



english version

**PILOMAT**  
MASTERSHIP IN RETRACTILE TECHNOLOGY

**CATALOGUE.15.1**



english version

**BOLLARDS**  
**AUTOMATIC**  
**ANTI-TERRORISM**  
**FIXED**  
**SEMI-AUTOMATIC**  
**REMOVABLE**

**CONTROL COLUMNS**  
**ENERGY**  
**BARRIER**  
**TYRE KILLER**  
**ROAD BLOCKER**  
**CITY GATE**  
**COMPLEMENTS**

CATALOGUE.15.1

**PILOMAT**

# INTER- ROD DUCTION



At present, PILOMAT S.r.l. counts itself among the top leading manufacturers of automated access control technologies in the world. The top priority is the continued development and expansion of the line of products, which is carried out entirely within the company to ensure speedy and precise responses to the various demands of the international

market. We have ensured the guarantee of the reliability and longevity of our mission, through the development of our philosophy geared towards quality improvement, as well as placing ever higher quality standards into our production at competitive costs and reduced lead time and schedule.



**BOLLARDS SINCE 20 YEARS**

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**CL SERIES** 220/CL 600A - 275/CL 600A

**PL SERIES** 220/PL 600A - 275/PL 600A - 355/PL 600A

**P SERIES** 127/P 600A - 127/P 800A - 220/P 600A - 275/P 400A - 275/P 500A - PARK 275/P 500A - 275/P 600A - 275/P 800A - 275/P10 800A

**K/M SERIES** 275/K4 700A - 275/M30 900A - 275/K12 900A - 275/M50 1200A



**PL SERIES** 127/PL 500SA - 127/PL 600SA - 220/PL 600SA - 275/PL 500SA - 275/PL 600SA - 275/PL 800SA - 355/PL 600SA



**PL SERIES** 127/PL 500F - 127/PL 600F - 127/PL 800F - 220/PL 600F - 275/PL 500F - 275/PL 600F - 275/PL 800F

**PF SERIES** 127/PF 500F - 127/PF 600F - 127/PF 800F - 220/PF 600F - 275/PF 500F - 275/PF 600F - 275/PF 800F - 355/PF 600F

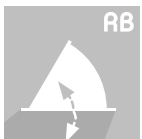
**K/M SERIES** 275/K4 700F - 275/K4FB 700F - 275/K4FB 900F - 275/M30FB 1200F - 275/K12FB 900F - 275/M50FB 1200F

**LUX** 220/PF - 220/PL - 276/PF - 275/PL - 275/K4FB - 275/K12FB



275/RM 600

120/RM 800



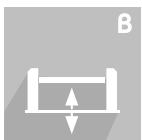
**500 SERIES** BASIC

**1000 SERIES** HIGH SECURITY



SMALL

BIG



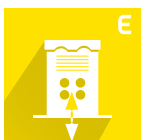
BARRIER



ONE SLIDE

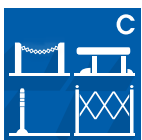
TWO SLIDES

FIXED



B3020 60 - B4030 60 - B4040 55

LONDON 6040 - LONDON 8050



**FLEX - CHAIN - PARKY - MULTIGATE**

At PILOMAT we believe that the best Feature of a product is its quality. We believe in the innovation and research of new products that understand and cater to customer demands, allowing For Full Functionality and security, with improved performance and greater benefits For the consumer.

Tradition and experience are important values,

a treasure that we always put into play in order to meet the new challenges that lie ahead. To this end, we constantly invest our resources, time and energy in research, technological innovation and instruction.

The present and Future of our professional capacity is held through our willingness to evaluate it any time..PILOMAT's strength is its

## HOW TO REACH US

**PILOMAT S.R.L.** Via Zanica 17/p, 24050 Grassobbio (BG) Italy

Geographic Coordinates: N 45° 6470 – E 9° 7080



wide range: whatever the need, ranging from residential security installation to the highest level of anti-terrorism securities, we have it all. Our products and accessories always provide for the possibility to find the ideal solution to satisfy any needs regarding management, safety, and design.

# THE COMPANY





## ORIGINS

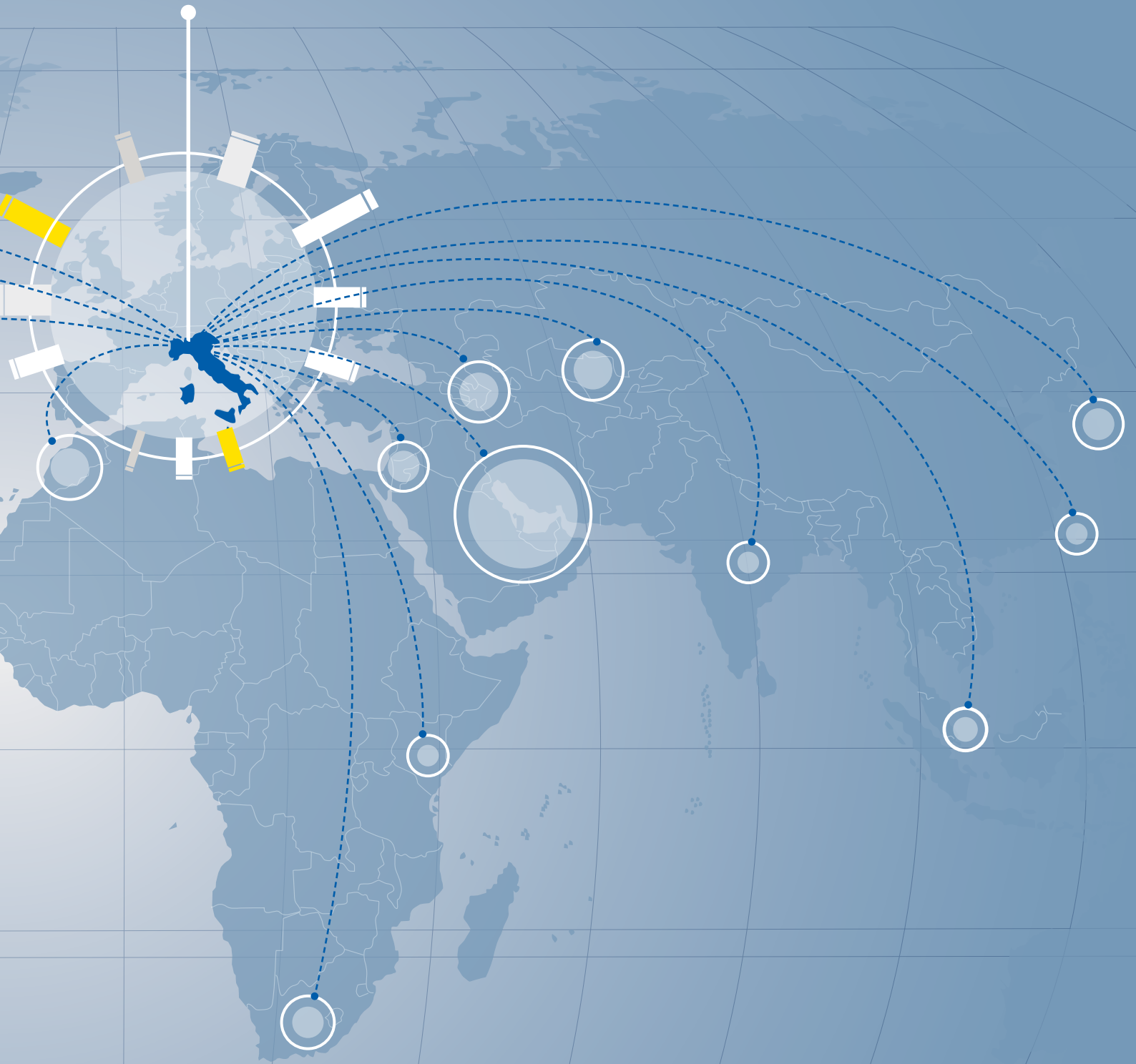
PILOMAT S.r.l. has been operating for over 40 years in the installation business, specialising in the design and manufacture of automotive products geared toward access control with concealed technology, designed to meet heavy-duty needs.

## DEVELOPMENT

In 2009, PILOMAT S.r.l. moved into the new headquarters in Grassobbio (BG), in an industrial area of 12,000 m<sup>2</sup> with a floor area of 7,200 m<sup>2</sup>, an area with new and spacious commercial administrative offices, technical, research and development offices for designing and experimenting with cutting-edge methods and means, customer service and maintenance, and above all else, complete production process with a large and comprehensive stock of products, accessories, and parts which allows for quick answers, deliveries, and spare parts that are always in availability.

The flagship products are the automatic PILOMAT bollards, hydraulic movement, technology that is universally recognised as the most reliable, seeing as it is a constant development in technology, the pace of the movement being constant, linear and low in noise, as well as uses materials that are reliable and durable, dependable in all temperatures and weather conditions.

# 100% MADE IN ITALY



To the end of Fostering greater confidence with the clients, PILOMAT S.r.l. has set an ambitious goal Focused on the customers, responding quickly to new market demands. The programme includes: market research, design planning, prototyping, testing and trials, design validation, production and testing, training for customers and distributors, sales and customer service.

## OBJECTIVES



## CERTIFICATIONS



Crash Test - K12 Rating  
 CertiFication - SD-SDT-02.01 Standard  
 Performed at the Texas Transportation Institute  
 The Texas A&M University System, Texas U.S.A.



Crash Test level M50 (K12)  
 CertiFication ASTM F2656-07 Standard  
 Performed at Karco Engineering, LLC.  
 Automotive Research Center, Adelanto CA, U.S.A.



Crash Test - M30 (K4) Rating  
 CertiFication - ASTM F2656-07 Standard  
 Performed at Karco Engineering, LLC.  
 Automotive Research Center, Adelanto CA, U.S.A.



Crash test - PAS68:2013 Bollard V/7500(N3)/80 (K12) Rating  
 CertiFication - PAS68:2013 Standard  
 Performed at Aisico srl.  
 Crash test Center , Pereto (Aq) - Italy



Crash test - PAS68:2013 Road Blocker V/7500(N3)/80 (K12) Rating  
 CertiFication - PAS68:2013 Standard  
 Performed at Aisico srl.  
 Crash test Center , Pereto (Aq) - Italy



## ITALIAN APPROVAL



*Ministero delle Infrastrutture*

ISPETTORATO GENERALE PER LA CIRCOLAZIONE E LA SICUREZZA STRADALE

The Ministry of Transport, Department of Land Transport, the Directorate General of Motors, the Italian agency is responsible for defining the electrical and/or mechanical equipment that is installed on all public roads in Italy.

The PILOMAT bollards products were the first in Italy to exceed the stringent testing and inspections carried out by the aforementioned Ministry, obtaining two approvals that formalise the installation of PILOMAT bollards on all Italian public roads.

To the end of achieving excellence in the design of new PILOMAT products, as well as the continuous manufacturing development, the new PILOMAT headquarters in Grassobbio operate equipment for the testing of products:

### ENVIRONMENTAL CHAMBER

The environmental chamber allows for the testing of environmental stability and simulates specific conditions in temperature. Temperature and relative humidity can be adjusted from +50°C and -30°C. The use of the environmental chamber can improve the reliability of the PILOMAT products tested at various temperatures and humidity levels, and specific tests are performed regarding the intense handling of high temperatures.

### INTERNATIONAL PROTECTION TESTING CHAMBER

The chamber for verifying the degree of protection against penetration by foreign entities, the verification of the effect of water penetration and the consequent achievement of electrical parts allow for the testing of PILOMAT products that can determine and improve product reliability in relation to the degree of IP (International Protection).

### GRAVITATIONAL PENDULUM

The gravitational pendulum for testing the impact on PILOMAT products is made up of a structure with a hammer attached, a foam ball that moves in a vertical plane after being released without any initial velocity. The hammer is fixed to a rotational axis which is adjustable to the desired height, above ground impact. The PILOMATs are made available for testing in order to ensure that the point of impact coincides with the point at which the trajectory of the hammer meets the vertical plane. The pendulum allows for a range of gravitational energy, adjustable from 500 to 100,000 Joules, depending on the mass of the hammer and the height of the fall. The use of the gravitational pendulum facilitates figuring out the breakage and thus improving the reliability of PILOMAT products, resulting from the damage from the vehicles.

### MOTORISED CART

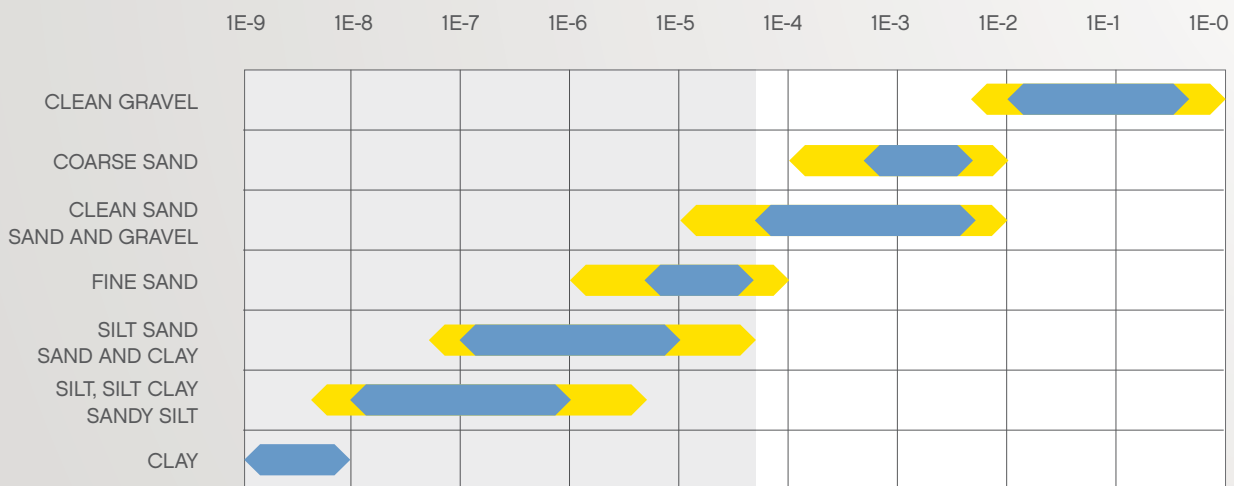
The motorised cart for carrying out prolonged stress tests on PILOMAT products is made up of an oil-hydraulic piston with big cylinder bore, adjustable by height, the beam of which is moving in rectilinear motion in the horizontal plane and is provided at the end of a section of interchangeable semicircular support, depending on the diameter of the PILOMAT being tested. The motorised cart allows for a range of energy, adjustable from 500 to 400,000 Joules, depending on the oil-hydraulic pressure control circuit. The use of the motorised cart facilitates figuring out the breakage and thus improving the reliability of PILOMAT products, resulting from prolonged stress.

## SOIL PERMEABILITY COEFFICIENT

An important Factor in the installation of PILOMAT bollards, prior to the assessment of the permeability of soil in relation to the drainage of rainwater, is that it should determine in advance whether the permeability of the ground covered by the installation is within acceptable parameters or not. If the water fails to qualify with ease, the soil is very permeable, and then the natural drainage of water will be defined as acceptable. On the contrary, if the soil opposes a strong resistance to the natural drainage of water, then the soil is defined with poor permeability, and then the installation will be carried out with "Wizard" rainwater drainage.

The chart shown below shows the typical values of the permeability coefficient (expressed in kv) for a series of soil, decreasing from soil with high permeability (gravel and sand) to soil of little to no permeability (silt and clay). To confirm the practise of acceptable soil permeability, it is recommended that at the time of installation, the excavation is carried out at about 50 litres of water per m<sup>2</sup>, and ensuring that it flows into the ground at about 30'.

