

BENITO

Automatic
H6004-H6008

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EN ENGLISH

Positive safety



Instructions H6004-H6008



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V04 28/01/2020

BENITO-Urban – Light-Play- Covers

V04 28/01/2020

BENITO-Urban – Light-Play- Covers

Información importante

BENITO Urban, is not responsible for damage caused to people, animals or objects, derived from misuse or applications that exceed the limits indicated in the attached technical sheet or due to a different use for which it was designed this product



Electrocución



Aplastamiento

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NOTES:

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1- General Warnings



**Warnings for the installer
-General safety obligations-**

- 1- ATTENTION!** It is extremely important for people's safety to read carefully these instructions. Incorrect installation or improper use it can cause serious damage.
- 2-** Please read the instructions carefully before installing the product.
- 3-** The packaging materials (plastic, polystyrene, etc ...) must not be left within reach children, as they are potential sources of danger, these should be deposited in containers or enclosures intended for waste management and / or collection.
- 4-** Save the instructions for future consultations.
- 5-** This product has been designed and manufactured exclusively for the indicated use in this manual. Any use different from the intended one could harm the operation of the product and / or represent a source of danger.
- 6-** BENITO, declines any responsibility derived from misuse, improper or diverse than expected.
- 7-** Do not install the device in explosive atmospheres, the presence of flammable gas or fumes they constitute a serious security hazard.
- 8-** In countries not belonging to the EEC, in addition to the current national regulations, to obtain an adequate level of security, they must follow and adhere to the standards described and mentioned above.
- 9-** BENITO, is not responsible for the breach of good installation techniques of the supplied products and their corresponding accessories as well as the deformations that could intervene in the use.
- 10-** The installations must be carried out respecting at all times the regulations existing that are applicable
- 11-** Remove / Disconnect the power supply before carrying out a any kind in the installation.
- 12-** Place a magneto thermal protection with bipolar interruption in the electric network, this differential protection with a threshold of 0.03 Amp.
- 13-** Verify that the ground installation is correctly carried out and connect the parts metallic.
- 14-** The automation has the possibility of incorporating a safety device anti-crushing consisting of a torque control (pressure switch), for applications where this type of security is required. However, it is necessary to check the intervention threshold as provided in the standards indicated in point 10.
- 15-** Safety devices (EN 12978 standard) allow protection of possible areas of danger of mechanical risks of movement, such as crush, drag, cut.
- 16-** For each team it is recommended to use at least one light signaling (e.g .: flashing built into the bollard head), as well as a signaling, in addition to the devices indicated in point "15").
- 17-** For maintenance use only and exclusively original BENITO spare parts.

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1.1 –General Warnings



18- BENITO, declines all responsibility related to safety and proper functioning automation if non-factory components are used production or those supplied by BENITO.

19- Do not make any modification to the components that are part of the system automation system.

20- The installer must provide all the information regarding the manual download of the bollard in case of emergency and provide the user of the equipment with the Warnings attached to the product.

21- Do not allow children or people to stop near the bollard during their functioning.

22- Keep radio controls or any other radio transmitter out of the reach of children. impulse, to avoid that the automation can be activated voluntarily.

23- You can only walk over the bollard with the device fully lowered.

24- In case of malfunction, activate the disconnectors to cut the power network, thereby releasing access, (positive security), in the case of a bollard with (negative security), is you must also release the valve corresponding, duly signaling the access with "OUT OF SERVICE", and request the intervention of a technician qualified (installer).

DECLARATION OF CONFORMITY FOR MACHINES

Manufacturer: BENITO URBAN, S.L.U.
 Address: St. Lleida, 10 08500 -Vic-Barcelona
 Declare: The bollard model H6604 4mm – H6006 6mm
 It has been manufactured to be incorporated into a machine or to be assembled with other machinery to manufacture a machine in accordance with the Directive 2006/42 / CE and meets the essential safety requirements of the following EEC directives.

