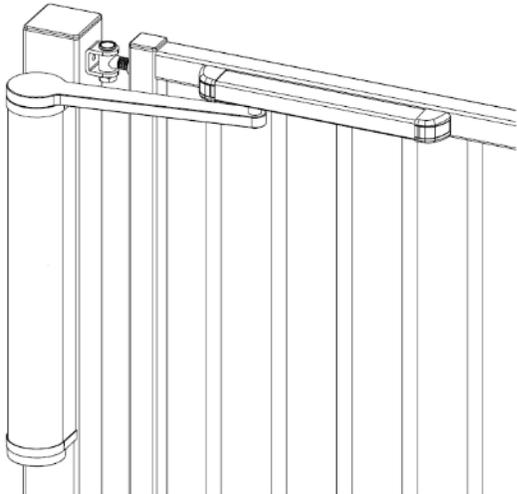


VENUS INSTALLATION TRAINING

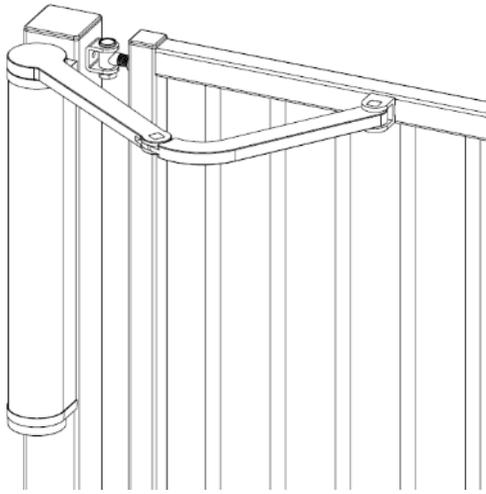
14/12/2023

VENUS – 3 ARM OPTIONS

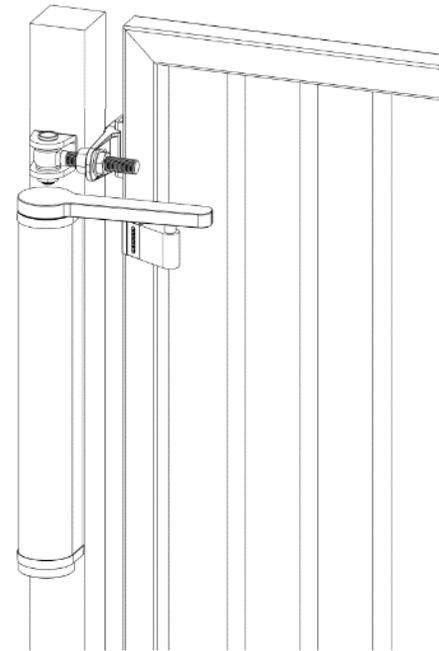
VENUS-S



VENUS-A



VENUS-G

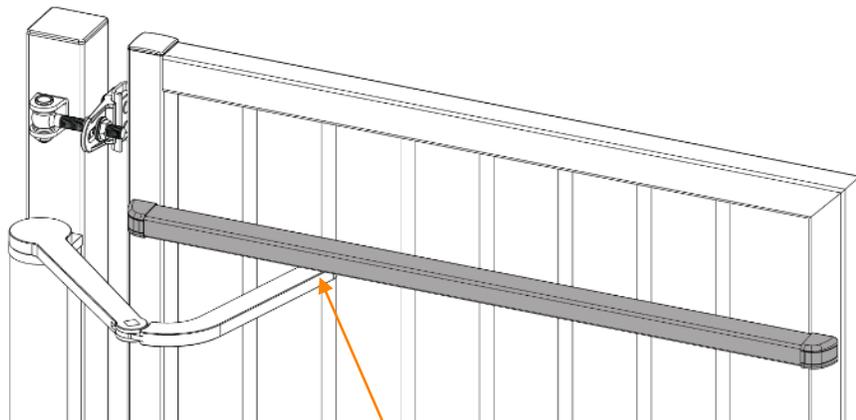
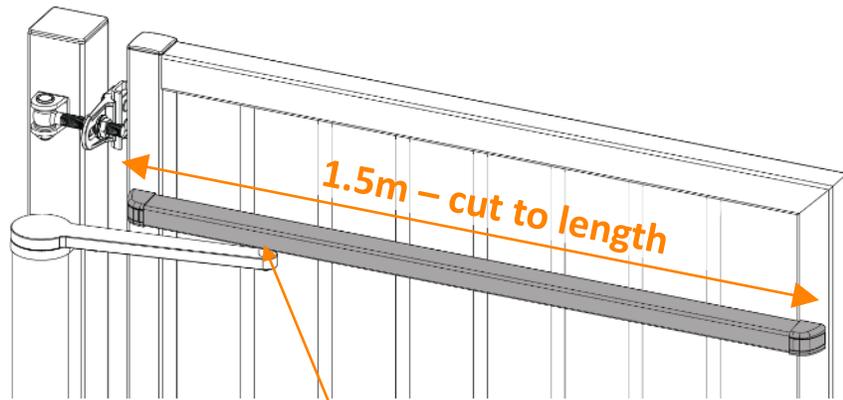


In development

VENUS ACCESSORIES

VENUS-RAIL

Accessory for VENUS-S and VENUS-A

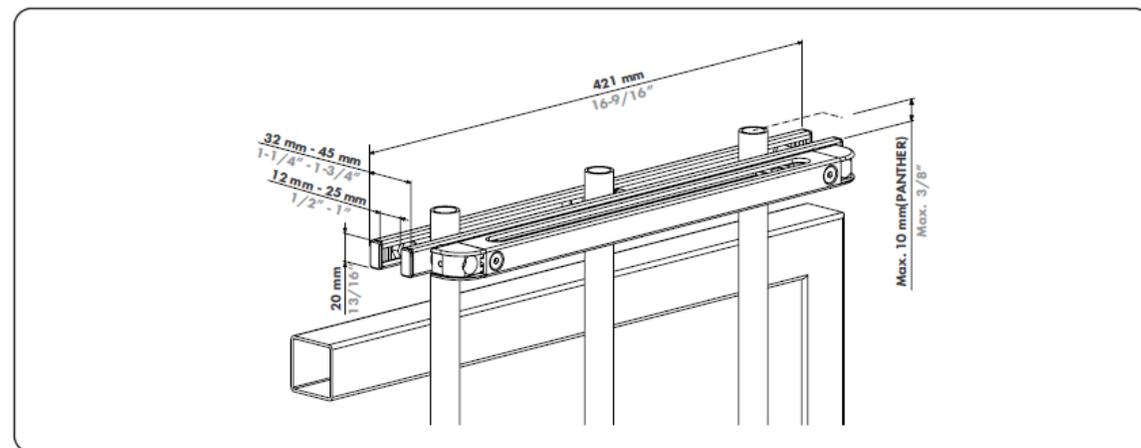
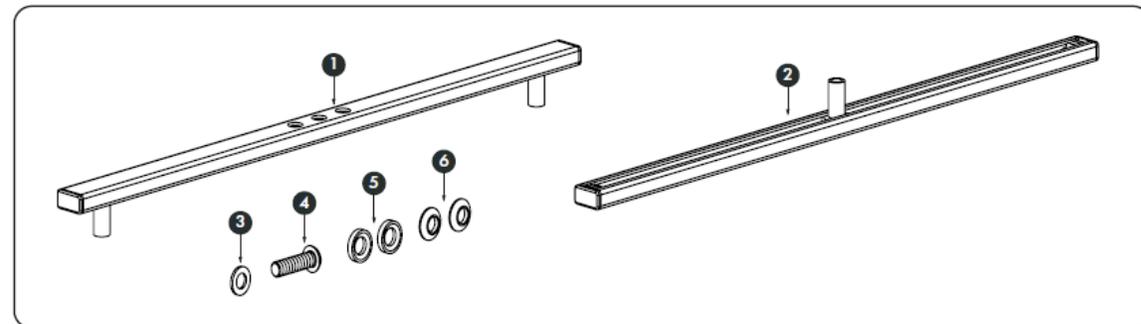
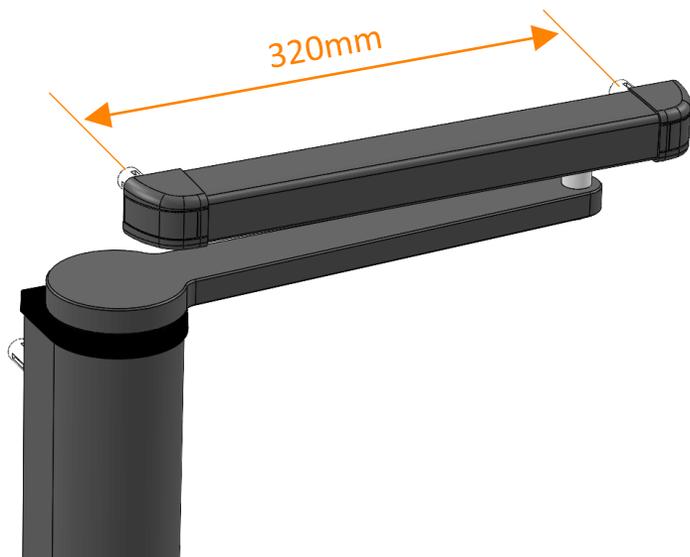


Adjustable but fixed attachment



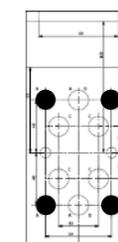
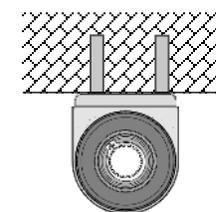
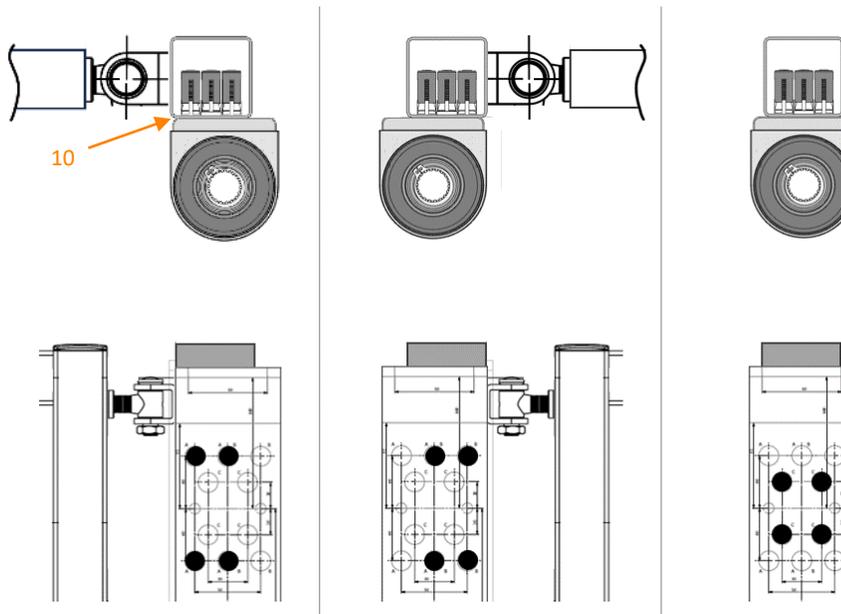
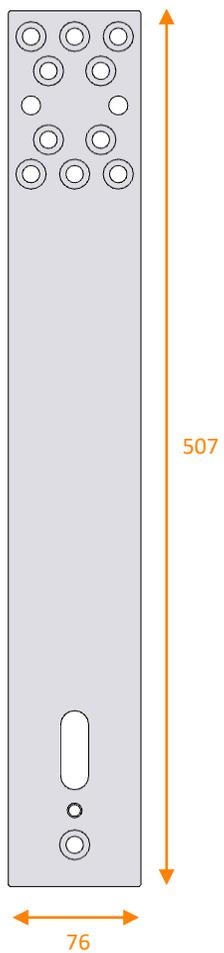
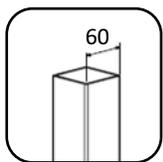
RAIL-FIT COMPATIBLE

