|---|---|---|---|---|
| 1 m | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 |
| 1,5 m | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | |
| 1,8 m | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | | |
| 2,1 m | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | | | |
| 2,5 m | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | | | | |
| 3 m | B-PR45E24 | B-PR45E24 | B-PR45E24 | B-PR45E24 | | | | | |
| 3,5 m | | | | | | | | | |
| 4 m | | | | | | | | | |

B-PR45E24

Note: Articulated arm sold separately - Part number: B-DU.E2

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## 2 or 4 Button Remote

Suitable for Beninca receivers

B-TO.GO2VA

B-TO.GO4VA

## Car Visor Clip or Wall Mount

Suitable for Beninca remotes

B-TO.CLIP

B-SMART

## Point-to-point Safety Beam Set

Suitable for Swing & Sliding Gates

B-PUPILLA.T

## Battery Operated Safety Beam Set

Suitable for Swing & Sliding Gates

B-PUPILLA XP20D

## Extension Antenna

Suitable for Beninca receivers

B-ANT433

## Bolt on Bracket

Suitable for B-BOB5024

B-BSR50

## Universal Hinge

Suitable for Driveway Swing Gates

B-417.20

## Wireless Access Keypad

Suitable for Beninca receivers

B-BE.CODE


## Bolt Down Centre Stop

Suitable for Double Swing Gates

B-535.0

## Cement in Centre Stop

Suitable for Double Swing Gates

B-530.0

## Bolt Down Open Stop

Suitable for Swing or Sliding Gates

B-247.2

## Standalone Beninca Receiver

Allows you to use the same remote for your Gate & Garage Door

B-ONE.2WB



### A-PROBE KIT

Vehicle Detection Device

### PW KEYPAD-XK1

Access Control Keypad

### E-CON KIT-W

Colour Video Intercom

### TVT-INTERCOM

IP Intercom

### DB-D1101V-Flush

IP Intercom

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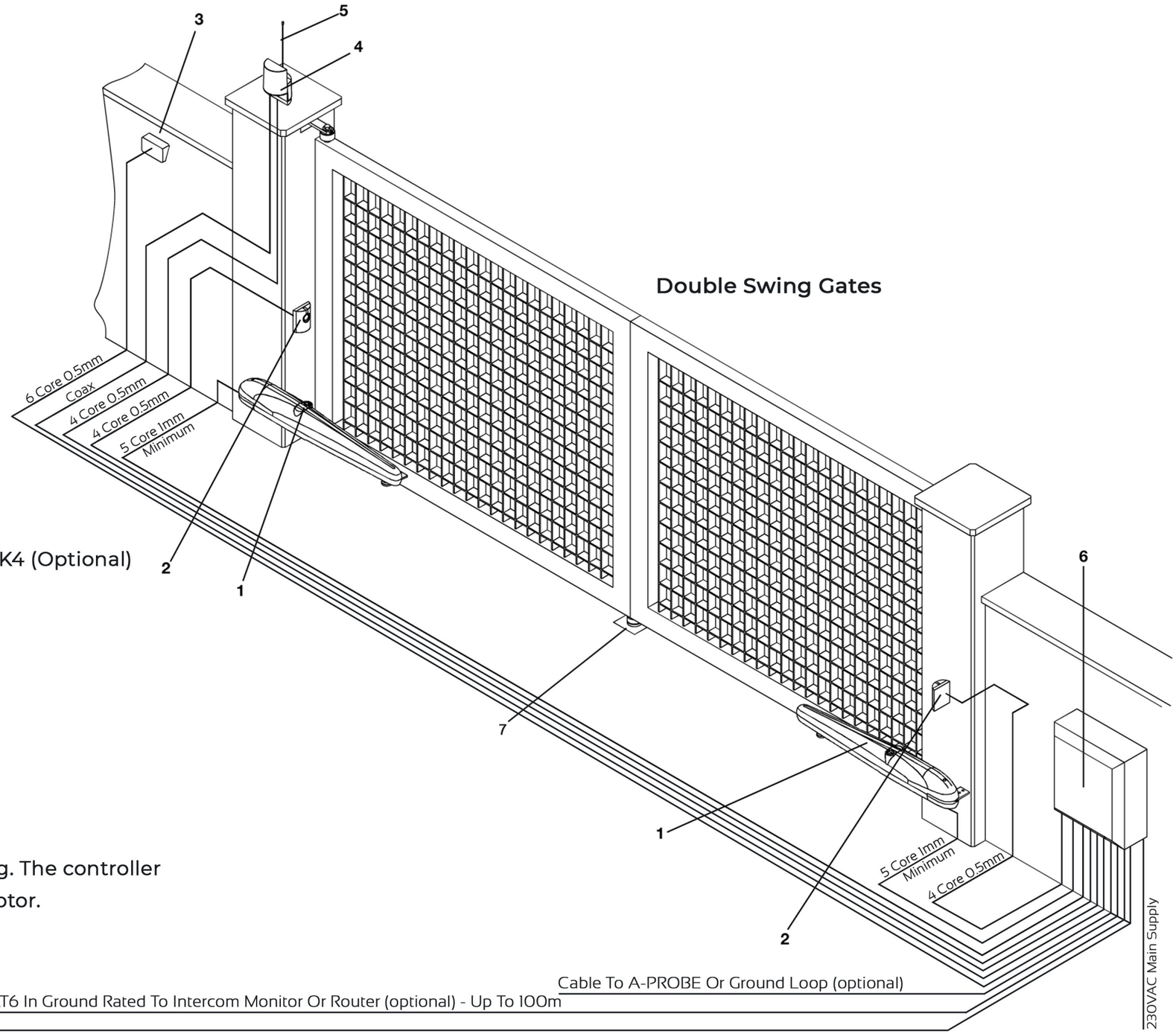
## Double Swing Gates