2006/95 / CE Low voltage directive.
 2004/108 / EC Electromagnetic Compatibility Directive
 Likewise, it declares that it is not allowed to put into operation the machinery until the machine in which it must be incorporated or of which it will be a component, has been identified and its compliance with the conditions of Directive 2006/42 / EEC, as well as its subsequent modifications

DECLARACION DE CONFORMIDAD PARA MAQUINAS

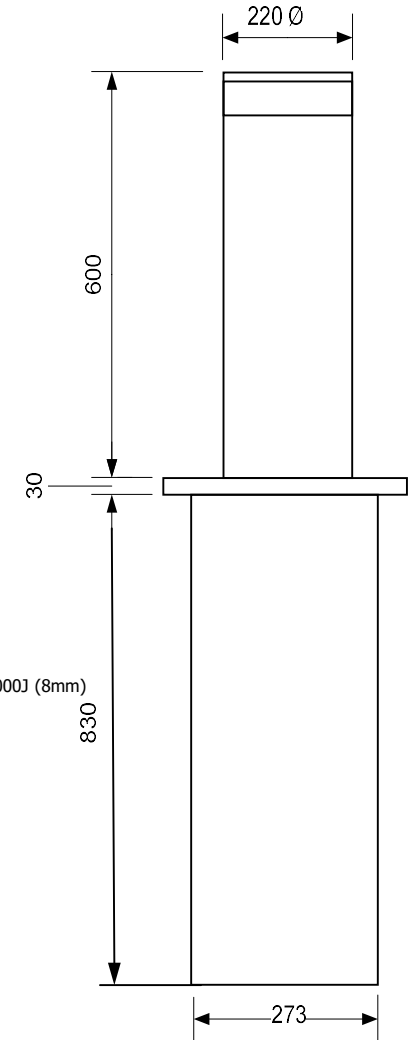
Manufacturer: BENITO Urban S.L
 Address: St. Lleida, 10 08500 -Vic-Barcelona
 Declare: Panel control by H600 – H6006 Bollards
 It complies with the essential security loopholes of the following EEC directives:

2006/95 / EC Low voltage directive
 2004/108 / EC Electromagnetic Compatibility Directive

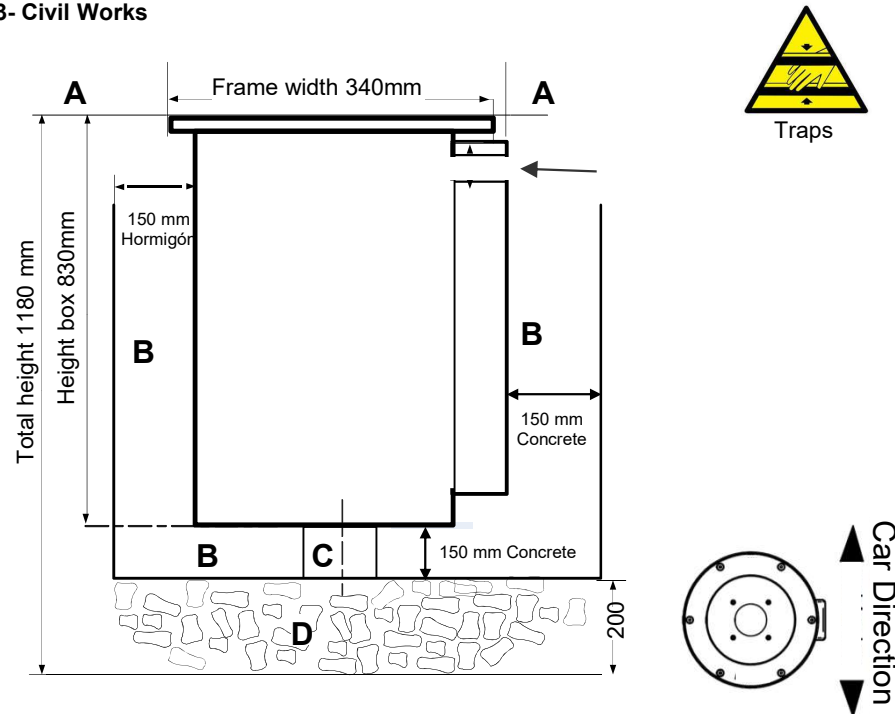
Note:
 This product has been tested in a typical configuration homogeneous



