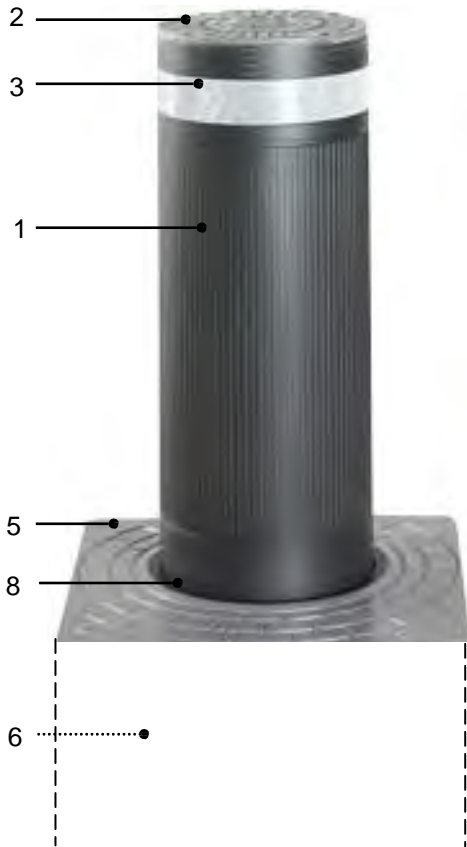




## RB 70 S



### Description

1. High-security obstacle comprising a 275 mm diameter, 10 mm thick steel cylinder.
2. 30 mm thick cast aluminium crown.
3. 56 mm reflective strip.
4. Mobile obstacle supported on a thick steel section supporting structure.
5. 10 mm thick cast aluminium cover plate.
6. Galvanized sheet steel embedded casing with a cast iron 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. Double-acting 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).
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), (10 m of electric cable provided), dipswitch programming, LED display for obstacle status and inputs/outputs used.

The RB 70S Security automatic rising obstacle 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 obstacles have greater impact resistance than that of the other obstacles in the range (see technical characteristics below).

**Surface protection**

- Bollard: hot galvanization + two-component epoxy top coating:  
Mobile obstacle: grey anthracite RAL 7016.  
Crown + cover plate: light grey RAL 9006.
- Casing: hot galvanization.
- Jack: surface anodizing.

**Technical characteristics**

- Impact resistance:
  - 60 000 joules, with guaranteed operation;
  - 700 000 joules, with permanent deformation.  
(= theoretical K4: stops a 6.8 ton [15000 lb] vehicle launched at 48 km/h [30 mi/h])
- Electrical power supply: 220 V single phase.  
(do not connect to a floating network or to high impedance earthed industrial distribution network)
- Frequency: 50 Hz.
- Nominal power: 400 W.
- Raising speed: 10 cm/s.
- Lowering speed: 20 cm/s.
- Operating temperature: - 15 to + 70°C.
- Frequency of use: 1,500 operations per day.
- Mean Cycles Between Failure: 2,000,000 cycles
- Weight: 220 kg
- Protection index of hydraulic components: IP 67.
- Complies with CE standards.

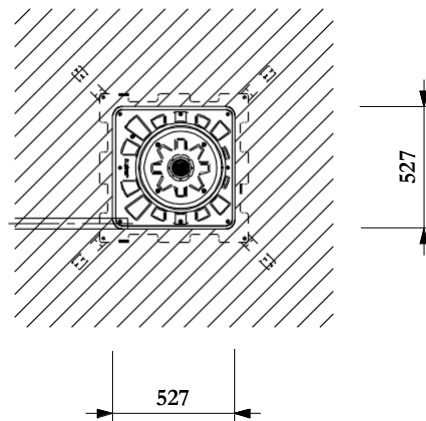
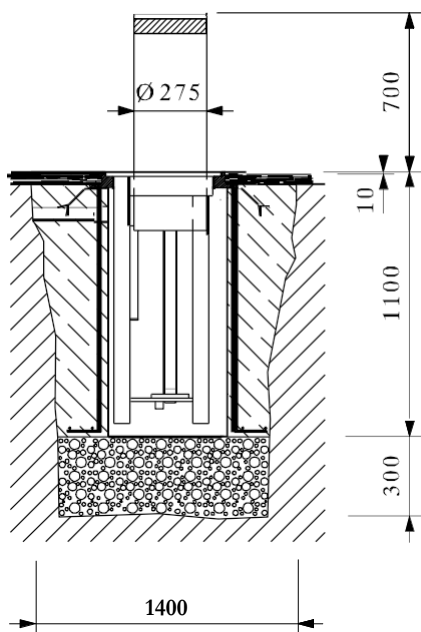
**Options**