### Cable Schematic

1. Motors - B-BOB3024, B-BOB5024 or B-PR45E24
2. Safety Beams - B-PUPILLA.T
   Recommended height 600 700mm
3. Access Control Keypad - PW KEYPAD-XK1 or PW KEYPAD-XK4 (Optional)
   Recommend height 1500mm
4. Flashing Light - B-IR.LAMP (Optional)
5. Extension Antenna - B-ANT433 (Optional)
6. Control Box - B-BRAINY24 or B-TRUST
7. Center Stop - B-535.0 or B-530.0

Note
Single swing gates use the exact same hardware and wiring. The controller stays the same, evern though you will only be using one motor.

Useful Information

- We recommend using gel filled or direct burial cable for all gate & intercom applications, even when installed in conduit.
- Motor geometry is very important with swing gates. Make sure you have the right motor for the application before mounting. See the following pages for detailed mounting specifications.
- An extension antenna is not normally required however if your motor is mounted behind concrete, stone or steel it will drastically increase range. Also use if the site has frequency interference.
- The B-ONE.2WB standalone receiver can be added to the automatic garage door. This will allow control of the gate & garage door from one remote.

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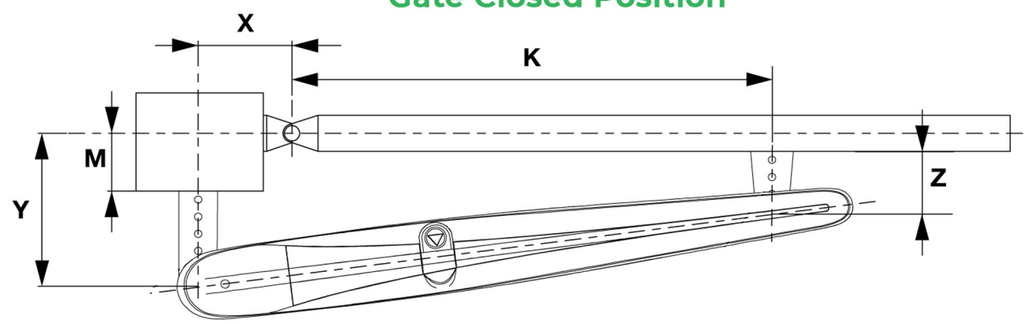
## Motor Mounting Geometry Table

| Opening degree using the relative X, Y, Z, K, M measurements | X | Y | z | K | M* max. | Opening time to 90° using the relative X, Y, Z, K, M measurements |
|---|---|---|---|---|---|---|
| 110° | 115 | 105 | 80 | 545 | 50 | 13 sec |
| 100° | 120 | 120 | 80 | 540 | 70 | 14 sec |
| 90° | 135 | 135 | 80 | 525 | 80 | 19 sec |