Height from ground level	600 mm
Bollard diameter	220 mm
Box Dimension	300x300x863 mm
Voltage	230V 50Hz
Consumo	650 W
Motor Power	375 W (3000r.p.m)
Work Speed	90 mm/s 130mm/s
Operating temperature range	-20°C +80°C
IP Protection Degree	IP 67
Rising force	1400 NW
Thickness Pipe	4-8 mm
Material & Finished	Stainless & Satin
Rise Time	4 seg.
Down Time	4 seg.
Control Panel	TPBC20
Impact Resistance	60.000 J(4mm) – 250.000J (8mm)
Safety people and objects	Optional
Light on top	Yes
Traffic lights Function	Yes
Reflective Band	Optional

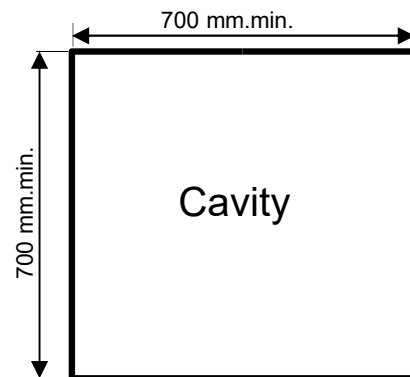


3- Civil Works



- A** = Street Level
- B** = Concrete 350 a 400 kg
- C** = PVC 63 mm, min
- D** = Add gravel for drain *

- If it is not possible to connect to a drain, you must add a layer of gravel to the bottom and favorable terrain, always avoiding terrains clayey or unfavorable to natural drainage, as well as those with a high water table.
- In case of connecting the drain to a sewer rainwater, it will always



11-Warranty

Our products have undergone rigorous quality controls before leaving the chain of production, as well as functionality and use tests for restriction, regulation and control of accesses, these being the environments for which they have been designed. However, should a problem arise, please read these warranty conditions carefully. The guarantee certificate issued by BENITO guarantees the quality of the product it covers, in the Legally established terms, for a period of two years in the control panel and a year in the bollard and / or bollard including the hydraulics, and from the date of delivery thereof, taking as valid the invoice date, if the delivery is prior to the final issuance of the invoice itself, the guarantee will start counting from the said delivery, appearing on the same invoice.

Excludes

Deficiencies caused by negligence, bumps, use, maintenance or tampering, unsuitable tension, incorrect installation, or materials subjected to wear and tear from normal use; as well as accidents, natural disasters or any other external cause under the control of BENITO.

- Tampering, improper use, neglect, overloading, or abandoning the appliance, current instability, power surges, faulty installations, and other causes external that are not attributable to the manufacture and quality of the product.
- Damage caused by breaks, blows or scratches on any part of the bollard / bollard that forms your set for access control.
- Damage caused during transport, by impacts or atmospheric actions, or any other cause of force majeure or that is not attributable to the quality of the device.
- Repairs or repair of the device by personnel not expressly authorized by BENITO. If so if this were the case, this guarantee will be invalidated at that same moment.
- Installation or use of the product in a way that does not comply with technical or safety standards in force at that time.
- The expenses derived from the movement of BENITO technical personnel to the location, of the bollard that the client indicates.
- The shipping costs of any of the parts, pieces, etc., ... that must be sent to BENITO for its repair as well as its re-shipment must be agreed / managed with BENITO prior to shipment

Duration and scope

For two years in the frame and one year in the bollard, BENITO guarantees the product against all defects, manufacturing that affects its good performance for which it has been designed.

- In the event of any anomaly detected, the content of the claim procedure section must be followed, calling the referenced telephone number and informing BENITO of the incidence, evaluating This by the technical department, we will proceed to send the spare / spare parts as well as instructions necessary for its correct replacement, as well as direct telephone attention with our S.A.T., the cost of replacement / repair labor is excluded from said guarantee or displacement of BENITO personnel (see exclusions), if required by the property or client, This possibility must always be agreed in advance with BENITO.