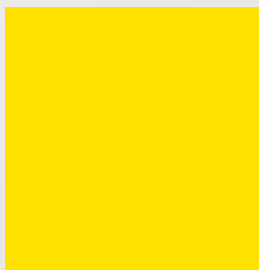
**BENCHMARK FOR PERMEABILITY COEFFICIENT (m/sec)**

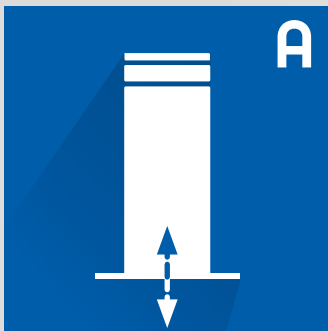


- USUAL RANGE OF VARIATION IN PERMEABILITY
- EXTREME RANGE OF VARIATION IN PERMEABILITY
- ACCEPTABLE PERMEABILITY VALUES



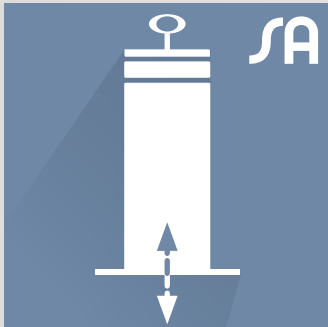
# PRODUCT RANGE





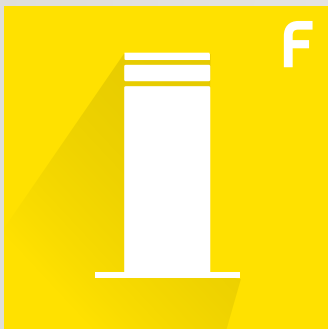
## **AUTOMATIC PILOMAT - PAG 14**

The range of automatic PILOMAT bollards includes a wide selection of items with different mechanical and dimensional characteristics, in order to meet all market demands, from the operation of the single parking space to anti-terrorism protection. Automatic PILOMAT bollards using the criterion of hydraulic or pneumatic handling. Many optional items are available to configure every single installation.



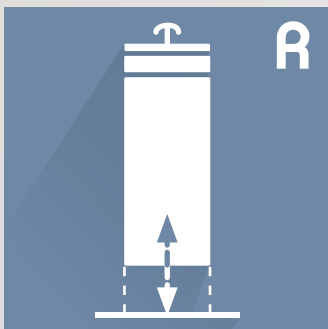
## **SEMIAUTOMATIC PILOMAT - PAG 60**

The range of semiautomatic PILOMAT bollards includes a wide selection of items with different mechanical and dimensional characteristics. They have the same architectural aspects as the automatic PILOMAT and they allow the combined use of both versions.



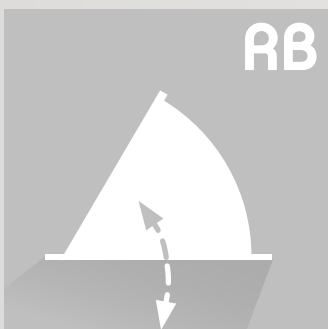
## **FIXED PILOMAT - PAG 64**

The range of fixed PILOMAT bollards includes a wide selection of items with different mechanical and dimensional characteristics. They have the same architectural aspects as the automatic PILOMAT and they allow the combined use of both versions.



## **REMOVABLE PILOMAT - PAG 76**

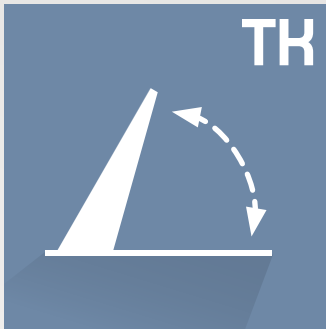
Removable PILOMAT bollards are designed to use typically during the night in order to protect access or windows. Their use is recommended in cases of low frequency of travel, or when the depth of excavation is limited and is therefore not possible to install retractable PILOMAT.



## **PILOMAT ROAD BLOCKER - PAG 80**

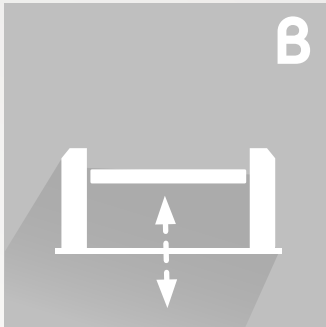
The motorized platforms, in general called ROAD BLOCKERS, use electrohydraulic movement and are available in two different mechanical toughness and different lengths, in order to meet all market requirements, from company driveways to the highest level of anti-terrorism protection.





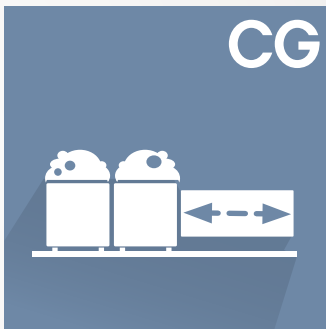
### PILOMAT TYRE KILLER - PAG 82

PILOMAT TYRE KILLER is composed by heavy duty spikes that rise from the ground; it operates like an access control barrier, it prevents the passage of unauthorized vehicles or it allows the exit from a supervised area. It can be installed with other access control elements in order to achieve an access control check-point at the highest level of security.



### PILOMAT BARRIER - PAG 84

Motorized barriers with vertical movement, called PILOMAT BARRIER, are available, depending on installation requirements, in different lengths (from 2.5 meters to 7 meters, with modules of 50 cm); they have a considerable mechanical strength to meet the highest anti-terrorism security .



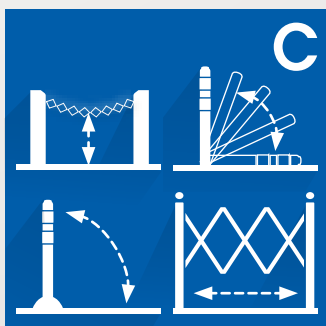
### PILOMAT CITY GATE - PAG 86

PILOMAT CITY GATE is a moving motorized barrier with unilateral or bilateral sliding; it consists of a metal planter with rectangular base and adjustable ground supports. Characterized by a large perimeter edge, with the function of delimiting the containment tank of the planter's earth and to cover the sliding mechanism, it is equipped with a moving barrier to hurdle.



### PILOMAT ENERGY - PAG 88

Semiautomatic PILOMAT ENERGY towers are designed to supply electric power, telephony, compressed air, and water in those areas, used for parking and sometimes used for market areas or venues that are used for events and concerts.



### PILOMAT COMPLEMENTS - PAG 96

The department of research and development of PILOMAT, always careful to what the synergy of market offers, continuously select products that enrich and complete the PILOMAT program; typically the complements are cheaper products, which help to bring a more complete program.

## **CL SERIES**

Automatic pneumatic bollards with compressor in the control unit  
220/CL 600A – 275/CL 600A

## **PL SERIES**

Automatic hydraulic bollards with pump in the control unit  
220/PL 600A – 275/PL 600A – 355/PL 600A

## **P SERIES**

Automatic hydraulic bollards with built-in pump  
127/P 600A – 127/P 800A – 220/P 600A  
275/P 400A – 275/P 500A – 275/P 600A – 275/P 800A  
PARK 275/P 500A – 275/P10 800A

## **ANTI-TERRORISM K/M SERIES**

Automatic hydraulic bollards with built-in pump  
275/K4 700A – 275/K4 900A - 275/M30 1200A  
275/K12 900A – 275/M50 1200A

## **ACCESSORIES**

## **COLUMNS OF CONTROL AND MANAGEMENT**

## **AUTOMATIC NUMBER PLATE READER**

## **INSTALLATION EXAMPLES**





# AUTOMATIC







220/CL 600A



275/CL 600A

The CL SERIES automatic pneumatic bollards are the products with the best quality/price ratio of the PILOMAT range. The current models are the result of the development of more than 20 years of experience.

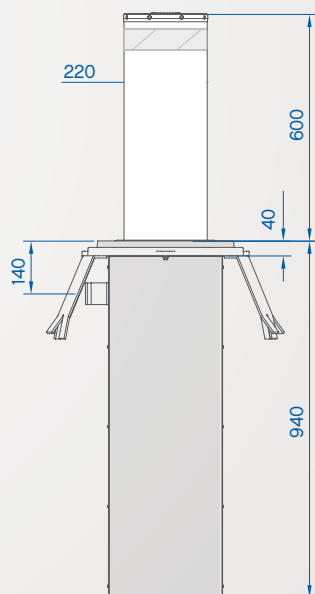
#### GENERAL FEATURES

- the cost of the product: made with industrial criteria of 500 units per batch, optimising production costs while offering a high-quality technology;
- air compressor in the control unit: to promote a greater speed of service;
- patented system for the protection of handling: to maximise the reliability of operations due to impact by vehicles on the cylinder that is put in motion;
- wide range of optional configurations: custom colours, flashing lights integrated in the head, intermittent acoustic signal, solenoid valve No. 220 (in case of power failure, PILOMAT is lowered, releasing the gate), UPS unit for operation in the temporary occurrence of power failure, equipment control, equipment accident prevention (see accessories and optional items).

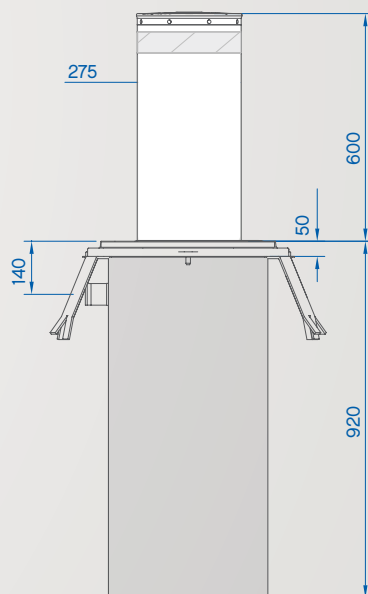
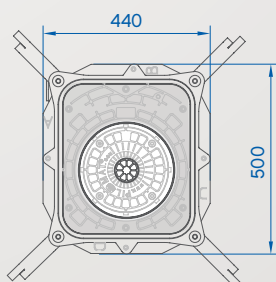
#### RECOMMENDED USES

- Pedestrian Areas
- Private Car Parks – Parking Company
- Private Driveways – Driveway Businesses – Commercial Driveways

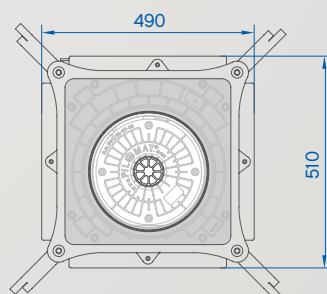
	220/CL 600A	275/CL 600A
MOVING CYLINDER	FE 370 STEEL – AISI 304 STAINLESS STEEL	FE 370 STEEL
MOVING CYLINDER NOMINAL DIAMETER	220 mm	275 mm
MOVING CYLINDER HEIGHT	600 mm	
MOVING CYLINDER FE 370 STEEL THICKNESS	4 mm	5 mm
MOVING CYLINDER STAINLESS STEEL THICKNESS	AISI 304 :4 mm	-
MOVING CYLINDER FE 370 STEEL FINISH	POLYESTER POWDER PAINT – STANDARD GREY ANTHRACITE	
MOVING CYLINDER STAINLESS STEEL FINISH	AS ABOVE, OR BRUSHED	-
REFLECTING ADHESIVE STRIP	YES – HEIGHT 55 mm	
RISING SPEED	7 cm/sec	
LOWERING SPEED	20 cm/sec	
AUTOMATIC EMERGENCY LOWERING	YES	
SAFETY REVERSAL PRESSURE SWITCH	YES	
CONNECTION LINE TO CONTROL UNIT	STANDARD 10 m (MAXIMUM LENGTH: 20 m)	
PNEUMATIC COMPRESSOR HANDLING	IN THE CONTROL UNIT	
PNEUMATIC SOLENOID VALVE	BUILT-IN INTO THE PILOMAT	
PROTECTION CLASS	IP 67	
TYPE OF USE	INTERMITTENT (300 OPERATIONS/DAY +/- 10%)	
IMPACT RESISTANCE (WITHOUT DEFORMATION)	30.000 J	40.000 J
BREAKOUT RESISTANCE	150.000 J	200.000 J
OPERATING TEMPERATURE	– 10°C + 60°C	
NOMINAL PILOMAT WEIGHT (WITHOUT PIT)	68 kg	80 kg
NOMINAL WEIGHT OF STANDARD PIT, WITH COUNTER-FRAME AND BRACKETS	35 kg	40 kg



**220/CL 600A**



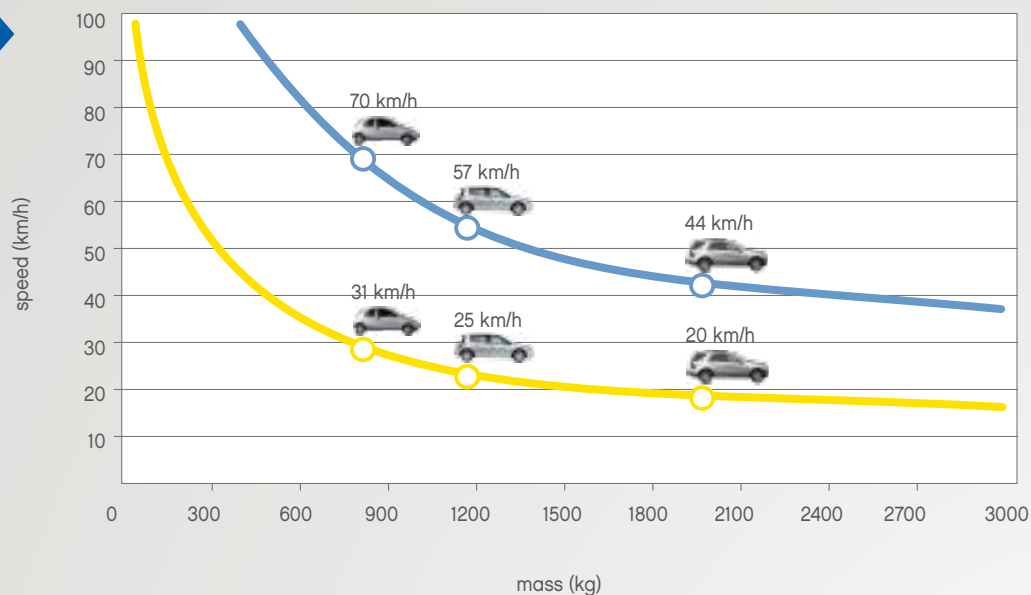
**275/CL 600A**





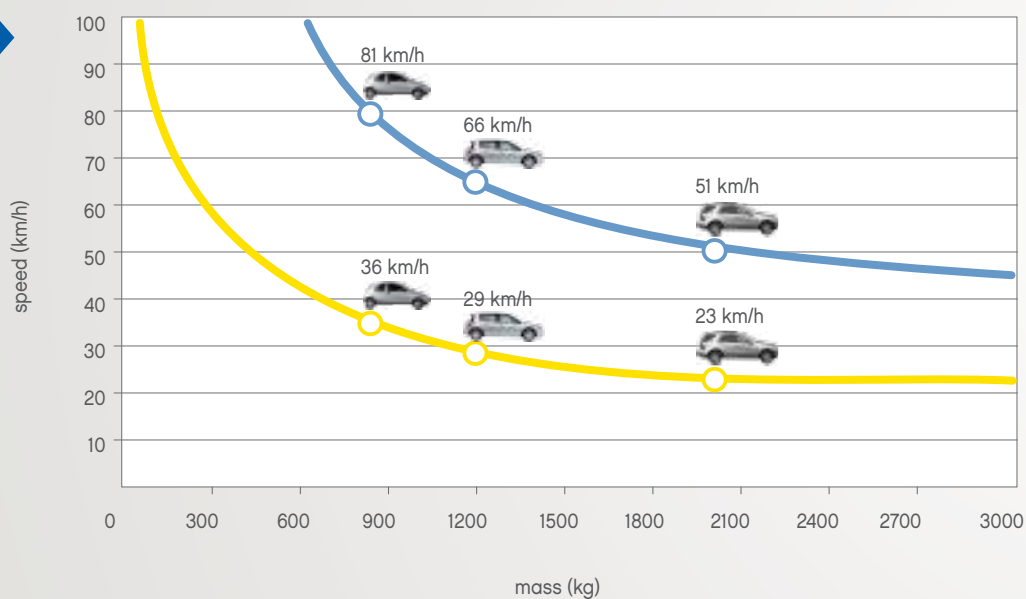
## PILOMAT 220/CL 600A

- 150.000 JOULES
- 30.000 JOULES



## PILOMAT 275/CL 600A

- 200.000 JOULES
- 40.000 JOULES



### BREAKOUT RESISTANCE

The resistance to breakage at a given threshold applies to the impact of a vehicle causing the Pilomat permanent damage in its active and structural mechanisms. The Pilomat, although damaged, provides the vehicle stop within a metre from the point of collision.