VENUS-S can be combined with the Locinox RAIL-FIT as an alternative for VENUS-RAIL



VENUS & ACCESSORIES

VENUS-ADAPTERPLATE



+

WALL-FIX (3x)



VENUS - ARTICLES OVERVIEW

Venus motor incl arm

- VENUS-S-9005
- VENUS-S-SILV

- VENUS-A-9005
- VENUS-A-SILV

- VENUS-G-9005
- VENUS-G-SILV

Arm only

- VENUS-ARM-S-9005
- VENUS-ARM-S-SILV

- VENUS-ARM-A-9005
- VENUS-ARM-A-SILV

- VENUS-ARM-G-9005
- VENUS-ARM-G-SILV

Accessories

- VENUS-ADAPTERPLATE-9005
- VENUS-ADAPTERPLATE-SILV

- VENUS-RAIL-9005
- VENUS-RAIL-SILV

STOCK AVAILABILITY

VENUS-S-9005 5/01/2024

VENUS-S-SILV **On stock**

VENUS-A-9005 12/01/2024

VENUS-A-SILV 12/01/2024

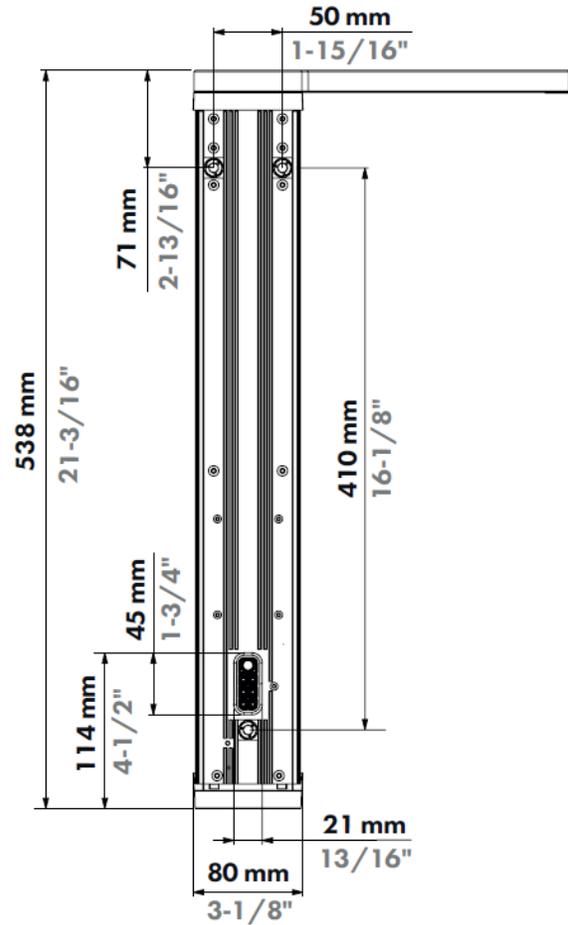
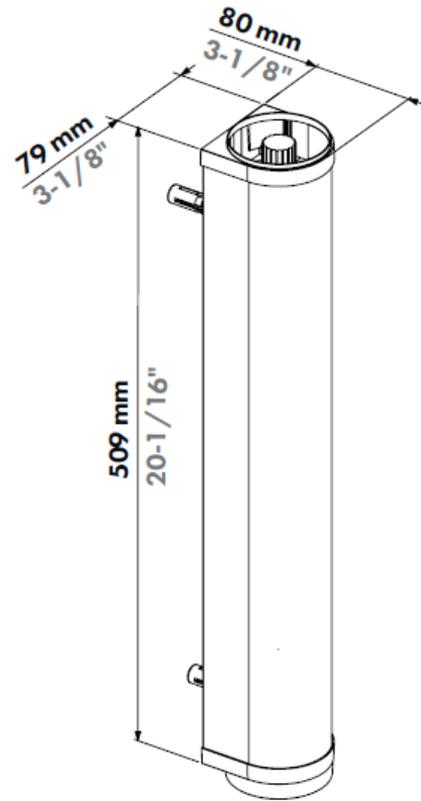
VENUS-G March 2024

