

Citadine

ELECTRICAL

ELECTRIC RETRACTABLE BOLLARD

The **Citadine** is an electromechanical automatic retractable bollard designed and patented by BES. Its innovative design gives it unparalleled performance; it can easily withstands repeated impacts from vehicles and sustained use. It is mainly used for access control in urban settings. Citadine allows priority access to be given to pedestrians, and enables traffic flow management and security at the boundaries of sensitive or strategic sites.

AUTOMATIC

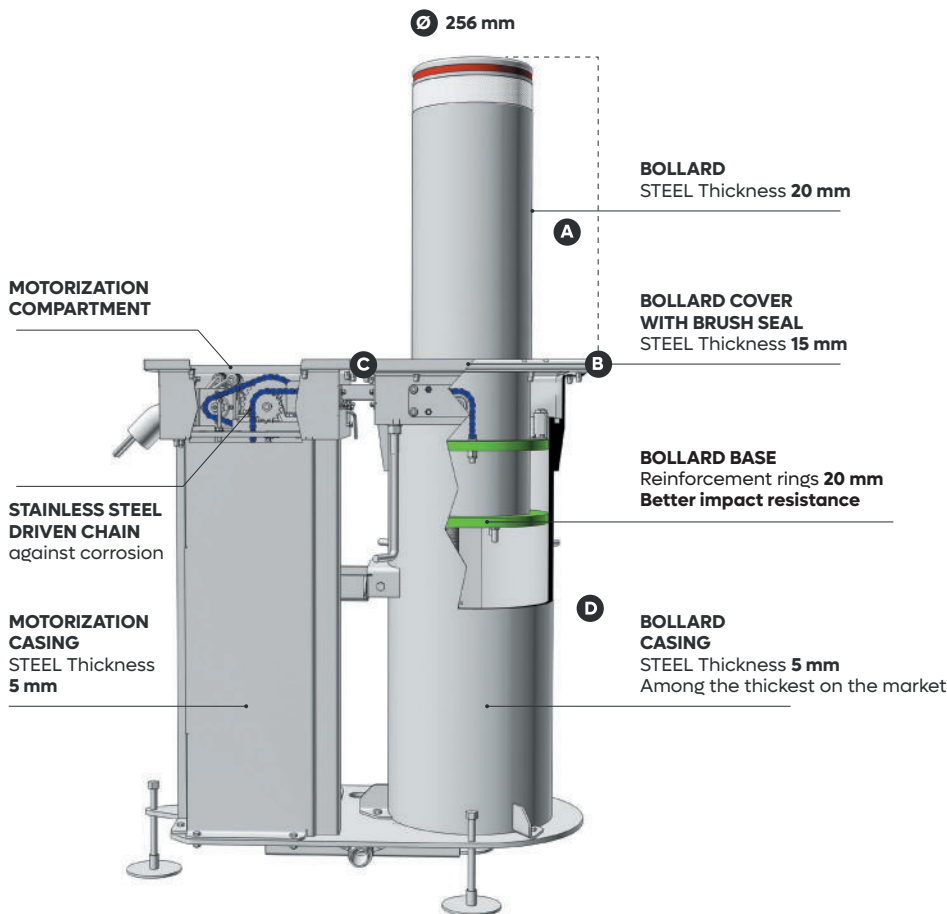
INTENSIVE USE

CAR PARKS

SENSITIVE SITES

HIGH STRENGTH

PEDESTRIAN AREAS



High strength



IMPACT RESISTANCE
Vehicle of 3,5 tons at 70 km/h **661 kJ***

INTRUSION RESISTANCE
Vehicle of 3,5 tons at 121 km/h **1983 kJ***

A	HEIGHT	600 mm Also in 700 mm
B	WIDTH	480 mm
C	LENGTH	940 mm
D	DEPTH	1050 mm
Ø	DIAMETER	256 mm

*Impact resistance (kJ) corresponds to the maximum impact energy that the bollard is able to absorb without major deformation while guaranteeing continuity of operation after an impact : the vehicle will be stopped dead. Intrusion resistance corresponds to the breaking threshold leading to the partial or total destruction of the bollard : the vehicle will be stopped without exceeding 3 m of distance after the bollard. ** See Terms and Conditions.

ADVANTAGES

Service continuity after impact



Unique BES design : double casing + driving system
The bollard remains **functional after an impact or seven several repeated impacts** without needing intervention.

High performance

Tireless motorization : able to provide a large number of daily movements, **up to 9000 movements per day**.

Easy to maintain

Access to the drive **without dismantling the bollard** and intervention performed **by a single technician**. Few wearing part to change.

Ideal for pedestrian safety

Adjustable speed enables gradual lifting so as not to surprise pedestrians.

★ UNRIVALLED WARRANTIES★

LIFETIME

Bollard casing, cylindrical bollard and cover against any deformation during the service life of installation.

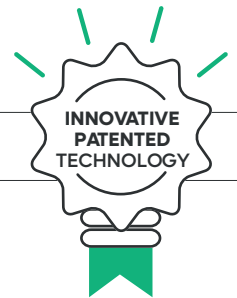
5 YEARS

Drive, transmission and spare parts.

BES
innovate • facilitate • secure

TECHNICAL CHARACTERISTICS

Electric drive system	Brushless motor from industrial robotics 230 V – 750 W – IP67
Security	Fail-safe position the bollard goes down if the power is lost Fail-secure position (option) the bollard is maintained in the high position if power is lost.
Rising/ lowering speed	Adjustable in both directions Take less than 3 seconds Rising and lowering speed less than 1,5 second (option)
Load capacity	Torque adjustable from 0 to 200 kg (dynamic and static)
Operating temperature	-25°C / +70°C
Finish	Replaceable finishing stainless steel sleeve : polished or powder-coated RAL of choice



INSTALLATION & MAINTENANCE



EASY AND DURABLE

Delivered full assembled, tested and ready to be installed.

We recommend sealing the Citadine in fibre-reinforced concrete : approximate volume 1,7 m³ and concrete dosage : 350 kg/m³

SIMPLIFIED AND MINIMIZED MAINTENANCE

Maintenance can be performed by **a single technician without lifting equipment and without dismantling the bollard.**

Replacement of only 2 wearing parts once a year : the brush seal and the reflective strip (depending on use).

ANNUAL PREVENTIVE MAINTENANCE

Cleaning and checking the main components of the bollard (transmission chain tension, bollard alignment, casing seal etc.)

STANDARD EQUIPMENT

- Stainless steel cap
- Reflective strip
- Replaceable finishing sleeve
- Crown with LEDs
- 3 adjustable feet

OPTIONS

- Customised sleeve
- Choice of RAL
- Heating resistance
- Audible alarm

OPERATION

Connects to an access control box or pillar.

CONTROL EQUIPMENT

Badge, card, remote control, mobile phone, call button, fireservice, license plate reading camera etc...