### IMPACT RESISTANCE

Resistance to impact at a given threshold indicates that the impact of a vehicle does not cause the PILOMAT blocking or damage to the structural and action mechanisms. The Pilomat's continued functionality and safety are guaranteed.

800 kg 

1.200 kg 

2.000 kg 

6.800 kg 



## OPTIONAL ITEMS - PILOMAT CL SERIES





220/PL 600A



275/PL 600A



355/PL 600A

The PL SERIES automatic bollards are the products with the best quality/price ratio of the hydraulic PILOMAT range. The current models are the result of the development of more than 20 years of experience.

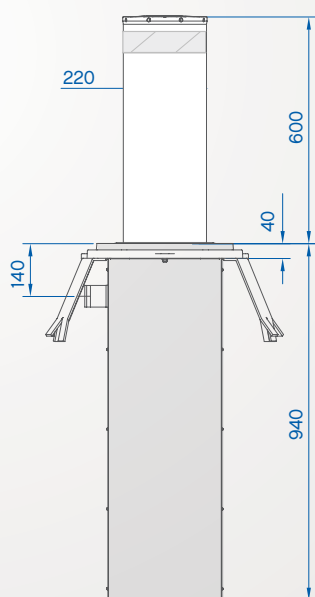
#### GENERAL FEATURES

- the cost of the product: made with industrial criteria of 500 units per batch, optimising production costs while offering a high-quality technology;
- hydraulic movement: The most reliable technology for most intense use at all temperatures and weather conditions;
- hydraulic pump in the control unit: for the promotion of quicker service;
- patented system for the protection of handling: to maximise the reliability of operations due to impact by vehicles on the cylinder that is put in motion;
- wide range of optional configurations: custom colours, flashing lights integrated into the head, intermittent sound signal, 220V solenoid valve (in case of power failure, the PILOMAT is lowered, releasing the gate), heat resistance installations in locations with harsh winter temperatures, UPS unit for operation in the temporary occurrence of power failure, equipment control, equipment accident prevention (see accessories and optional items).

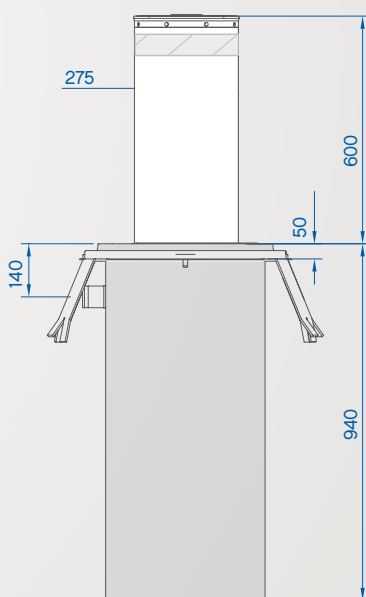
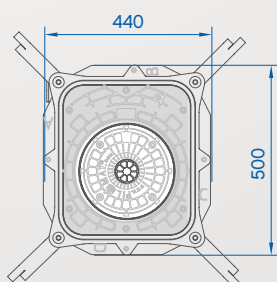
#### RECOMMENDED USES

- Pedestrian Areas
- Private Car Parks – Parking Company
- Private Driveways – Driveway Businesses – Commercial Driveways

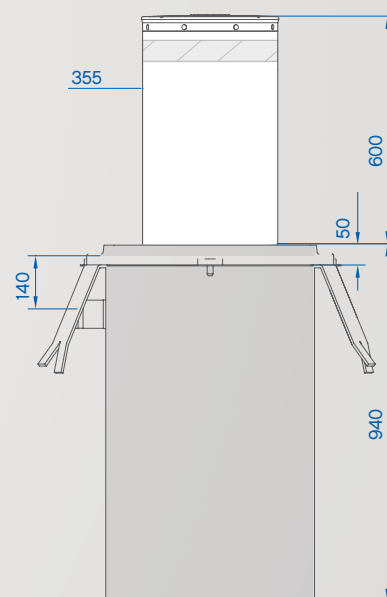
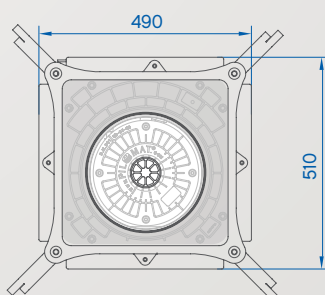
	220/PL 600A	275/PL 600A	355/PL 600A
MOVING CYLINDER	FE 370 STEEL AISI 304 STAINLESS STEEL	FE 370 STEEL	
MOVING CYLINDER NOMINAL DIAMETER	220 mm	275 mm	355 mm
MOVING CYLINDER HEIGHT	600 mm		
MOVING CYLINDER FE 370 STEEL THICKNESS	4 mm	5 mm	
MOVING CYLINDER STAINLESS STEEL THICKNESS	AISI 304 :4 mm	-	-
MOVING CYLINDER FE 370 STEEL FINISH	POLYESTER POWDER PAINT – STANDARD GREY ANTHRACITE		
MOVING CYLINDER STAINLESS STEEL FINISH	AS ABOVE, OR BRUSHED	-	-
REFLECTING ADHESIVE STRIP	YES – HEIGHT 55 mm		
RISING SPEED	12 cm/sec		
LOWERING SPEED	25 cm/sec		
MANUAL EMERGENCY LOWERING	YES (VERSION WITH RELEASE NO 220 = AUTOMATIC LOWERING)		
SAFETY REVERSAL PRESSURE SWITCH	YES		
CONNECTION LINE TO CONTROL UNIT	STANDARD 10 m (MAXIMUM LENGTH: 20 m)		
HYDRAULIC PUMP	IN THE CONTROL UNIT		
PROTECTION CLASS	IP 67		
TYPE OF USE	IINTENSIVE - LIFE AVERAGE 2.000.000 MOVEMENTS - 2.000 MOVEMENTS/DAY		
IMPACT RESISTANCE (WITHOUT DEFORMATION)	30.000 J	40.000 J	
BREAKOUT RESISTANCE	150.000 J	200.000 J	
OPERATING TEMPERATURE	– 40°C + 70°C (FOR LOW TEMPERATURES SEE HEATING RESISTANCE)		
NOMINAL PILOMAT WEIGHT (WITHOUT PIT)	66 kg	87 kg	110 kg
NOMINAL WEIGHT OF STANDARD PIT, WITH COUNTER-FRAME AND BRACKETS	35 kg	39 kg	60 kg



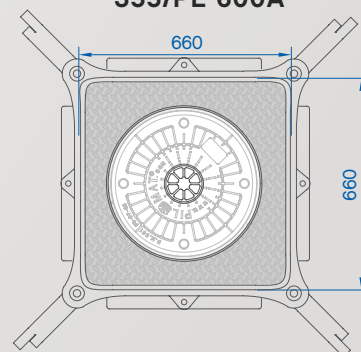
**220/PL 600A**



**275/PL 600A**

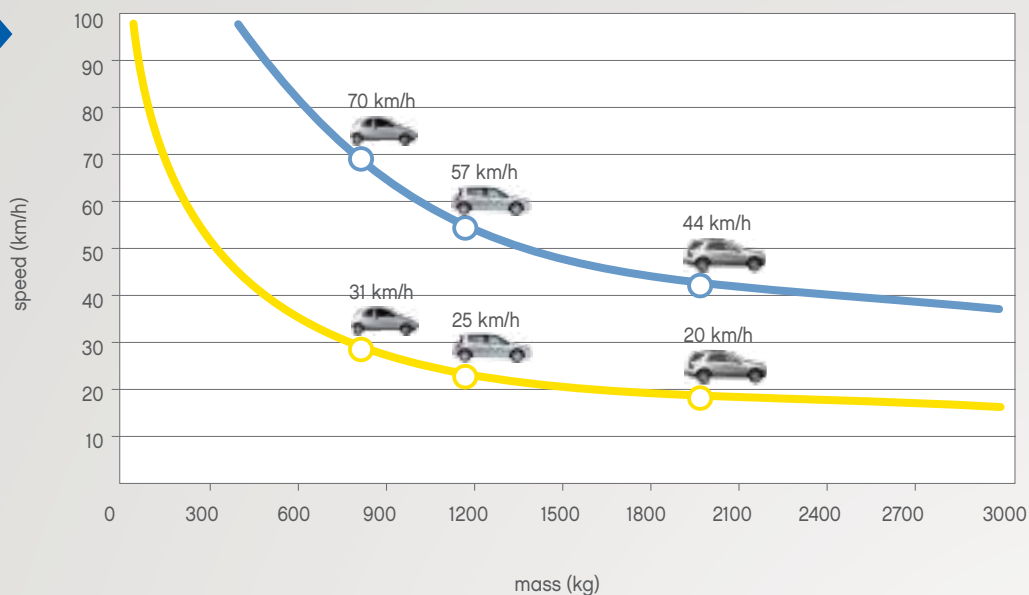


**355/PL 600A**



## PILOMAT 220/PL 600A

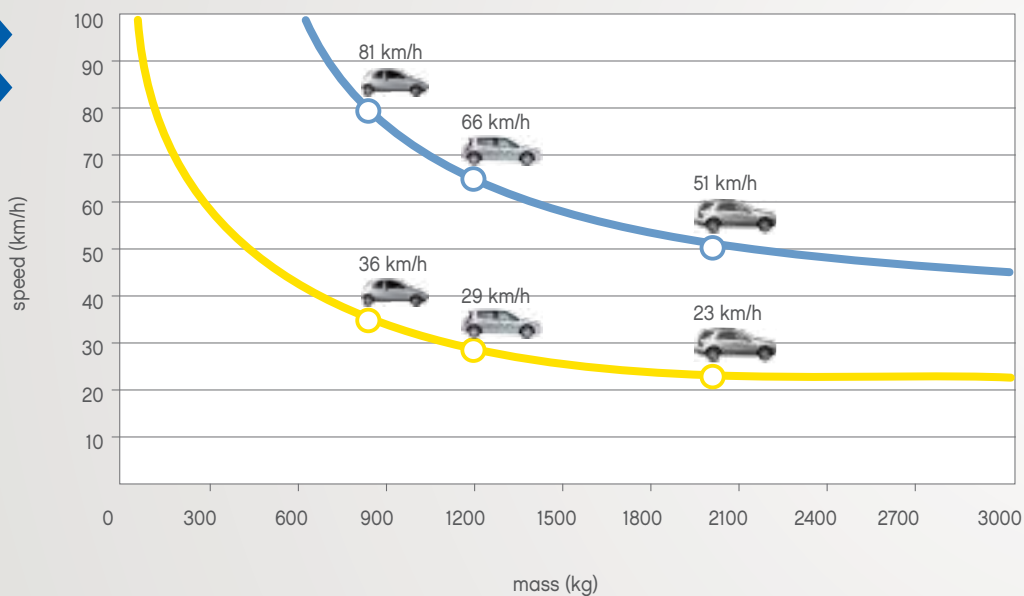
- 150.000 JOULES
- 30.000 JOULES



## PILOMAT 275/PL 600A

## PILOMAT 355/PL 600A

- 200.000 JOULES
- 40.000 JOULES



### BREAKOUT RESISTANCE

The resistance to breakage at a given threshold applies to the impact of a vehicle causing the Pilomat permanent damage in its active and structural mechanisms. The Pilomat, although damaged, provides the vehicle stop within a metre from the point of collision.

### IMPACT RESISTANCE

Resistance to impact at a given threshold indicates that the impact of a vehicle does not cause the PILOMAT blocking or damage to the structural and action mechanisms. The Pilomat's continued functionality and safety are guaranteed.

800 kg



1.200 kg



2.000 kg



6.800 kg







## OPTIONAL ITEMS - PILOMAT PL SERIES





The P SERIES automatic bollards are the top line products of PILOMAT range. The current models are the result of the development of more than 20 years of experience.

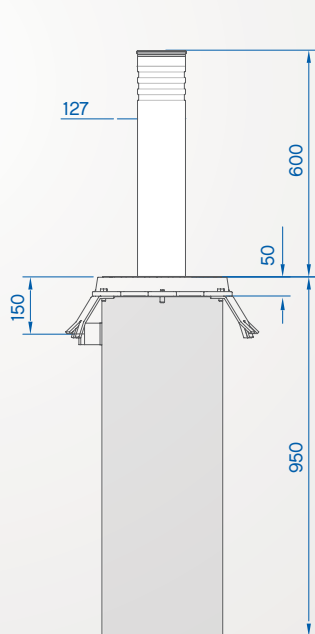
#### GENERAL FEATURES

- hydraulic movement: The most reliable technology For most intense use at all temperatures and weather conditions;
- built-in hydraulic pump in the bollard: This philosophy has many advantages, particularly in installations in locations with severe winter temperatures or when the installation requires a considerable distance (up to 80 metres) between the PILOMAT and the control unit;
- patented system For the protection of handling: to maximise the reliability of operations due to impact by vehicles on the cylinder that is put in motion;
- wide range of optional configurations: custom colours, flashing lights integrated into the head, intermittent sound signal, 220V solenoid valve (in case of power failure, the PILOMAT is lowered, releasing the gate), heat resistance installations in locations with harsh winter temperatures, UPS unit For operation in the temporary occurrence of power failure, equipment control, equipment accident prevention (see accessories and optional items).

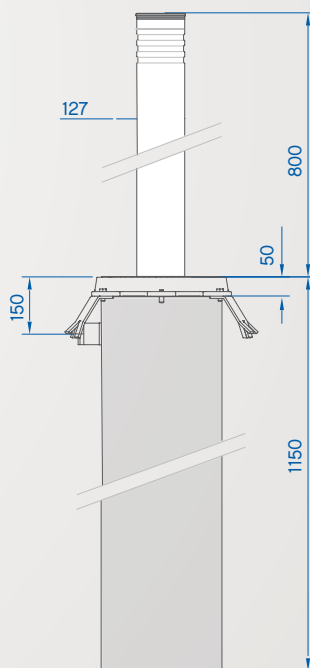
#### RECOMMENDED USES

- Pedestrian Areas
- Private Car Parks – Parking Company
- Private Driveways – Driveway Businesses – Commercial Driveways

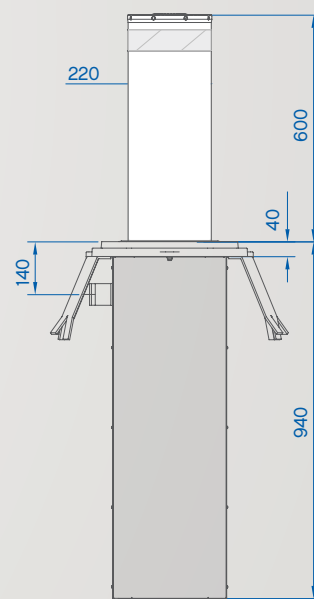
	127/P 600A	127/P 800A	220/P 600A
MOVING CYLINDER	FE 370 STEEL – AISI 304 STAINLESS STEEL		
MOVING CYLINDER NOMINAL DIAMETER	127 mm		220 mm
MOVING CYLINDER HEIGHT	600 mm	800 mm	600 mm
MOVING CYLINDER FE 370 STEEL THICKNESS	6 mm		4 mm
MOVING CYLINDER STAINLESS STEEL THICKNESS	AISI 304 :4 mm		
MOVING CYLINDER FE 370 STEEL FINISH	POLYESTER POWDER PAINT – STANDARD GREY ANTHRACITE		
MOVING CYLINDER STAINLESS STEEL FINISH	AS ABOVE, OR BRUSHED		
REFLECTING ADHESIVE STRIP	YES – HEIGHT 23 mm		YES – HEIGHT 55 mm
RISING SPEED	15 cm/sec		
LOWERING SPEED	25 cm/sec		
MANUAL EMERGENCY LOWERING	YES (VERSION WITH RELEASE NO 220 = AUTOMATIC LOWERING)		
SAFETY REVERSAL PRESSURE SWITCH	YES		
CONNECTION LINE TO CONTROL UNIT	STANDARD 10 m (MAXIMUM LENGTH: 80 m)		
HYDRAULIC PUMP	BUILT-IN INTO THE PILOMAT		
PROTECTION CLASS	IP 67		
TYPE OF USE	IIINTENSIVE - LIFE AVERAGE 2.000.000 MOVEMENTS - 2.000 MOVEMENTS/DAY		
IMPACT RESISTANCE (WITHOUT DEFORMATION)	30.000 J		
BREAKOUT RESISTANCE	150.000 J		
OPERATING TEMPERATURE	– 40°C + 70°C (FOR LOW TEMPERATURES SEE HEATING RESISTANCE)		
NOMINAL PILOMAT WEIGHT (WITHOUT PIT)	75 kg	71 kg	76 kg
NOMINAL WEIGHT OF STANDARD PIT, WITH COUNTER-FRAME AND BRACKETS	28 kg	33 kg	35 kg



