URBACO
AUTOMATIC BOLLARDS

mobility made safe and easy

Overview
High Security
ICT
Complements
Emotion

ACCESS CONTROL

ACCESS CONTROL

MANAGING, REGULATING, CHECKING - GIVING TOWNS A BREATH OF FRESH AIR

The protection and improvement of quality of life are at the heart of the public and public authorities' concerns.

Modern urban planning requirements demand advanced systems capable of regulating vehicle flows in both public and private settings. A growing number of spaces need traffic restrictions: residential areas, loading/unloading zones, lanes reserved for public transport, not forgetting historic or pedestrian areas, sometimes even varying according to the time of day.

Urbaco automatic and mechanical solutions play an irreplaceable part in traffic regulation and control. In addition, they contribute to reduced exhaust emissions, helping towns breathe and reducing the environmental impact of modern lifestyles.

The Automatic Solution

An Urbaco automatic solution is an access control system made up of different components:

THE BOLLARD
one or more bollards

MODE OF OPERATION
one or more electromagnetic detection loops are placed in the ground on both sides of the bollards, to detect the presence of vehicles

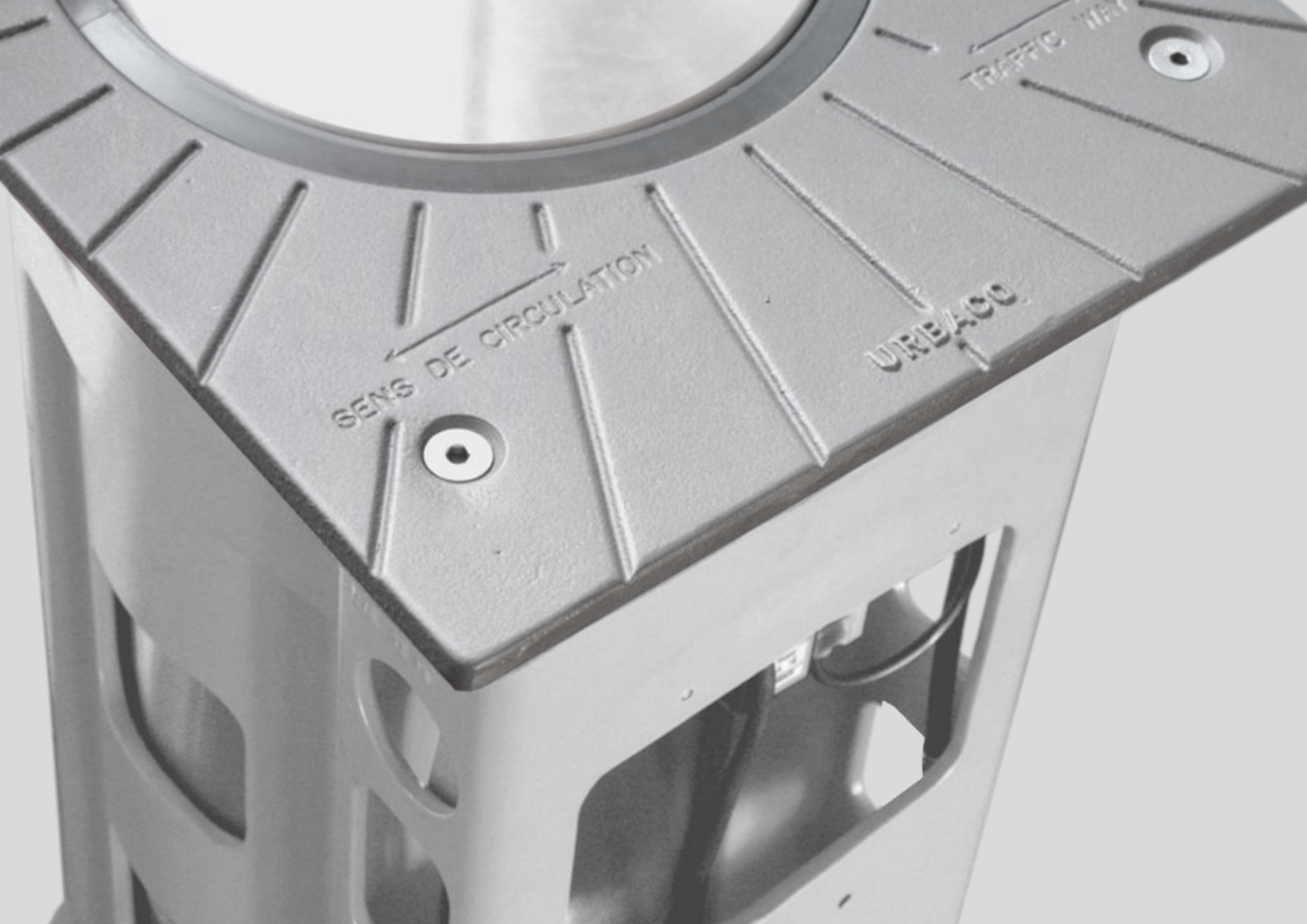
THE MANAGEMENT SYSTEM comprising:
- an automatic controller which manages the access control system, sending the command to open or close;
- a compressor and air distribution system or a hydraulic system providing the power necessary to make the bollards rise and fall.
- a controller to transmit the user's commands (radio remote control, proximity card, press button, keypad etc.)

The bollard

THE AUTOMATIC SOLUTION

Legendary Robustness

Phenomenal Durability


SENS DE CIRCULATION
URBAGO

The bollard: **G6**, Legendary Robustness

Model Vendôme Ø250 H500

Generation 6 range retractable bollards are the result of experience gained over many years.

The three parts of their structure, moulded in ductile cast iron, are extremely robust. Their strength lies in the use of Urbaco MONOBLOC® system.
Combining robustness and beauty, they blend perfectly into urban development projects while providing effective protection against ram-raid attack.

Urbaco Generation 6 retractable bollards are fully compliant with French standard NFP 98.310 and have been approved by the Italian Ministry of Infrastructure and Transport.

Generation 6 retractable bollards have been subjected to rolling tests in accordance with the provisions of the EN ISO 124 standard and are E600-approved. They can therefore be installed in areas that require high axis loads such as factory yards, dry docks or port areas.

Fully compliant with French decree PMR
Focus page 39

Ministry of Infrastructure and Transport
Approval for installation on the public highway
Protocol No. 32658, of 1 April 2009

ISO EN 124: E600 Groupe 5
System certification

THE PATENT MONOBLOC®

- moulded from one solid block, with thickness where it is needed and no-weld construction

- rise and fall system with no wearing parts, ensuring:
  - zero maintenance costs
  - bollards stay aligned indefinitely
  - extra durability

- resistance to everything the road can throw at it: vandalism, rain, ice, sand, dust, solvents, repeated impacts, etc.
Endurance tests conducted under independent supervision record over 4,500,000 operating cycles without breakdown or need to change any structural component - equivalent to 100 operating cycles a day for 70 years.

IMPACT 55 km/h 2.5 tons RESISTANCE*

* Impact resistance : 241,1 kJ

Illuminated top-ring* and reflective band

The Class II reflective band in white or yellow (depending on model) further enhances visibility and reduces the risk of accidental collision with the bollard.
The red LED-illuminated top-ring makes the bollard highly visible both in daylight and at night. In addition to being a safety device, the illuminated top-ring is also decorative, giving the bollard a particularly elegant style.

* Available as an optional depending on models and sizes

Dimensions (mm)

The G6 range has 7 size combinations with 3 diameters and 3 heights depending on model.

Ø 120 X h 500
Ø 120 X h 750

Ø 200 X h 500
Ø 200 X h 750

Ø 250 X h 500
Ø 250 X h 600
Ø 250 X h 750

Material and Finish

GS cast iron head, cover and box

The bollard gets a rich in zinc primer as standard in order to reinforce its rust-inhibiting performance and improve the polyester finishing paint adherence.

The stainless steel version has a cast iron core clad in 316L stainless steel.