- The lack of maintenance of the apparatus as a whole, or that it has been carried out in a incorrectly and inappropriately against the instructions provided by BENITO.

- Each and every one of the spare parts, necessary for the repair of the bollard in BENITO warranty period will be sent to the place indicated by the customer for replacement. Being those that originate for the shipment, they will be borne by the customer.

For the validation of this guarantee, it will be an essential requirement, the previous exhibition of the invoice.

Reclamation way

The purchaser of the machine must contact BENITO, through the telephone number +34938521000, for the purposes of putting in knowledge of their lack of conformity on detected anomaly, or the proper functioning of the device.

8- Conections

Electrical connection basic 1 Bollard H6004-H6008 with Control Panel

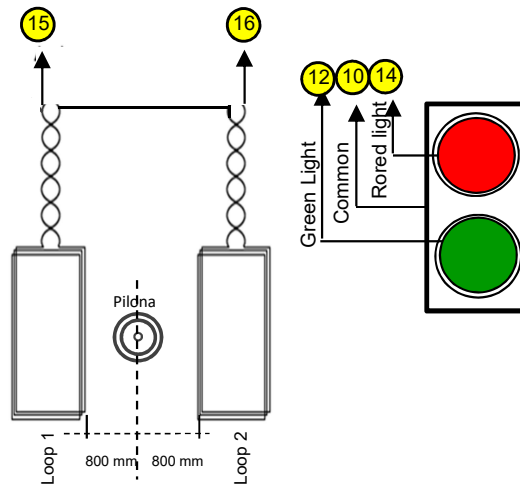
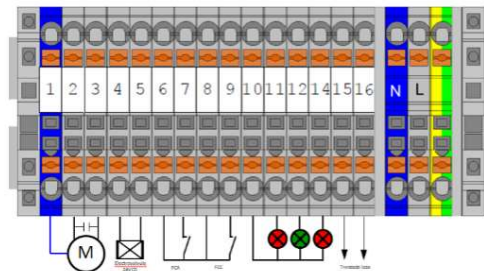


Electrocution

Bollard side

Terminal Conection Side

- 1 Motor Common
- 2 Motor Up
- 3 Motor Down
- 4 Electrovalvle
- 5 Electrovalvle
- 6 FC Down
- 7 FC Down
- 8 FC Up
- 9 FC Up
- 10 Common Light on top
- 11 Red Light on top
- 12 Green light on top
- 14 Red trafficc light extern
- 15 Safety Loop
- 16 Safety Loop