VENUS-ADAPTERPLATE **On stock**

VENUS-RAIL 5/01/20204

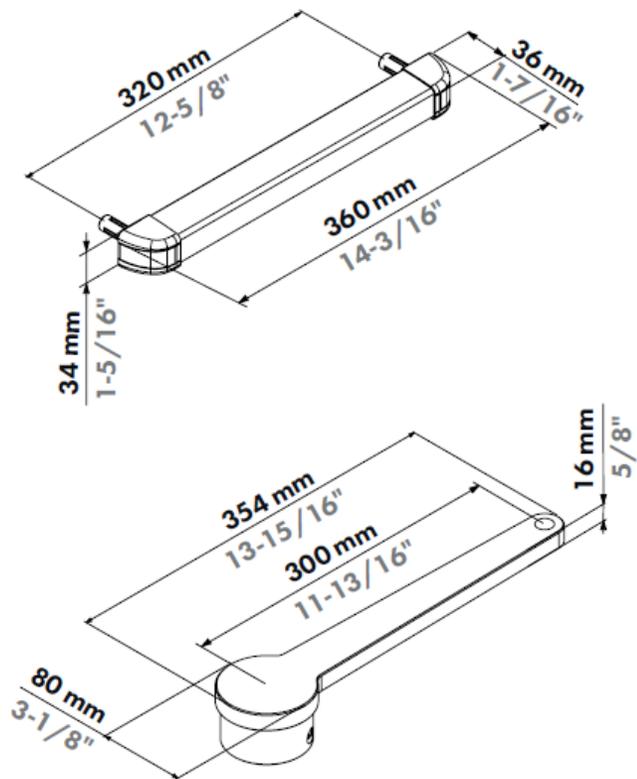
VENUS-ARM-A/S/G March 2024

DIMENSIONS

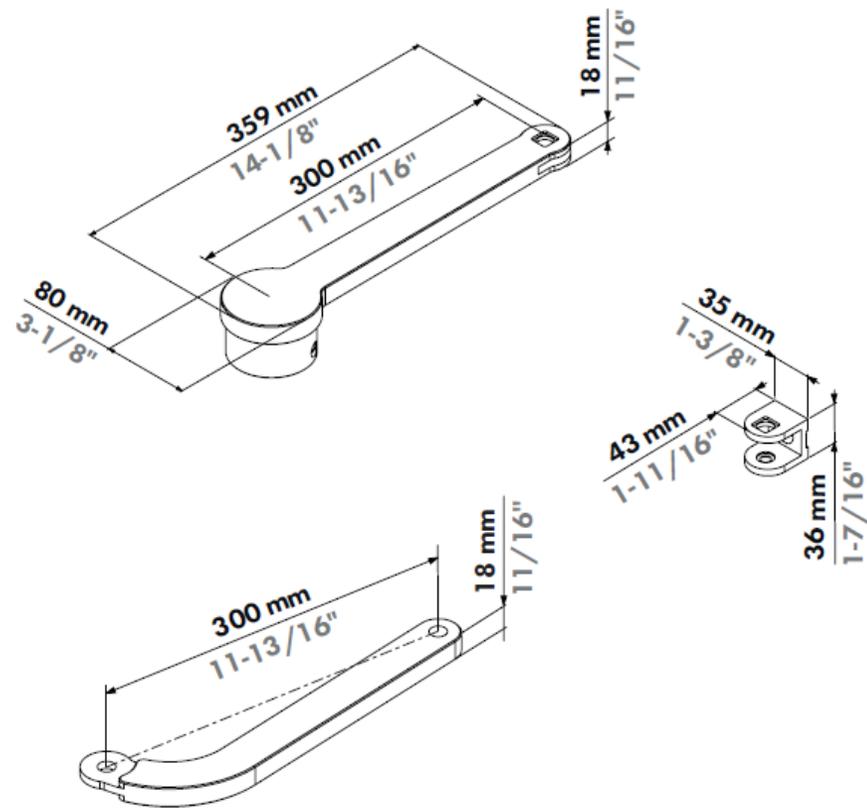


DIMENSIONS

VENUS-S

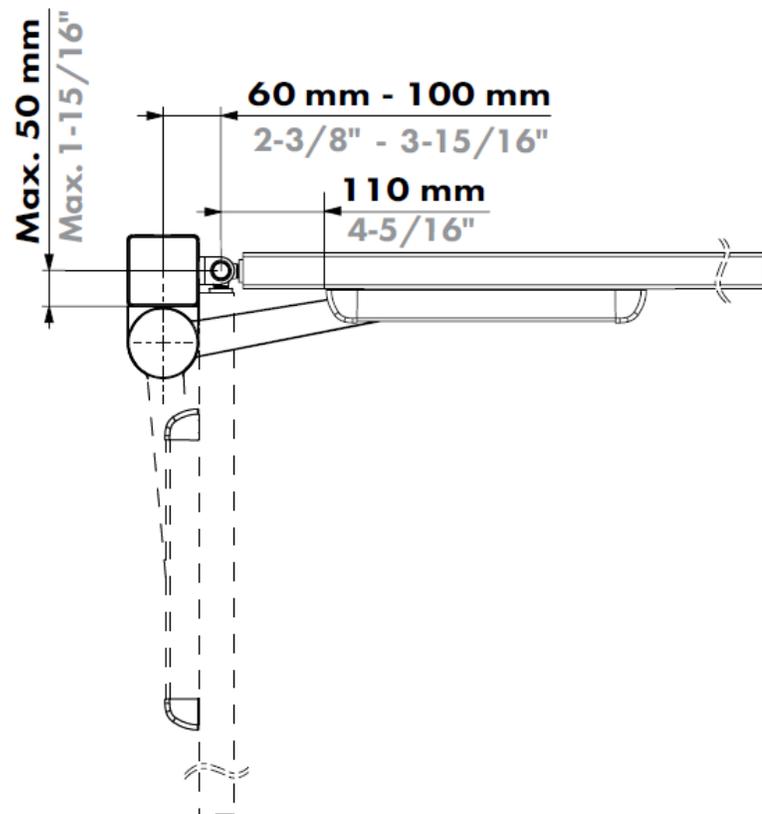


VENUS-A

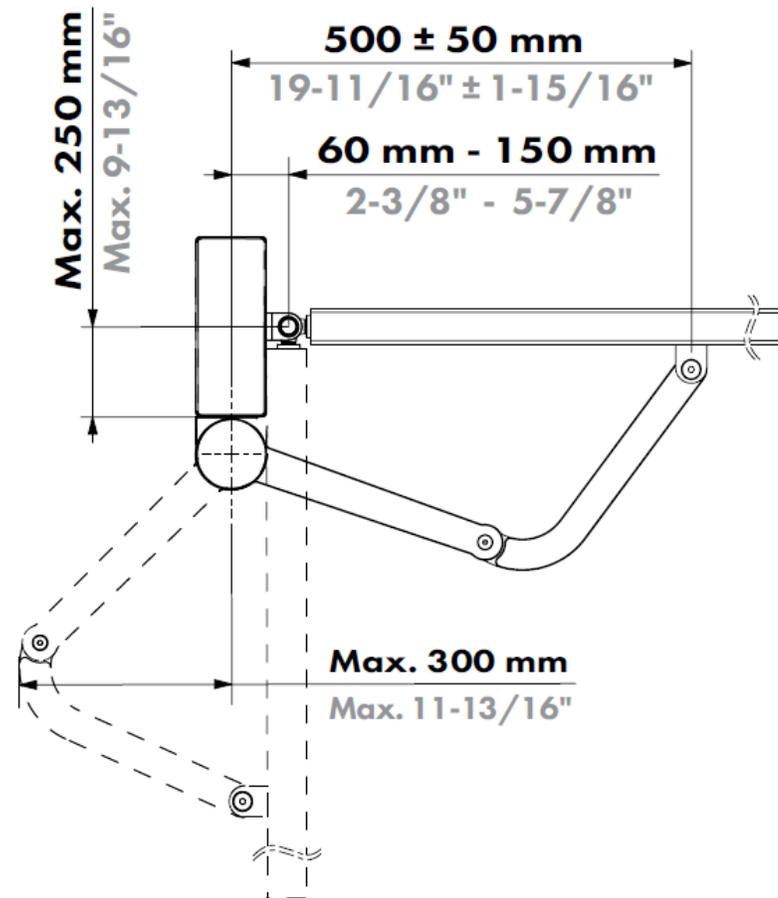


USAGE LIMITS

VENUS-S

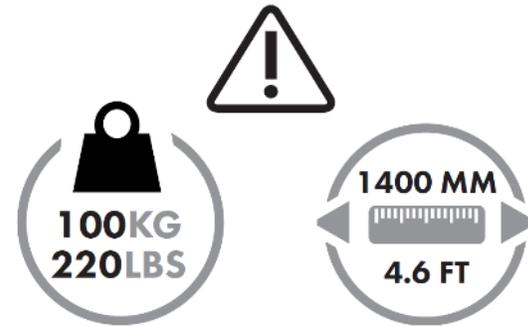


VENUS-A



SPECIFICATIONS

Power supply	110 - 240V AC (50/60Hz)
Motor voltage	24V DC
Nominal power, excl output power	30 W
Max power consumption	150 W
Max motor torque	150 Nm
Operating temperature range	-30°C ~ 70°C
Opening time to 90°	> 4 sec
IP rating	IP 55
Weight excluding arm	6.1 kg

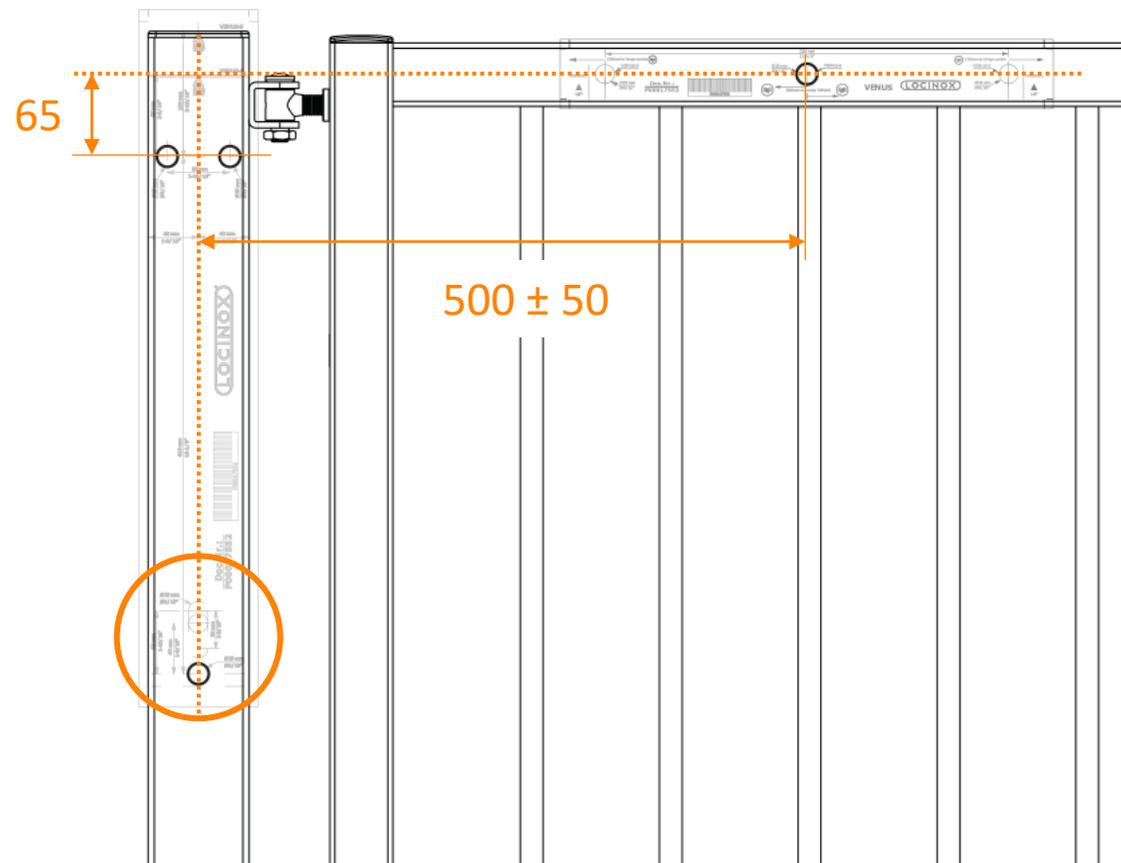
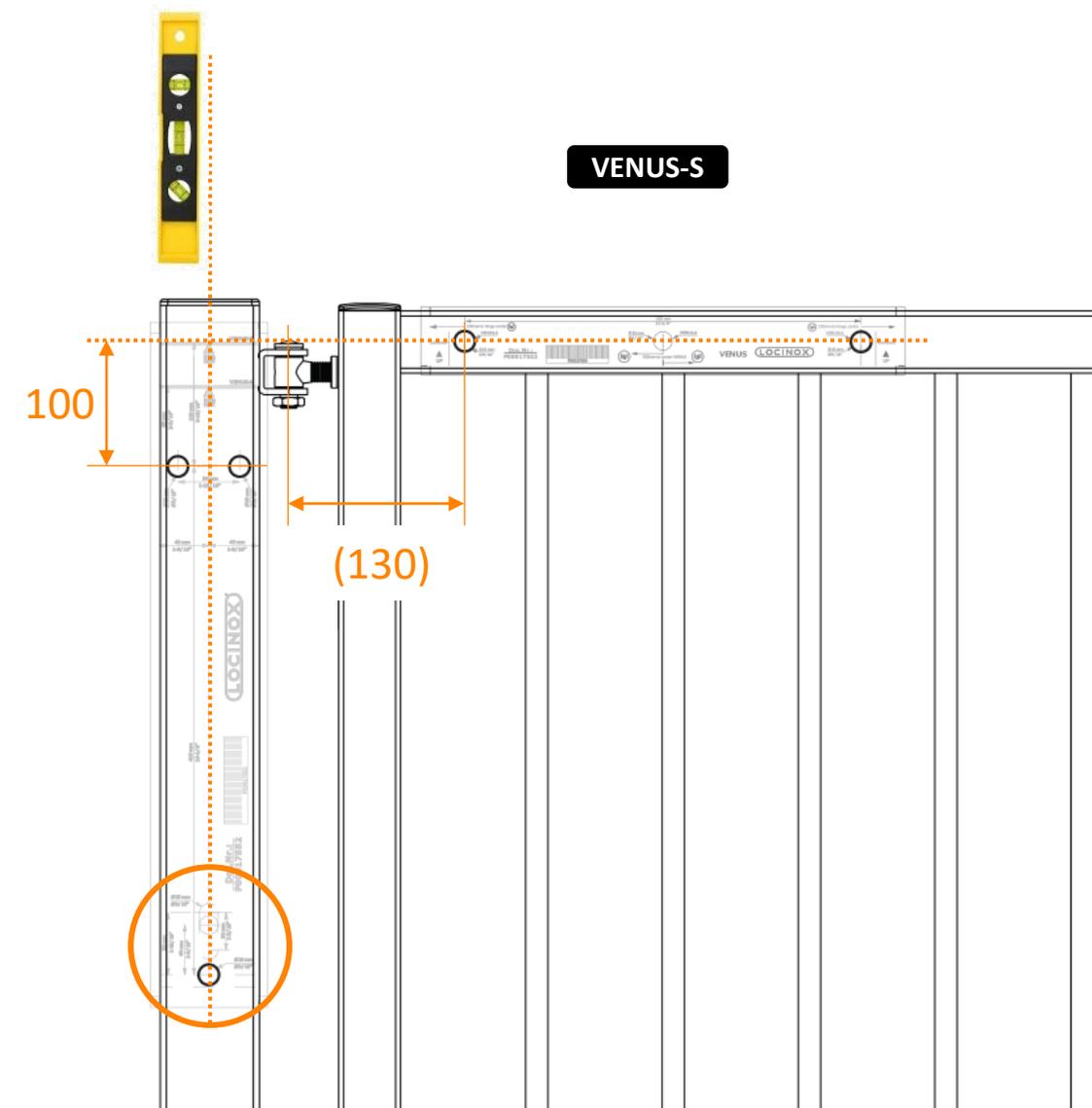


