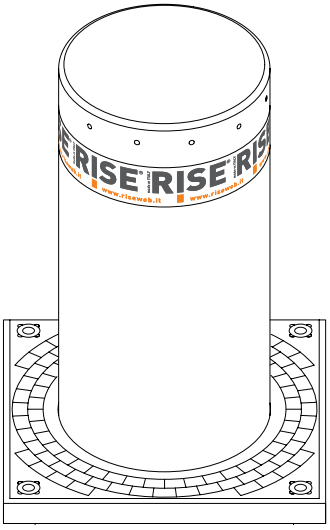
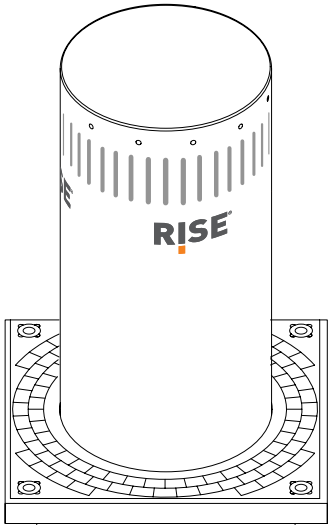
RL8542750 - Rev.00

RISE
Smart Moving

FORCE 825K/825KI





FORCE 825k/FORCE825KI successfully passed the crash test and achived a Performance Rating of IWA14-1:2013 Rising Bollard V/2500(N1G)/64/90:5.0.

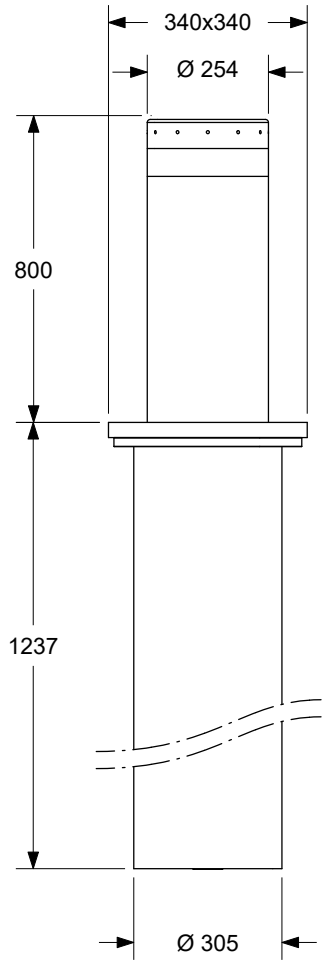
Manuale di installazione
Installation manual
Installationsanleitung
Manuel d'installation
Manual de instalación