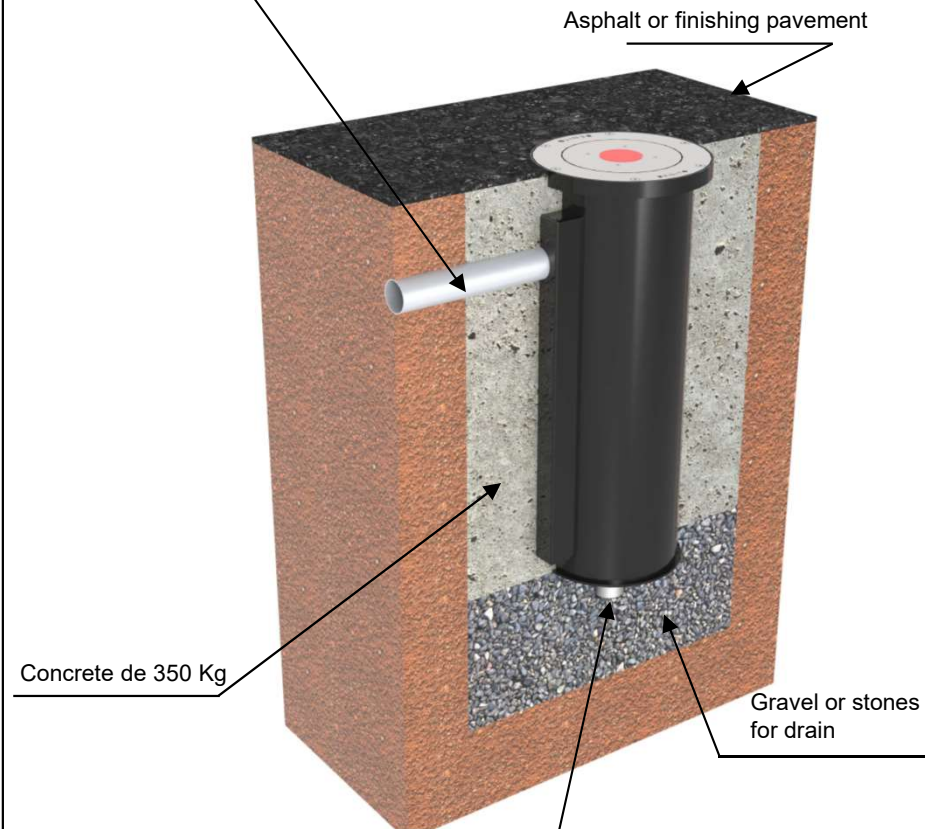
Note: 13
No coneccion – leave free

3.1 – Civil works



Traps

Minimum corrugated pipe placement
Ø 63 mm, up to frame location,
the entrance to this will be at the bottom..



Drain outlet, it is convenient to lead the drain
tube to a natural drain using a siphon, if it is not
possible, a 300 mm min layer will suffice gravel

4 – Connection Terminal Board



Electrocution

- Waterproof metal box, epoxy paint
- Measurements: 400 x 400 x 200 mm
- 230 V supply
- Maximum capacity up to 3 bollards
- 24V power supply, protections, programmable automat, remote control.
- Vehicle detector with power fail function.
- Mode operating selector(manual-automatic)
- Optional: Wifi, bluethot
- Lock with key.



7.1- Function and starting

Incidence	Cause	Effect	Actions
The bollard starts the climb stage and the entrance (X5) of the automat disappears, descending again, and there is no vehicle in the safety zone	Failure or mismatch of the loop or magnetic loop, of vehicles or metal mass.	One of the loops, or both, are very close to the bollard, detecting the bollard in motion, understanding this circumstance as the presence of a vehicle, X5 missing in PLC	Correctly relocate ties or turns (80 cm). Adjust sensitivity or reset detector by pressing for 3 sec. The Mode Simm1 button. The led will be green, and X5 in PLC appears.

IN

Status of the necessary indications of the PLC in the raised position.
Leds on: X0 = Security X1-Start- X2-Bollard Down X3 = Bollard Up – X4 = Not use – X5 = Security loop - X6= Manual Mode- X7-Automatic Mode.

OUTS

Y0= Motor UP - Y1= Motor DOWN- Y2= ElectroValve= Y3= Errors Subrutine- Y4=Red Crown – Y5 Green Crown

*Only in installations with pressure switch installed for personal safety, in the version Basic pressure switch is optional.

Warning:

In case of using a time clock, ON contacts must be programmed for descent times, and OFF contacts for rising times, selector S1 must be in automatic, upper position

Loop Reset

Warning:

- Push 2, 3 seconds.

1- The led should be green, the reading on the display remains fixed.

2- And in the Controller must be the X5

Input X5 be turned On.