FIXATION HOLES

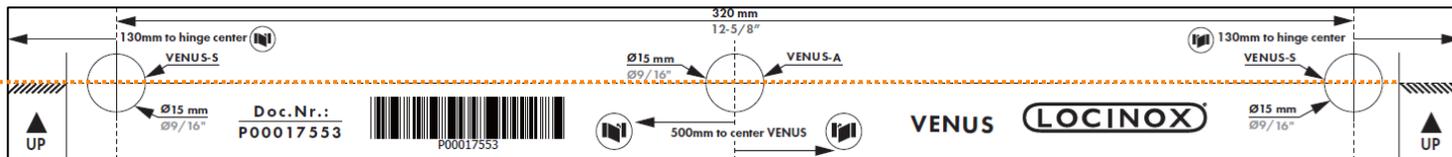
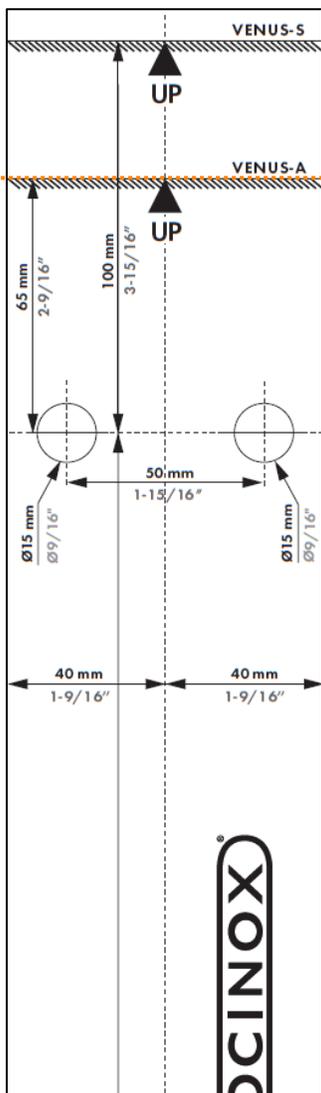
Ø15 mm
Ø9/16"

VENUS-S

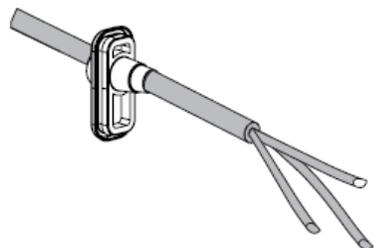
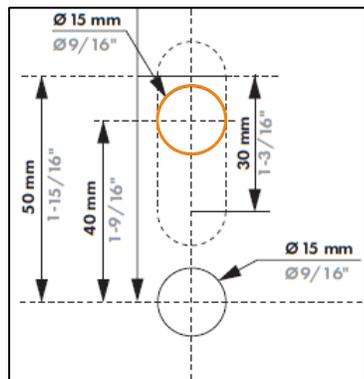
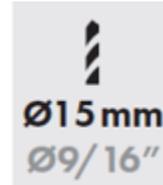
VENUS-A



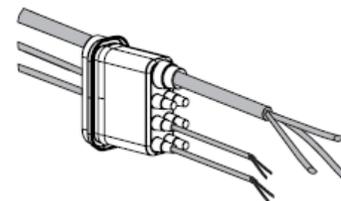
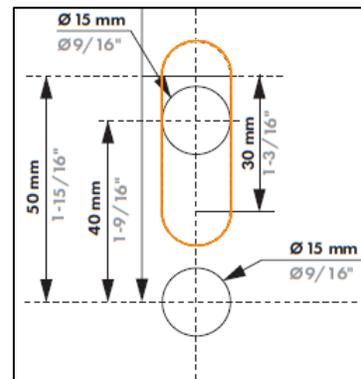
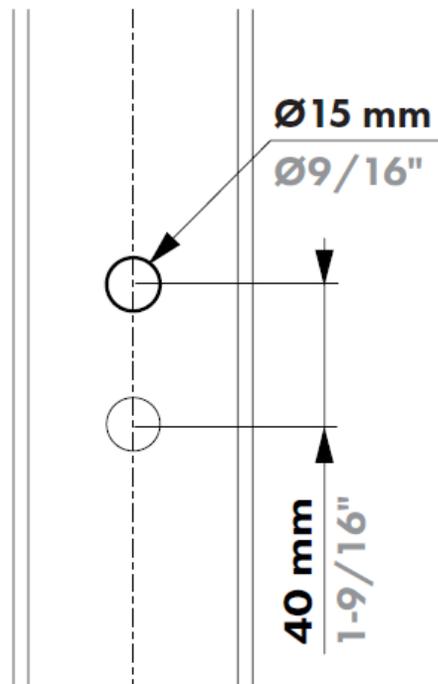
DRILLING TEMPLATE



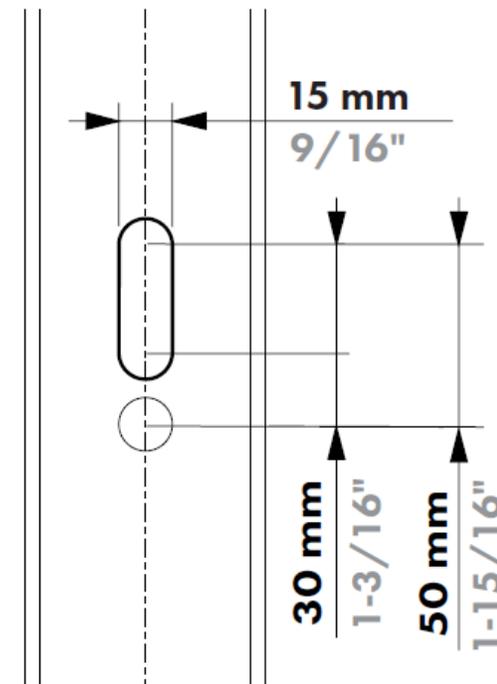
CUTOUT - CABLE PASS THROUGH



MANUAL MODE
Gatecloser functionality only



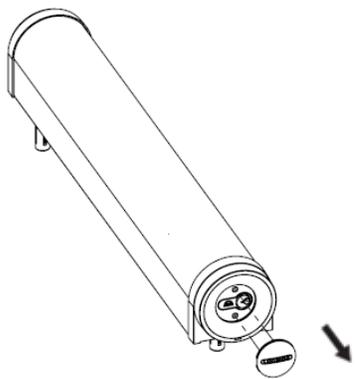
AUTOMATIC MODE
Electric lock + access control



REMOVE THE HOUSING

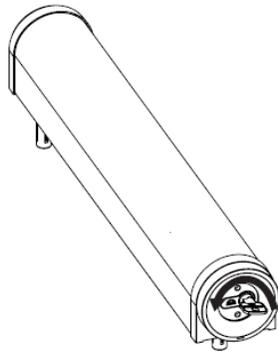
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Remove keycap



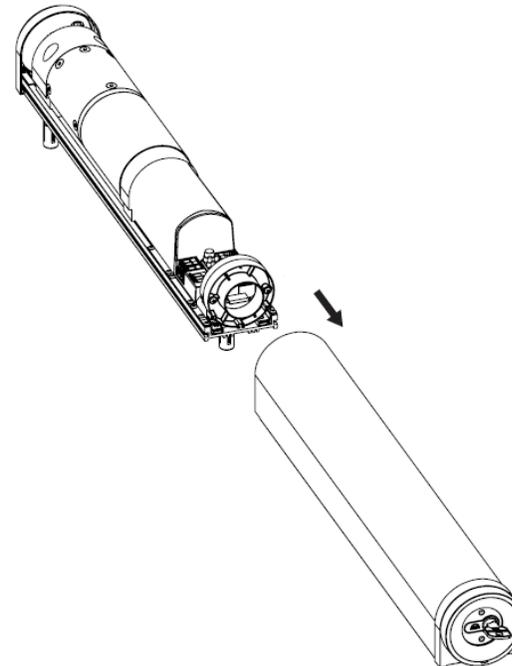
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Unlock

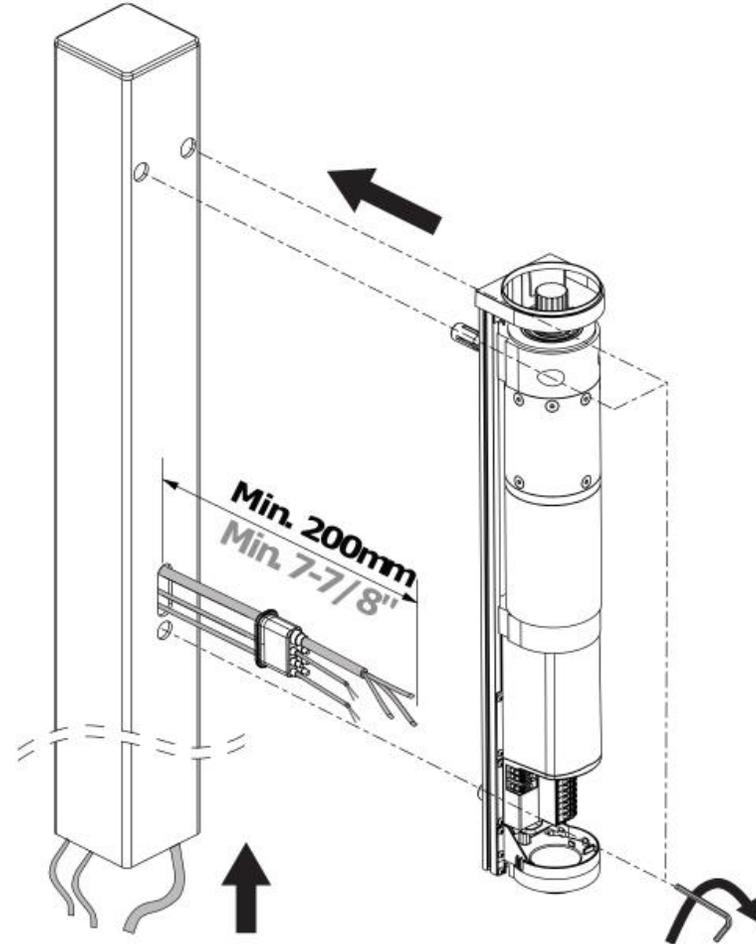
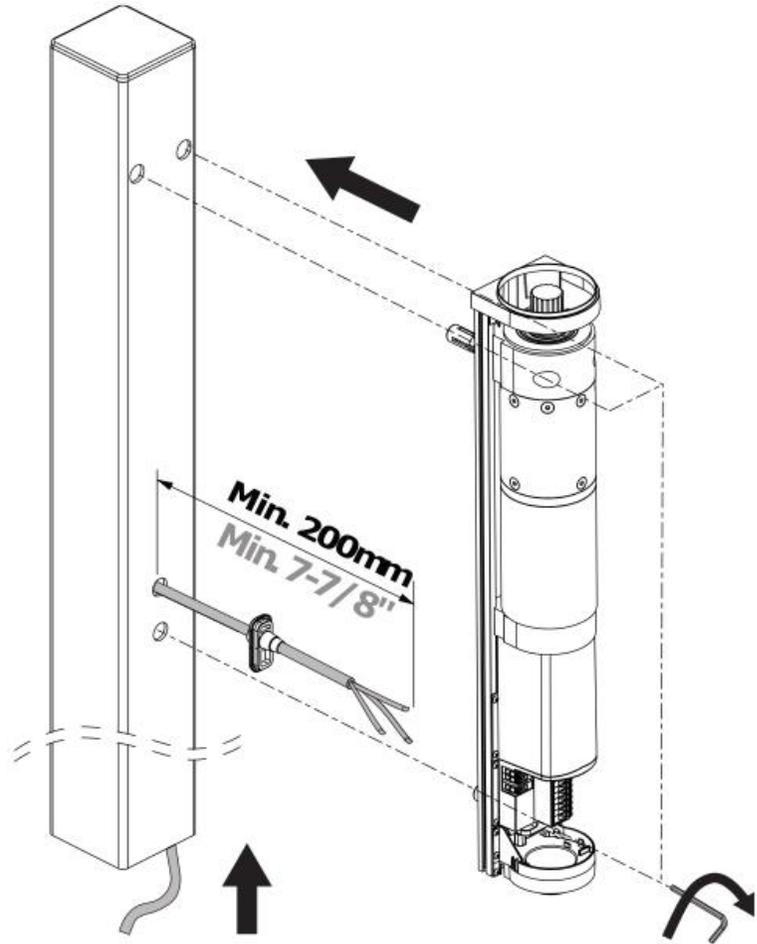


