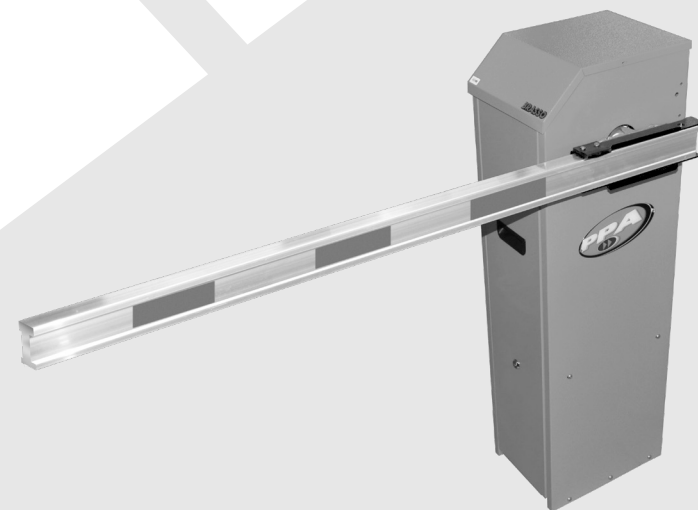




Technical Manual

JETFLEX BRASSO AUTOMATIC BARRIER



All images in this manual are for illustrative purposes only.



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ATTENTION:

Do not use this equipment without first reading the User's Manual.

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INSTALLATION LOCATION

The location where the barrier will be installed must be previously analyzed, including the entire site infrastructure, floor conditions, electrical power supply, passageway width, ceiling height (if any), vehicle flow and the need to use optional accessories.

Once it is analyzed, the equipment that best fits the needs of the place should be chosen.

☑ **NOTE:** Using articulated barriers is usually recommended in places with low ceilings. In this case, contact the factory to have a barrier with the proper size for installation in the specific location supplied.

⚠ IMPORTANT

Check if any obstacles could interfere with the complete barrier opening and closing. If so, the equipment installation will be impaired, and repairs to the local infrastructure will be necessary. Carefully choose the model according to its technical features and where it will be installed. Notice the need for optional accessories. Calculate the flow of vehicles on site.

☑ **NOTE:** If the floor does not meet the above specifications, a concrete base plate respecting the cabinet base dimensions must be provided to fix the cabinet. The concrete base plate should be installed at a minimum height of 100 mm from the ground.

Preparing the location:

1. Run a 3/4" conduit pipe through the floor or concrete base plate from the center of the base to the circuit breaker box installed from where the equipment's electrical supply will come.
2. Run the power and pushbutton cables through this pipe to where the equipment will be operated. Check the table below to choose the cables according to the NBR 5410 standard.

Motor power supply	Cable type and size
110V	1 PP cable - 2 x 2.5 mm
220V	1 PP cable - 2 x 2.5 mm
220V	1 PP three-phase cable - 3 x 2.5 mm
380V	1 PP three-phase cable - 4 x 2.5 mm

☑ **NOTE:** If accessories are used, provide piping and cables as needed. Provide a grounding rod that will be fixed close to the body of the gate.

GENERAL FEATURES

- Universal cabinet that allows installing the barrier arm on either side of the barrier.
- Concealing system for manual unlocking (up to 4.5m).
- Electronic control unit with frequency inverter.
- Mechanical stop with height adjustment.
- System activation through a gearmotor, pulleys, and belts.
- Galvanized steel cabinet with anti-corrosion treatment and electrostatic painting guarantee excellent resistance against the action of time.
- Limit switch system with encoder.
- Electronic brake.
- Allows installing several accessories (inductive loop, signal light, photocell, pushbutton, etc.).

TECHNICAL SPECIFICATIONS

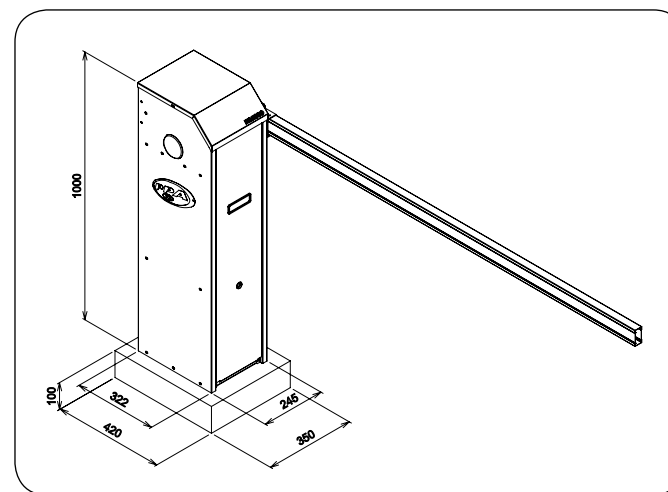
Brasso barrier (aluminum linear)