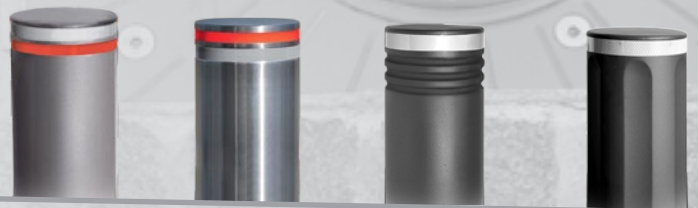
RAL7016 standard

Other RAL in option

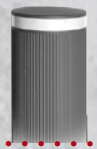
Stainless steel cladding: the Vendôme

Design

Available in 5 models, all of which blend perfectly into every environment.



Cylinder | Vendôme | Chateauneuf | Athéna



On demand

Acropole

Power Options

- Pneumatic
- Electro-mechanical
- Hydraulic

The bollard: **Luxor**, Acces Control Simplified

Model Luxor Ø200 H600

Luxor is the ideal solution to the needs of private users and government bodies: business centres, supermarket chains, car dealerships, historic urban centres; places where elegance and the public's safety and well-being have to go hand in hand.

When a pneumatic Luxor bollard starts moving, this is signalled in two ways using light and sound, to protect pedestrians and 2-wheel riders from any possible accidental collision. The audible signal ensures the safety of pedestrians in the vicinity of the moving bollard.

The cast iron bollard head cap has been designed to be more aesthetically attractive when the bollard is in its lowered position, blending perfectly with urban road surfacing.

Whenever the need to control traffic also touches on environmental protection by aiming to reduce exhaust emissions, the Luxor is your ally!

Urbaco LUXOR retractable bollards are fully compliant with French standard NFP 98.310 and have been approved by the Italian Ministry of Infrastructure and Transport. Luxor retractable bollards have been subjected to rolling tests in accordance with the provisions of the EN ISO 124 standard and are D400-approved. They can therefore be installed on the roadway.

PMR

Fully compliant with French decree PMR
Focus page 39

Ministry of Infrastructure and Transport
Approval for installation on the public highway
Protocol No. 32658, of 1 April 2009

ISO EN 124: E600 Groupe 5
System certification

Illuminated top-ring and audible warning signal

This device used to provide a warning of bollard movement makes the bollard perfectly visible in all weather conditions. It is an essential fitting when the bollard is installed in very busy public spaces or in areas of heavy traffic where the least distraction could lead to an accidental collision with a moving bollard.
The audible warning signal renders the Luxor even more complete and exclusive since it adds safety against the possibility that it might not be noticed by pedestrians. In addition to being a safety device, the illuminated top-ring is also decorative, giving the bollard a particularly elegant style.

Surface Coating and Finish

The paint has a clear-coat finish and this process ensures exceptionally enduring colour even in extreme conditions.

RAL3002 standard

RAL7016 standard

Other RAL in option

Construction

The bollard is made from 6 mm steel.
The head and ground plate are in GS nodular cast iron.

Dimensions (mm)

The LUXOR range has 7 size combinations with 3 diameters and 3 heights.

Ø 200 X h 600
Ø 270 X h 600
Ø 320 X h 600

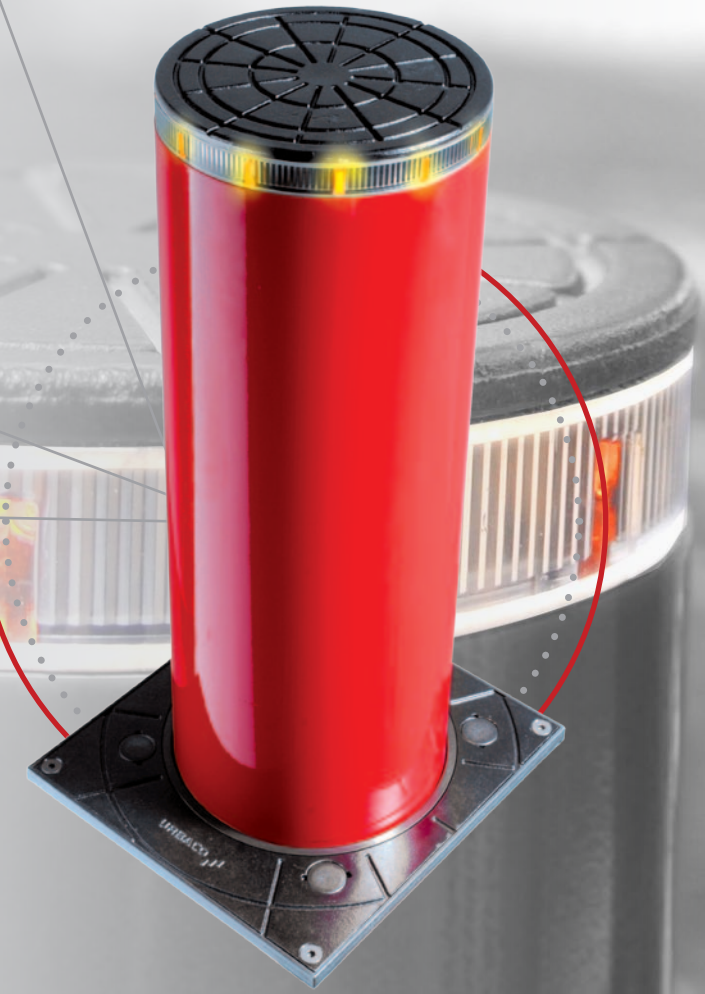
Ø 200 X h 800
Ø 270 X h 800
Ø 320 X h 800

Ø 320 X h 950

Power Options

Pneumatic

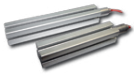
Electro-mechanical



The bollard Option Range

Customization
Choice of non-standard RAL paint colours
Illuminated top-ring, white
Matt finish illuminated top-piece for diffused light output
Yellow or red reflective band

Installation
Lost casing or with finishing plate (depending on size)
Connection kit, 25 or 50 linear metre



Heating Kit
The heating kit guarantees correct operation of the bollard even in cold conditions.

Movement Warning Buzzer
A buzzer with a 60 to 80 dB output at 10 cm sounds when the bollard is in movement

Integral movement switch (depending on size)
A device mounted on the bollard enabling it to retract, using a key-operated switch mounted in series with the automatic control emergency stop.
This option requires one of the special key options to be chosen (triangle 11, triangle 14 or half-moon).

Mode of Operation
Positive safety: in the event of a power outage, the bollard descends by gravity
Negative safety: in the event of a power outage, the bollard remains in the position it was in before the outage