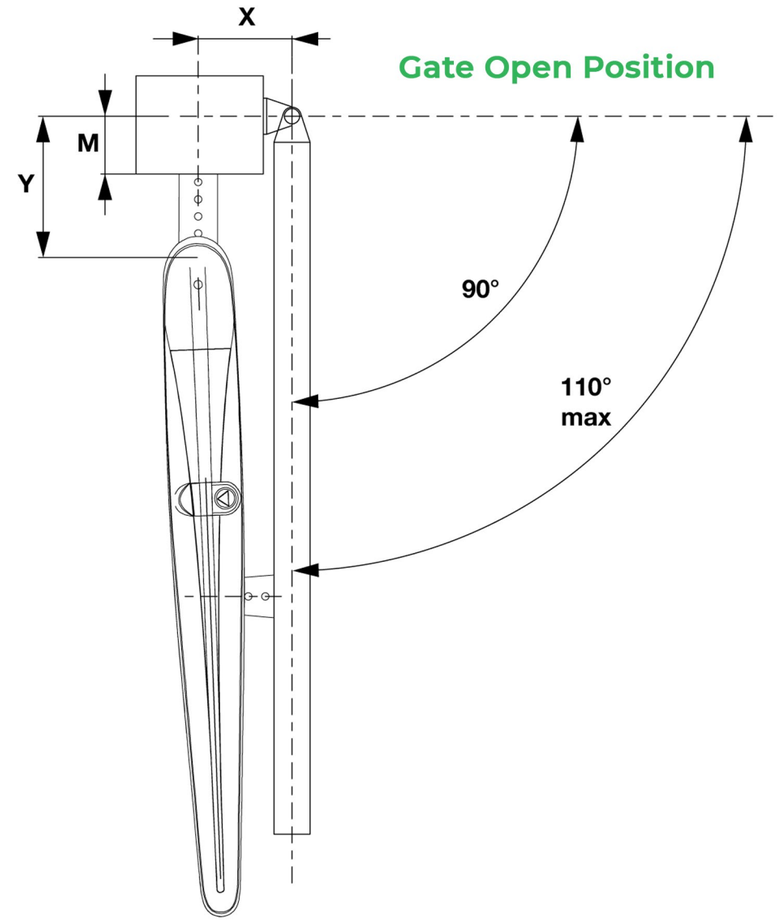
See diagram (right of page) and reference from this table for accurate mounting geometry.

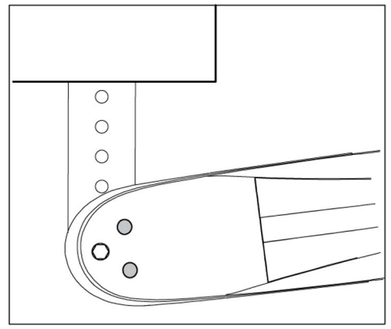
Because every application is different, you will need to choose the degree of opening that best suits your post diameter and hinge mounting position

### Gate Closed Position




### Gate Open Position





- Motor geometry is very important with swing gates. Before mounting, make sure you have the right motor for the application by checking the ‘Motor Mounting Geometry Table’ above.
- We recommend mounting the back bracket to the post first (as per the X, Y measurements). We then recommend fixing the front bracket with a ‘G Clamp’, unlocking the motor gear box, then opening and closing the gate. This will let you know if the geometry is going to work before you make holes in the gate.
- If the geometry is wrong you will get binding, or the gate will not open or close to the required degree.

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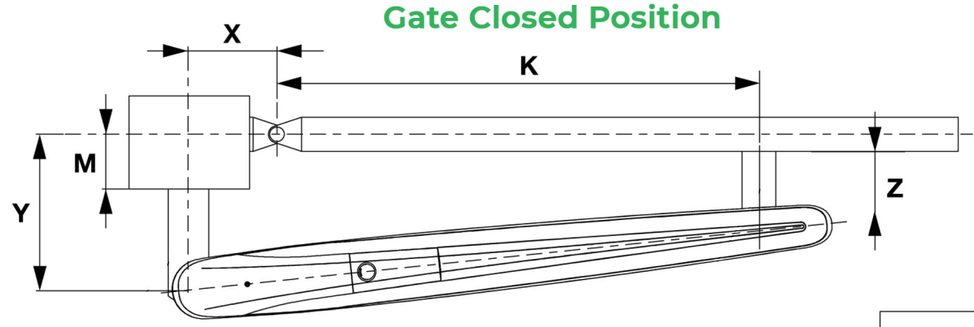
## Motor Mounting Geometry Table

| | Opening degree using the relative X, Y, Z, K, M measurements | X | Y | z | K | M* max. | Opening time to 90° using the relative X, Y, Z, K, M measurements |
|---|---|---|---|---|---|---|---|
| → | 90° | 150 | 150 | 75 | 695 | 90 | 25sec |
| or | | | | | | | |
| → | 90° | 225 | 225 | 130 | 625 | 155 | 38sec |
| or | | | | | | | |
| → | 100° | 200 | 200 | 110 | 650 | 130 | 34sec |
| or | | | | | | | |
| → | 110° | 175 | 175 | 90 | 680 | 110 | 30sec |