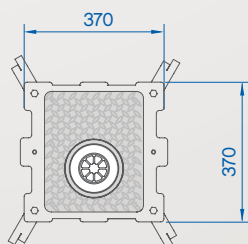
**127/P 600A**



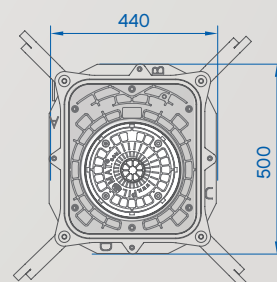
**127/P 800A**



**220/P 600A**



THE DIMENSIONS ARE  
EQUIVALENT IN THE MODELS:  
127/P 600A, 127/P 800A

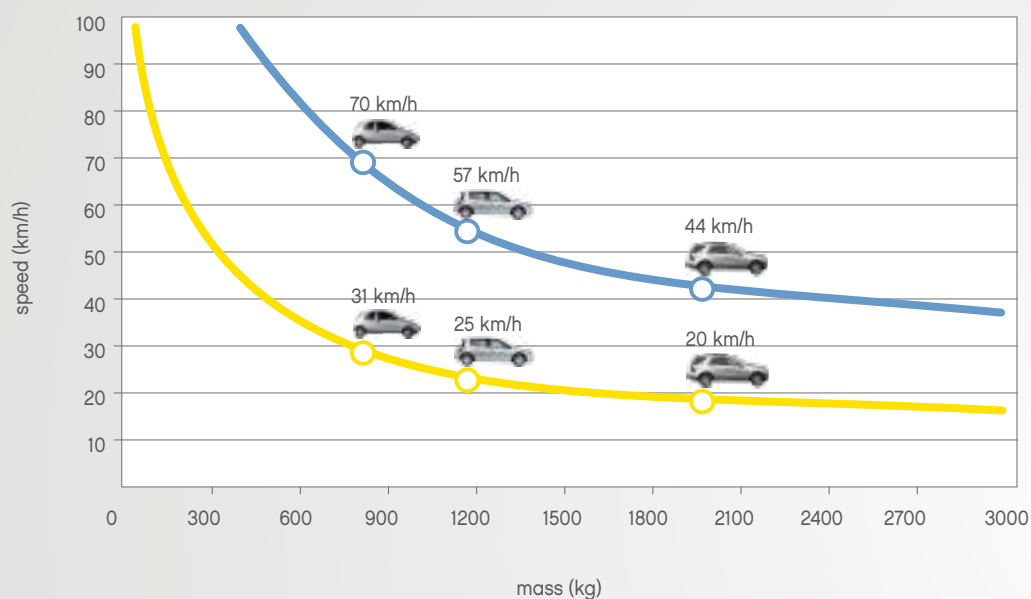


PILOMAT 127/P 600A

PILOMAT 127/P 800A

PILOMAT 220/P 600A

- 150.000 JOULES
- 30.000 JOULES



#### BREAKOUT RESISTANCE

The resistance to breakage at a given threshold applies to the impact of a vehicle causing the Pilomat permanent damage in its active and structural mechanisms. The Pilomat, although damaged, provides the vehicle stop within a metre from the point of collision.

#### IMPACT RESISTANCE

Resistance to impact at a given threshold indicates that the impact of a vehicle does not cause the PILOMAT blocking or damage to the structural and action mechanisms. The Pilomat's continued functionality and safety are guaranteed.

800 kg 

1.200 kg 

2.000 kg 

6.800 kg 





## OPTIONAL ITEMS - PILOMAT 127/P – 220/P





**275/P 400A**



**275/P 500A**



**275/P 600A**



**275/P 800A**

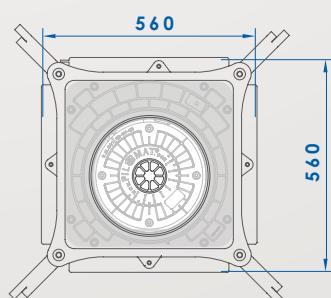
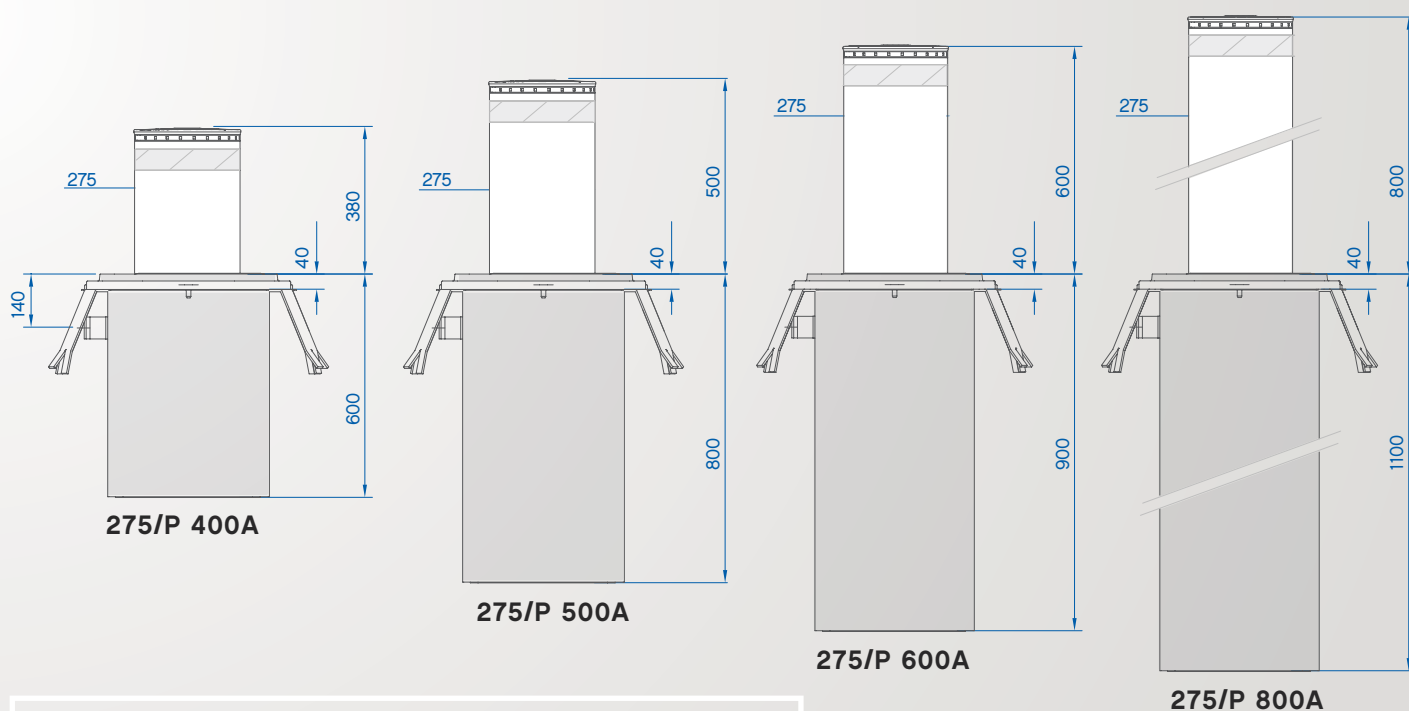
**RECOMMENDED USES**

Pedestrian Areas

Private Car Parks – Parking Company

Private Driveways – Driveway Businesses – Commercial Driveways

	275/P 400A	275/P 500A	275/P 600A	275/P 800A
MOVING CYLINDER	AISI 304 STAINLESS STEEL		FE 370 STEEL – AISI 304 STAINLESS STEEL	
MOVING CYLINDER NOMINAL DIAMETER	275 mm			
MOVING CYLINDER HEIGHT	380 mm	500 mm	600 mm	800 mm
MOVING CYLINDER FE 370 STEEL THICKNESS	-		6 mm	
MOVING CYLINDER STAINLESS STEEL THICKNESS	AISI 304 :6 MM - AISI 316:4 mm			
MOVING CYLINDER FE 370 STEEL FINISH	-		POLYESTER POWDER PAINT STANDARD GREY ANTHRACITE	
MOVING CYLINDER STAINLESS STEEL FINISH	POLYESTER POWDER PAINT - STANDARD GREY ANTHRACITE OR BRUSHED			
OTHER MOVING CYLINDER FINISH	-	RIBS ON CYLINDER SURFACE		
REFLECTING ADHESIVE STRIP	YES - HEIGHT 55 mm			
RIISING SPEED	15 cm/sec			
LOWERING SPEED	25 cm/sec			
MANUAL EMERGENCY LOWERING	YES (VERSION WITH RELEASE NO 220 = AUTOMATIC LOWERING)			
SAFETY REVERSAL PRESSURE SWITCH	YES			
CONNECTION LINE TO CONTROL UNIT	STANDARD 10 m (MAXIMUM LENGTH: 80 m)			
HYDRAULIC PUMP	BUILT-IN INTO THE PILOMAT			
PROTECTION CLASS	IP 67			
TYPE OF USE	IINTENSIVE - LIFE AVERAGE 2.000.000 MOVEMENTS - 2.000 MOVEMENTS/DAY			
IMPACT RESISTANCE (WITHOUT DEFORMATION)	40.000 J			
BREAKOUT RESISTANCE	250.000 J			
OPERATING TEMPERATURE	– 40°C + 70°C (FOR LOW TEMPERATURES SEE HEATING RESISTANCE)			
NOMINAL PILOMAT WEIGHT (WITHOUT PIT)	95 kg	105 kg	114 kg	124 kg
NOMINAL WEIGHT OF STANDARD PIT, WITH COUNTER-FRAME AND BRACKETS	58 kg	60 kg	62 kg	66 kg



THE DIMENSIONS ARE  
EQUIVALENT IN THE MODELS:  
275/P 500A, 275/P 500A,  
275/P 600A, 275/P 800A

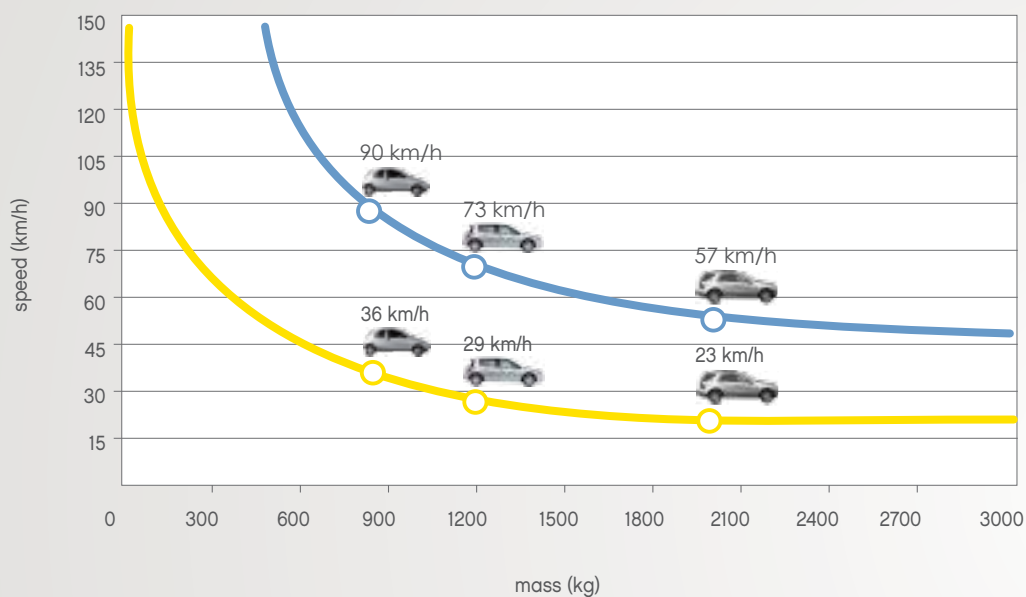
PILOMAT 275/P 400A

PILOMAT 275/P 500A

PILOMAT 275/P 600A

PILOMAT 275/P 800A

- 250.000 JOULES
- 40.000 JOULES



#### BREAKOUT RESISTANCE

The resistance to breakage at a given threshold applies to the impact of a vehicle causing the Pilomat permanent damage in its active and structural mechanisms. The Pilomat, although damaged, provides the vehicle stop within a metre from the point of collision.

#### IMPACT RESISTANCE

Resistance to impact at a given threshold indicates that the impact of a vehicle does not cause the PILOMAT blocking or damage to the structural and action mechanisms. The Pilomat's continued functionality and safety are guaranteed.

800 kg 

1.200 kg 

2.000 kg 

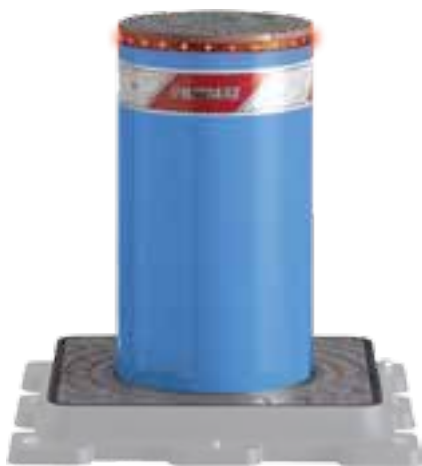
6.800 kg 





## OPTIONAL ITEMS - PILOMAT 275/P





PARK 275/P 500A



275/P10 800A

**PARK 275/P 500A****Breakout resistance: 250.000 J**

PILOMAT PARK 275/P 500A is a variant of PILOMAT P SERIES, which has the same general Features (pag 24), but the hydraulic system allows faster handling time (lowering 1" - rising 3"), is typically used in public parking access or private, in combination with traditional barriers in order to improve the level of passive safety, preventing theft of vehicles that are parked but not limiting the timing of transit.

**275/P10 800A****Breakout resistance: 400.000 J**

PILOMAT 275/P10 800A is a variant of PILOMAT P SERIES, which has the same general Features (pag 24), but the cylinder is thicker in order to increase the resistance of breakage. It is typically used in business and industry, combined with the classical gates in order to improve the level of passive safety, preventing theft of vehicles and its cargo inside the area.