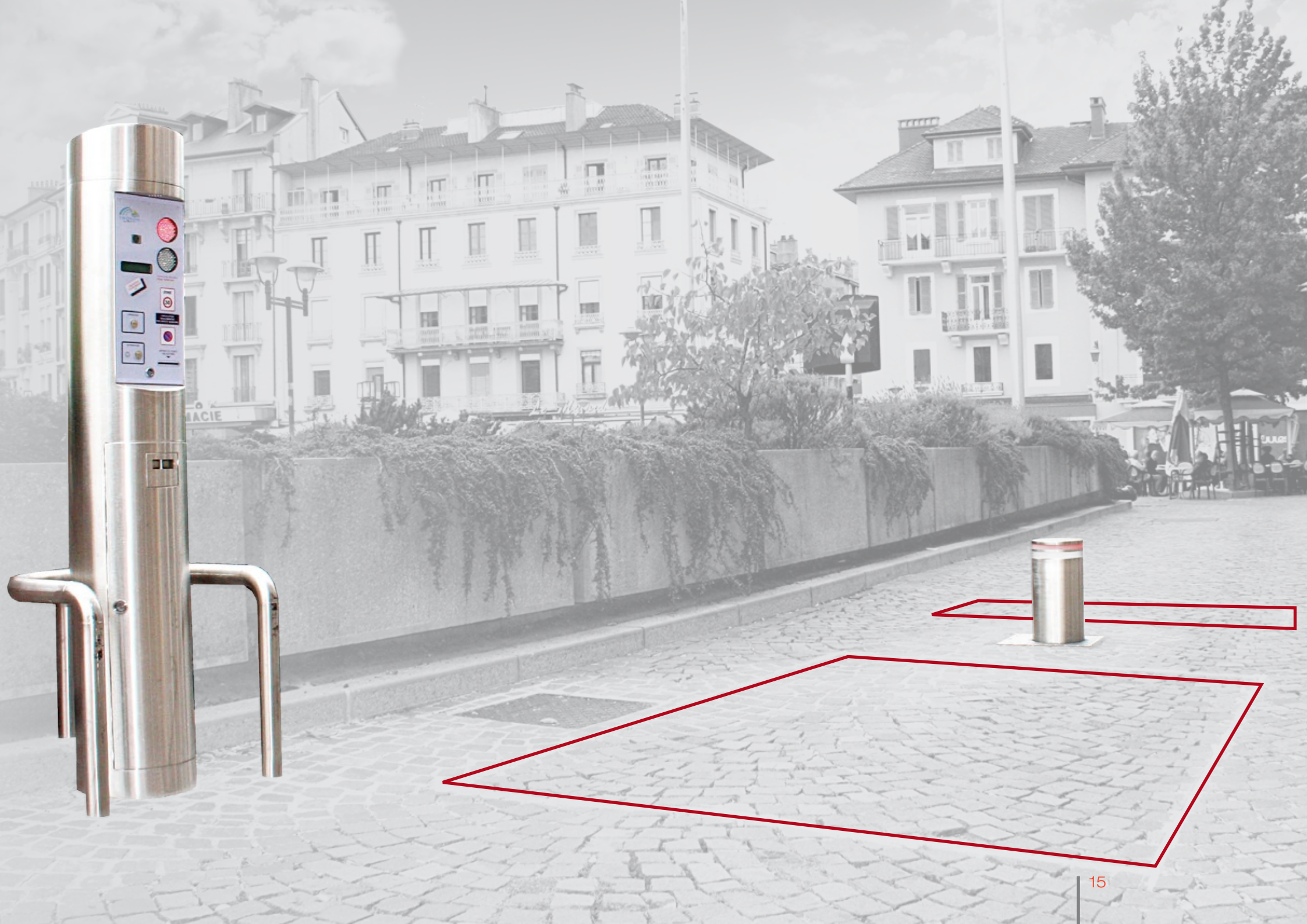
Pedestrian safety
If a pedestrian steps on the bollard while it is coming up, the system prevents the upward movement.
The system is inhibited when the bollard is in the high position.

Vandalism Resistance
Set of 4 anti-vandal screws on the top-piece
Anti-vandal key

Mode of Operation

Presence detection

secure operation



Mode of Operation: Access Logic Control

Access configuration, going beyond aesthetic considerations and the bollard performance itself, depends on the security and management levels desired.

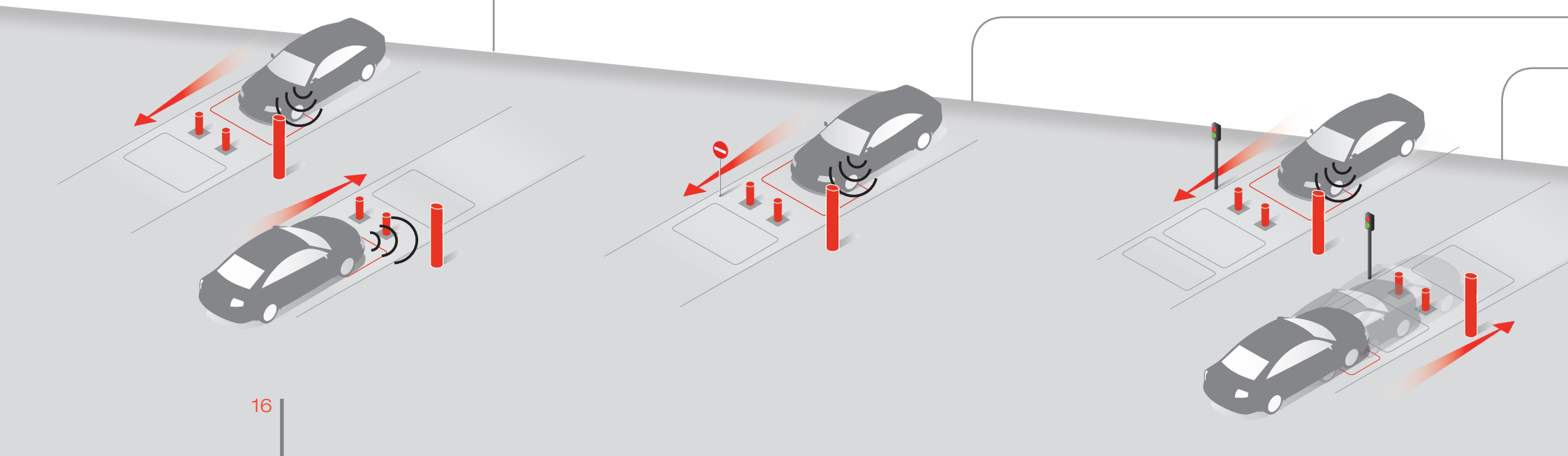
These security and management levels find their form in the installation of magnetic loops, (safety loops and security/presence loops) which create an operating mode.

This, then, is referred to as operating logic.

Safety loop: this detects the presence of vehicles and stops the bollard from rising when there is a vehicle above it.
The loop is buried under the road surface and it is capable of carrying out the two functions of security/presence and safety at the same time.

The security/presence loop: this detects the presence of a vehicle and makes it possible to accept a command sent by a remote control user.
The bollard falls, thus enabling the vehicle to pass over it.

The number of loops used depends on the type of operation (operating logic systems) desired to be installed.



Controlled Entry and Controlled Exit - Two-way traffic

Entry

The vehicle passes over the presence loop.
The user puts the bollard(s) in the low position via a command (radio pulse, contact-free badge, button, keypad code...).
The vehicle passes over the bollard(s) and the presence/safety loop.
The bollard(s) come(s) back up automatically when the vehicle is no longer on the presence/safety loop.

Exit

The vehicle passes over the presence/safety loop.
The user puts the bollard(s) in the low position via a command (radio pulse, contact-free badge, button, keypad code...).
The vehicle passes over the bollard(s) and the presence loop.
The bollard(s) come(s) back up automatically when the vehicle is no longer on the presence loop.

Controlled Entry or Controlled Exit - One-way traffic

The vehicle passes over the presence loop.
The user puts the bollard(s) in the low position via a command (radio pulse, contact-free badge, button, keypad code...).
The vehicle passes over the bollard(s) and the presence/safety loop.
The bollard(s) come(s) back up automatically when the vehicle is no longer on the internal or external loop.

Controlled Entry and Automatic Exit - Two-way traffic

Entry

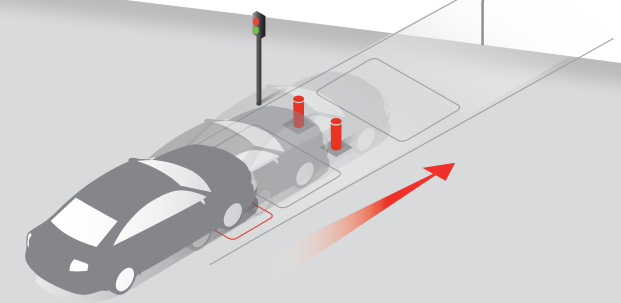
The vehicle passes over the presence loop.
The user puts the bollard(s) in the low position via a command (radio pulse, contact-free badge, button, keypad code...).
The vehicle passes over the bollard(s) and the presence/safety loop.
The bollard(s) come(s) back up automatically when the vehicle is no longer on the presence/safety loop.

Exit

The vehicle passes over the automatic exit loop and the presence/safety loop.
As soon as the automatic exit loop and the presence/safety loop detect the user, the automatic device puts the bollard(s) in the low position.
The vehicle passes over the bollard(s) and the presence loop.
The bollard(s) come(s) back up automatically when the vehicle is no longer on the presence loop.

Automatic Exit - One-way traffic

The vehicle passes over the automatic exit loop and the presence/safety loop.
As soon as the automatic exit loop and the presence/safety loop detect the user, the automatic device puts the bollard(s) in the low position.
The vehicle passes over the bollard(s) and the presence loop.
The bollard(s) come(s) back up automatically when the vehicle is no longer on the presence loop.