3

Slide off

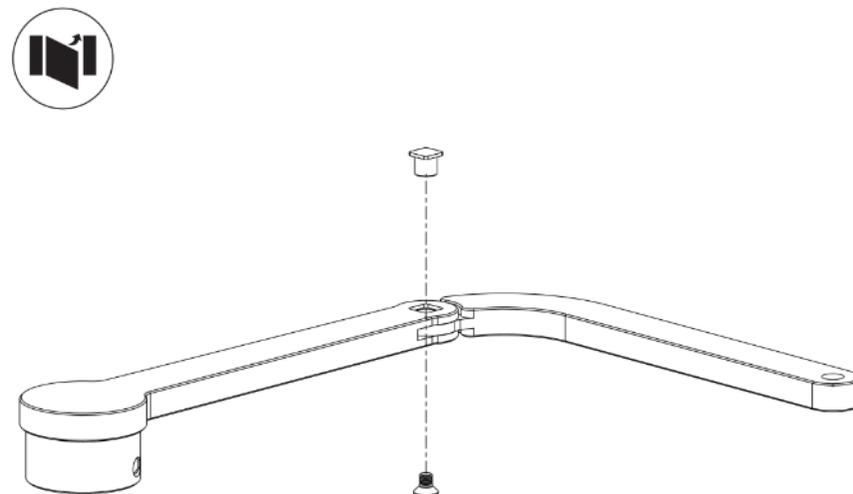
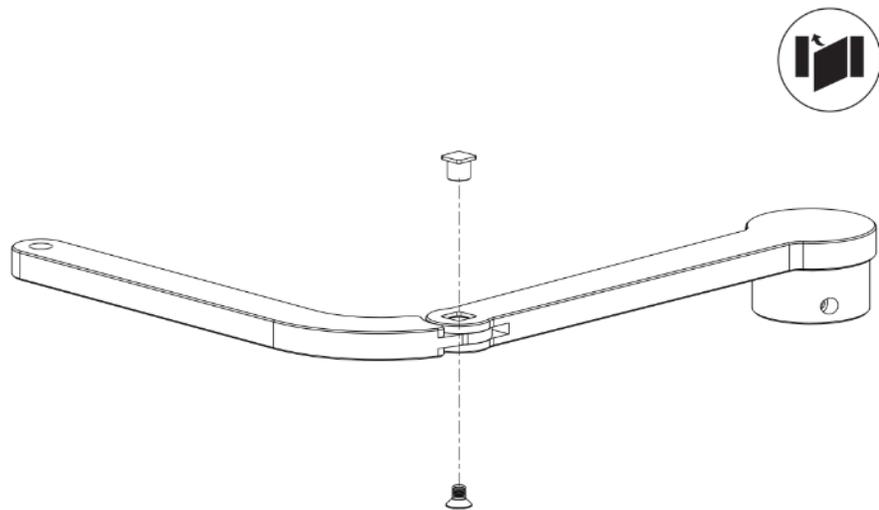