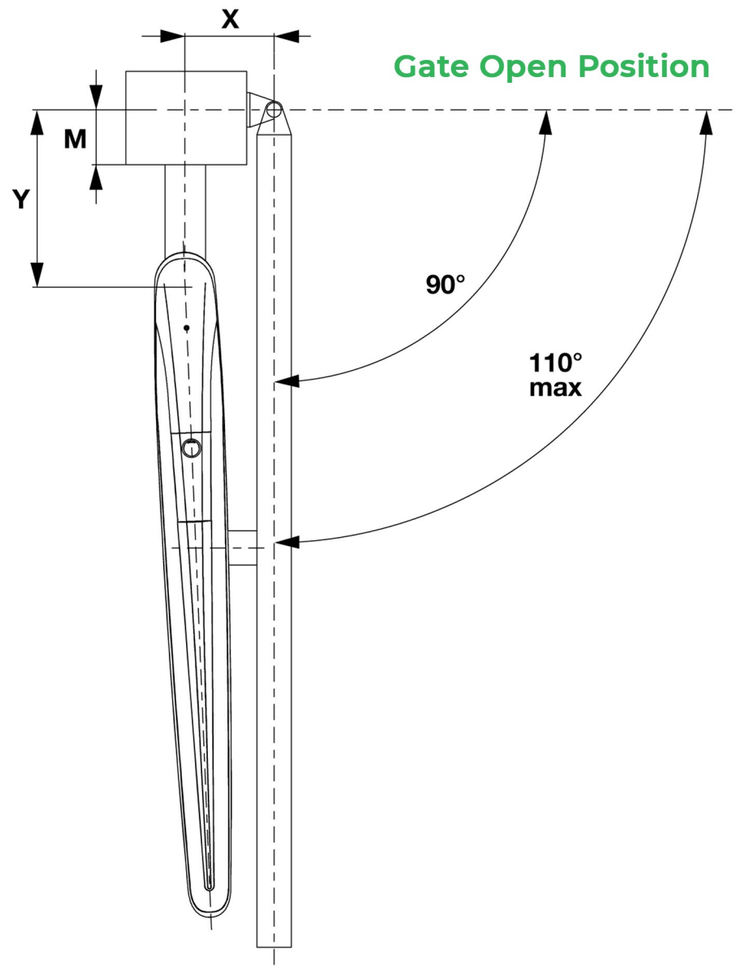
See diagram (right of page) and reference from this table for accurate mounting geometry.

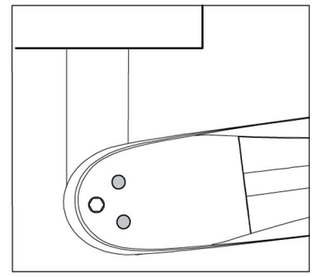
Because every application is different, you will need to choose the degree of opening that best suits your post diameter and hinge mounting position

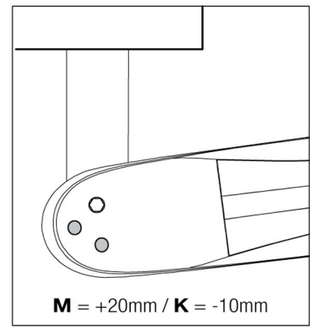
### Gate Closed Position




### Gate Open Position






Useful Information

- Motor geometry is very important with swing gates. Before mounting, make sure you have the right motor for the application by checking the ‘Motor Mounting Geometry Table’ above
- We recommend mounting the back bracket to the post first (as per the X, Y measurements). We then recommend fixing the front bracket with a ‘G Clamp’, unlocking the motor gear box, then opening and closing the gate. This will let you know if the geometry is going to work before you make holes in the gate.
- If the geometry is wrong you will get binding, or the gate will not open or close to the required degree.