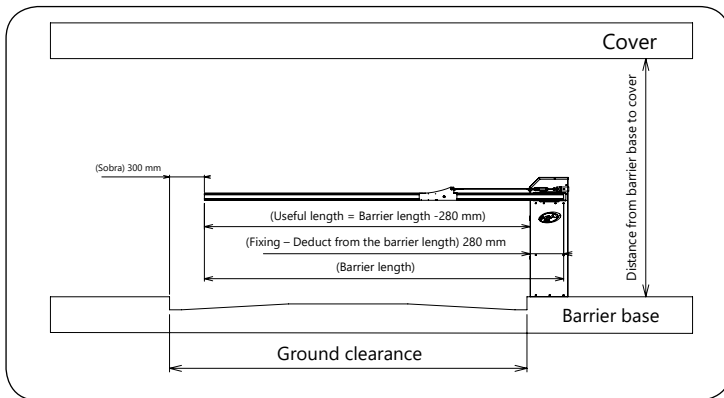
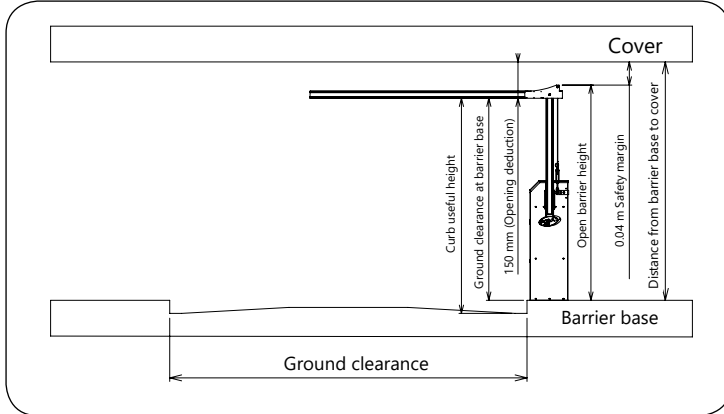
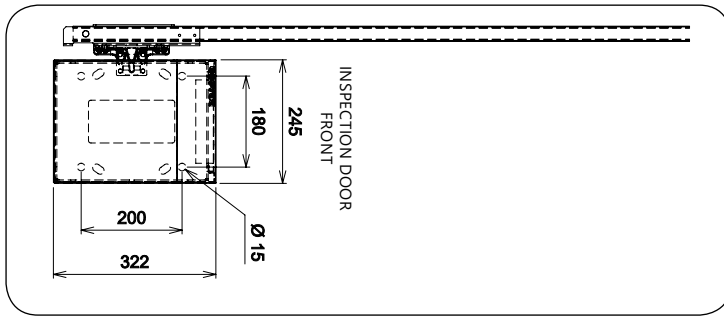
Barrier length	Cycles/hour	Opening time (adjustable)	Closing time (adjustable)	Motor power	Voltage
2.5 to 3m	200	1.5 second	1.5 second	1/2 HP	127 and 220 V
3.5 to 4.5m	180	2 seconds	3 seconds	1/2 HP	127 and 220 V
5 to 6m	180	3 seconds	5 seconds	1/2 HP	127 and 220 V

Brasso barrier (aluminum articulated)

Barrier length	Cycles/hour	Opening time (adjustable)	Closing time (adjustable)	Motor power	Voltage
2.5 to 3m	120	1.5 second	2 second	1/2 HP	127 and 220 V
4m	100	3 seconds	4 seconds	1/2 HP	127 and 220 V