The Management System

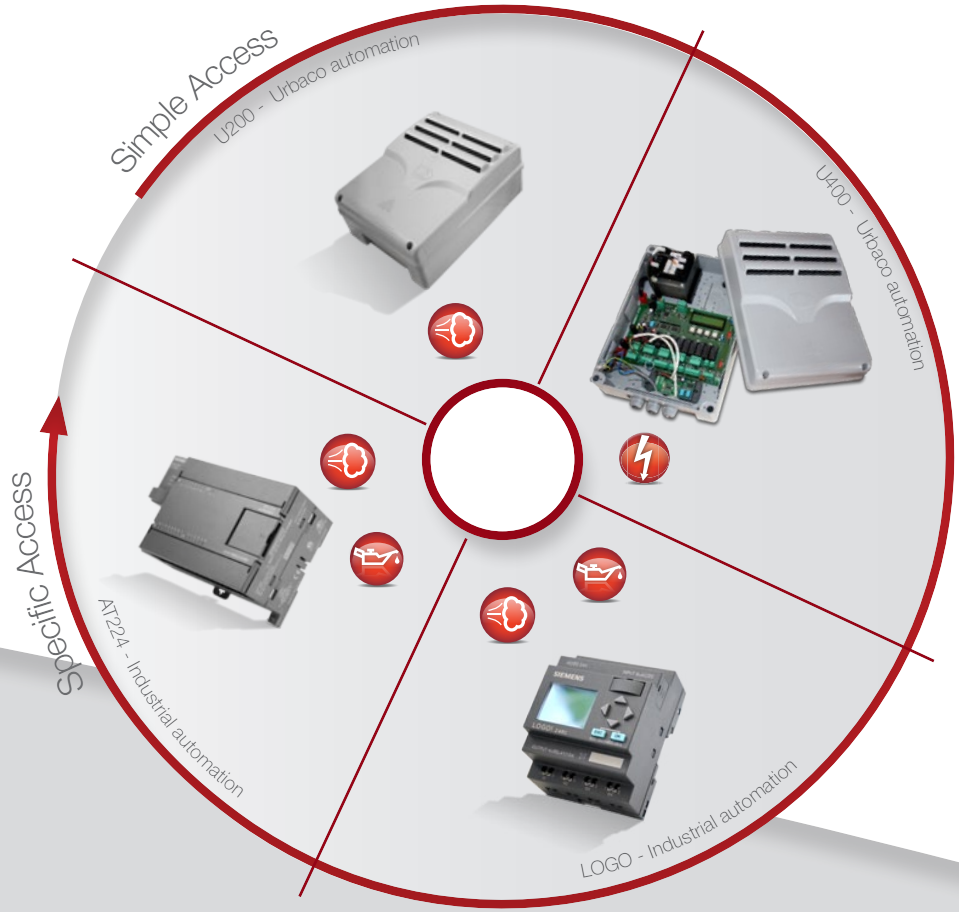
User interface
Smart control


PROXIMITY
CAME

The Management System: from simple management to smart control

Each application has its own bespoke automation system, power operation system and control equipment

Urbaco can offer automation systems to meet every possible operational requirement.
Customised to match the intensity of use and operating logic desired, Urbaco develops its own automation systems or integrates industry standard systems.
Depending on the degree of complexity of access management, Urbaco recommends a choice of power operation and control equipment from the broad range of possibilities at its disposal.



PNEUMATIC

HYDRAULIC

ELECTRO-MECHANICAL

Proximity cards

Remote controls

Keypads

Key-operated switch

Automatic number plate recognition

Camera

Intercom

Mobile telephony

TeleTag

... please consult our ICT brochure

The Management System: from a simple control box to a user interface

Controllers - Positioned near the controlled access, they can contain control equipment (depending on size), but equally they can house users' communications devices. Their installation near to the access gives them a signalling role with the presence of position lamps.

CITY 5

TECHNICAL SPECIFICATION

- 7 mm cast aluminium construction
- Polyester powder coat finish
- Height: 1400 mm - City 5 Drive in
  1600 mm - City 5 Piéton
- Dimensions: 470 mm x 330 mm
- Cast aluminium plinth
- Central section with access door with security hinges and lock
- Upper section with 2 front faces screen printed polycarbonate
- Cap
- Optional emergency stop button located on the side under an access hatch)
- 2 LED lights (colours as per legislation)
- Acoustic and thermal insulation

CITY 3

TECHNICAL SPECIFICATION

- 6 mm steel construction
- Polyester powder coat finish or stainless steel
- Height: 1600 mm
- Diameter: 325 mm
- One lockable access door
- One lockable access hatch for the emergency stop button
- Front face in screen printed polycarbonate
- LED lights (colours as per legislation)
- Galvanised steel base plate for embedding in concrete
- Acoustic and thermal insulation

Available in stainless steel

CITY 6

TECHNICAL SPECIFICATION

- 6 mm steel construction
- Polyester powder coat finish or stainless steel
- Height: 1800 mm
- Diameter: 325 mm
- One lockable access door
- One lockable access hatch for the emergency stop button
- Front face in screen printed polycarbonate
- LED lights (colours as per legislation)
- Galvanised steel base plate for embedding in concrete
- Acoustic and thermal insulation

Available in stainless steel

Available in Double Face version (city 3)

Control Units - Located in a control centre or on the roadway, the control units house the control equipment and remote control receivers

A control housing fitted in a control centre

TECHNICAL SPECIFICATION
- Gloss finish painted steel housing
- Two-point lock
- Acoustic and thermal insulation
- Ventilated at top and bottom
- Wall fixed

A cabinet located on the roadway

TECHNICAL SPECIFICATION
- 1.5 mm aluminium construction cabinet
- Three-point key-operated lock
- Acoustic and thermal insulation
- Optional ventilation

Ancillary Control Boxes - these are used to house control devices as an extra to control housings or, most often, control cabinets. They can also be linked to a controller to supplement or complement user controls.

CITY 0

TECHNICAL SPECIFICATION
- 3 mm steel tube
- Polyester powder coat finish
- Height: 1300 mm
- Diameter: 140 x 80 mm
- LED lights (colours as per legislation)

CITY 1

TECHNICAL SPECIFICATION
- 6 mm steel tube
- Polyester powder coat finish
- Height: 1400 mm
- Diameter: 200 mm
- One lockable access door
- One lockable access hatch for the emergency stop button
- Front face in screen printed polycarbonate
- LED lights (colours as per legislation)
- Galvanised steel base plate for embedding in concrete

Available in Double Face version

TRAFFIC LIGHT POST

POST (ONLY) TECHNICAL SPECIFICATION
- 3 mm steel tube
- Height: 1400mm
- Diameter: 76 mm
- Coloris standard RAL 7016 gris anthracite

LIGHT (ONLY) TECHNICAL SPECIFICATION
- IP55 Black plastic housing
- Height: 440 mm
- Light Diameter: 85 mm
- LED lights (colours as per legislation)

Available in twin light version

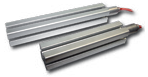
Management System Options

Customization

Choice of non-standard RAL paint colour (controllers only)
Choice of colour for position lights and their options
Special face printing

Additional module

For City 6 only



Heating Kit

The heating kit increases the City's operating temperature range to -20° to +40°C (standard to 0° to +40°)