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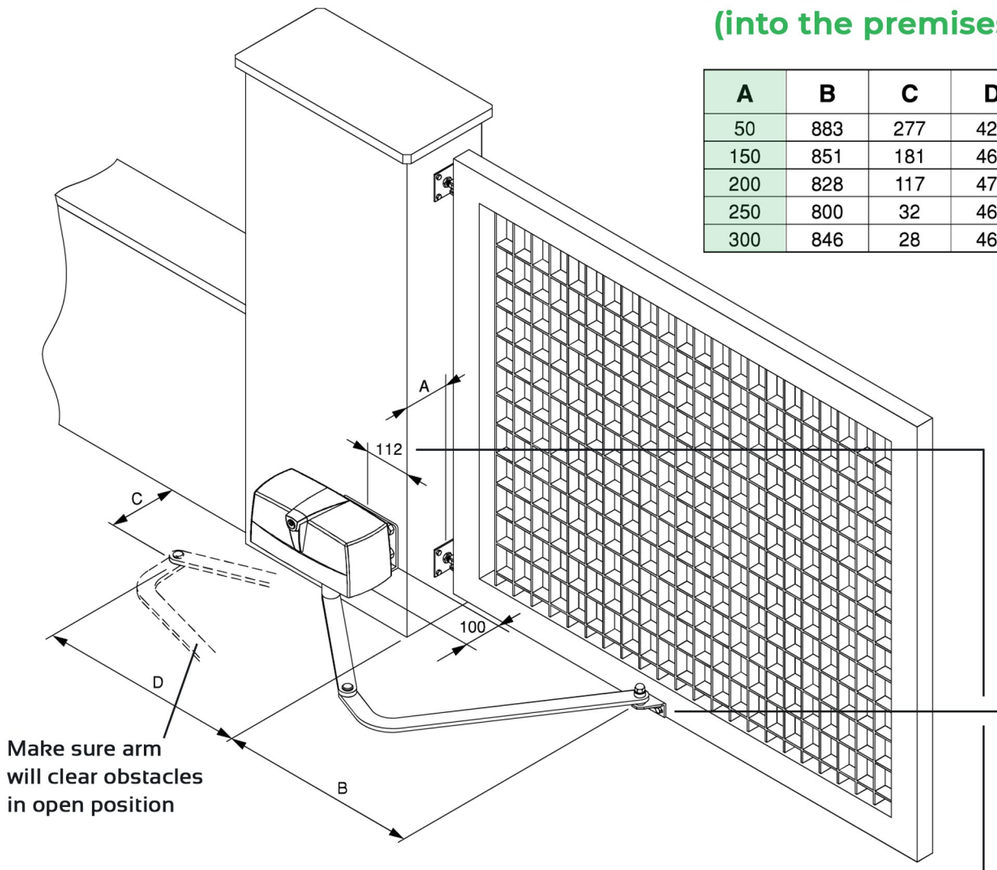
**Motor Mounting Geometry**

Mount the motor and arm as per the A, B, C, D measurements from the diagrams below. The ‘A’ measurement (hinge mounting position) will determine the B, C, D measurements you will be required to use

## Measurements & diagram for gate opening inward (into the premises)

| A | B | C | D |
|---|---|---|---|
| 50 | 883 | 277 | 429 |
| 150 | 851 | 181 | 466 |
| 200 | 828 | 117 | 475 |
| 250 | 800 | 32 | 469 |
| 300 | 846 | 28 | 468 |




## Measurements & diagram for gate opening outward (towards the street)

| A | B | C | D |
|---|---|---|---|
| 50 | 688 | 390 | 154 |
| 100 | 651 | 453 | 137 |
| 150 | 606 | 503 | 135 |
| 200 | 550 | 553 | 138 |