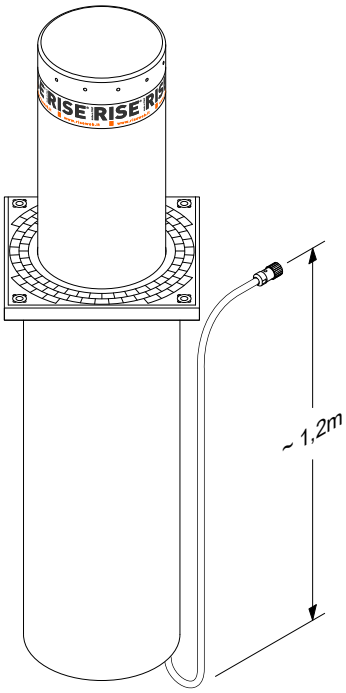
Made in Italy

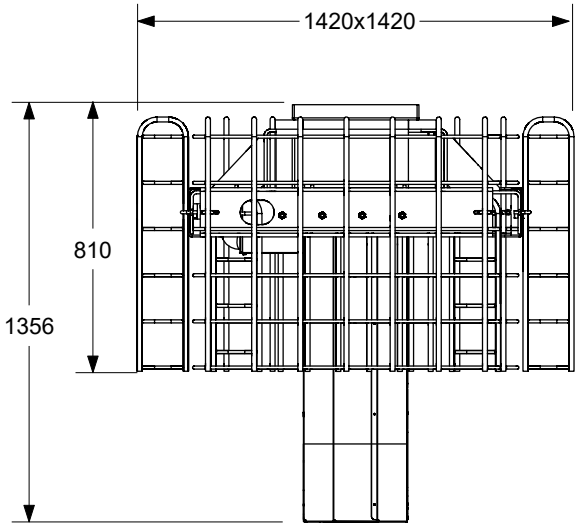
GB **Crash Tested rising bollard**

CE

Overall Dimentions







We thank you for having chosen one of our Vigilant model automatic rising bollards.
All articles in the Rise range are the fruit of long experience in the sector of mechanical and electronic automations.
This is why today we are able to offer extremely innovative and reliable automatic rising bollards that, thanks to their per formance, efficiency and durability, fully satisfy the final customer's requirements.
All our products are covered by a two-year warranty.
Furthermore, a product Civil Liability policy stipulated with a leading insurance company covers any damage to things or persons caused by manufacturing defects.

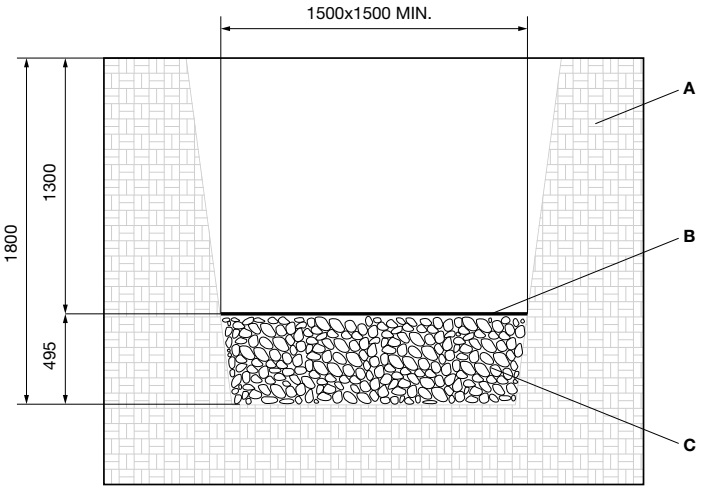
General information

The FORCE825K/I automatic rising bollard, with its high resistance to impact and elegant design, is suitable for installation in public or commercial areas and is particularly indicated for protecting of buildings.
The standard version, manufactured in steel, is painted with electrophoresis painting, a corrosion-proof treatment that guarantees an extremely elevated resistance to the elements and to salty environments.
The bollard is operated with 24Vdc; an amperometric sensor detects any obstacles when rising and inverts the movement immediately. The bollard is fitted with 12 leds that operate in sequence and with a high-visibility reflecting band. The bollard can be easily unlocked in an emergency. In the event of a power cut different functions can be selected: the bollard can remain in raised position or can be unlocked and lowered by keeping the emergency button pressed; automatic lowering in the event of a power cut is also available (accessory). The system can also be fitted with an uninterrupted power supply unit (accessory) that allows the bollard to be used in automatic mode even in the event of a power cut.
The foundation case is manufactured in cataphoresis-painted steel and can easily be assembled on site before installation.
If the bollard is not installed immediately, a cover for closing the hole is available.

TECHNICAL DATA	
MODEL	**FORCE 825K/825KI**
Power supply	230/250 Va.c. 50/60 Hz
Motor power supply	24 Vdc
Motor power	90 W
Motor absorption (24 Vdc)	7 A
Maximum working frequency	25 cicli/ora
Protection level	IP 68
Working temperature	-20°C / +50°C
Lubrication	Permanent grease
Cylinder dimensions	Diameter 254x800 mm - thickness 10 mm (FORCE 825KI :+1,2mm Aicciao Inox AISI 316)
Foundation case dimensions	Diameter 1500x1500x1800 mm
Impact resistance	411.000 J
Breaking strength	IWA14-1:2013 Rising Bollard V/2500(N1G)/64/90:5.0.
Rising time	10"
Lowering time	9”
Weight	Force 825K: 195 kg - Force 825KI: 207 kg
Finish	Force 825K: Black cataphoresis + powder paint / FORCE 825KI : AISI 316 Stainless Steel

Carry out the excavation in the ground with the measurements indicated in the image alongside and prepare a suitable draining foundation.