Number of access points managed

Choice of number of access points managed by control centre

Operating Logic

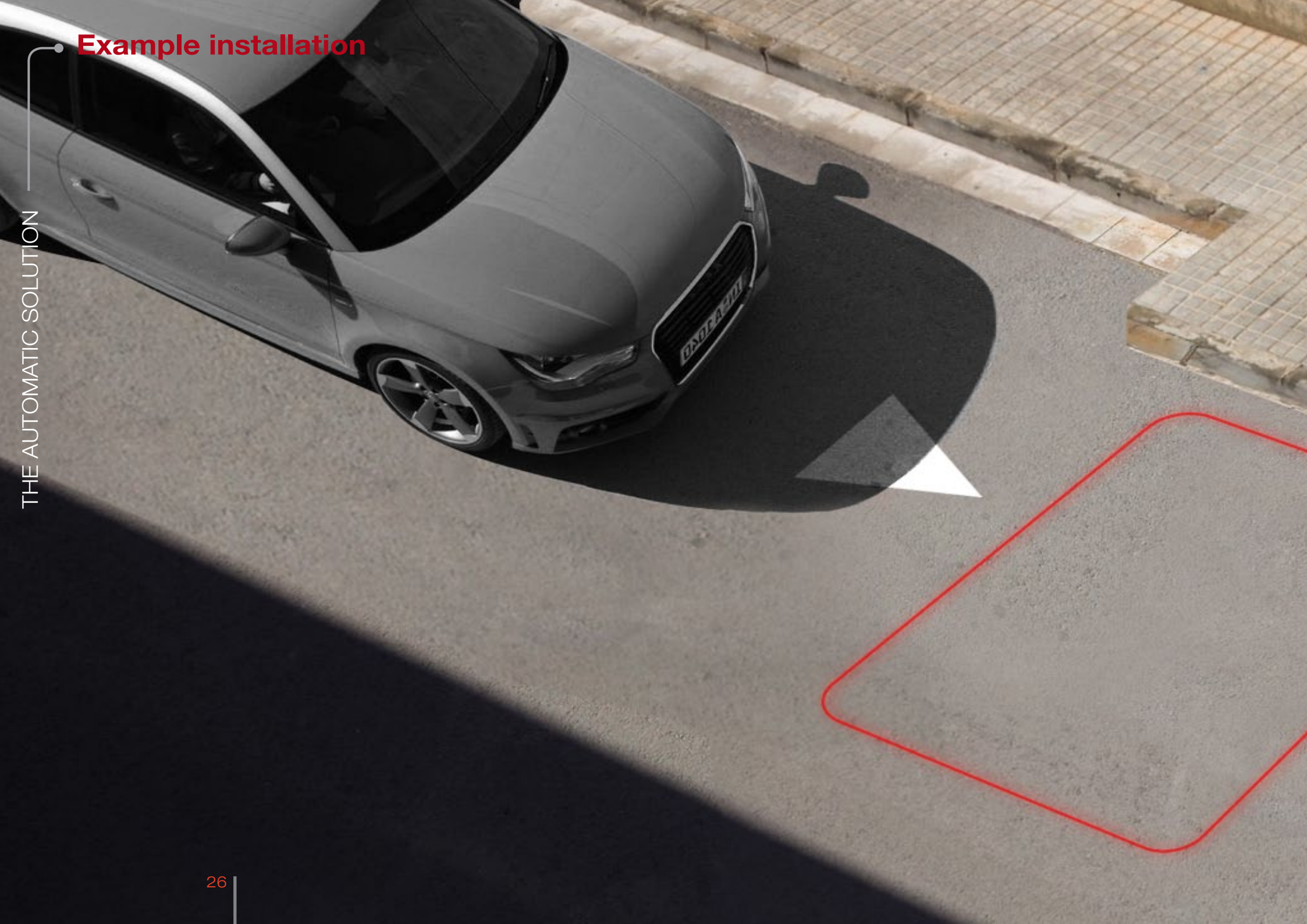
Capacity to set the access point operating logic (1 operating logic per access point)

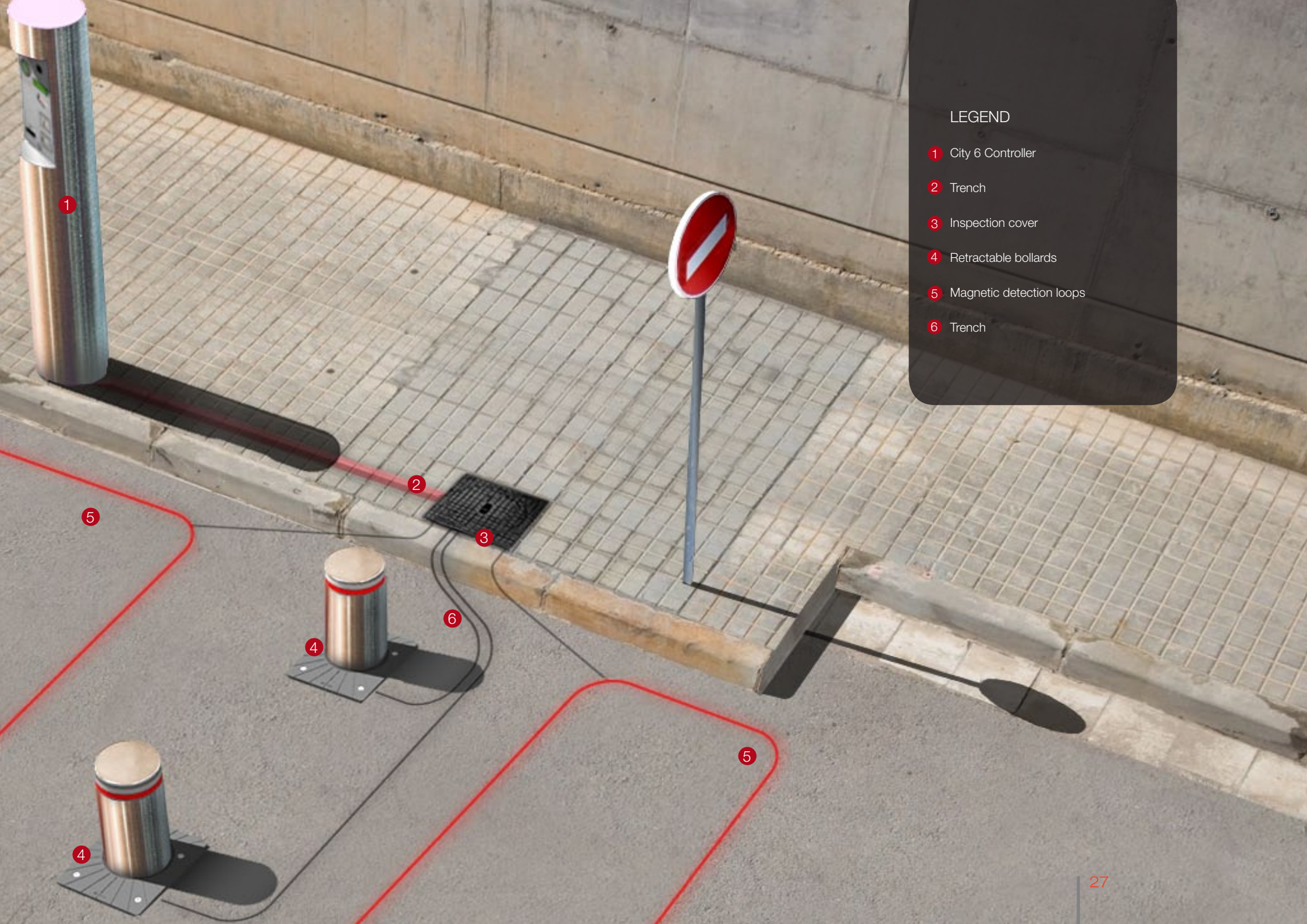
Safety

Loop detectors positioned to ensure access point safety
Emergency stop operates when emergency services cut through cuttable linkage provided for this purpose