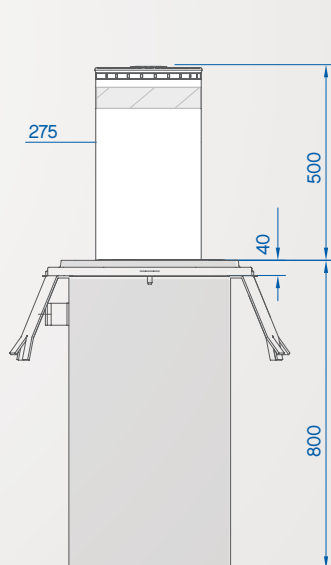
**RECOMMENDED USES**

Pedestrian Areas

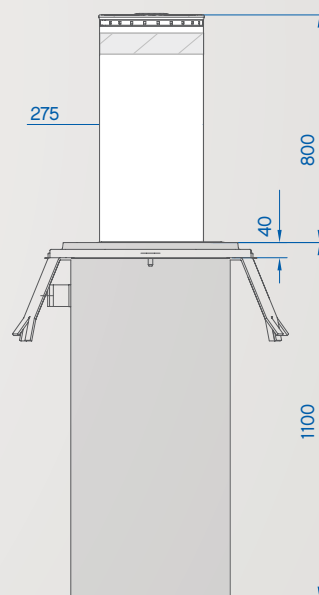
Private Car Parks – Parking Company

Private Driveways – Driveway Businesses – Commercial Driveways

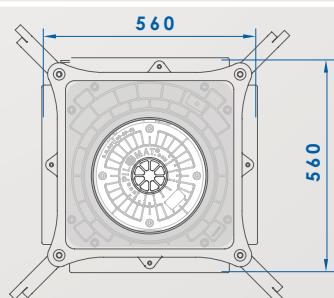
	<b>PARK 275/P 500A</b>	<b>275/P10 800A</b>
<b>MOVING CYLINDER</b>	<b>AISI 304 STAINLESS STEEL</b>	<b>FE 370 STEEL – AISI 304 STAINLESS STEEL</b>
MOVING CYLINDER NOMINAL DIAMETER	275 mm	
<b>MOVING CYLINDER HEIGHT</b>	<b>500 mm</b>	<b>800 mm</b>
MOVING CYLINDER FE 370 STEEL THICKNESS	-	10 mm
<b>MOVING CYLINDER STAINLESS STEEL THICKNESS</b>	<b>6 mm</b>	-
MOVING CYLINDER FE 370 STEEL FINISH	-	POLYESTER POWDER PAINT STANDARD GREY ANTHRACITE
<b>MOVING CYLINDER STAINLESS STEEL FINISH</b>	<b>POLYESTER POWDER PAINT - STANDARD GREY ANTHRACITE OR BRUSHED</b>	-
OTHER MOVING CYLINDER FINISH	RIBS ON CYLINDER SURFACE	
<b>REFLECTING ADHESIVE STRIP</b>	<b>YES - HEIGHT 55 mm</b>	
RISING SPEED	20 cm/sec	15 cm/sec
<b>LOWERING SPEED</b>	<b>50 cm/sec</b>	<b>25 cm/sec</b>
MANUAL EMERGENCY LOWERING	YES (VERSION WITH RELEASE NO 220 = AUTOMATIC LOWERING)	
<b>SAFETY REVERSAL PRESSURE SWITCH</b>	<b>YES</b>	<b>YES (EXCLUDABLE)</b>
CONNECTION LINE TO CONTROL UNIT	STANDARD 10 m (MAXIMUM LENGTH: 80 m)	
<b>HYDRAULIC PUMP</b>	<b>BUILT-IN INTO THE PILOMAT</b>	
PROTECTION CLASS	IP 67	
<b>TYPE OF USE</b>	<b>IINTENSIVE - LIFE AVERAGE 2.000.000 MOVEMENTS - 2.000 MOVEMENTS/DAY</b>	
IMPACT RESISTANCE (WITHOUT DEFORMATION)	40.000 J	
<b>BREAKOUT RESISTANCE</b>	<b>250.000 J</b>	<b>400.000 J</b>
OPERATING TEMPERATURE	- 40°C + 70°C (FOR LOW TEMPERATURES SEE HEATING RESISTANCE)	
<b>NOMINAL PILOMAT WEIGHT (WITHOUT PIT)</b>	<b>109 kg</b>	<b>150 kg</b>
NOMINAL WEIGHT OF STANDARD PIT, WITH COUNTER-FRAME AND BRACKETS	41 kg	47 kg



**PARK 275/P 500A**



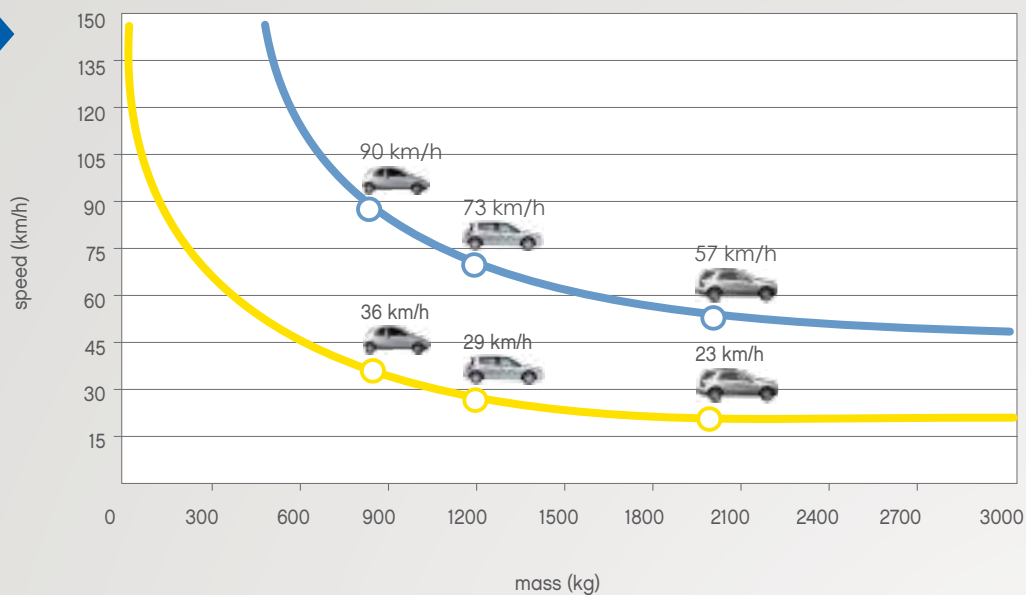
**275/P10 800A**



THE DIMENSIONS ARE  
EQUIVALENT IN THE MODELS:  
PARK 275/P 500A, 275/P10 800A

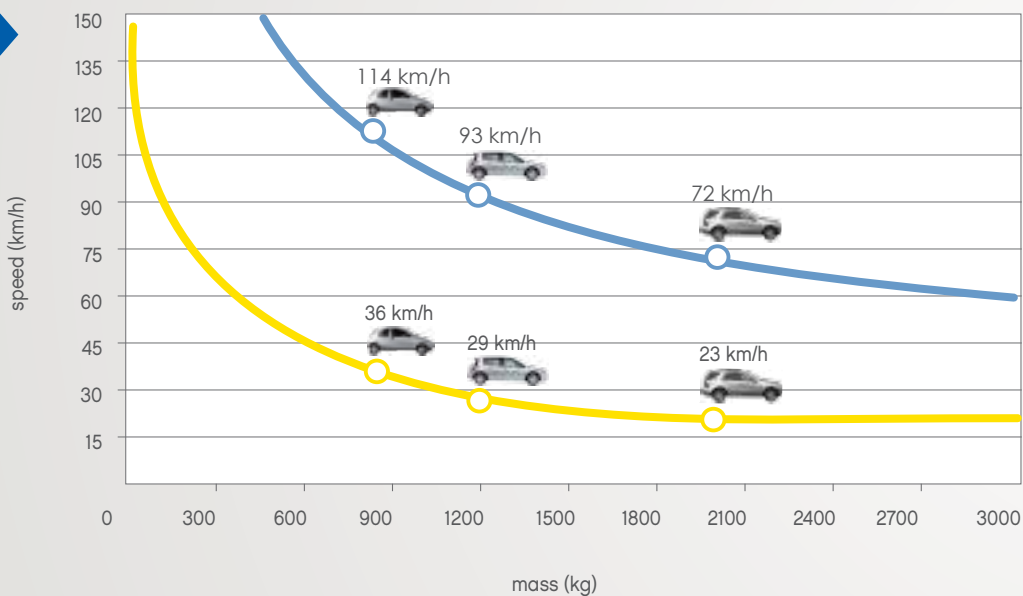
## PILOMAT PARK 275/P 500A

- 250.000 JOULES
- 40.000 JOULES



## PILOMAT 275/P10 800A

- 400.000 JOULES
- 40.000 JOULES



### BREAKOUT RESISTANCE

The resistance to breakage at a given threshold applies to the impact of a vehicle causing the Pilomat permanent damage in its active and structural mechanisms. The Pilomat, although damaged, provides the vehicle stop within a metre from the point of collision.

### IMPACT RESISTANCE

Resistance to impact at a given threshold indicates that the impact of a vehicle does not cause the PILOMAT blocking or damage to the structural and action mechanisms. The Pilomat's continued functionality and safety are guaranteed.

800 kg



1.200 kg



2.000 kg



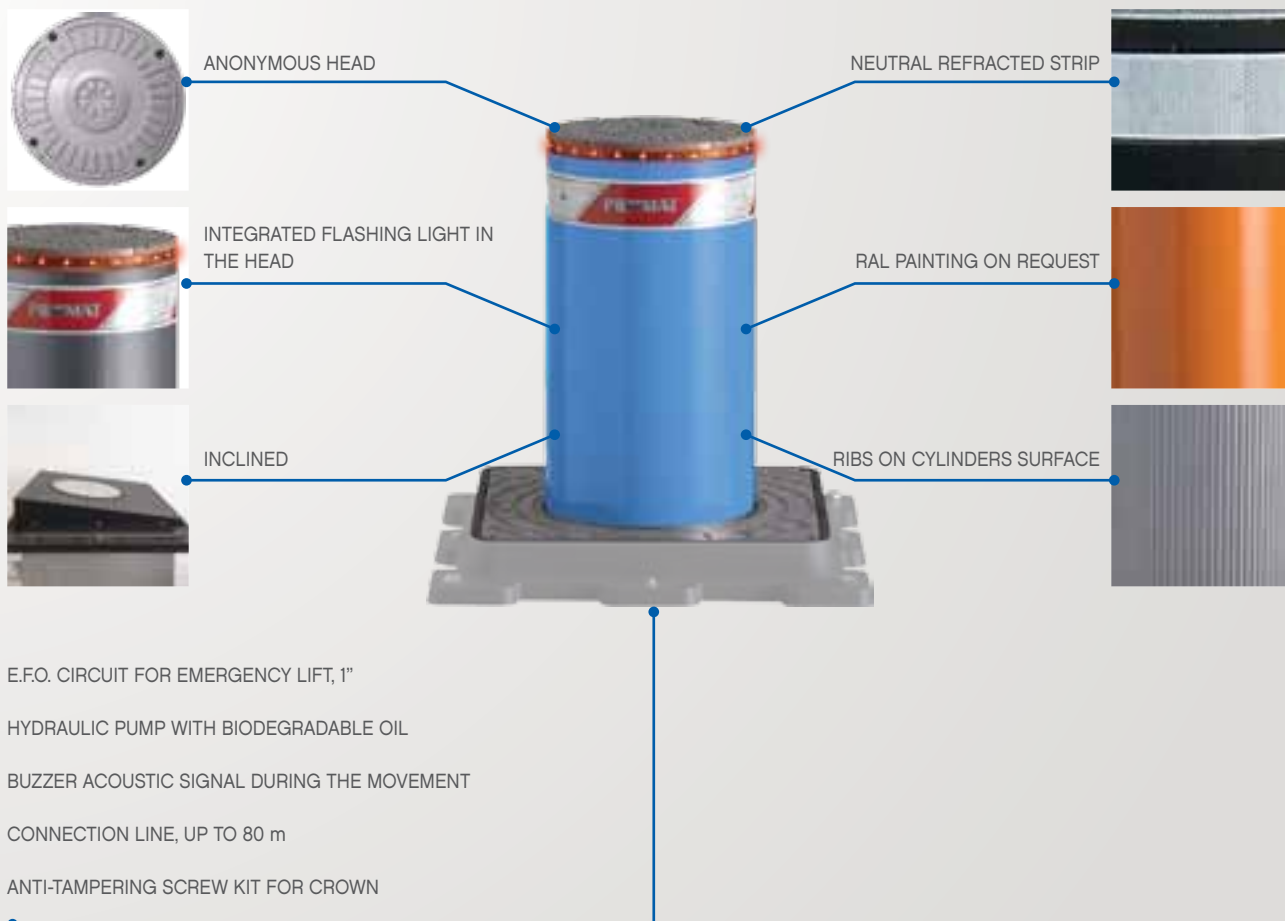
6.800 kg







## OPTIONAL ITEMS - PILOMAT PARK 275/P - 275/P10





275/K4 700A

275/K4 900A

275/M30 1200A

CERTIFIED ASTM M30 (K4)

The PILOMAT K4/M30 SERIES automatic bollards have been designed to ensure the anti-terrorism defence. The current models are the result of the development of more than 20 years of experience.

**All our anti-terrorism bollards are built to ASTM/PAS 68 specifications**

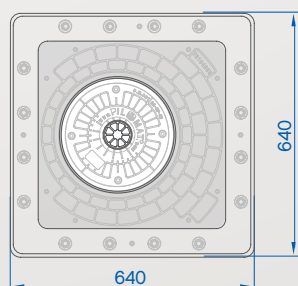
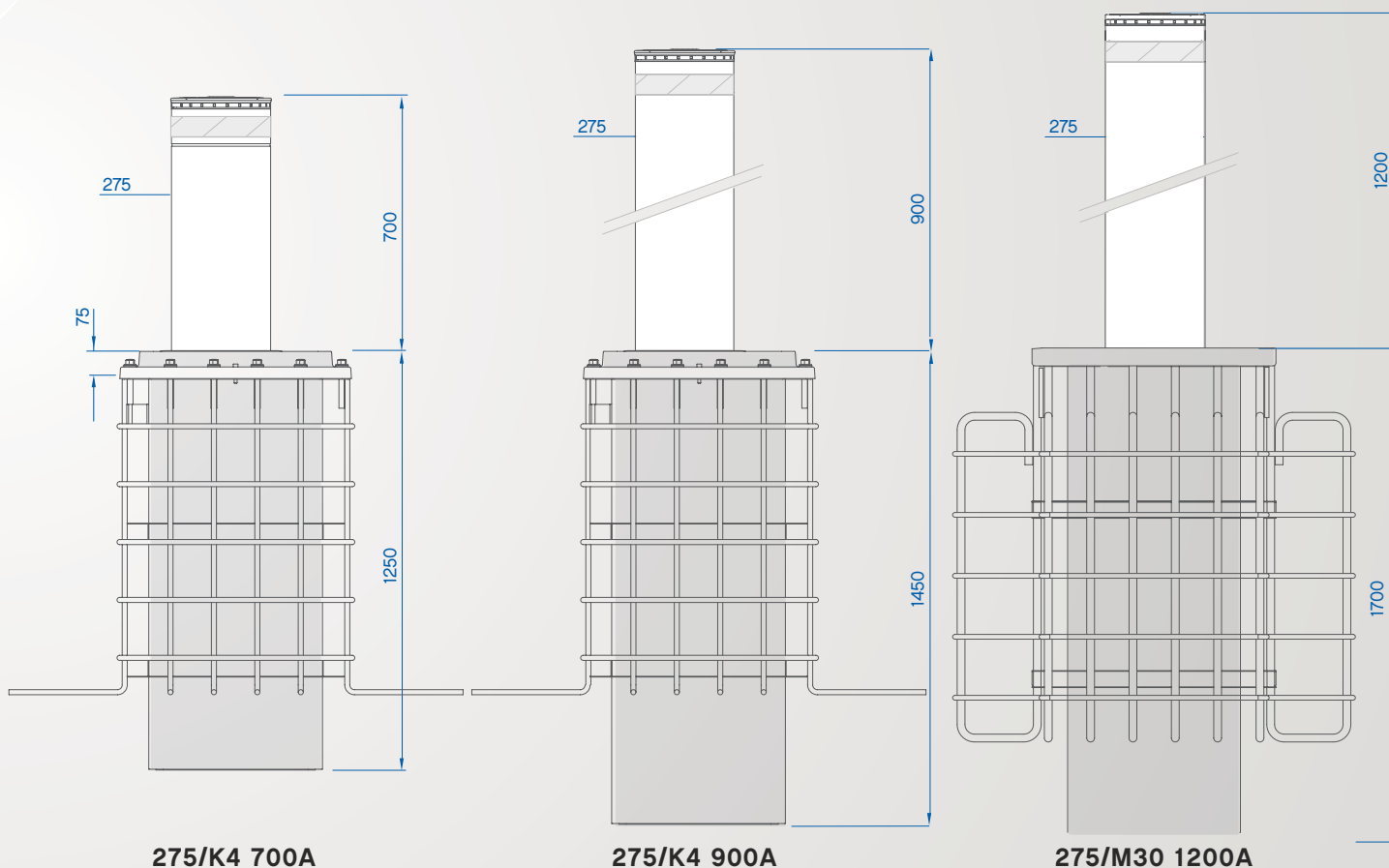
#### GENERAL FEATURES

- hydraulic movement: The most reliable technology for most intense use at all temperatures and weather conditions.
- built-in hydraulic pump in the bollard: This philosophy has many advantages, particularly in installations in locations with severe winter temperatures or when the installation requires a considerable distance (up to 80 metres) between the PILOMAT and the control unit;
- patented system for the protection of handling: to maximise the reliability of operations due to impact by vehicles on the cylinder that is put in motion.
- wide range of optional configurations: custom colours – integrated flashing light – acoustic signal – heat resistance – UPS group – control equipment (see optional items and accessories).