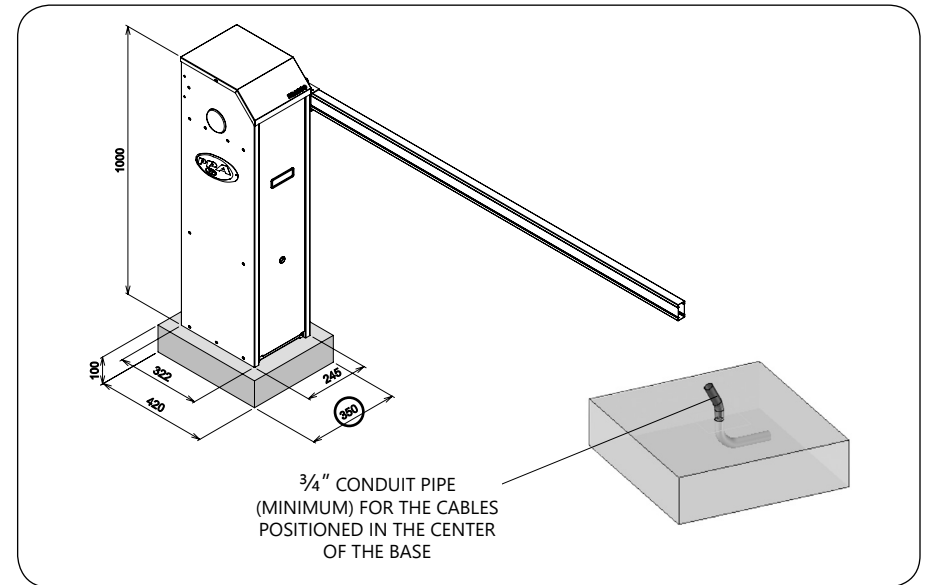
EQUIPMENT DIMENSIONS





BUILDING THE BASE PLATE TO INSTALL THE CABINET

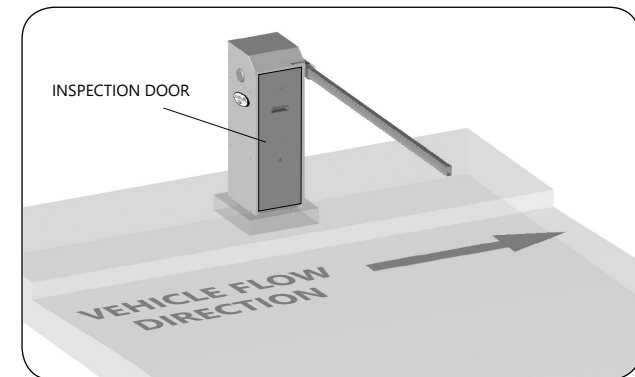
Build a concrete base so that the highlighted direction (350) faces the curb (street, passing vehicles) according to the suggested dimensions.



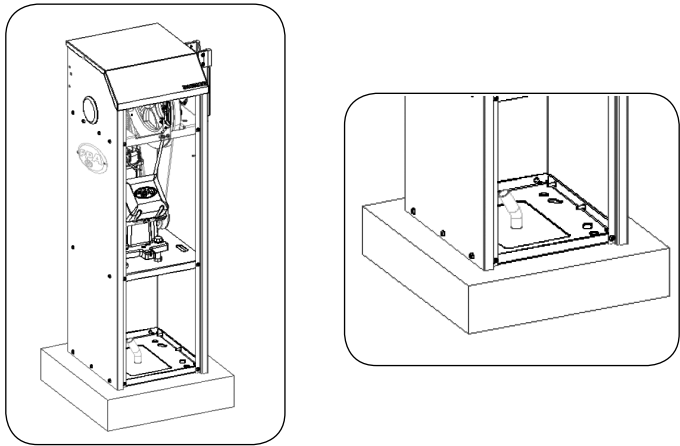
OBS.: Measurements in mm. The base plate must be leveled to allow the equipment to perform better.

INSTALLING THE BARRIER

1. When fixing the barrier, notice that the cabinet inspection door must face the side of the road or vehicle passage.



2. Position / align the cabinet on the base and mark the holes so that the front of the gate (inspection door side) faces the curb (street, passage of vehicles).

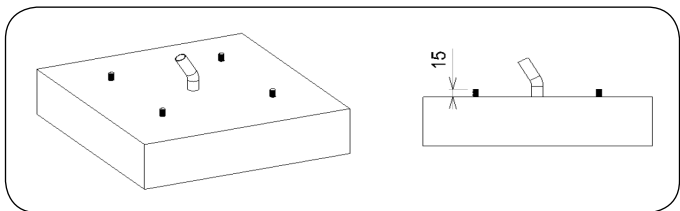


3. Remove the cabinet from the base and drill holes in the previously marked locations.

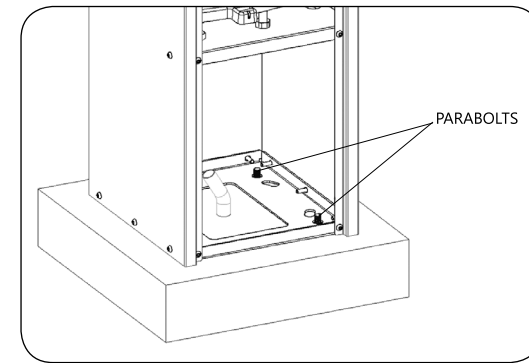
OBS.: Make 04 holes with a Ø10mm drill and at least 80-mm deep.

