

A) Warning to the user and/or installer

- 1) CAUTION: It is important to your safety that these instructions are followed. The installation or misuse of this product may cause personal injuries or material damages.
- 2) Keep these instructions in a safe place for future reference.
- 3) This product was designed and produced strictly for the use indicated in this manual. Any other use other than the ones expressly indicated may damage the product and/or be a source of danger, invalidating the warranty.
- 4) Electrocelos S.A. is not liable for the incorrect use of this product, or another use other than the one for which it was designed.
- 5) Electrocelos S.A. is not liable if the safety standards were not taken into account when installing the equipment to be automated, or for any deformation that may occur to it.
- 6) Before the installation, turn off the power supply.
- 7) Electrocelos S.A. is not liable for the safety and proper installation of the product when are used components that are not sold by itself.
- 8) Do not make any changes to the motor components and/or accessories.
- 9) The installer should inform the customer how to operate the product in emergencies and provide him with a manual of use.
- 10) Keep the remote control out of reach of children, preventing the bollard to operate accidentally.
- 11) The customer shall not, in any circumstances, attempt to repair or tune the bollard. For this purpose, he must call a qualified technician.
- 12) Connect the bollard to a 230V power supply, with ground wire.
- 13) The equipment is determined for outdoor use.

CONFORMITY:

Electrocelos S.A. declares, the automatic bollard MPIE10 follows the european norms and directives:

2006/95/CE-Low voltage electrical equipment;

89/336/CEE-Electromagnetic compatibility.

EN 60335-1, EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3

Electrocelos S.A. declares, the control board follows the directive 95/05/EC (R&TTE)



B) Technical Specifications

1) Motor Specifications:

Model	WING400/600/800
Input	24 VDC
Power	60 W
Intensity	1.2 - 4A
Thermal Protection	120°C
Temperature	>-20°C; <+50°C

2) Mechanical Specifications:

Mobile piece	INOX 2.5 mm
Covers	Anti-Slip Stainless Steel 4mm
Fitted material	PVC 10 mm

3) Physical Specifications:

Diameter	204 mm
Course	370 / 570 / 785 mm
Top flange	400 mm
Fitted material	320 x 320 x 870 / 320 x 320 x 1080 / 320 x 320 x 1280 (mm)
Weight capacity when closed	20.000 Kg
Weight	35 / 40 / 45 Kg