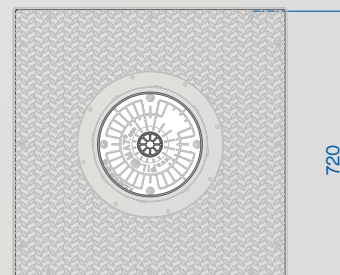
#### RECOMMENDED USES

Company Driveways – Industrial Driveways – Research Centres  
Embassies – Police Headquarters – Military Bases – Ministerial Buildings  
Sensitive Sites

	275/K4 700A	275/K4 900A	275/M30 1200A
MOVING CYLINDER	FE 510 STEEL		
MOVING CYLINDER NOMINAL DIAMETER	275 mm		
MOVING CYLINDER HEIGHT	700 mm	900 mm	1200 mm
MOVING CYLINDER FE 510 STEEL THICKNESS	10 mm		15 mm
MOVING CYLINDER FE 510 STEEL FINISH	POLYESTER POWDER PAINT – STANDARD GREY ANTHRACITE		
OTHER MOVING CYLINDER FINISH	RIBS ON CYLINDER SURFACE - 316 AISI STAINLESS STEEL BRUSHED COVERING 1,5 mm		
REFLECTING ADHESIVE STRIP	YES - HEIGHT 55 mm		
RISING SPEED	10 cm/sec		20 cm/sec
LOWERING SPEED	22 cm/sec		
MANUAL EMERGENCY LOWERING	YES (VERSION WITH RELEASE NO 220 = AUTOMATIC LOWERING)		
CONNECTION LINE TO CONTROL UNIT	STANDARD 10 m (MAXIMUM LENGTH: 80 m)		
HYDRAULIC PUMP	BUILT-IN INTO THE PILOMAT		
PROTECTION CLASS	IP 67		
TYPE OF USE	IINTENSIVE - LIFE AVERAGE 2.000.000 MOVEMENTS - 2.000 MOVEMENTS/DAY		
IMPACT RESISTANCE (WITHOUT DEFORMATION)	150.000 J		700.000 J
BREAKOUT RESISTANCE	700.000 J		1.200.000 J
OPERATING TEMPERATURE	- 40°C + 70°C (FOR LOW TEMPERATURES SEE HEATING RESISTANCE)		
NOMINAL PILOMAT WEIGHT (WITHOUT PIT)	187 kg	210 kg	385 kg
NOMINAL WEIGHT OF STANDARD PIT, WITH COUNTER-FRAME AND BRACKETS	150 kg	174 kg	275 kg



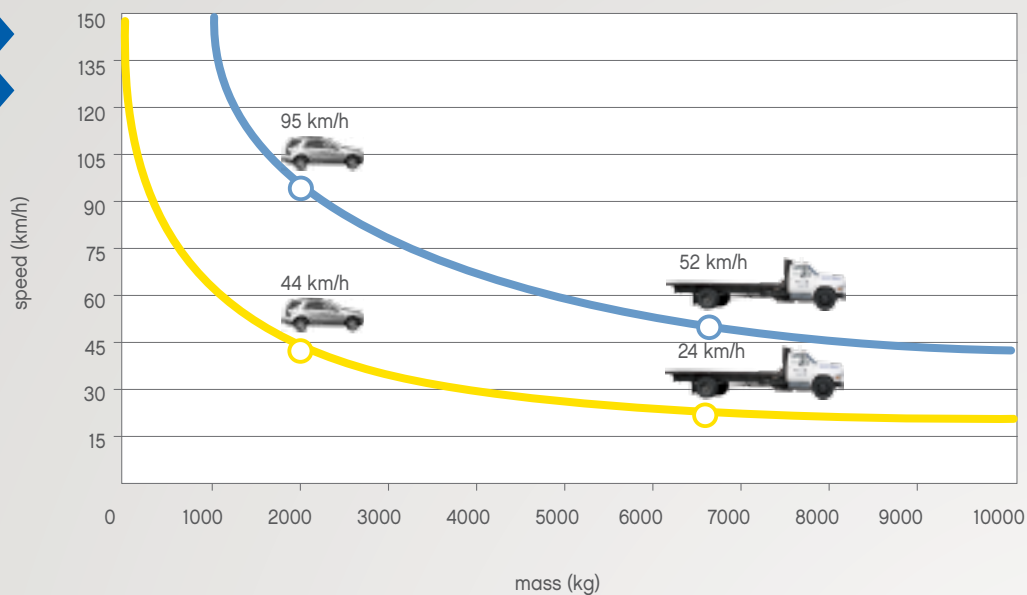
THE DIMENSIONS ARE  
EQUIVALENT IN THE MODELS:  
275/K4 700A, 275/K4 900A



### PILOMAT 275/K4 700A

### PILOMAT 275/K4 900A

- 700.000 JOULES
- 150.000 JOULES



### PILOMAT 275/M30 1200A

- 1.200.000 JOULES
- 700.000 JOULES



#### BREAKOUT RESISTANCE

The resistance to breakage at a given threshold applies to the impact of a vehicle causing the Pilomat permanent damage in its active and structural mechanisms. The Pilomat, although damaged, provides the vehicle stop within a metre from the point of collision.

#### IMPACT RESISTANCE

Resistance to impact at a given threshold indicates that the impact of a vehicle does not cause the PILOMAT blocking or damage to the structural and action mechanisms. The Pilomat's continued functionality and safety are guaranteed.

800 kg 

1.200 kg 

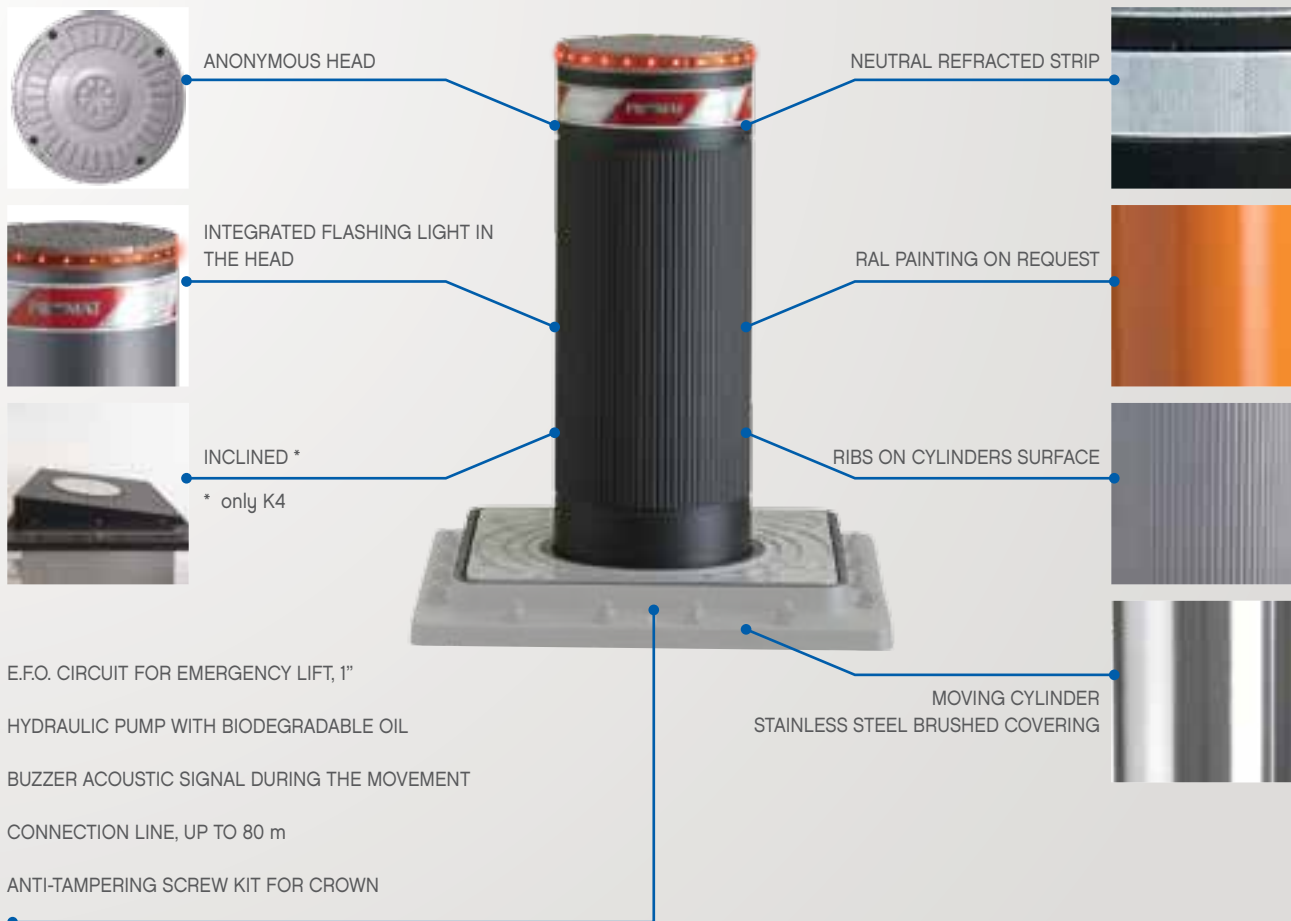
2.000 kg 

6.800 kg 





## OPTIONAL ITEMS - PILOMAT K4/M30 SERIES





275/K12 900A



275/M50 1200A

## BREAKOUT RESISTANCE: 2.000.000 J

The PILOMAT K12/M50 SERIES automatic bollards have been designed to ensure the anti-terrorism defence at the highest levels. The current models are the result of the development of more than 20 years of experience.

**All our anti-terrorism bollards are built to ASTM/PAS 68 specifications**

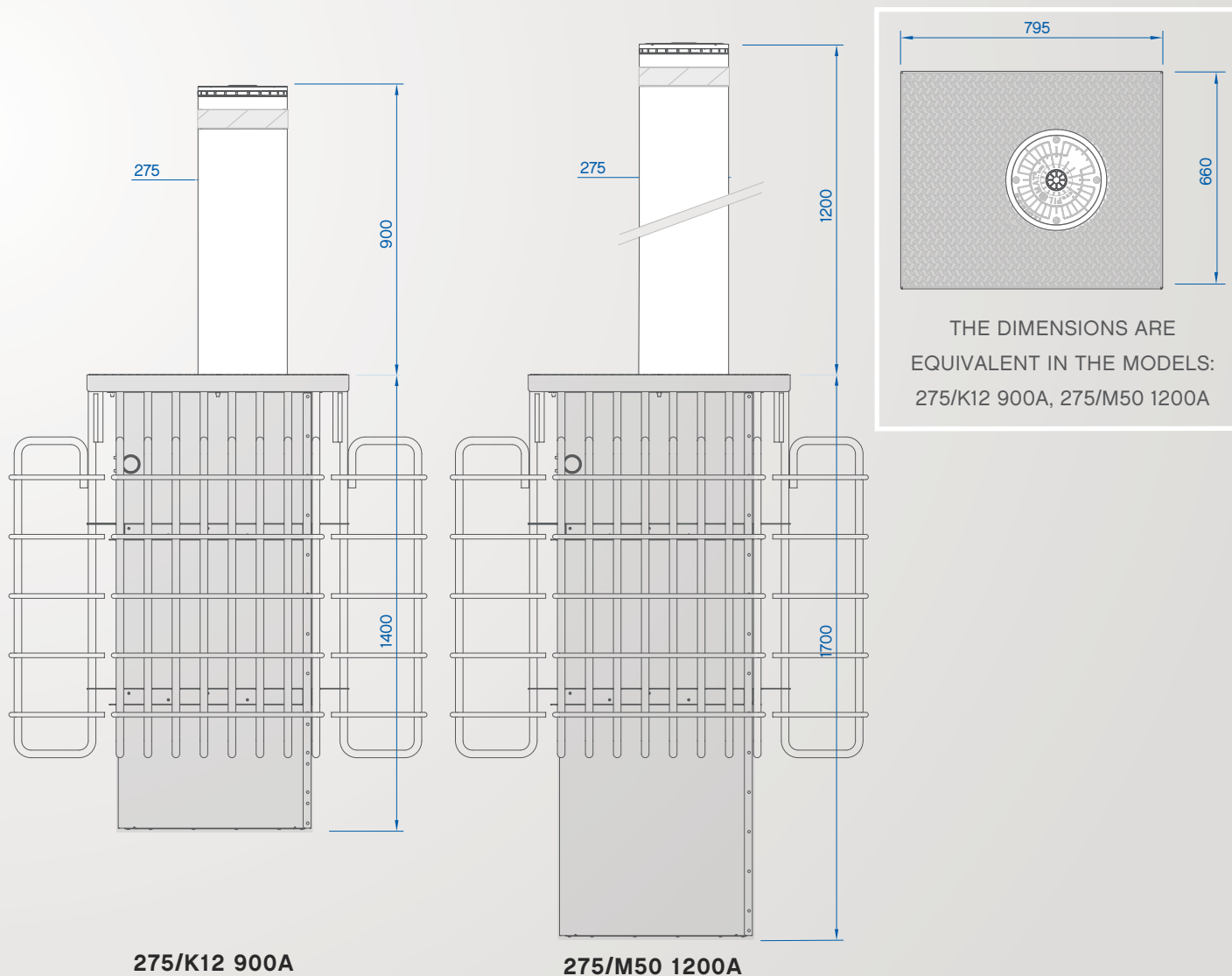
### GENERAL FEATURES

The main features are the same as the K4/M30 series (pag. 36) but the mechanical breakage resistance features are elevated to obtain an appropriate product for the demands of security of driveways at the highest levels.

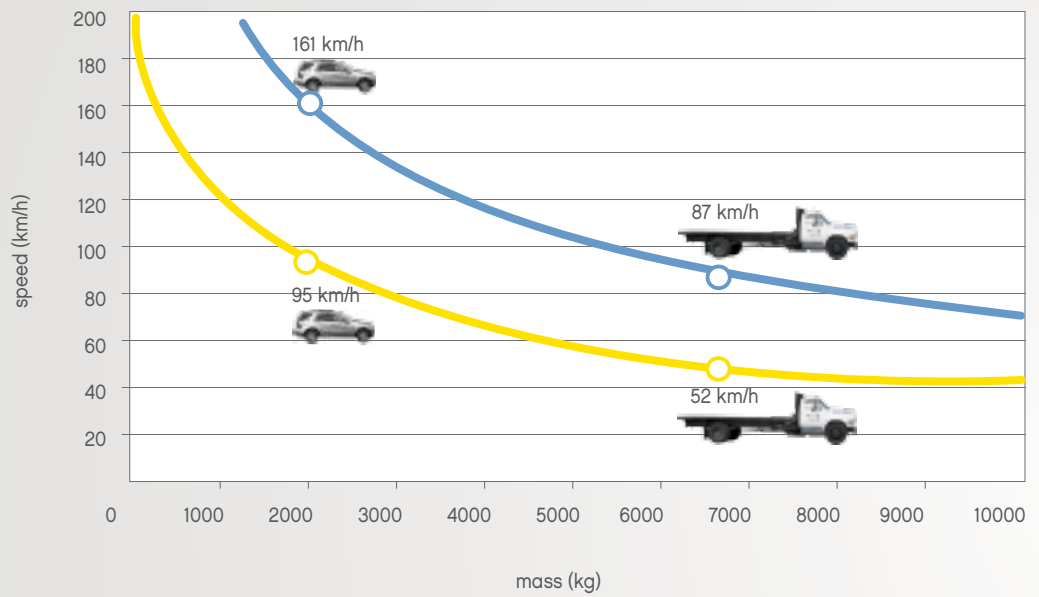
### RECOMMENDED USES

Company Driveways – Industrial Driveways – Research Centres  
Embassies – Police Headquarters – Military Bases – Ministerial Buildings  
Sensitive Sites

	275/K12 900A	275/M50 1200A
MOVING CYLINDER	FE 510 STEEL	
MOVING CYLINDER NOMINAL DIAMETER	275 mm	
MOVING CYLINDER HEIGHT	900 mm	1200 mm
MOVING CYLINDER FE 510 STEEL THICKNESS	25 mm	
MOVING CYLINDER FE 510 STEEL FINISH	POLYESTER POWDER PAINT – STANDARD GREY ANTHRACITE	
OTHER MOVING CYLINDER FINISH	RIBS ON CYLINDER SURFACE - 316 AISI STAINLESS STEEL BRUSHED COVERING 1,5 mm	
REFLECTING ADHESIVE STRIP	YES - HEIGHT 55 mm	
RISING SPEED	22 cm/sec	
LOWERING SPEED	22 cm/sec	
MANUAL EMERGENCY LOWERING	YES (VERSION WITH RELEASE NO 220 = AUTOMATIC LOWERING)	
CONNECTION LINE TO CONTROL UNIT	STANDARD 10 m (MAXIMUM LENGTH: 80 m)	
HYDRAULIC PUMP	BUILT-IN INTO THE PILOMAT	
PROTECTION CLASS	IP 67	
TYPE OF USE	IINTENSIVE - LIFE AVERAGE 2.000.000 MOVEMENTS - 2.000 MOVEMENTS/DAY	
IMPACT RESISTANCE (WITHOUT DEFORMATION)	700.000 J	
BREAKOUT RESISTANCE	2.000.000 J	
OPERATING TEMPERATURE	- 40°C + 70°C (FOR LOW TEMPERATURES SEE HEATING RESISTANCE)	
NOMINAL PILOMAT WEIGHT (WITHOUT PIT)	545 kg	605 kg
NOMINAL WEIGHT OF STANDARD PIT	295 kg	425 kg



- 2.000.000 JOULES
- 700.000 JOULES



#### BREAKOUT RESISTANCE

The resistance to breakage at a given threshold applies to the impact of a vehicle causing the Pilomat permanent damage in its active and structural mechanisms. The Pilomat, although damaged, provides the vehicle stop within a metre from the point of collision.