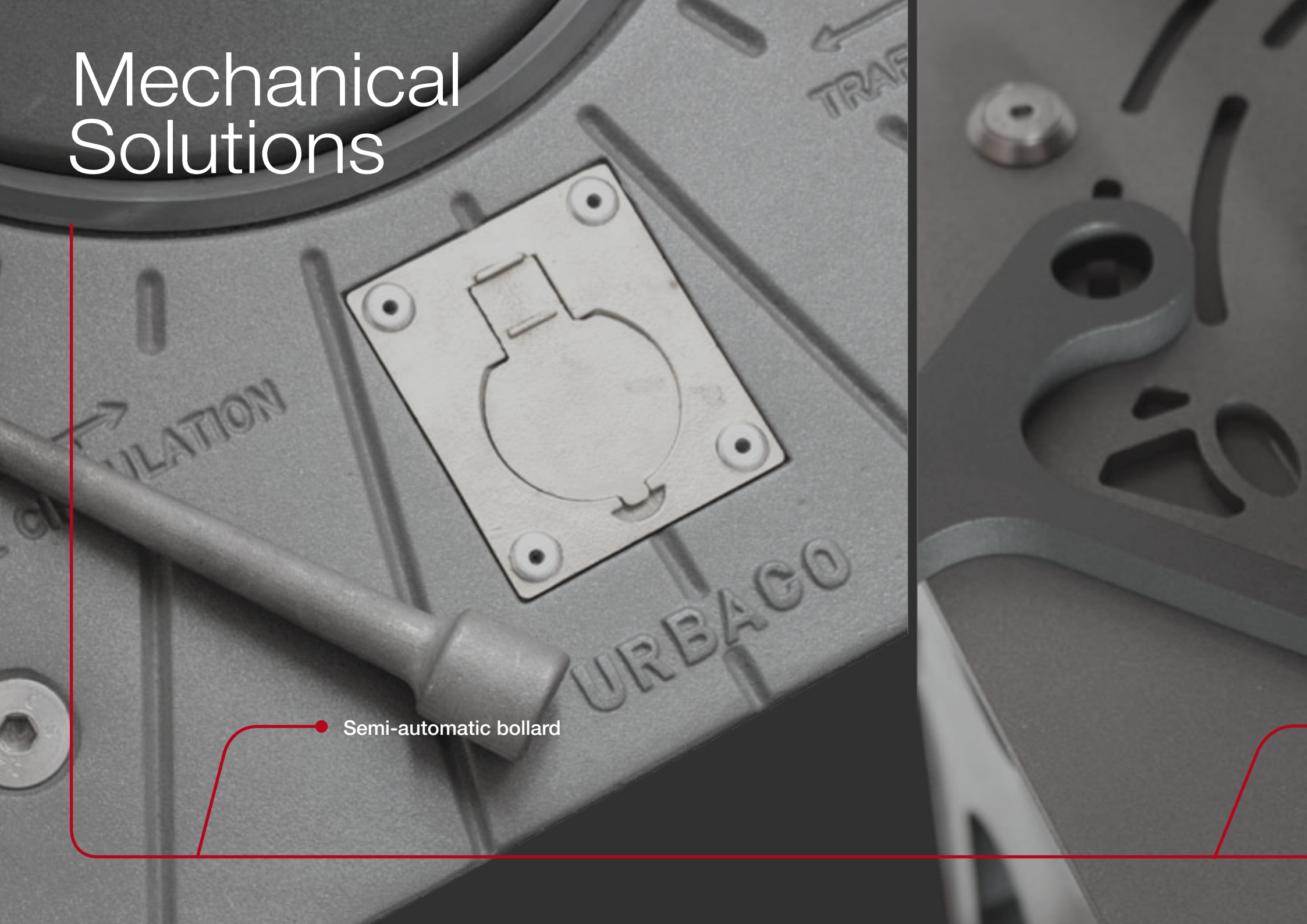

CONTRÔLE D'ACCÈS
UN VÉHICULE À LA FOIS
ATTENDEZ
PASSEZ

Example installation

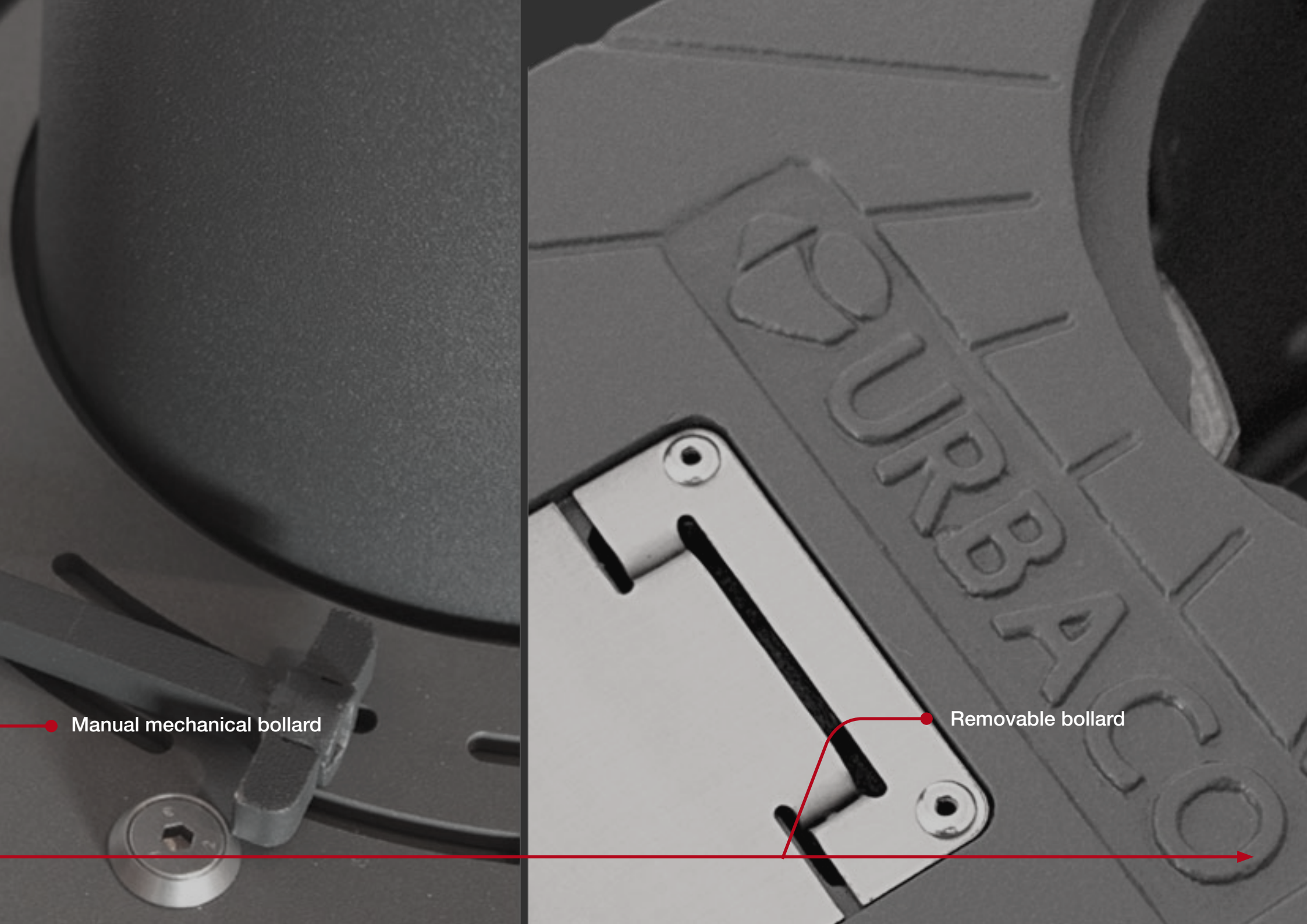



LEGEND
1 City 6 Controller
2 Trench
3 Inspection cover
4 Retractable bollards
5 Magnetic detection loops
6 Trench

Mechanical Solutions



Semi-automatic bollard


Manual mechanical bollard
Removable bollard

Semi-automatic bollard

The semi-automatic retractable bollard is a system developed for very occasional access. For this reason it is recommended for situations with low access opening frequency.

The bollard is moved using a key which releases the mechanism.
One push on the head of the bollard is all it takes to make it descend to flush with the ground, where it automatically locks in position.
Then, with a turn of the key, the bollard rises automatically and locks in the up position.

The key opening is protected by a stainless steel cover plate stopping the ingress of dust or gravel.