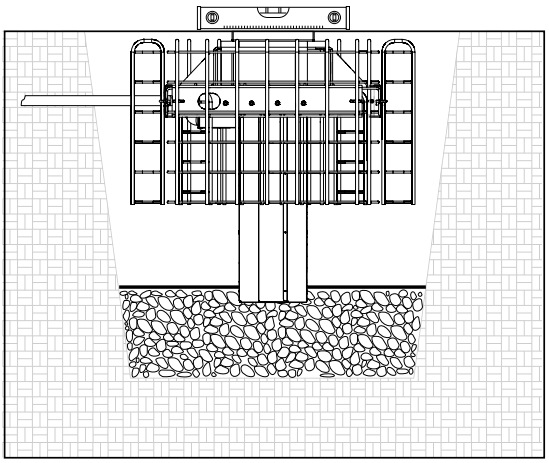
DRAINAGE TEST
Dig a hole down to 1800mm and introduce approx 30lt of water.
Water has to drain out within 30/35 minutes. In case the water will remain longer into the hole, it is necessary to drain the water out through a pipe connected to a pit with an electric pump.
See the alongside image.

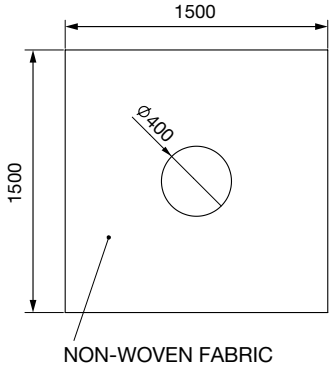


A: CONCRETE
B: NON-WOVEN FABRIC
C: DRAINING GRAVEL

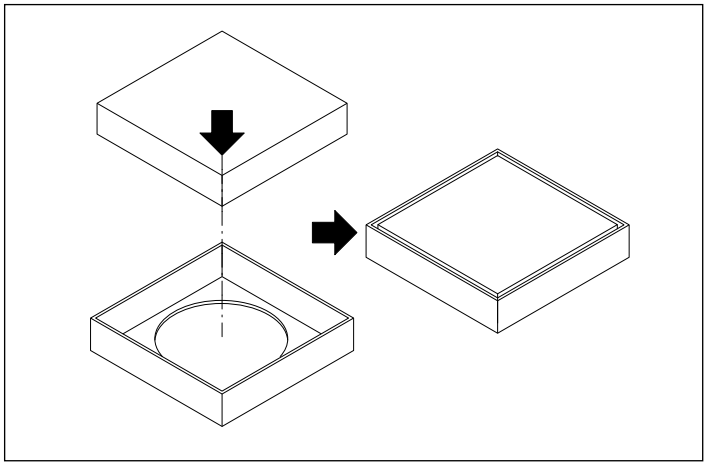
Insert the foundation case in the excavation. **Attention: The case must rest on the bottom of the excavation and must be perfectly vertical - check this by placing a level on the upper flange**.
Important: In order to make inserting the case easier, preparation for the corrugated sheath must be 200mm from the flooring surface, as shown in figure.
Insert the 50 mm diameter corrugated sheath in the case using the metal guide.
The corrugated pipe must enter a maximum of 2/3 cm inside of the metal protection, so that it does not interfere when the bollard is later inserted.
Fix the case with cement.
Attention: Make sure, during the cast, that the fixing plug located under the cramp-iron is completely covered by concrete. Using a spirit level, check if the flange plane is horizontal.

IMPORTANT: Carefully vibrate the concrete!