4. Insert the anchor bolts in the holes of the base, as shown below.

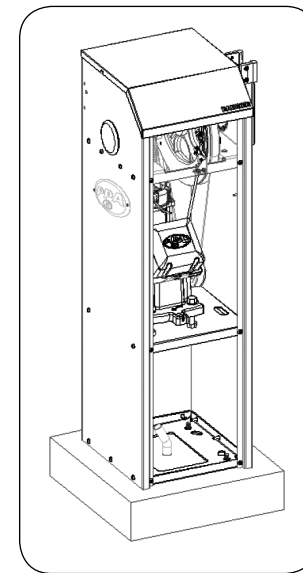
OBS.: The anchor bolts must not be inserted thoroughly. They must be approximately 15 mm above the base.



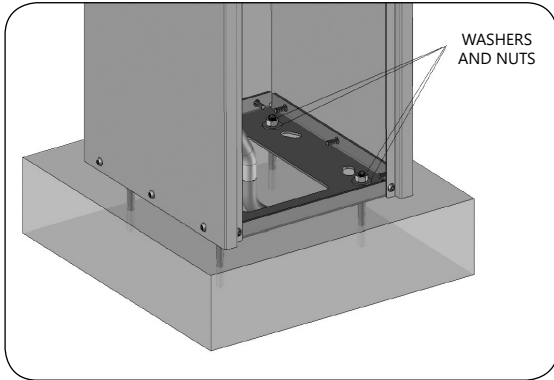
5. Position the cabinet over the base, and fit the cabinet holes into the anchor bolts.



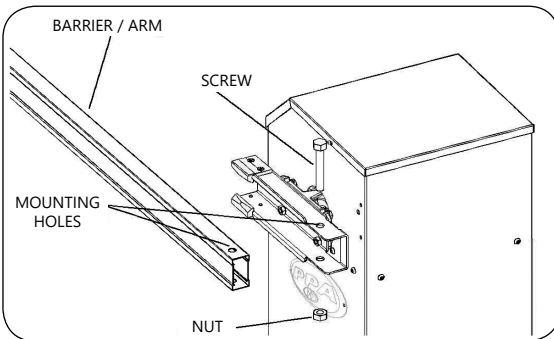
6. Recheck the cabinet alignment. If necessary, move it circularly as desired.



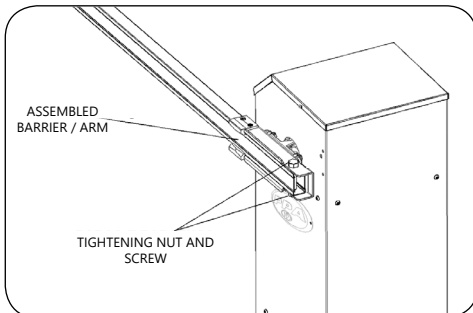
7. Insert the washers and nuts to fix the cabinet.



8. Insert the barrier/arm into the fixing assembly housing, and align the mounting holes.



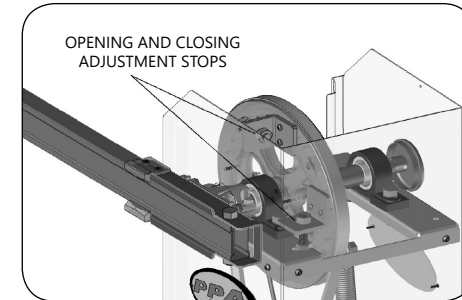
9. After positioned, tighten the nut and the screw.



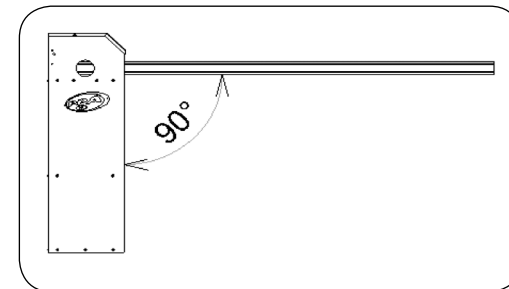
10. Power/energize the barrier according to the purchased product voltage (127V or 220V).