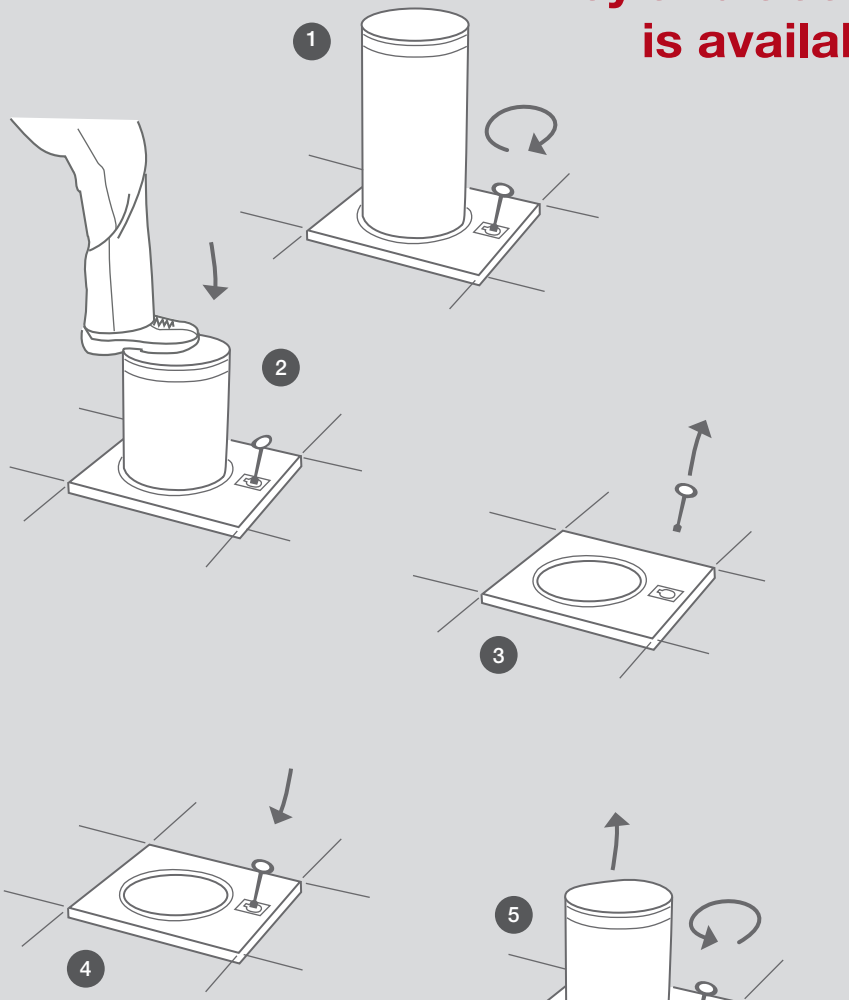
The semi-automatic bollard is also the ideal access control solution in areas without an electricity supply.

Fully compliant with French decree PMR
Focus page 39

Ministry of Infrastructure and Transport
Approval for installation on the public highway
Protocol No. 32658, of 1 April 2009

ISO EN 124: E600 Groupe 5
System certification

One turn of the key and access is available!



Zero maintenance
Zero electricity

Surface Coating and Finish

The bollard gets a rich in zinc primer as standard in order to reinforce its rust-inhibiting performance and improve the polyester finishing paint adherence.

The stainless steel version has a cast iron core clad in 316L stainless steel.

RAL7016 standard

Other RAL in option

Stainless steel cladding: the Vendome

Dimensions (mm)

Ø 120 X h 500
Ø 120 X h 750

Ø 200 X h 500
Ø 200 X h 750

Ø 250 X h 500
Ø 250 X h 750

Reflective Band

The Class II reflective band in white or yellow (depending on model and legislation) further enhances visibility and reduces the risk of accidental collision with the bollard.

Key Pattern

The unlocking key pattern matches that of the lock rod.

E11 E14 EDL ESA* EPE*

*on demand

Design

Available in 5 models, all of which blend perfectly into every environment

Cylinder Vendôme Chateauneuf Athéna

On demand

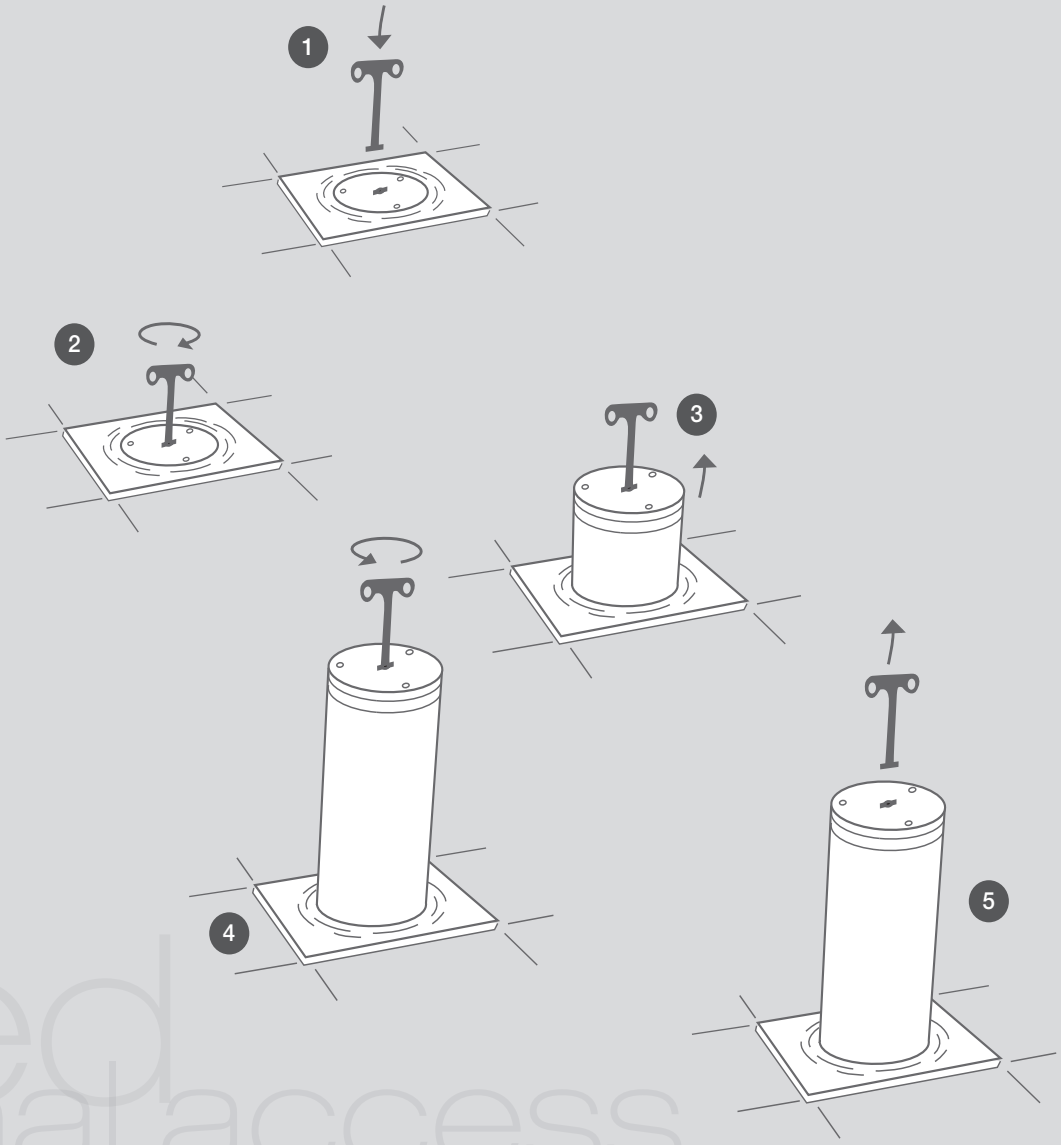
Acropole

* Impact resistance : 241,1 kJ

Manual mechanical bollard

The manual mechanical bollard without power operation or gas lift is the recommended solution to secure occasionally used accesses.

Locking, raising and lowering are done using a specific notched T11 key which is inserted into the top of the bollard. This system is compatible with the fire-fighter type key).



Costs controlled occasional access

Surface Coating and Finish

The bollard gets a rich in zinc primer as standard in order to reinforce its rust-inhibiting performance and improve the polyester finishing paint adherence.

RAL7016 standard

Other RAL in option

Dimensions (mm)

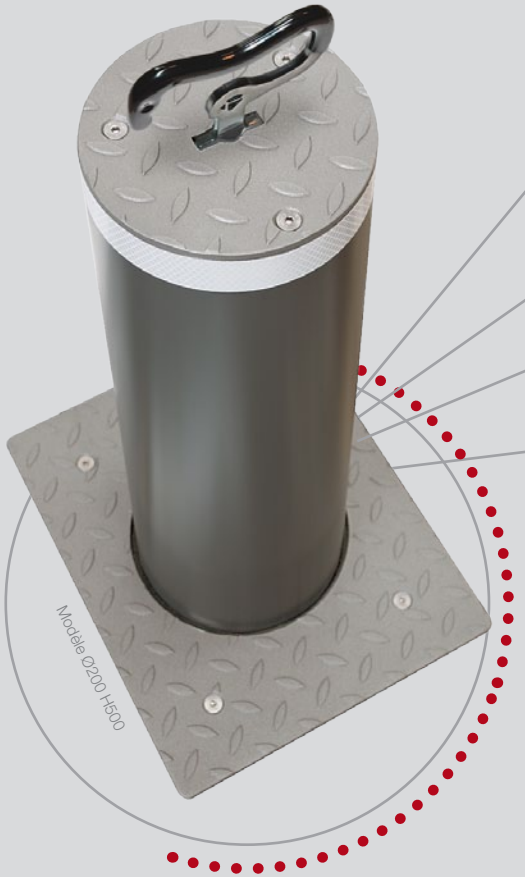
120x500

200x500

250x500

Reflective Band

The Class II reflective band in white or yellow (depending on model) further enhances visibility and reduces the risk of accidental collision with the bollard.