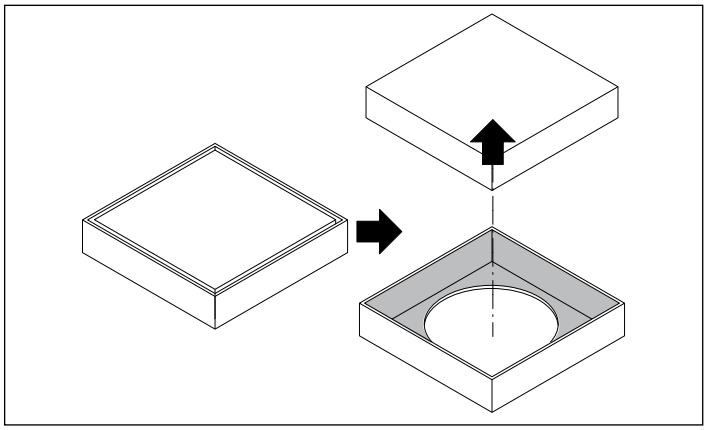




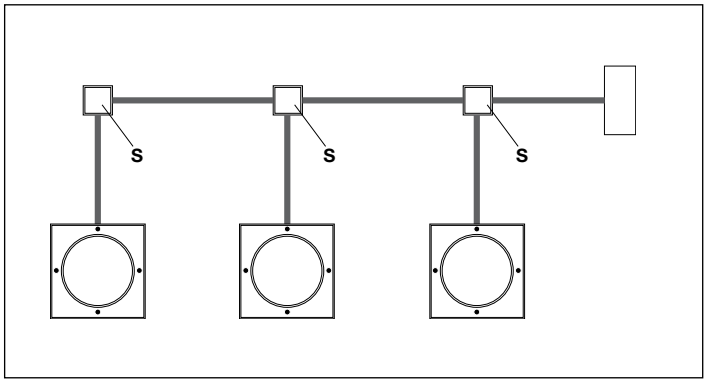
After positioning the case, **make sure that the open recess is covered** for the entire amount of time that the rising bollard is not inserted, **with covering that is suitable to avoid accidents that may involve persons or property**. A sheet metal cover is available as an option.
See figures alongside.



Before inserting the bollard into its housing, remove the previously placed closing or cover making sure that the anchorage housing of the bollard, represented by the grey area, is cleaned carefully.
See figures alongside.



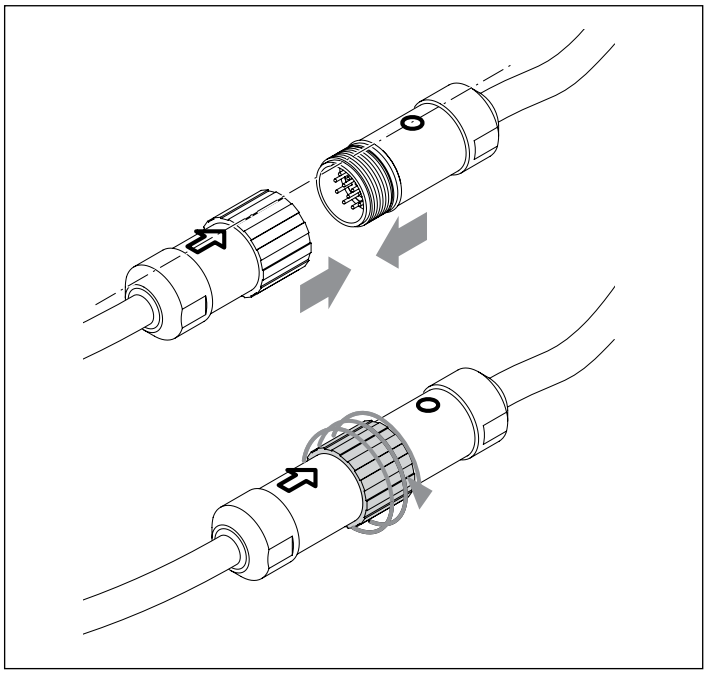
Plan for a junction box in proximity (max 2/3m) of the bollard (Ref. S), where about 1m of extra cable should be left. While inserting the bollard, thanks to this junction box it will be possible to recover/release the cable
When installing multiple bollards, plan on a junction box for each bollard.
When laying the conduit, try to keep the path as straight as possible, avoiding sharp corners.
See figures alongside.