#### IMPACT RESISTANCE

Resistance to impact at a given threshold indicates that the impact of a vehicle does not cause the PILOMAT blocking or damage to the structural and action mechanisms. The Pilomat's continued functionality and safety are guaranteed.







## OPTIONAL ITEMS - PILOMAT K12/M50 SERIES





Inductive detector For safety one-channel inductive loops  
 Inductive detector For safety two-channel inductive loops  
 Inductive detector For command one-channel inductive loops  
 Inductive detector For command two-channel inductive loops

BB100141  
 BB100151  
 BB101771  
 BB100911



Inductive loop – dimension 4,60 m - connection line to control unit: 15 m  
 Inductive loop – dimension 4,60 m - connection line to control unit: 30 m  
 Inductive loop – dimension 7,60 m - connection line to control unit: 15 m  
 Inductive loop – dimension 7,60 m - connection line to control unit: 30 m  
 Inductive loop - dimension 9,60 m - connection line to control unit: 15 m  
 Inductive loop - dimension 9,60 m - connection line to control unit: 30 m  
 Inductive loop - dimension 12,60 m - connection line to control unit: 15 m  
 Inductive loop - dimension 12,60 m - connection line to control unit: 30 m

AA100161  
 AA100171  
 AA101431  
 AA101441  
 AA100181  
 AA100191  
 AA100201  
 AA100211



Automatic PILOMAT control safety switch,  
 complete with No. 3 keys  
 Automatic PILOMAT control standard switch,  
 complete with No. 2 keys

BB100331  
 BB100321



Radio receiver - standard version  
 Radio receiver - professional version  
 with anti-cloning circuit

BB100351  
 BB100371



Two-channel radio transmitter - standard  
 Two-channel radio transmitter - with anti-cloning circuit

BB100361  
 BB100381



PILOMAT remote control gsm activator

BB100391



Weekly timer programming

BB100501

Yearly timer programming

BB100511



Acoustic analyser with breakglass button used for automatic lowering of PILOMAT passage in the presence of emergency vehicles with sirens (sirens recognised in Italy)

AA100131



Inductive master card reader - with container for outside

BB100401

Inductive slave card reader - with container for outside

BB100411



Microprocessor circuit for PILOMAT transit lane management with the use of cards - radio transmitters - telephone calls. The circuit is predisposed to connections to remote management software

BB100451



Circuit ETH-MOD for circuit networking management gates control code BB100451

BB100461



Software license for remote management control, 5 gates

BB100471

Software license for remote management control, 10 gates

BB100481

Software license for remote management control, 255 gates

BB100491



Metallic column, Fixed to the pavement For control unit of automatic PILOMAT. Maximum of 4 units

BB100071



Fibreglass column, Fixed to the pavement For control unit of automatic PILOMAT. Maximum of 9 units

BB100081



Retractable structure For control unit of automatic PILOMAT. Maximum of 3 units

AA100121



Stainless steel brushed column, 275mm, For automatic PILOMAT control unit with upper sector For intercom controls - traffic lights - maximum of 4 units

AA100111

Stainless steel Painted column, 275mm, For automatic PILOMAT control unit with upper sector For intercom controls - traffic lights. Maximum of 4 units

AA100101



Stainless steel brushed column, 170mm, For automatic PILOMAT control unit with upper sector For intercom controls - traffic lights - camera. Maximum of 2 units

AA103131



Stainless steel brushed column, 170mm, one-side For traffic light beacon, LED, 100 mm diameter

AA103021

Stainless steel brushed column, 170mm, two-sides For traffic light beacon, LED, 100 mm diameter

AA103031





Heating resistance For control unit

BB900051



Heating resistance For automatic PILOMAT PL series,  
complete with transFormer and thermostat

AA100991

Heating resistance For automatic PILOMAT P/K4 series,  
complete with transFormer and thermostat

AA100041

Heating resistance For automatic PILOMAT K12/M30/M50  
series, complete with transFormer and thermostat

AA100901



TraFFic light with LED, 100 mm diameter

BB100241



Signpost, "RETRACTABLE BOLLARD" in Italian language

AA100261

Signpost, "RETRACTABLE BOLLARDS" in Italian language

AA100271



Metal trap For counter Frame closing, 127 Series

AA900031

Metal trap For counter Frame closing, 220 Series

AA900531

Metal trap For counter Frame closing, 275 Series

AA900551

Metal trap For counter Frame closing, 275 K4

AA900711

Metal trap For counter Frame closing, 275 M30

AA101351

Metal trap For counter Frame closing, 275 K12/M50

AA900851

Metal trap For counter Frame closing, 355 Series

AA901091



Anonymous head For custom 220 Series PILOMAT

AA100061 - AA100071

Anonymous head For custom 275 Series PILOMAT

AA100571 - AA100581

Anonymous head For custom 275K/M Series PILOMAT

AA100721 - AA100731

Anonymous head For custom 355 Series PILOMAT

AA101191 - AA101201



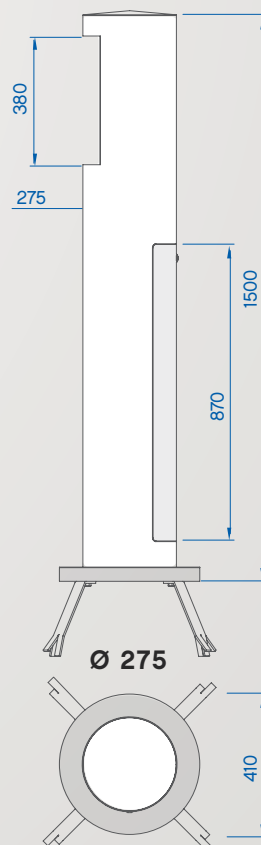
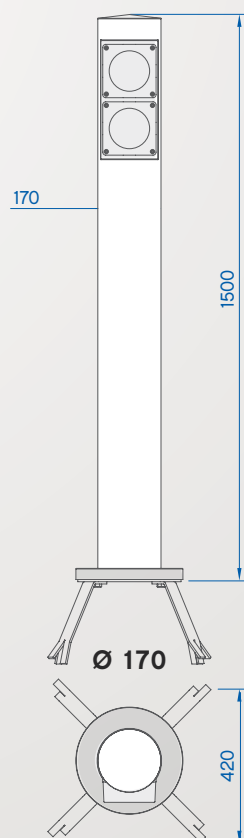
The columns of control and management Fixed version, made in AISI 304 stainless steel painted or brushed, are available with 170mm and 275mm diameter, the standard height is 1.500 mm but may be carried out based on the standard customer requirements.

The columns can be configured for the installation of: intercom system, one-side traffic light beacon, two-sides traffic light beacon, control devices such as key selector, keypad, badge reader, and so on.

The 275mm diameter column is designed to hold the control unit for a system configured with up to a maximum of 4 PILOMAT bollards and has opening sector with key lock to allow the maintenance.



	FIXED COLUMN Ø 170	FIXED COLUMN Ø 275
CYLINDER DIAMETER	170 mm	275 mm
CYLINDER HEIGHT	1500 mm	
CYLINDER STAINLESS STEEL PAINTED FINISH	YES	
CYLINDER STAINLESS STEEL BRUSHED FINISH	YES	
FOUNDATION BRACKET	YES	
COMPARTMENT FOR CONTROL UNIT	NO	YES, OPENING WITH KEY





The column of control and management, retractable and modular version, made in AISI 304 stainless steel painted or brushed, is available with 170mm diameter, the height varies according to the modularity defined.

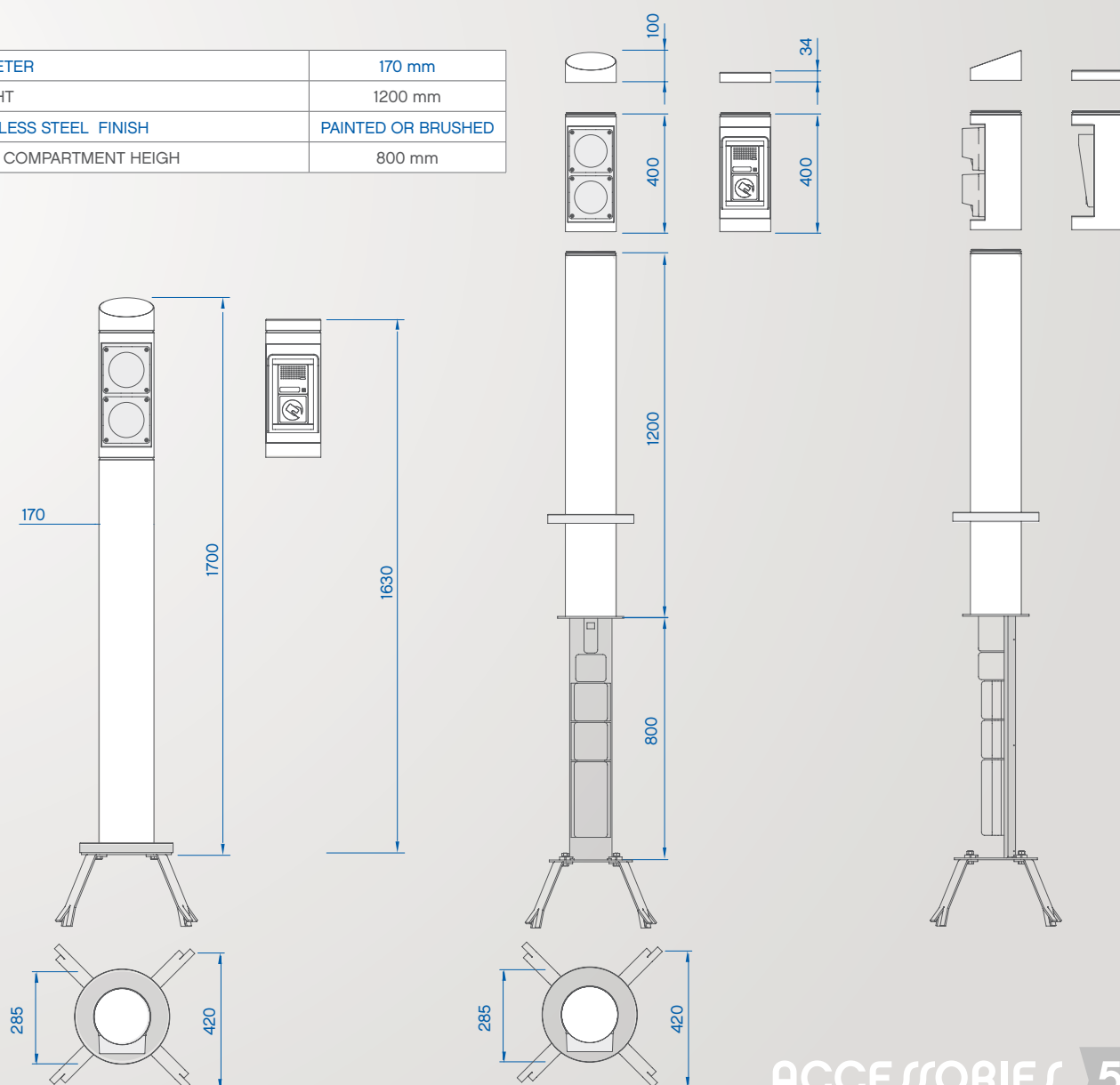
This column allows to install the control unit for a system with up to 3 PILOMAT bollards and has a lifting mechanism to allow the maintenance; the column has a straight or an inclined upper section.

The modular components allow the rotation for the correct positioning before locking and many options are available: for middle section for one-side traffic light beacon, middle section for two-sides traffic light beacon, middle section for intercom and / or control devices such as key selector - keypad - badge reader, and so on.





COLUMN DIAMETER	170 mm
COLUMN HEIGHT	1200 mm
COLUMN STAINLESS STEEL FINISH	PAINTED OR BRUSHED
CONTROL UNIT COMPARTMENT HEIGH	800 mm



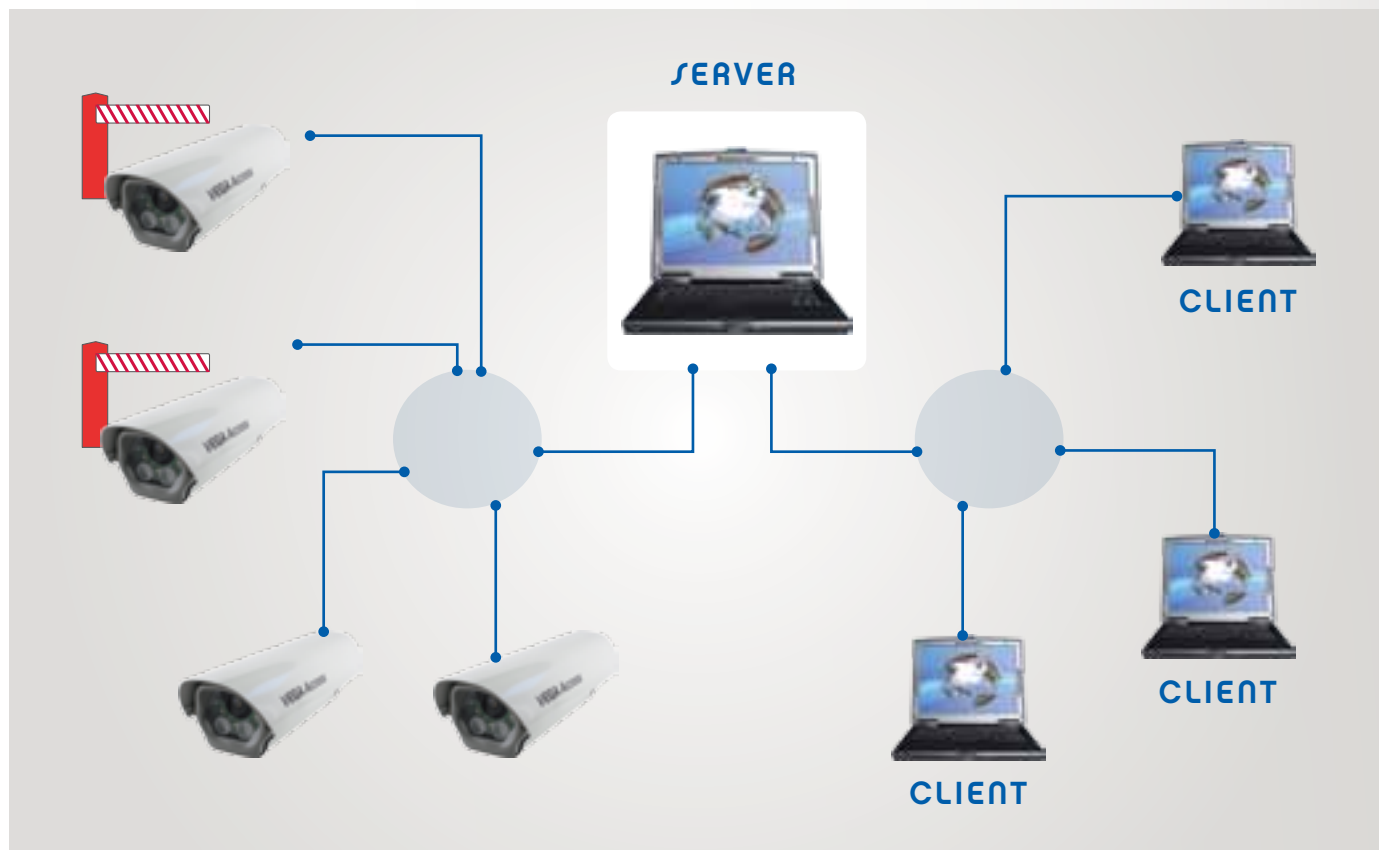


The automatic reader of license plate called VEGA ACCESS, is a complete “stand-alone” solution of automatic reading of license plates, in integrated monoblock version as a single outer container contains the following components: sensor CCD B / W 1000x800 with sensitivity in the field of IR, LEDs IR illuminator with integrated strobe control and unit of elaboration.

