



The standard model is without grooves

The RB120 **High-Security** automatic rising bollard is designed to protect and control access to sites that are susceptible to attempted break-in. It can be used on any site where it is wished to create an obstacle to traffic without restricting pedestrian access. In urban environments, it has the advantage of being completely invisible when lowered. It is also perfect for controlling vehicle access to pedestrian areas.

The high-security bollards have greater impact resistance than that of the other obstacles in the range (see technical characteristics below).

Description

1. High-security obstacle comprising a 275 mm diameter, 25 mm thick steel cylinder.
2. 30 mm thick cast aluminium crown.
3. 55 mm reflective strip.
4. Mobile obstacle supported on a thick steel section supporting structure.
5. 5 mm thick cast aluminium cover plate.
6. Galvanized sheet steel embedded casing with a steel frame at the top for attaching the obstacle.
7. Mobile obstacle is held vertically and strengthened by means of a thick steel collar connected to the supporting structure and a nylon bush built-in to the obstacle and sliding along the central jack.
8. Synthetic joint.
9. Plunger central hydraulic jack for raising and lowering the obstacle.
Obstacle not fixed to the jack to limit damages caused by small shocks.
10. Hydraulic unit mounted on the supporting structure producing 40 bars to maintain the obstacle in the raised position.
11. Obstacle stopped in raised and lowered positions by mechanical stops.
12. Steel/rubber bearings support the obstacle when in the retracted position, allowing it to withstand the passage of heavy vehicles (40T – Class Load D400).
13. Inductive sensors for raised and lowered position status information.
14. Remote microprocessor control board, separated from the obstacle (10 m of electric cable provided), dipswitch programming, LED display for obstacle status and inputs/outputs used.

Surface protection

- Bollard: anticorrosion galvanizing treatment – polyester powder paint.
Mobile obstacle + cover plate grey anthracite RAL 7016.
Crown: light grey RAL 9006.
- Casing: polyester powder paint RAL 7016.
- Jack: surface anodizing.

Technical characteristics

Impact resistance	<ul style="list-style-type: none"> •100,000 joules, with guaranteed operation; •2,000,000 joules, with permanent deformation. (=M50 certification: stops a 6.8 ton [15000 lb] vehicle launched at 80 km/h [50 mi/h])
Electrical power supply	230 V single phase. (do not connect to a floating network or to high impedance earthed industrial distribution network)
Frequency	50/60 Hz.
Nominal power	1700 W
Raising speed	25 cm/s
Lowering speed	40 cm/s
Operating temperature	- 15 to + 60°C.
Frequency of use	2,000 operations per day
Mean Cycles Between Failure	2,000,000 cycles, respecting the recommended maintenance
Weight	1030 kg (bollard: 540kg; pit: 490 kg).
Protection index	IP 67 for hydraulic components
CE	Complies with European standards

Options

1. Indicator lights (LEDs in the perimeter of the crown) – flashing with or without warning given prior to obstacle operation.
2. Intermittent audible signal with or without warning given prior to obstacle operation.
3. Heating resistance for operation at a temperature down to -40°C in case of use in areas that are highly exposed to snow or prolonged freezing.
4. Additional cable lengths (to connect the bollard unit to the central logic box) (maximum length: 60 meters).
5. Push button box.
6. Radio transmitter/receiver.
7. Vehicle inductive loop.
8. Presence detector for inductive loop.
9. Emergency Fast Opening (EFO: 1 s).
10. Mobile obstacle in AISI 304 brushed stainless steel.
11. Paint of another RAL colour for the mobile obstacle.
12. Alarm in case of lowering attempts of the obstacle.
13. Control board for 1 to 5 synchronous bollards.
14. Dry contacts for bollard position information (up/down).
15. Anti tampering screws for the cover plate (access to manual unlocking).

Work to be realised by the customer

- Embedding casing in a concrete foundation (refer to installation drawing).
- Drainage or connection to mains drainage (if necessary).
- Power supply.
- Electric connections with external peripherals.

Standard dimensions (mm)