1. Indicator lights (LEDs on 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 temperatures down to -40° C or in case of use in areas that are highly exposed to snow or prolonged freezing.
4. Hermetically sealed, embedded casing fitted with an immersion pump if direct drainage or connection to mains drainage is not possible.
5. Additional cable lengths (to connect the bollard unit to the central logic box) (maximum length: 80 meters).
6. Push button box.
7. Radio transmitter/receiver.
8. Vehicle inductive loop.
9. Presence detector for inductive loop.
10. Booster to increase the raising speed (1 s).
11. Mobile obstacle in AISI 304 brushed stainless steel.
12. Paint of another RAL color for the mobile obstacle.
13. Antirust crown for the perimeter of the cover plate.
14. Alarm in case of lowering attempts of the obstacle.
15. Control board for 2 to 8 synchronous bollards.
16. Dry contacts for bollard position information (up/down).
17. Anti tampering screws for the cover plate (access to manual unlocking).
18. Automatic lowering in case of power failure.
19. UPS (backup power in case of power failure).

**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).
- 220V single phase power supply.
- Electric connections with external peripherals.

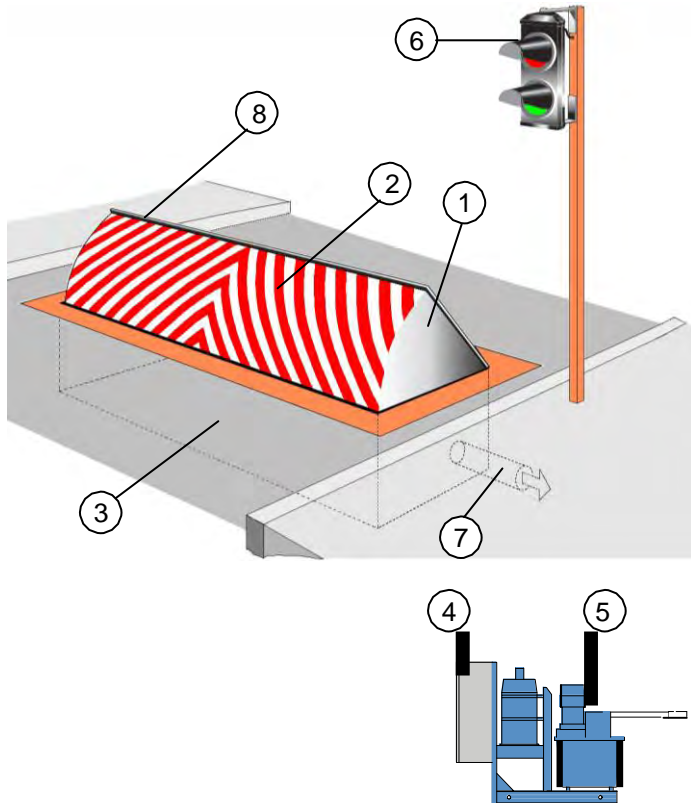
**Standard dimensions (mm)**





## RSBN 76 H

### Description



1. Frame of thick section galvanized steel profiles. The obstacle unit is articulated on a hinge (axle in stainless steel). The obstacle is operated by 1 heavy duty ram. Two other small rams ensure the effective locking of the obstacle in raised position, for ensuring proper resistance to an impact whatever its direction.

The position control of rams is made by waterproof inductive sensors, without any movable part likely to distort.

2. The barrier front face is formed by curved plating closed at both ends, white enameled with chevron-shaped red reflecting stripes, which encloses the mechanism.