C) Underground Bollard Installation

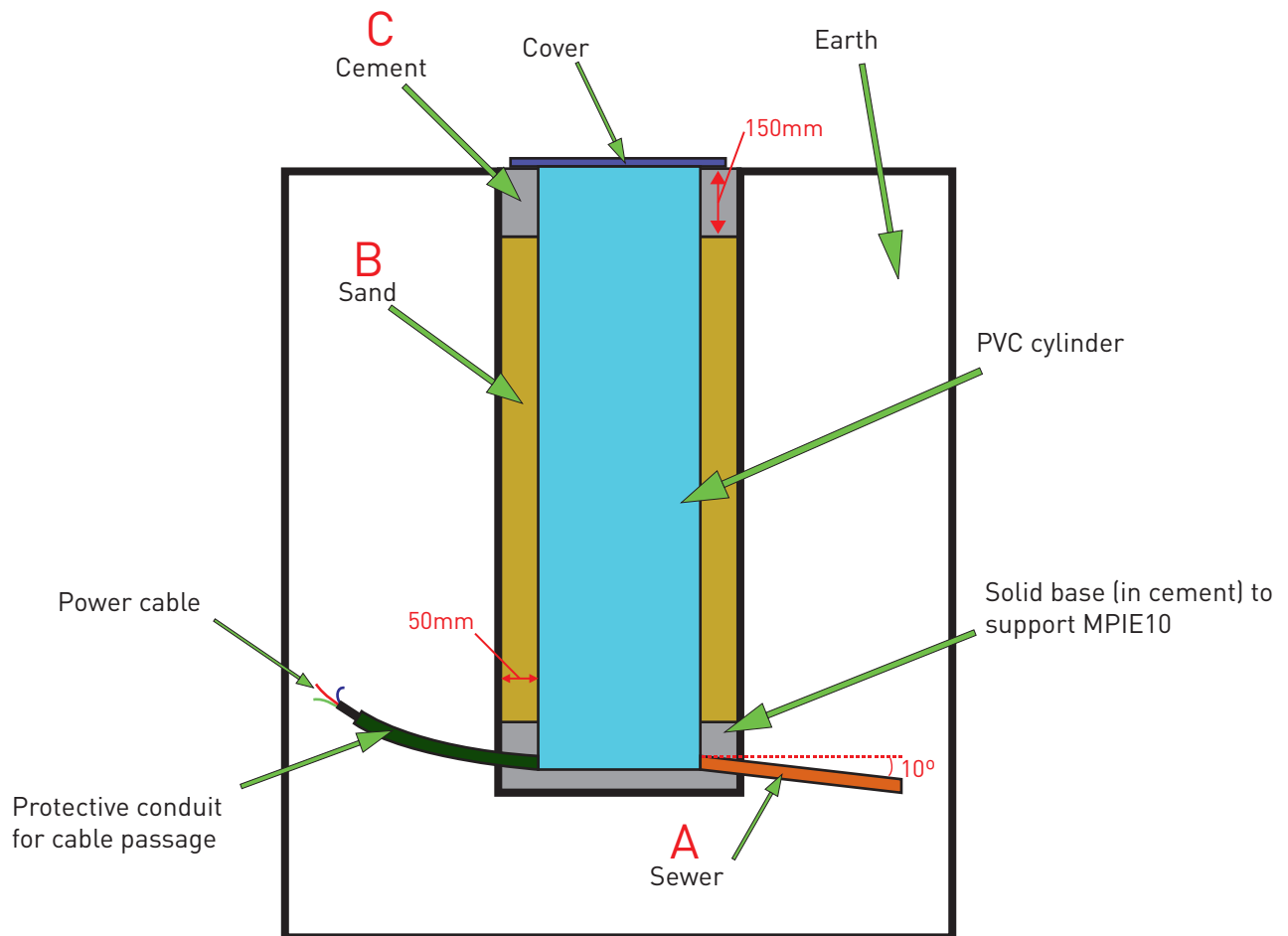


Figure 1: Bollard scheme

CAUTION:

1. **IMPORTANT!** Place the sewer with a minimum declination of 10°. **A**
2. Put sand around the bollard, for better accommodation. **B**
3. The cement must be made with sand. **C**
4. The control box must be installed in a place near the bollard, at a minimum height of 20cm from the ground.
5. If the distance from the control box to the bollard MP400/600/800 is bigger than 10 meters, use a 2.25mm power cable.

C) Underground Bollard Installation

In order to install the bollard, you can dismantle the cover, making the process much easier. To do that, you must remove the 6 screws furthest from the center, marked at red in Fig.2. Next, remove the cover as shown in Fig.3 and place the bollard in the hole (Fig. 5). Note that no waste or other objects fall into the inside of the bollard protecting the space using a piece of cloth, paper or other material serving as a seal between the stainless steel tube and the PVC pipe (Fig.6) . After placing the bollard in the hole and finishing the pavement around it, remove the material used for sealing and place the cover (Fig.3) in the bollard, fixing it with the six screws removed early in the process.

The bollard and it's cover must be aligned as shown in Fig.4.

The installation can be made without following these steps, however, it becomes more complex and harder, so, it's advised to follow the steps described above.