Attention: The bollard is equipped with a short segment of connection cable equipped with a male IP68 connector.
Different size extension cords are available (5 to 25 m), , equipped with a female IP68 connector, for connecting to the control unit.
Bring the two parts of the connector together, aligning the arrow with the circle as shown, then fully screw down the fixing nut.

IMPORTANT: You must close the connector fully and in the correct manner to avoid bending the electrical contacts and to ensure a waterproof seal. Check the connector and the illustrations carefully before proceeding. Do not force the two parts of the connector for any reason.
The connector, when correctly put together, guarantees IP68 protection. The manufacturer cannot guarantee against faults and malfunctions in the event of incorrect connection of the connector.

You are advised to check movement of the connector in the sheathing by simulating the movement of the cable in the bollard, using specific products if necessary.

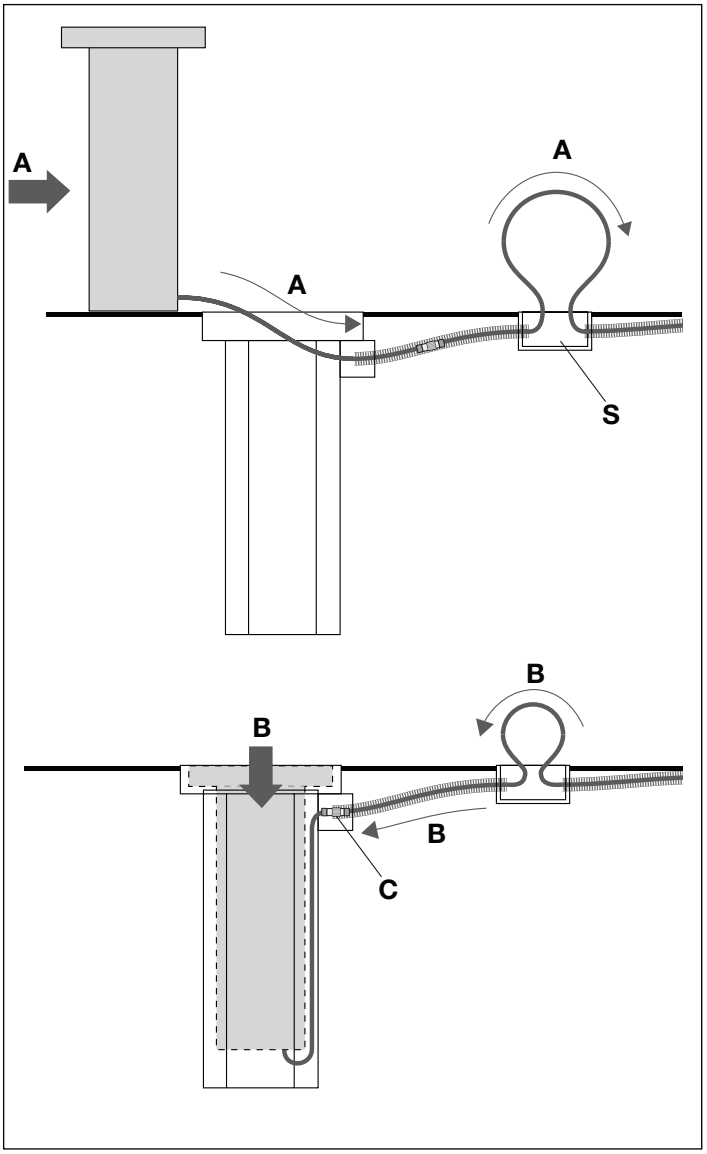


The cable must be recovered while the bollard comes near the foundation case (ref A).
Important: In this phase the connector must be free to slide inside of the corrugated sheath. For this reason is it necessary for the segment between the bollard and the junction box to be connected by a sheath with a diameter of 50 mm, correctly placed, without joints or cross section reductions.

The cable must be gradually released while the bollard descends in the case, (Ref. B)

Once the insertion has been completed, the connector must be in proximity of the metal protection (ref C).
Pay attention to the electrical cable, it must be free inside the case housing and it must not be crushed.

See figures alongside.



Use four supplied eyebolts to lift the bollard
See image alongside.