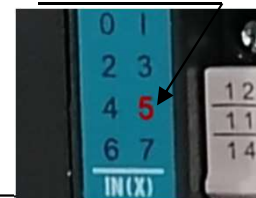


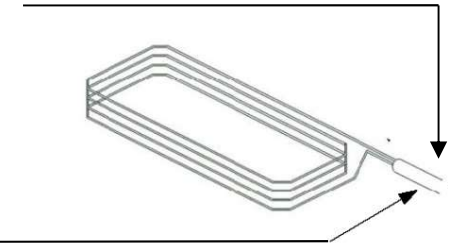
Image 1

Incidence	Cause	Effect	Actions
The bollard reaches the maximum at the top and descends again, repeating it for 3 times, stays below and does not rise, if the voltage is removed the system is restored and the three cycles are repeated again. When it reaches the top, input X3 does not light up in the automaton, detector bollards up.	Bollard reading failure in up position, the system does not know that the pylon has reached the top.	Dirt that prevents the bollard from reaching the top, or end of stroke failure, for safety the bollard remains in the down position	1.Clean sand, mud ... etc, 2.Replace detector
With the bollard in the down position and with fast flashing red and changes to green 3 successive times, with the same behavior after 3 minutes.	*Safety pressure switch failure people or obstacles.	1.Dirt or obstacle preventing the bollard from climbing 2.Strong blow causing a forced slide, safety shot by obstacle. 3.Pressure switch failure	1.Inspección y limpieza de restos u obstáculos que dificultan la subida normal de la pílona. 2.Substituir presostato y ajustar.
With the bollard stopped in the up position, it descends without starting the engine.	1. Solenoid valve failure. 2.Oil leak	1.Particle or impurity inside the valve that prevents its closing. 2.Valve defective. 3. Oil leaks in the hydraulic system.	1. Replace electroválvle. 2. Look oil level or leaks
With the bollard in the up position and the crown lights up in flashing red.	Bollard up reading fault, the system does not recognize in which position the pylon is stopped up.	1.Dirt that prevents the bollard from reaching the top, or end of race failure.	1.Clean sand, mud ... 2.Replace detector
Bollard stays down completely and the crown lights up green, input X2 is not indicated, bollard detector below.	Bollard down reading failure, the system does not recognize in which position the bollard is stopped	1.Dirt that prevents the bollard from reaching the top, or end of race failure.	1.Clean the pylon drawer bottom 2. Replace the limit switch.
The bollard does not rise, remaining below with a green crown, and the exit is switched on by the automaton (Y3-Y5)	The bollard has made three attempts to climb without finding the bollard signal above (X3)	1.Bollard does not rise 2.If we remove the tension (reset), the bollard will try to climb again and if it continues to find no limit switch up (X3) it will try 2 more times, staying down again.	1.Clean sand, mud ... etc, 2.Replace detector
La pílona no sube, quedándose abajo con corona en verde, y en autómatas no se enciende la entrada (X4)	* Safety pressure switch failure people or obstacles.	1.Dirt or obstacle preventing the bollard from climbing 2.Strong blow causing a forced slide, safety shot by obstacle. 3.Pressure switch failure	1.Inspection and clean of rest or strange objects that prevent normal operation. 2.* Pressure switch failure

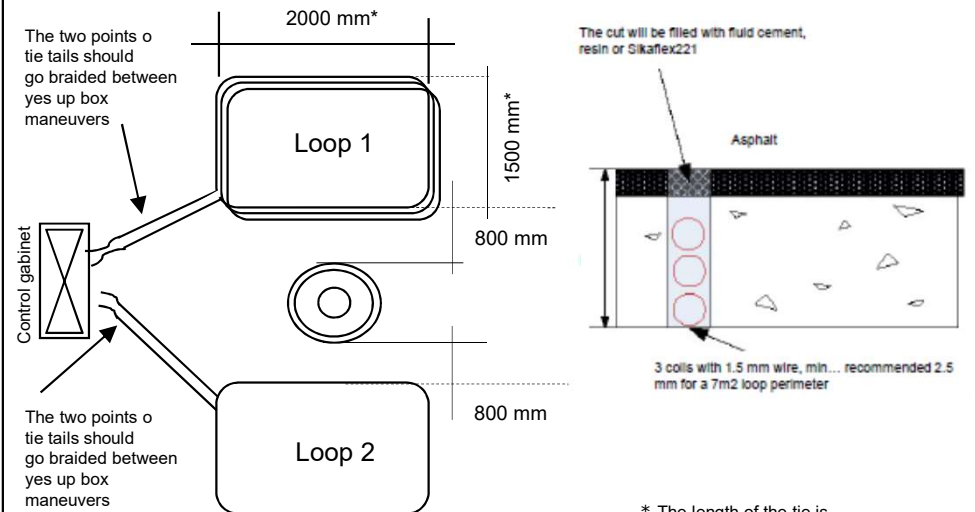
* Only in system with the optional pressure selected

5-Safety loops

- To cabinet tubed 25 mm corrugated, not having to go in said tube no wiring, recommended
- do not cross or drive into the box with
- pipes contain live wiring.