3. Galvanized metal frame sealed into the concrete pit.

4. AS1300 Control Board enabling various additional commands and/or accessory options.

5. Hydraulic power unit, to be placed separately from the RSB, containing:

- motor,
- hydraulic pump,
- oil accumulator,
- oil tank,
- filter with plug and oil gauge,
- two hydraulic valves,
- manometer,
- pressure regulator and security valve,
- drip tray

6. Two-color (green/red), unidirectional LED traffic light, delivered with wall mounted brackets.

***Operating the RSB without traffic light is forbidden by Automatic Systems.***

7. Duct linking the barrier to the power generator. The standard equipment includes flexible hoses of 5m.

8. Covering steel sheet for vehicles passage and access to hydraulic rams and position sensors for maintenance.  
Treatment: sand + metallization + powder paint RAL 2000, thickness 80 to 100 microns.

The hydraulic road blocker RSB76H was designed as an effective means of controlling access to high security areas (Impact resistance: theoretical K4 - 610KJ) such as embassies, airports, strategic factory sites, etc ...The RSB76H offers the advantage of not requiring a side column to house the drive mechanism.

The hydraulic drive is operated by an energy accumulator that can be positioned as far away as 5 m (15 m optionally). This facilitates placing several barriers end to end to control exceptionally wide access points.

An energy reserve also allows up to 3 operating cycles in case of power failure.

The RSB76H is available in 3 widths: 3000, 3500 and 4000 mm (width of the rising obstacle)

**INTERSYSTEMS Inc. Jordan**

**TRADING & CONTRACTING Division**

Comm. Reg. NO:CC/2/18334/13010 Amman, H.K. of Jordan VAT NO:11812249



**Standard technical characteristics**

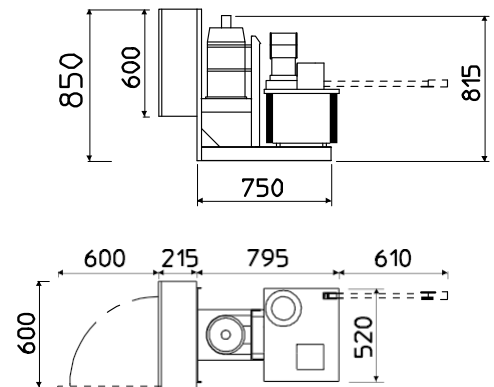
Impact resistance	DoS K4 (stops a 6,8 tons vehicle at 48 km/h); calculated numerically (finite elements).
Power supply	230/400V 3-phase (10A + N + GND)
Power consumption	max. 1,5 kW
Hydraulic fluid	22 cSt oil
Operating temperature	-20°C* to + 50°C (* -40°C with adapted oil) Control unit to be kept in a room between 0°C and +40°C, within 5 m of RSB (length of hydraulic hoses).
Net weight	1170 kg (obstacle 3000 mm) 1372 kg (obstacle 3500 mm) 1575 kg (obstacle 4000 mm)
Net weight of the hydraulic power unit + control unit	175 kg
Operating time	3 seconds (depending on the oil temperature and the length of the hoses between the hydraulic power unit and the obstacle)
Maximum load allowed	20 tons per axle
MCBF (Mean Cycles Between Failures)	1,500,000 cycles, when respecting recommended maintenance
IP	RSB: IP44 if the concrete pit is correctly drained. Hydraulic power unit: IP54.
Compliance	

**Options**

- Additional LED traffic light.
- Post to install traffic light(s) (standard AS model)
- Push button box (open - stop - close).
- Longer hydraulic hose: 10 or 15 m.
- Vehicle presence detector with inductive loop.
- Safety cell Transmitter / Receiver on post.
- UPS (emergency power supply for the control unit).
- Manual pump

**Work to be provided by the customer**

- Power supply to the control unit.
- Electrical connection wiring (not provided) between the control unit, the traffic light(s) and the position sensors.
- Reinforced concrete pit with rainwater drainage and fixing frame installation (3)
- Installation of hoses between the pit and the power generator unit.



**Standard dimensions (mm) (not contractual)**