Construction

Steel bollard and ground plate

Key pattern

The unlocking key pattern matches that of the lock rod

E11 E14 EDL ESA* EPE*

* On demand

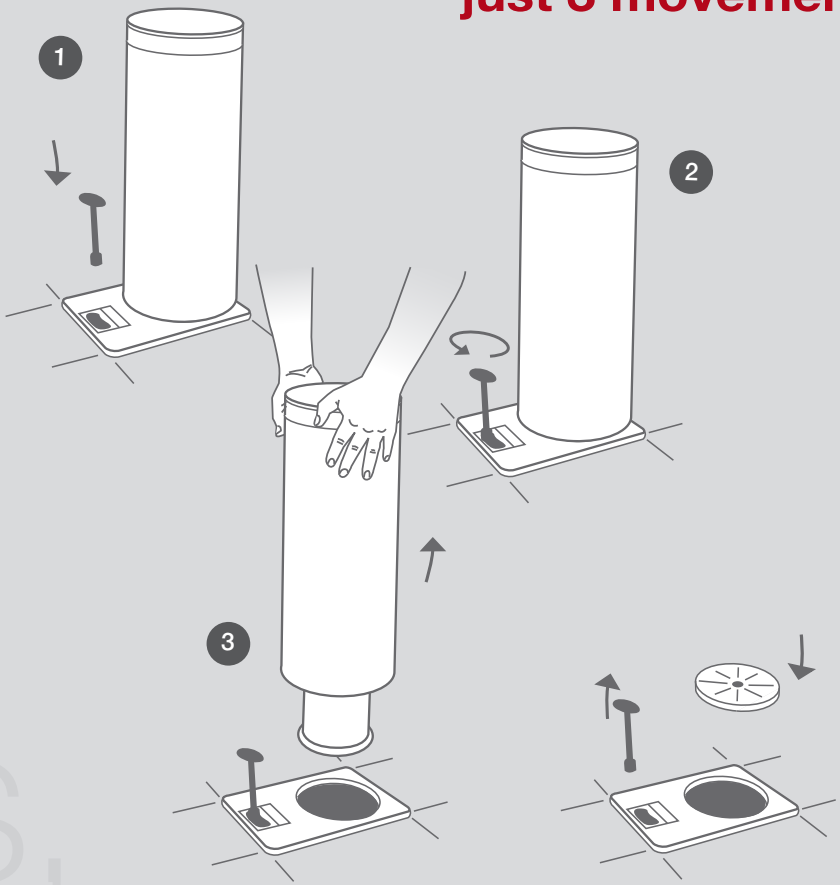
Removable bollard

The removable bollard is the starter solution for access control.
It is the cost-conscious way to effectively control access.

The FIXATOR® is concreted into the ground and the bollard or post is fitted into it by manually rotating it and securing it with a key.

Fully compliant with French decree PMR
Focus page 39

Access control in just 3 movements !



No motors, no lift cylinders
Low opening frequency

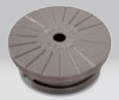
Surface Coating and Finish

The bollard gets a rich in zinc primer as standard in order to reinforce its rust-inhibiting performance and improve the polyester finishing paint adherence.

RAL7016 standard

Other RAL in option

T11



Fixator

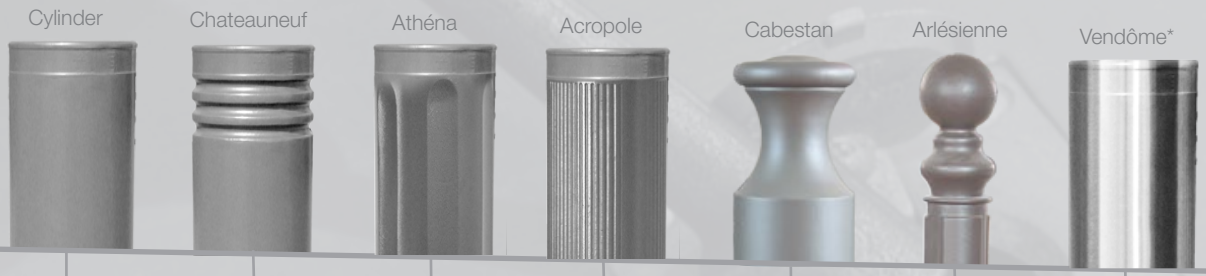
As an option, the ground cover plate is the ideal accessory to close off and secure the FIXATOR® when the bollard is removed.

A model without key is also available.

Options

Rings
Cabinets
Reflective Band

Design



Cylinder	Chateauneuf	Athéna	Acropole	Cabestan	Arlésienne	Vendôme*
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
120X500	120X500	120X500	120X500	250X310	175X290	120X500
120x750	120x550	200x500	200x500	250x380	180x600	200x500
120x950	120x750			250x570	240x700	
120x1200	120x950					
200x500	120x1200					

*On demand

References

Pedestrianized Zone Development

Toulon, Lyon, Nice, Aix en Provence, Poitiers, Rennes, Angers - France | Shanghaï, Beijing - China | Coïmbra, Braga - Portugal | Tenerife, Canary | Stockholm - Sweden | Sydney, Australia

Protection of Public Buildings

Imperial Palace, Tokyo, Japan | Parliament, Canberra, Australia | City Hall, Sydney, Australia | Human Rights Palace, Strasbourg, France | Congress Center, Lyon and Paris, France | Forbidden City, Beijing, China | Space Center of Rabat, Morocco | UFJF, Federal University of Juiz de Fora, Brazil | Stadium of France, Sain- Denis, France

Access Control for Major Shopping Chains

Ikea | Lidl | Auchan | Carrefour | Intermarché | Leclerc

Access Control for Major Hotel Chains

Hyatt, Morocco | The Meridian, India | Marriott, Egypt | Numerous hotels of ACCOR Group across the world

Protection of Industrial Sites and Premises

Eurodif (Nuclear plant COGEMA), France | Rolex Headquarters and plant, Switzerland | BMW, Peugeot, Renault, VW-Audi, Michelin | SHELL, Morocco | Porsche, Germany | French Train stations of Valence, Avignon, Aix en Provence…| Toyota, Japan | PEMEX, Petróleos Mexicanos, Mexico | Big french companies as EDF-GDF, TF1, …

Protection of Banks

Richmond Federal Reserve, USA | Rothschild Bank, Switzerland | Pictet & Cie Bank, Switzerland | Banque de France | Numerous french banks agencies as Société Générale, Crédit Agricole, BNP, Banque Populaire, Caisse d'Epargne…accross the Europe

FOCUS

PMR Range

Because safety is important for all of us, and particularly for more vulnerable persons, **Urbaco** offers its PMR range, comprising illuminated bollards and posts with audible warnings, contrasting colours and specific sizes to fully comply with **the French decree of 18 september 2012 modifying the decree of 15 january 2007 applying Decree 2006-1658 of 21 December 2006 regarding technical specifications for access on roadways and spaces, enabling Persons with Reduced Mobility** to have the best possible day-to-day travel.

Convinced that enterprise has a major role to play at the heart of civil society and that its role places it at the very centre of urban development and social progress, **Urbaco** is committed to people with disabilities to ensure they have access to urban areas.

Urbaco S.A.
457 avenue du Clapier
84320 Entraigues - FRANCE
Tél. + 33 (0)490 480 808
www.urbaco.com - urbaco@urbaco.fr