CABLE PASS THROUGH + FIX MOTOR



HEX
6mm

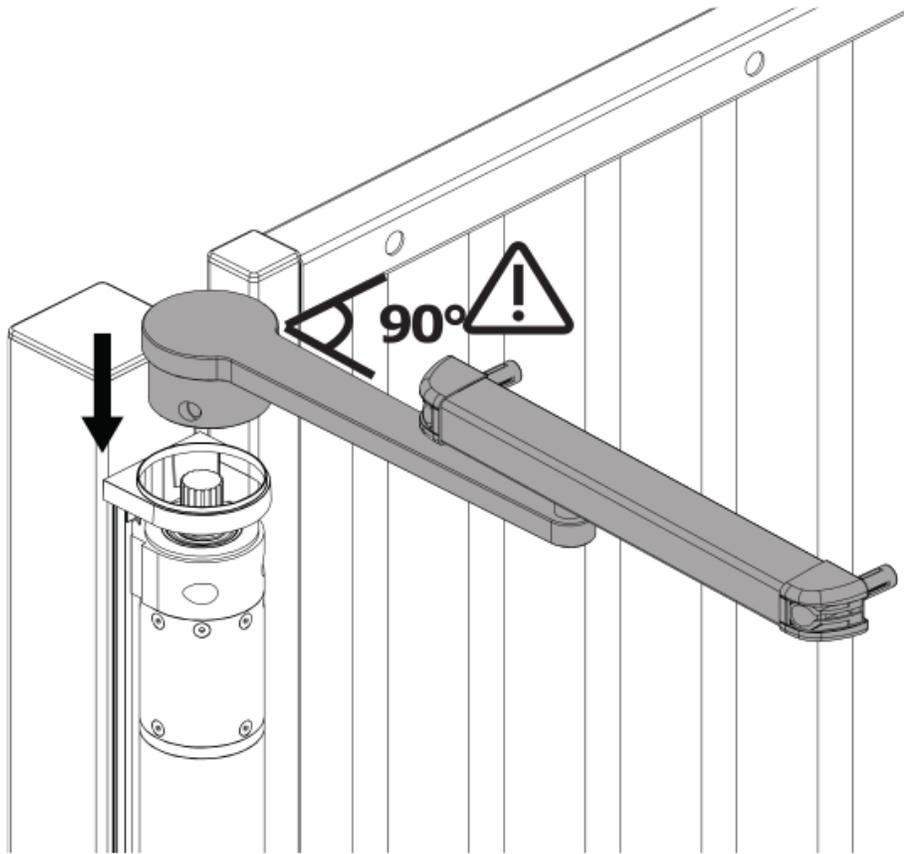
ASSEMBLE ARM-A



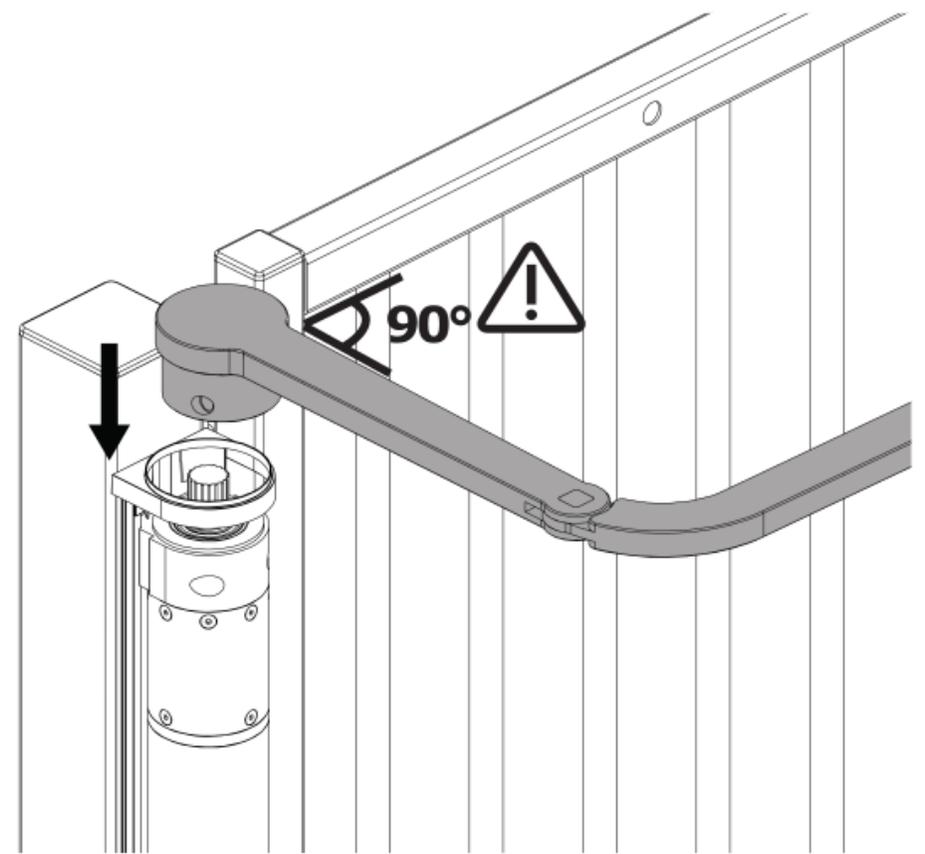

HEX
5mm

ATTACH THE ARM TO THE MOTOR SHAFT

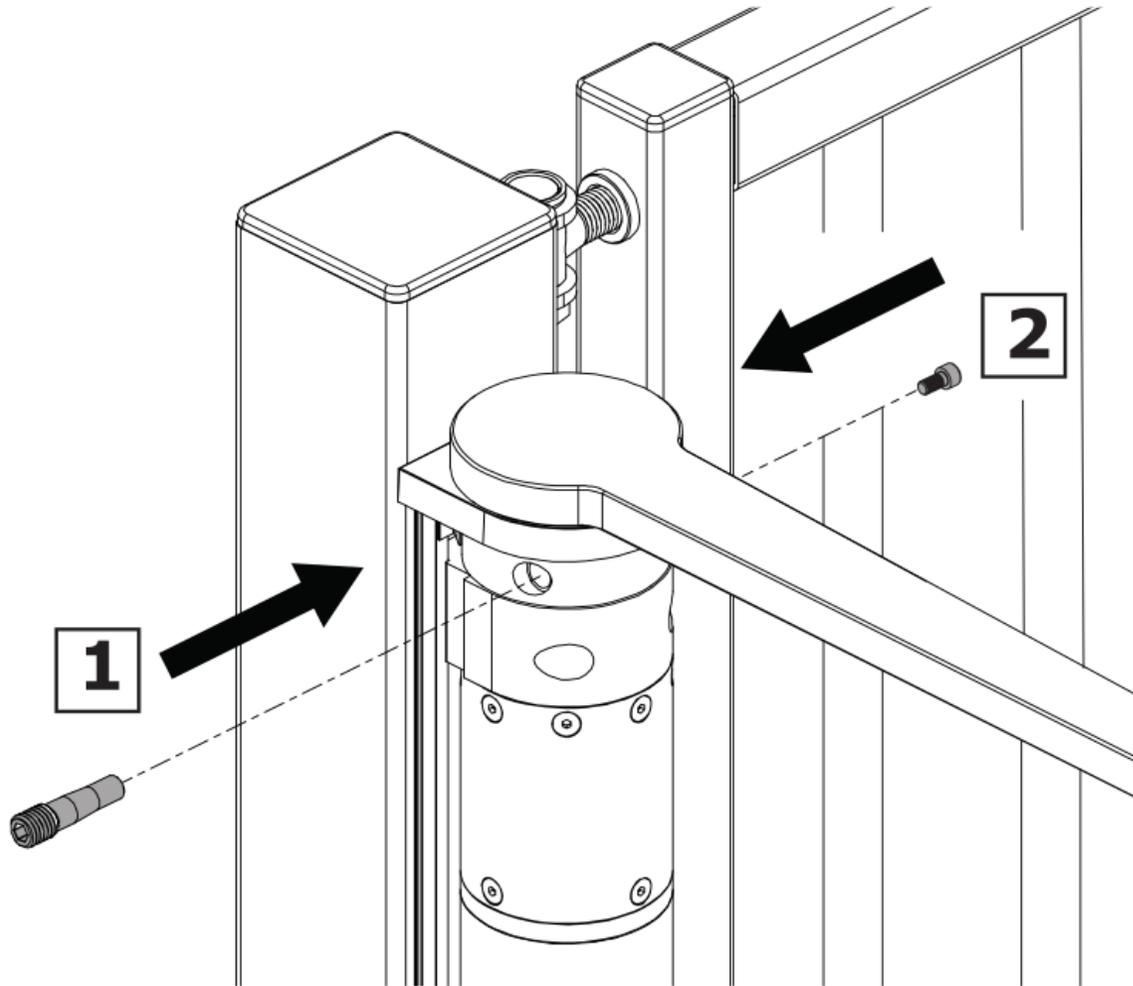
VENUS-S



VENUS-A



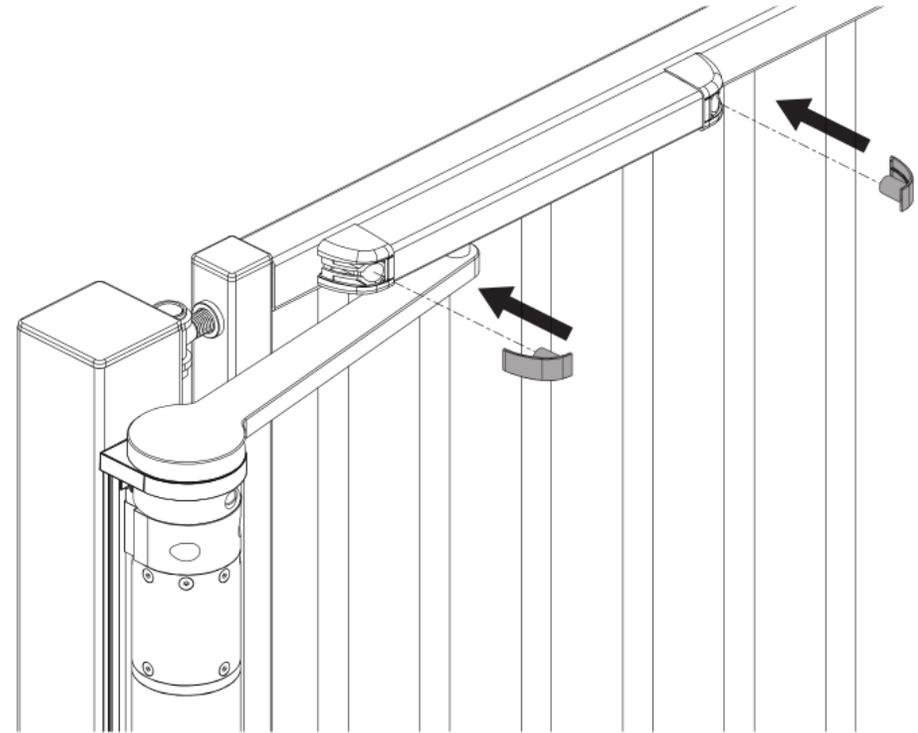
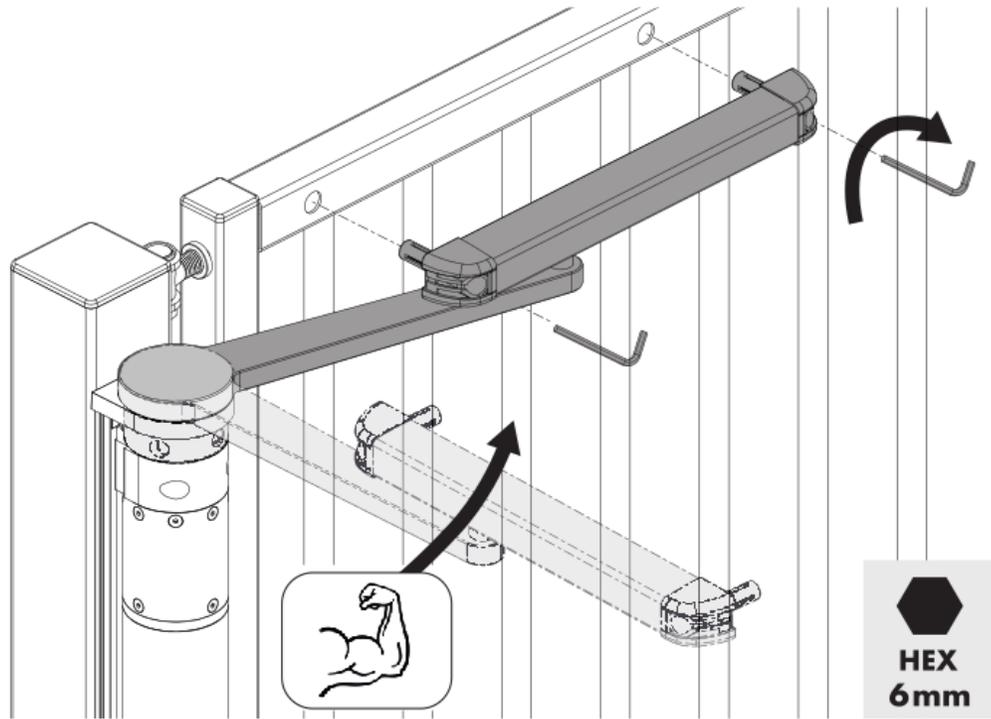
FIX THE ARM TO THE MOTOR SHAFT



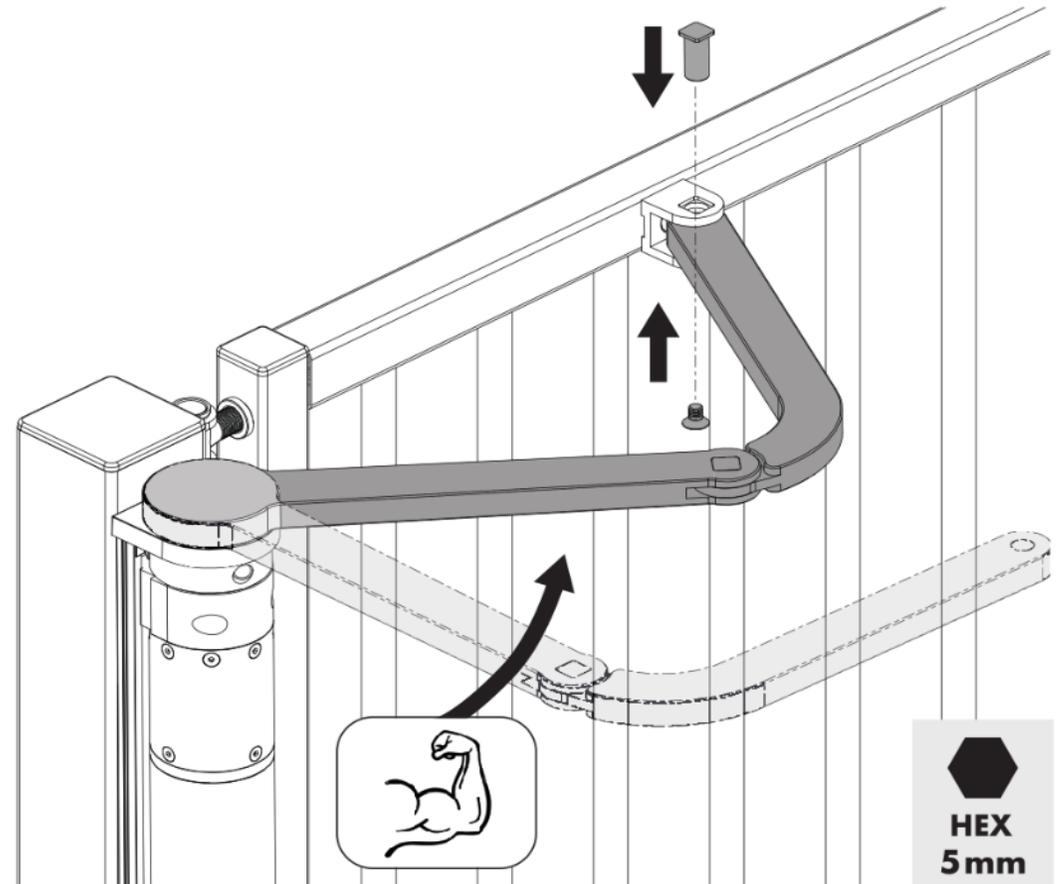
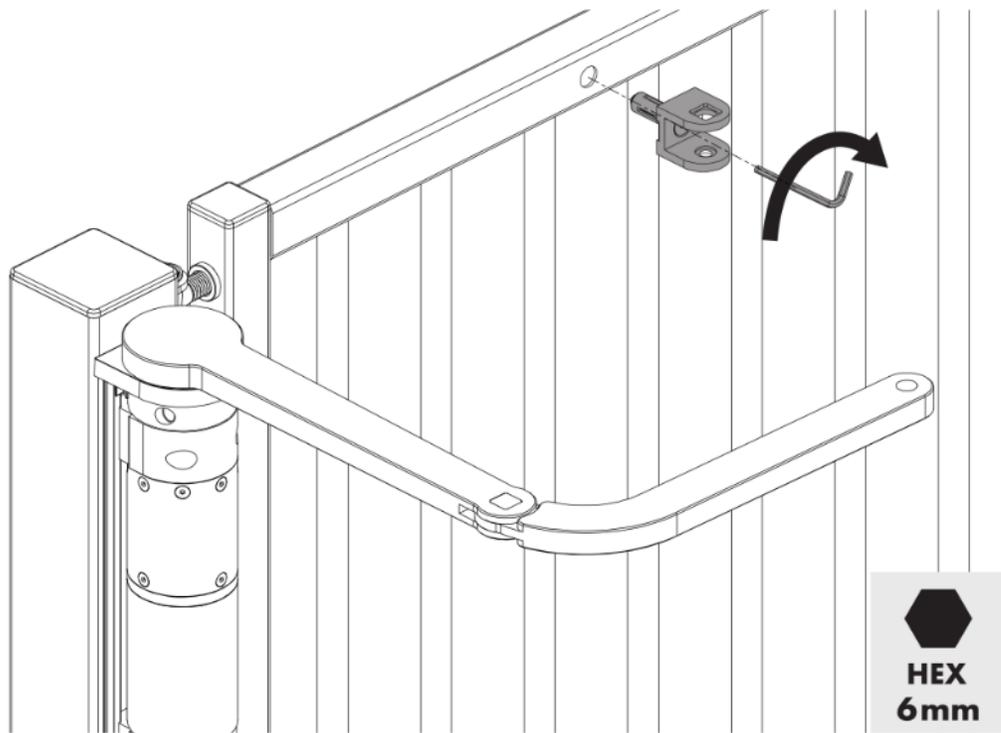
HEX
3mm

HEX
6mm

FIX THE ARM-S TO THE GATE



FIX THE ARM-A TO THE GATE



INSTALL THE LOCINOX APP



LOCINOX



EN12453 / EN16005

EN12453

Requirements and test methods for the safety in use of **power operated** industrial, commercial and garage doors, **gates** and barriers intended for installation in areas **in the reach of persons**, and for which the main intended use is giving safe access for goods and vehicles accompanied or driven by persons in industrial, commercial or residential premises.