- The termination of the loop must be braided at 20 crossings per meter approx.
- and bring them up to the box, connecting both tips on terminals
- marked as braided loop on the terminal block.



The quality of the cable used for the loop, it is decisive in the duration and life of system. Your protection from isolation shall be capable to withstand the aggressions of the environment especially the moisture, to avoid distortions in reading metal mass as well as own chemical attacks of the same pavement



* The length of the tie is determined That from point "A", allow to see clearly the bollards have already arrived to lowered bollard position.

Turn calculation table

Perimeter	Turns
Of 1 to 4 m ²	4 to 8
Of 8 to 16 m ²	2 to 3
+ 16 m ²	1 to 2

6- Functions mode and starting

Function selector S1.

Automatic Mode

(Habilitado solo con lazo de seguridad)

With lights on top function traffic lights

Selector S1 UP position

Starting the system: with the bollard in the down position, light crown in green, and no vehicle on any of the turns or loops of security, after 10-12 seconds, the bollard will start with a cycle of notice for three seconds, thus giving a margin protection of warning to the user, through a flashing light crown in red, thus indicating the imminent maneuver climb, after this time the bollard starts the climb maneuver, In this phase the indication is flashing red, reaching the up position, the indication becomes solid red, and waiting until a descent order to the opening.

Vehicle security:

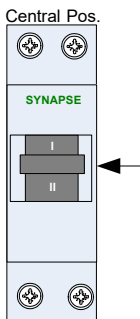
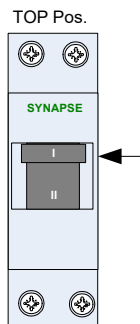
If during the climb maneuver a vehicle invades the area safety (loop), the bollard stops its climb maneuver, and reverses the direction of travel, staying in the down position, waiting for the release of the security zone (loop) of the vehicle, the bollard will not climb. (only in installations where there is a security loop). It is not recommended to park vehicles on the security loop, these are intended for the detection of metallic mass in movement, (vehicles, motorcycles, bicycles, etc.)

People security:

(Optional) If the order to climb is given and there is a Person or obstacle greater than 20 kg, the bollard will not rise, remaining in the down position, wait 10 sec. and will try to climb again, if the person or obstacle on it persists, will continue without going up, this loop will repeat up to 3 times, after the third attempt it will continue down for three minutes, giving time for the bollard to release. (only in installations where security for people is activated)

Selector S1 Central position

In this position the bollard will always remain lowered and crown in green. This selection is used for public events where everything needs to be Released the access space, preventing it from going up either automatically or in manual by remote control



6.1- Functions mode and starting

Manual Mode

(step by step)

Selector S1 down position

In the down position, the bollard will not start a cycle until an operating order, this can be by remote control, card proximity, tag ... etc. Started the cycle, the bollard in position lowering, luminous crown in green colour, and no vehicle on none of the loops or safety ties, (if any), the bollard will start a warning cycle for three seconds, thus giving a protection margin of response to the user, through a rapid flashing of the red in head bollard, this indicating the imminent operating cycle.

At the end of this time the bollard will rise, during the climb, the indication is with slower flashing red color, the up position reached, the indication passes to be solid red, waiting for an opening order.

Once the climb maneuver has started, it can be interrupted by pressing the knob to go down, go down again.

Vehicle security:

If during the climb maneuver a vehicle invades the area safety (loop), the bollard stops its climb maneuver, and reverses the direction of travel, staying in the down position, waiting for the release of the security zone (loop) of the vehicle, the bollard will not climb. (only in installations where there is a security loop). It is not recommended to park vehicles on the security loop, these are intended for the detection of metallic mass in movement, (vehicles, motorcycles, bicycles, etc.)

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