

Semiautomatic Bollard



Series No.DBO-114/133/168/220/273S4

Series No.DBO-114/133/168/220/273S0

TECHNICAL MANUAL

Verb 1.0

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1. SAFETY INSTRUCTIONS

ATTENTION! To ensure the safety of people, it is important that you read all the following instructions. Incorrect installation or incorrect use of the product could cause serious harm to people.

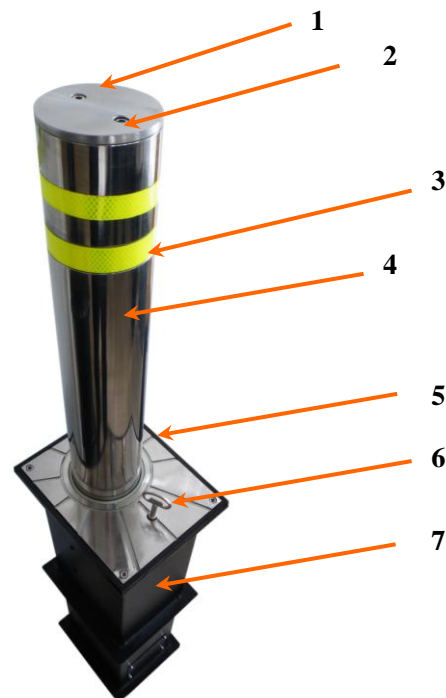
2. DESCRIPTION

2.1. Description of the series and definitions

The semiautomatic bollard has been designed to control access to a site with a high level of security, middle duty cycle requirement, guaranteeing pedestrian access but blocking the area to road traffic.

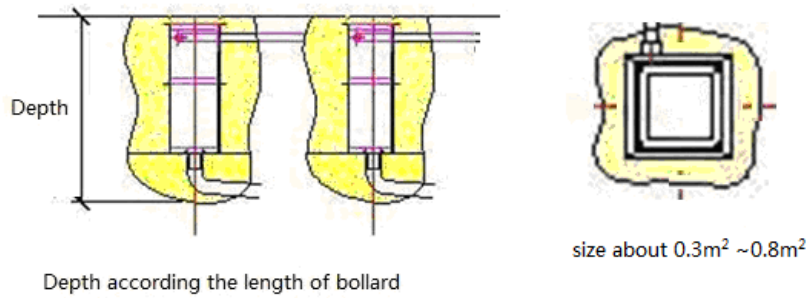
2.2. Location of the components

1. Top cover
2. Anti-theft screw
3. Reflector tape
4. Cylinder
5. Flange
6. Lock and Key
7. Underground parts



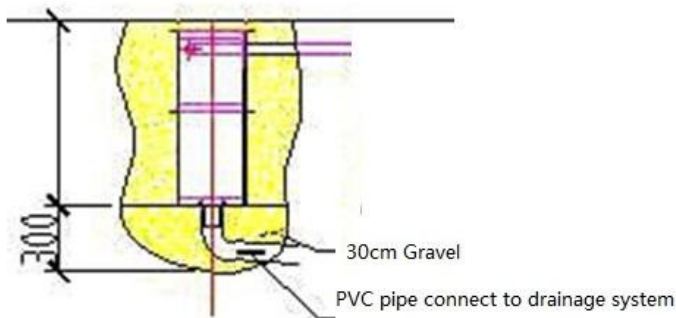
3. INSTALLATION

1. Make sure that the place where the DELOS bollard is to be installed is not a low-lying; or it need install drainage channel equipped with covering grid to protect the DELOS bollard with.
2. Dig up to a hole about size $0.3m^2 \sim 0.8m^2$ and depth according the raising length of bollard.
(As our experience, we dig a long deep channel if there is a lot of bollard in one line.)



The depth of hole	The length of raising bollard
1200mm	600mm
1350mm	750mm
1500mm	900mm

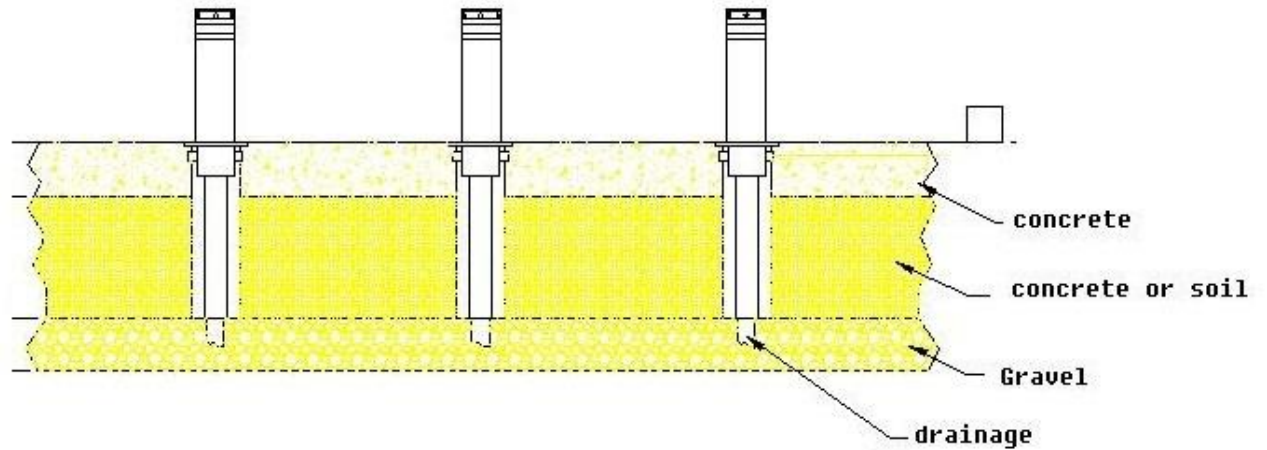
3. Put gravel (Diameter of approx. 8-20mm) on the bottom to obtain a thickness of about 30cm, taking care to compact it well to avoid future settlements.



4. Install the bollard underground parts inside of the hole, taking care to position it vertical. Raise the cylinder to the highest position and make sure all the bollards are on the same line and level.



5. In the condition of good drainage system, fill the hole with concrete or Ram down with soil to approx. 30-50cm from the floor surface.
6. Lay the a PVC pipe or soft wired hose (a diameter of approx. 32mm) within 1.5 mm² two core power lines in for LED.(Optional)
7. Continue to cast concrete up to the level of floor in the condition of promising the tightness between PVC pipe and external vat joint.

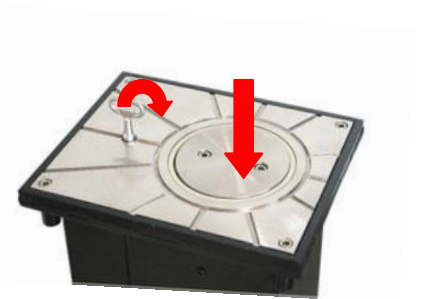


8. The top level of the flange must be approx. 10mm higher than the floor surface to limit the inlet of rainwater in the pit.

4. USE

4.1. Procedure to down the bollard

1. Insert the key and rotate it 90° and keep this position
2. Push down the cylinder, in this process you can release the key
3. Push down till end, then the lock will fixed bollard automatically.



4.2. Procedure to raise up the bollard

1. Push the cylinder about 5mm
2. Insert the key and rotate it 90°
3. The bollard will raise up and lock in top position automatically