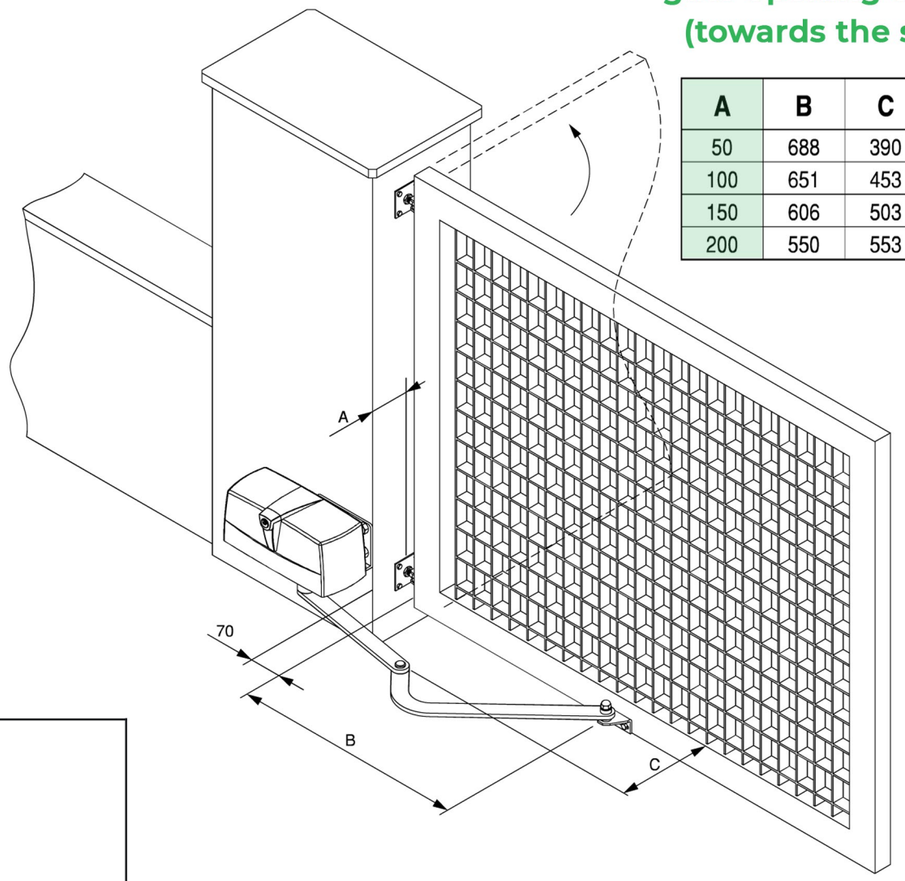



*Fig.7*

- Articulated arm motors are the least fussy when it comes to geometry, however you still need to make sure you have the right motor for the application by checking the geometry table above.
- We recommend mounting the motor bracket to the post first (as per the 112mm measurement and at the correct height so the arm lines up with the middle of your bottom gate rail).
- We then recommend fixing the arm to the gate with a ‘G Clamp’, unlocking the motor gear box, then opening and closing the gate. This will let you know if the geometry is going to work before you make holes in the gate.

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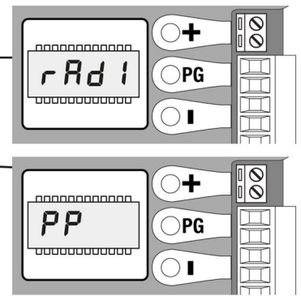
### Learning Remotes




- From the home screen press the PG button to enter the first menu. Use the + or - button to scroll until the display reads rAd 1
- Press the PG button to enter the rAd 1 menu and the display should read PP
- Push the PG button again and the display should read PUSH. Now push the remote button you wish to learn and the display should read OK. Repeat to learn more remotes or press the + & - together several times to return to the home screen.

### Remote Protocols

- AAP mostly only stock the green/yellow button remotes shown here:  B-TO.GO2VA or B-TO.GO4VA.
- These remotes can be changed between miltiple protocols. The receiver can only learn one of these protocols at a time. I.e. All remotes in the receiver have to be the same protocol.
- The receiver learns the protocol of the first remote that is learnt and all others that follow must be the same protocol.

- To view the protocol of the remotes simply hold down 2 buttons at the same time and keep holding. The red LED will flash 2, 3, or 4 times to indicate which protocol the remote is currently in.
- To change the protocol, keep holding the 2 buttons together until the red LED becomes constant and then release the buttons.
- Hold down 2 buttons again to view the new protocol & repeat this process on all remotes until they all have the same amount of flashes.

### Clearing The Receiver

Press PG button then scroll using the + or - button until the display reads rAd1. Press the PG button to enter the rAd1 menu, then scroll using the + or - button until the display reads rtr.

Now press the PG button twice and the receiver memory is erased.

Press the + or - buttons together at the same time multiple times to return to the home or operating screen.

**The BRAINY24 controller comes with the full manual. Follow the same procedure as detailed above to change any of the functions and features the product has to offer. Don't be afraid of making a mistake as you can always use the rES (reset) option in the first menu to return the system to default settings.**