OBS.: Use 2.50mm² cables. Use a dedicated circuit breaker, that is, a circuit breaker where only the barrier will be connected.

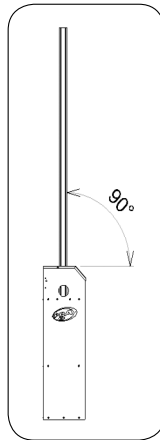
11. Check/set the barrier alignment (opening and closing). Use mechanical stops for this situation and move them as necessary.



12. The barrier will be in good working conditions when closing when the barrier/arm follows the requirements shown below in the image.



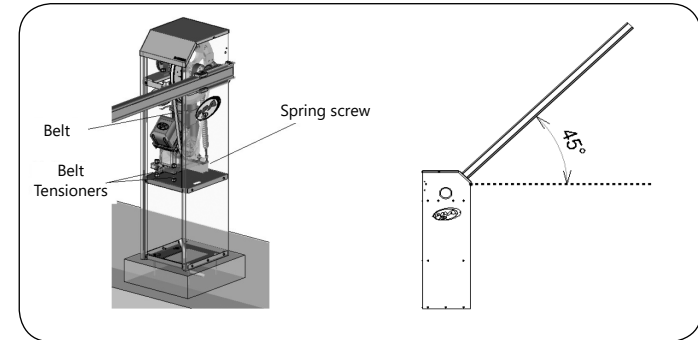
13. The barrier will be in good working order when opening when the barrier/arm follows the requirements shown below in the image.



OBS.: It is not necessary to rebalance the barrier, as it leaves the factory balanced. However, if necessary, follow the guidelines below.

BALANCING THE BARRIER AND CHECKING THE BELT

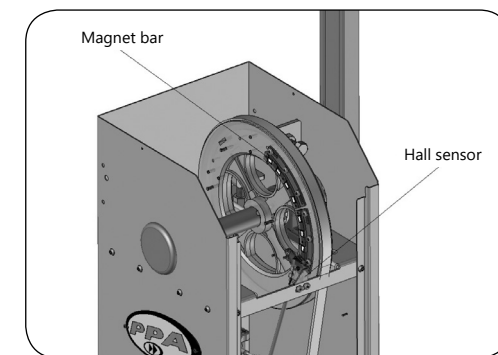
1. Remove the gearmotor from the cabinet, leave the belt free, and check if the barrier remains at approximately 45°. Otherwise, adjust it through the spring screw by loosening or tightening it until finding the ideal adjustment.
2. Once adjusted, replace the gearmotor and the belt, and check if the belt is well tensioned and ready for operation. With your thumb, apply even pressure on the belt. If it does not bend, it is because it is well-tensioned. If the belt is loose, adjust it through the belt tensioner screws, using a wrench according to the respective nut.



ADJUSTING THE MAGNET BAR

After the barrier is balanced correctly and adjusted in the opening and closing "mechanical stops", check if the magnet bars need adjusting.

1. Keep the barrier in the open position (90°).
2. Adjust the magnet bar so the last magnet is in front of the Sensor Hall (Encoder), and tighten the fixing screws.



OBS.: Follow the same procedure with the barrier in the closing position (0°). The barrier is ready to work. Turn on the circuit breaker, press the "+" button on the electronic board, and the barrier will move

OBS.: On the first activation, the barrier will move slowly in the opening and closing directions as it reads the path. Soon after the reading, the operation is normalized and will start operating at the factory default speed. For more accurate adjustments, refer to the electronic board options.

OPERATION

The barrier is operated by a micro-controlled control board, activated via remote control or any other device that provides a NO (Normally Open) contact.

TRIFLEX CONNECT AC CONTROL BOARD

The control board operates with a frequency inverter, which drives the three-phase induction motor from a single-phase AC power supply and a logic controller to carry out the inverter operations. For more information, refer to the TRIFLEX CONNECT AC control unit manual.

ENCODER SYSTEM (DIGITAL REED)

An encoder monitors the barrier position. Also called Digital Signal Angular Positioning Transducer System, it is used to precisely control and monitor the gearmotor movements.

Therefore, there is the possibility of recording certain gate positions in the memory and enabling the control board to control opening and closing. This is done by employing sensors that inform the barrier travel direction and position during operation.

Thus, it is a device responsible for the barrier path's reading, memorization, and accuracy.