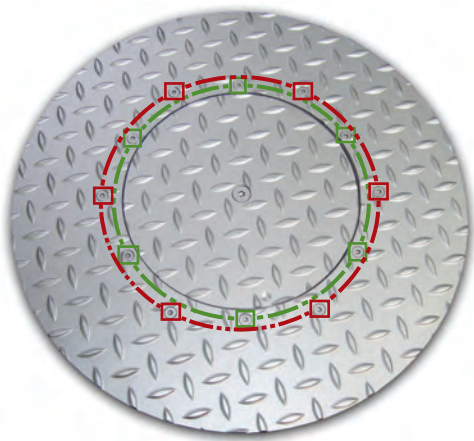


Figure 2: Cover



Figure 3: Removing Cover

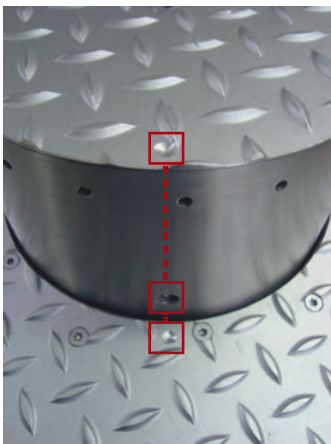


Figure 4: Bollard's alignment



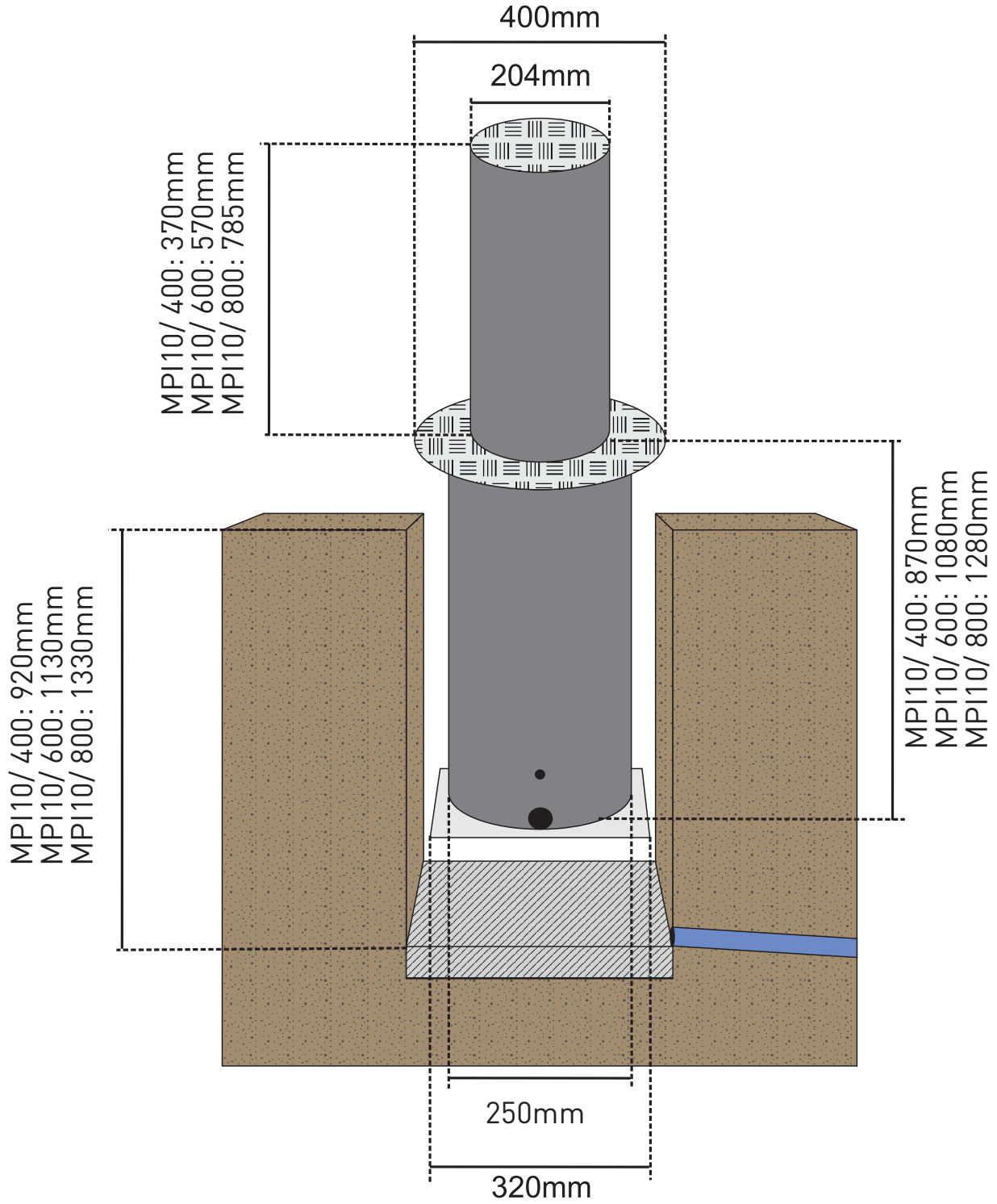
Figure 5: Bollard installed



Figure 6: Seal the bollard

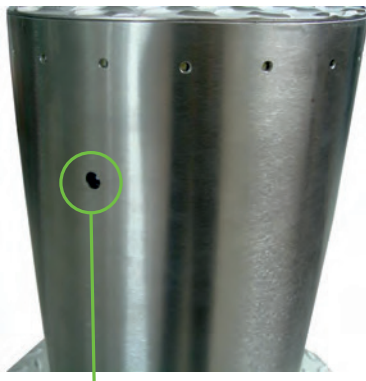
Important
Don't touch the screws marked at green - Fig.2

D) Dimensions



E) Unlocking

Unlocking the bollard in case of an emergency, power outage or malfunction.



Slot to make the release

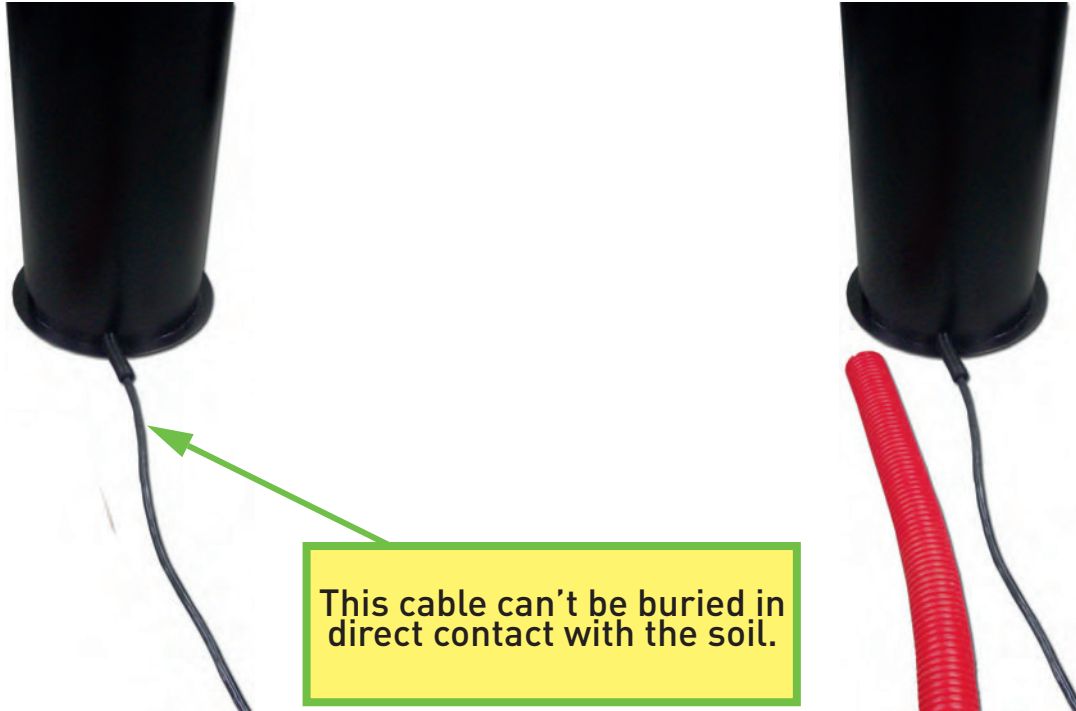


Rotate the key in clockwise direction

IMPORTANT

- After unlocking, the MPIE10 400/600/800 will descend automatically.
- In case of power outage, the bollard is prevented by a battery that has enough power to make one manoeuvre (open or close). You shall not use the bollard anymore until there is a power supply at 230V because the battery was designed for emergencies only. In case you use the bollard more than 1 time powered only by the battery, it may not have enough energy and an incomplete manoeuvre may occur.
- In case of malfunction of the equipment, you shall call a qualified technician.

IMPORTANT



ATTENTION!

A protective conduit must be used for underground cable passage.