EN16005

Requirements regarding design and test methods for **external** and internal **power operated pedestrian doorsets**. Such doorset constructions may be operated **electro-mechanically**, electro-hydraulically or pneumatically.

Includes the definition of “Low Energy Movement”

EN12453 / EN16005

- Norms describe all requirements to manufacture an automatic gate on “system level”:
gate construction, hinges, motorization, safety accessories etc.
- The installer is responsible that his automatic gate installation complies with these norms and that all components used are CE compliant.
- The Venus motor is designed for use in such installations and has all the necessary capabilities to comply with these standards.

EN12453 / EN16005

Minimum safety requirements for industrial door closing edges

EN12453 5.5.1 table 1

Control \ Location	"Hold to run" control mode of operation (door in sight)	Impulse activation		Automatic control
		Door in sight	Door out of sight	
The door is out of public area with a limited group of trained users	"Hold to run" control (no requirements on force limitation)	Force limitation with safety ① edges or in the motor		Force limitation plus ① light barrier/light curtain ②
		or guaranteed the door leaf is not touched up to 2.5 meters height		
The door is located in a public area with a limited group of trained users	Operated with Key switch (no requirements on force limitation)	Force limitation ① with safety edges or in the motor	Force limitation with safety edges or in the motor plus light barrier/light curtain	
		or guaranteed the door leaf is not touched up to 2.5 meters height		
The door is in contact with the general public and anyone is free to use it	Force limitation with safety edges or in the motor plus light barrier/light curtain ①+②			
	or guaranteed the door leaf is not touched up to 2.5 meters height			

Combining force limitation and light barrier/light curtain, the light barrier/light curtain function does not have to be monitored when functions are inspected at least every 6 month. "Door in sight" is control from a position that allows full, direct and permanent view of the door during operation.

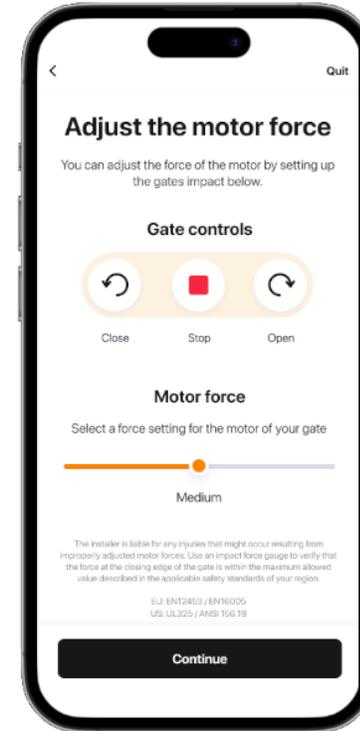
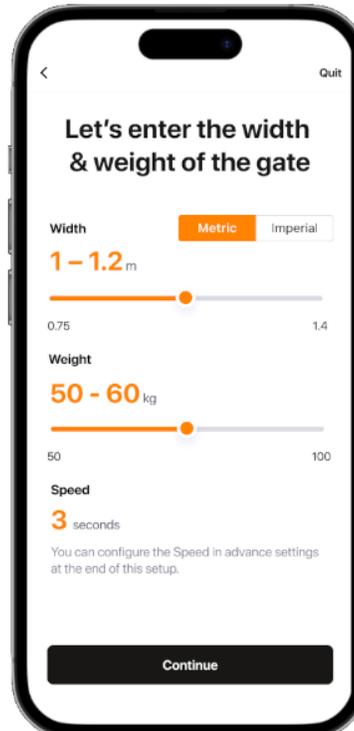
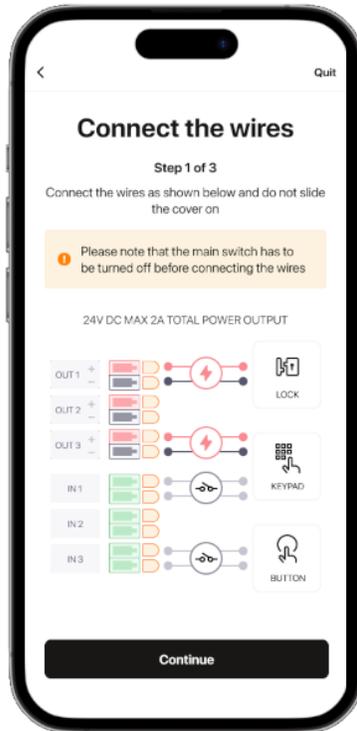
EN12453 / EN16005

EN16005 - Low energy movement

Low energy movement of the doorset is generally not protected with additional protective equipment against the hazards of impact and crushing because the kinetic energy levels are not considered to be hazardous,

however use of low energy doorset movement should only be considered when the risk assessment has taken account of **elderly, frail and disabled users** and indicates that the risk to these users is low.

VENUS INSTALLATION APP



REGISTRATION (OPTIONAL)

- Purpose is to collect minimal contact details of the installer for identification and link the Venus installations with the installer.
- Standard 2 years warranty will be extended to 3 years after registration (links with the serial number)
- Registration can be skipped by pressing the 'I do not wish to register' link at the bottom of the page
- Location information and configuration settings are uploaded to our servers for data analytics

Register for extended warranty

By registering we can also offer you extended warranty on the products configured and registered through the app.

Communication (optional)

Receive e-mail notifications about firmware updates and new features.



Register

[I do not wish to register](#)

2 OPERATING MODES

MANUAL operating mode



- **Mechanical lock**
- Push-&-Go to open
- Automatic closing after pause time

AUTOMATIC operating mode



- **Electric lock**
- Access control or button to open
- Push-&-Go to open
- Automatic closing after pause time

WIRING THE VENUS

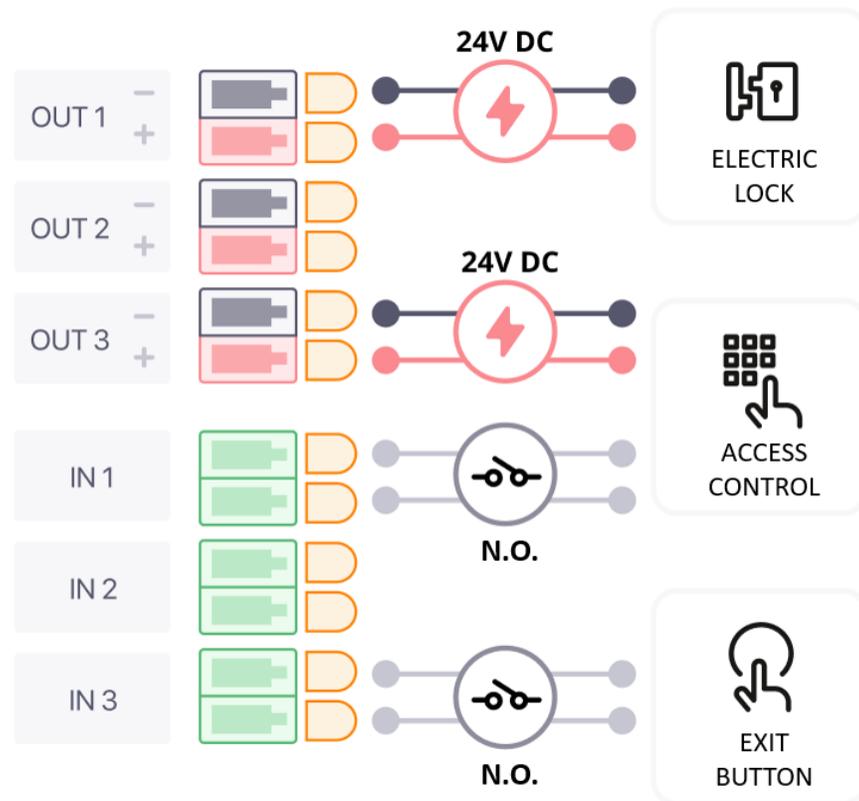


- 110-240V AC
- 3 output connector pairs (24V) – can be configured as:
 - Electric lock
automatic detection for Emissa or Ruptura
 - Auxiliary power
 - Flashlight
 - Courtesy light with timer
- 3 input connector pairs - can be configured as:
 - NORMALLY OPEN (NO): Actuating device
Command: open, stop, close, keep open, step by step
 - NORMALLY CLOSED (NC) or 8K2: Safety device
Detection while open/stop/moving: stop, reverse or ignore

WIRING THE VENUS



Default setting for "automatic mode"



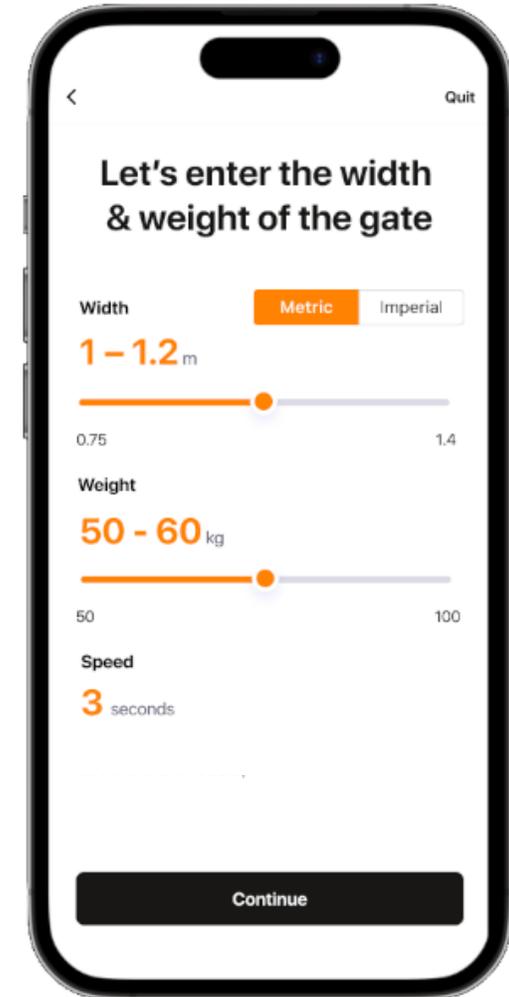
LOW ENERGY SPEED

Focus on motorization for pedestrian gates

- Max width = 1.4m
- Max weight = 100kg

The gate opening time is automatically calculated to match the Low energy speed settings

Speed adjustment is currently not implemented yet (first release)



LOW ENERGY SPEED

Minimum opening time (in seconds) to open 80°

		<50	50-75	75-100	kg
		<100	100-160	160-220	lbs
<0,75	<30	3	3	3,5	
0,75-0,85	30-36	3	3,5	4	
0,85-1	36-42	3,5	4	4,5	
1-1,2	42-48	4	5	5,5	
1,2-1,4	48-54	4,5	5,5	6,5	

m inch

OPEN / CLOSE POSITION

Manually open the gate to the desired maximum opening angle + confirm

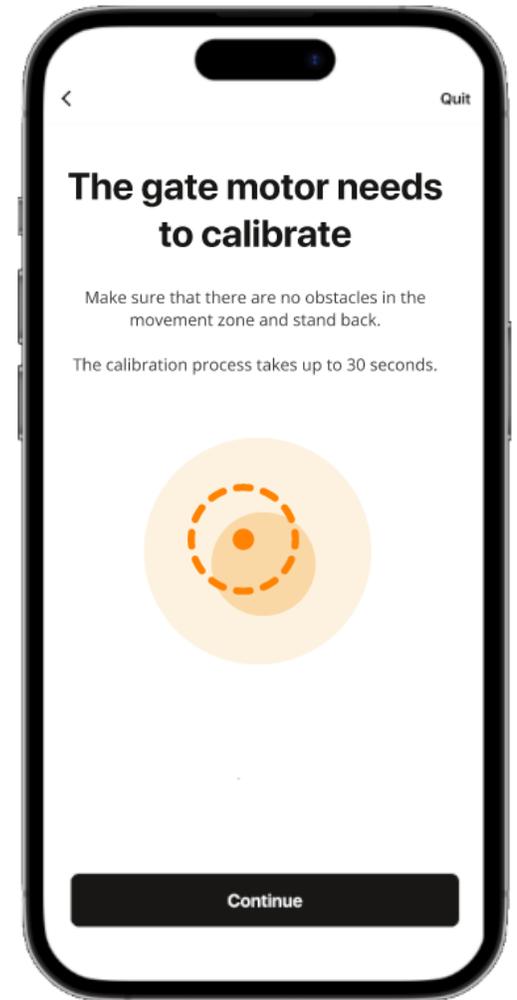
Manually close the gate + confirm

→ The motor controller is now registering the opening direction and end positions

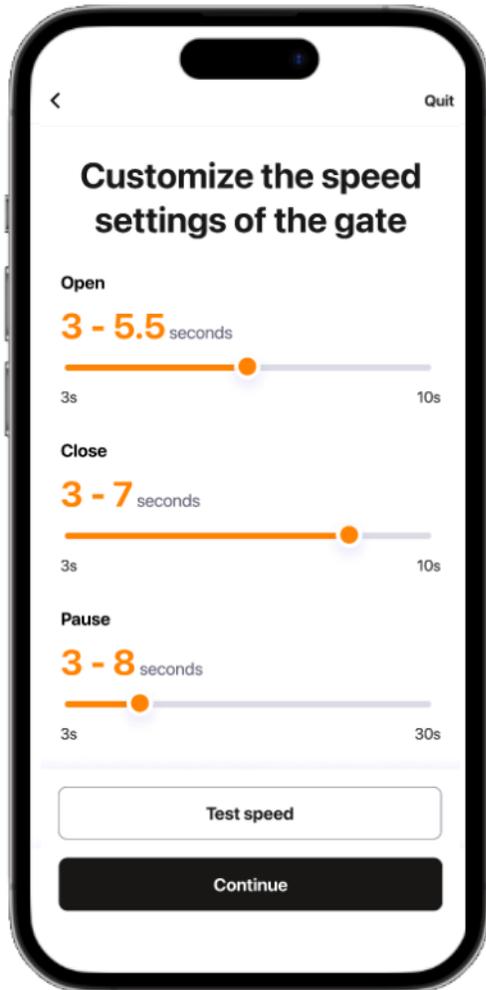


CALIBRATION

- Detect the lock type (Emissa / Ruptura)
- Measure the breaking distance in opening and closing direction
- Measure the current consumption with standard speed to calibrate the obstacle detection threshold



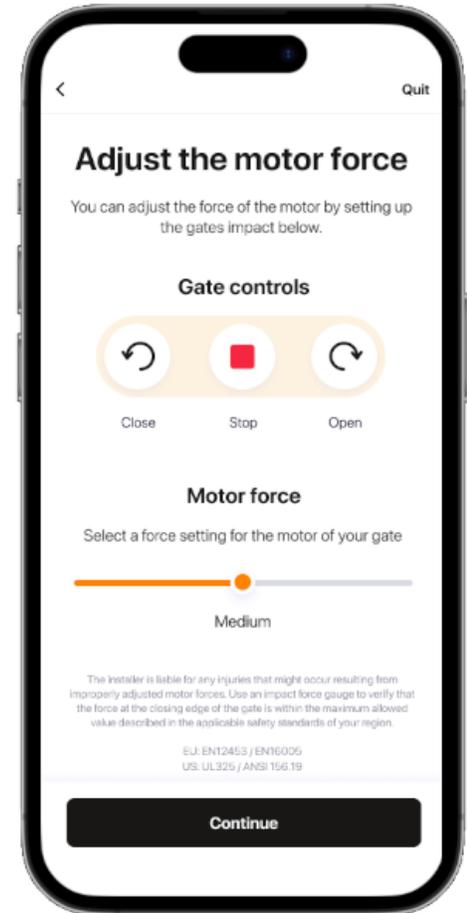
SPEED ADJUSTMENT



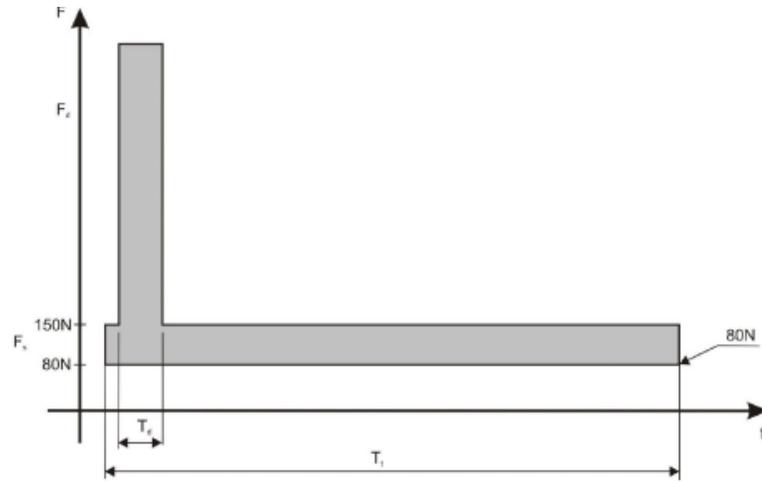
- Max opening speed is Low Energy speed limit
- Opening speed and closing speed can be configured independently
- 5 seconds = default Pause time
- Test buttons available

OBSTACLE DETECTION (1)

- The installer is liable for the safety of the complete installation
- The motor control system will automatically detect when the gate encounters an obstacle and the motion will reverse.
- The motor force at which the 'obstacle detection' is activated can be adjusted to comply with the regulations
- This setting is a compromise between wind-resistance and user comfort during a collision
- Standards on automated gates/doorsets:
 - EU: EN12453 / EN16005
 - US: UL325 / ANSI 156.19



OBSTACLE DETECTION (2)



- Key**
- F_d maximum force measured during the dynamic period T_d (dynamic force) – see Table 1 for permitted values
 - T_d period of time of maximum 0,75 s starting from the first measured force exceeding 150 N
 - F_s maximum force measured outside the dynamic period T_d (static force)
 - T_t period of 5 s starting from the first measured force exceeding 80 N and including T_d

Figure 5 — Force versus time

Table A.1 — Admissible impact forces

Admissible impact forces	Between closing edges and counterclosing edges		Between flat areas other than closing edges and counter-closing edges, > 0,1 m ² with no side < 100 mm
	in gaps from 50 mm to 500 mm	in gaps > 500 mm	
horizontally moving door	400 N	1400 N	1 400 N
door rotating around an axis perpendicular to the floor	400 N	1400 N	1 400 N
vertically moving door	400 N	400 N	1 400 N
door rotating around an axis parallel to the floor — barriers	400 N	400 N	1 400 N

The values specified in Table A.1 are maximum values permitted within a period of time of maximum 0,75 s ($T_d \leq 0,75$ s).

A.2.2 Admissible force

After T_d has elapsed, no force > 150 N is allowed. This force shall come down to a residual force < 25 N after a total time T_t of maximum 5 s. The residual force can be achieved either by reversing the movement of the door or by releasing the obstacle.

This limitation of T_t to 5 s can be disregarded under the condition that the force never reaches 50 N provided that the door can be pushed back to a distance of at least 50 mm with a force < 50 N.

However, after T_d , peaks higher than the admissible forces shown in Table A.1 will be accepted, if

- they are decreasing from one to the other

and

- the period of oscillation is ≤ 1 s

and

- the average force calculated within the remaining part of T_t is ≤ 150 N.

ADVANCED SETTINGS

- 3 Output connectors
 - Electric lock
 - Courtesy light
 - External Flashlight
 - Aux 24V
- 3 Input connectors
 - Control device
 - Safety device
- Motion settings
 - Push and Go (On / Off)
 - Pause time (default = 5s)
 - Number of retries after collision (0 / 3)
- Light settings
 - Courtesy light timer (default = 30s)
 - Pre-flash time (default = 0s)
 - Flashlight brightness (High / Low / Off)
 - Warning ON during pause time (On / Off)

Connectors & Gate

The connectors have been predefined as described in the manual. These can be configured below.

Connector settings

OUTPUT 1 Lock	>
OUTPUT 2 Not configured	>
OUTPUT 3 24V AUX	>
INPUT 1 Control device	>
INPUT 2 Control device	>
INPUT 3 Control device	>

< close

Connector Settings / OUTPUT 1

OUTPUT 1

Unused	<input type="radio"/>
24V AUX	<input type="radio"/>
Lock 2 options selected	>
Light Not configured	>

< close

Connector Settings / INPUT 1

INPUT 1

Unused	<input type="radio"/>
Control device Open	>
Safety sensor Not configured	>
8K2 Safety edge Not configured	>