Vega Access can be interfaced to Gate Master software which allow the standard management of six gates (expandable up to 16).

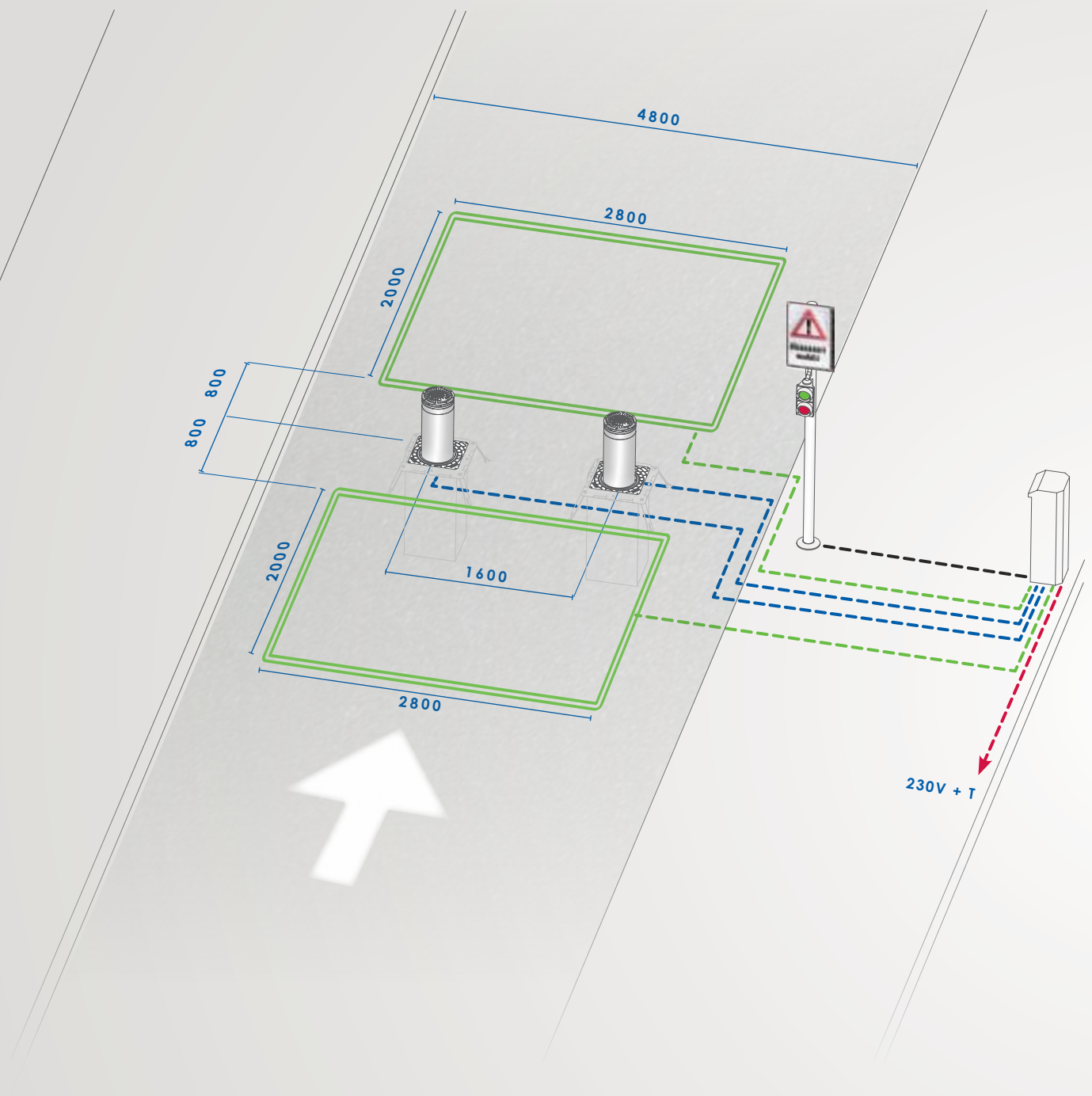
### GENERAL FEATURES

- all in one system: camera, analyser, IR illuminator;
- embedded solution: OCR Software on board;
- worldwide countries available;
- black/white list management;
- range of action: 3.5 mts width - 6mts distance;
- storage: SD Memory up to 32 GB;
- ethernet interface for supervised architecture;
- configuration and set-up by web server on;
- user friendly interface;
- scalable & flexible system;
- microsoft technologies;
- NET platform based;
- personalized users/vehicles in Po;
- individual access authorizations;
- data report and statistics;
- unlimited gates number;



COUNTRY	ALL EUROPEAN COUNTRIES - WORLDWIDE COUNTRIES AVAILABLE
TYPES	IR - REFLECTIVE NUMBER PLATES MODELS
RESULTS	NUMBER PLATES CHARACTER STRING AND/OR IMAGE (JPG)
INTERFACE	GRAPHICAL TOOLBAR MENU INTERFACE - WEB BROWSER INTERFACE
CONFIGURATION	EASY LAN CONNECTION AND CONFIGURATION VIA INTEGRATED WEB SERVER, LOGIN AND PASSWORD PROTECTED
STORAGE	SD CARD UP TO 32 GB
RANGE OF ACTION - DISTANCE	UP TO 6 mts
RANGE OF ACTION - WIDTH	UP TO 3.5 mts
COMMUNICATION - ETHERNET 10/100 MBPS	TCP - UDP - FTP - HTTP - DHCP
OPERATING TEMPERATURE	-20° A 55° C / -40° A 55° C
DIMENSION	123 x 109 x 400 mm (W x H x L)
WEIGHT	3 kg
PROTECTION LEVEL	WEATHERPROOF STANDARD IP66 ACCORDING TO EN 60529
POWER CONSUMPTION	24 VDC + / - 10%, 6W





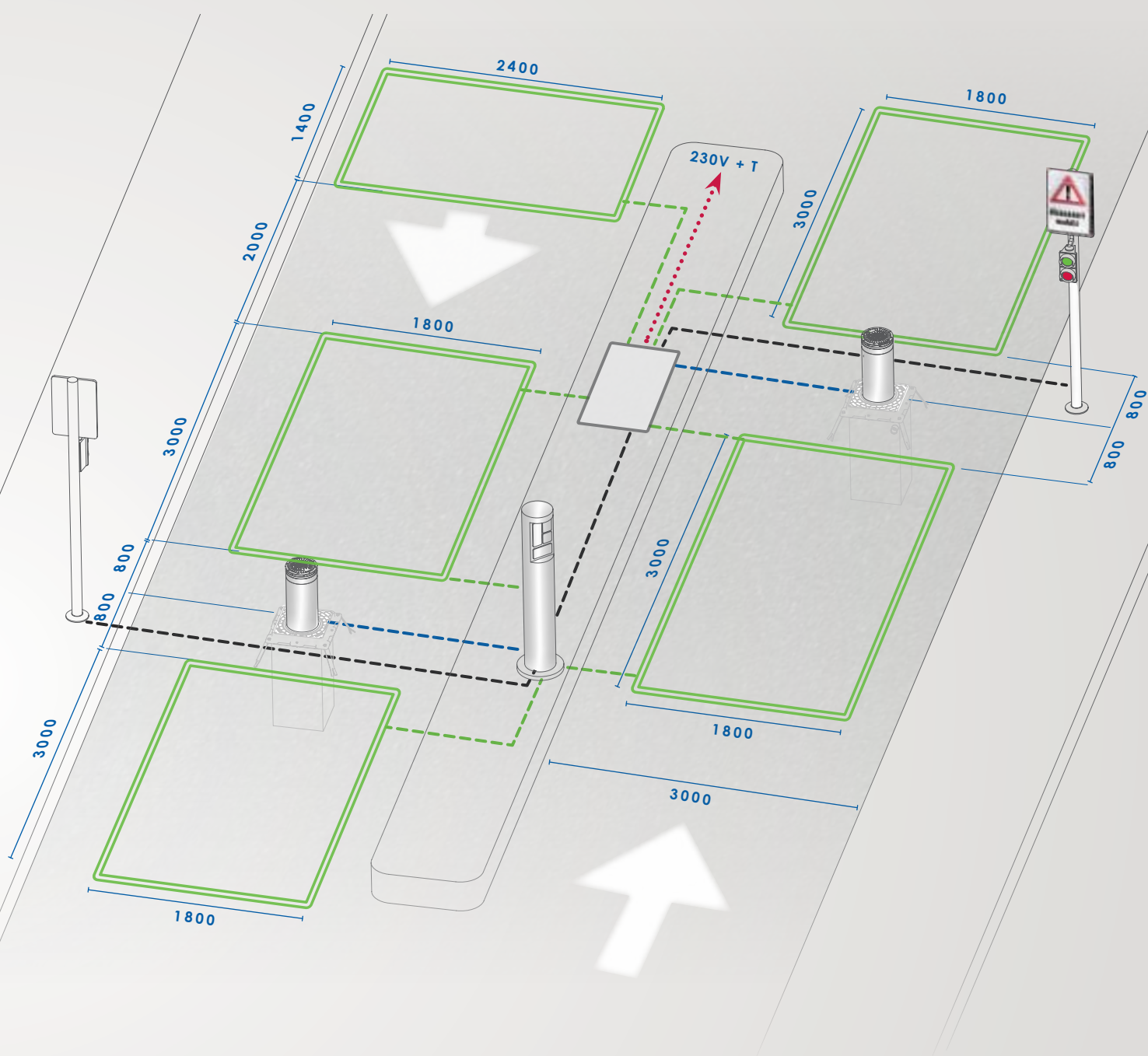
### CONFIGURATION OF THE SYSTEM DISPLAYED

The example of installation displayed is only one of the possible configurations. It is recommended that assessments be made regarding the full range of available options and accessories for the configuration of the system, as executed suggestions.

- no. 2 automatic PILOMAT with integrated flashing light and foundation pit
- no. 1 metallic column on pavement for control unit, with radio receiver
- no. 1 traffic light
- no. 1 signpost (italian only)
- no. 1 inductive detector for safety one-channel inductive loop  
with inductive loop - dimension 9,60 m - connection line to control unit: 15 m



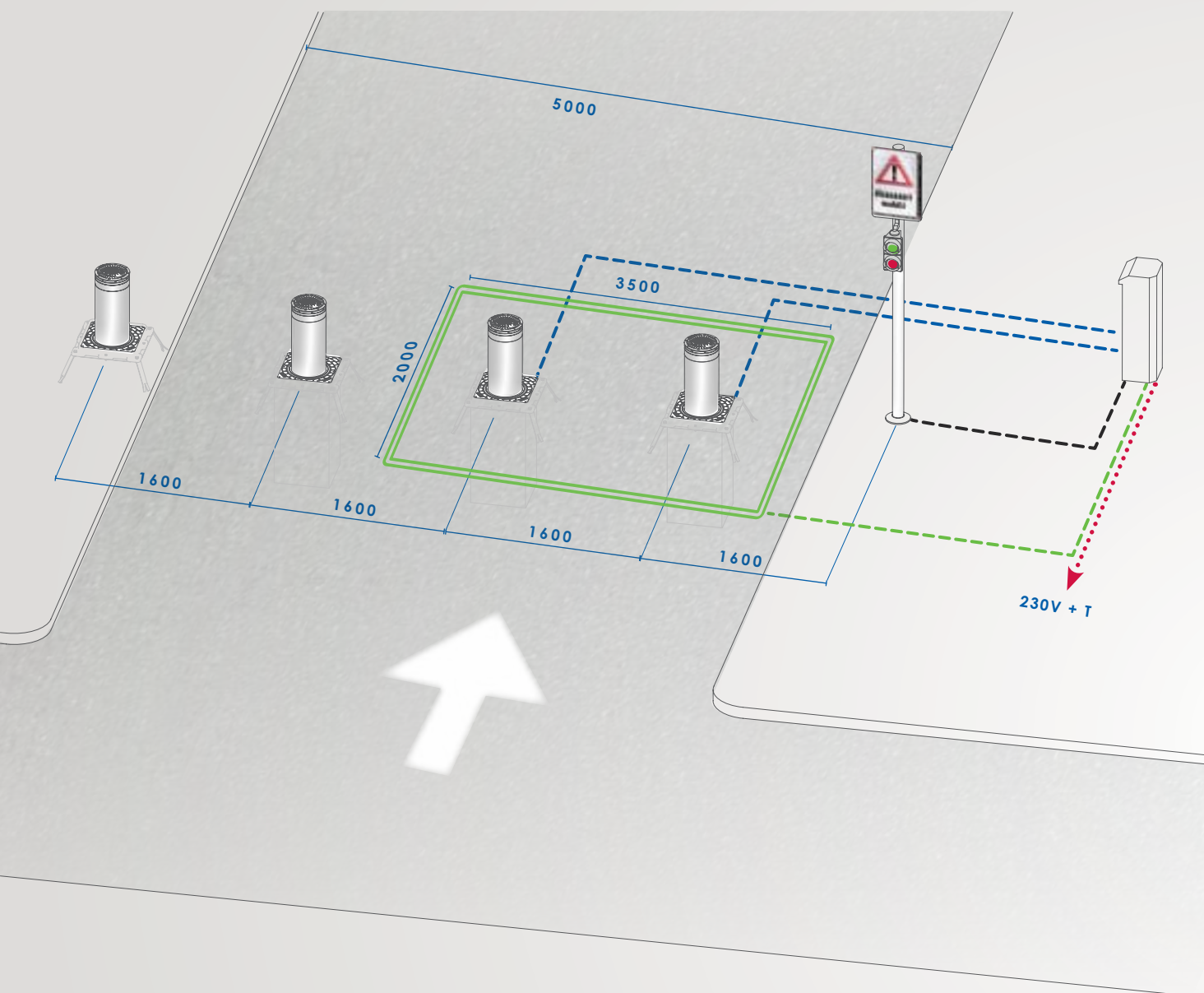
## EXAMPLE OF INSTALLATION: RUNNING TWO-WAY STREET



### CONFIGURATION OF THE SYSTEM DISPLAYED

The example of installation displayed is only one of the possible configurations. It is recommended that assessments be made regarding the full range of available options and accessories for the configuration of the system, as executed suggestions.

- no. 2 automatic PILOMAT with integrated Flashing light and Foundation pit
- no. 1 stainless steel column on pavement for no. 2 control unit
- no. 1 inductive card reader integrated in the front of the column
- no. 2 traffic lights
- no. 2 signposts (italian only)
- no. 1 inductive detector for safety one-channel inductive loop with inductive loop - dimension 9,60 m - connection line to control unit: 15 m
- no. 1 inductive detector for command one-channel inductive loop

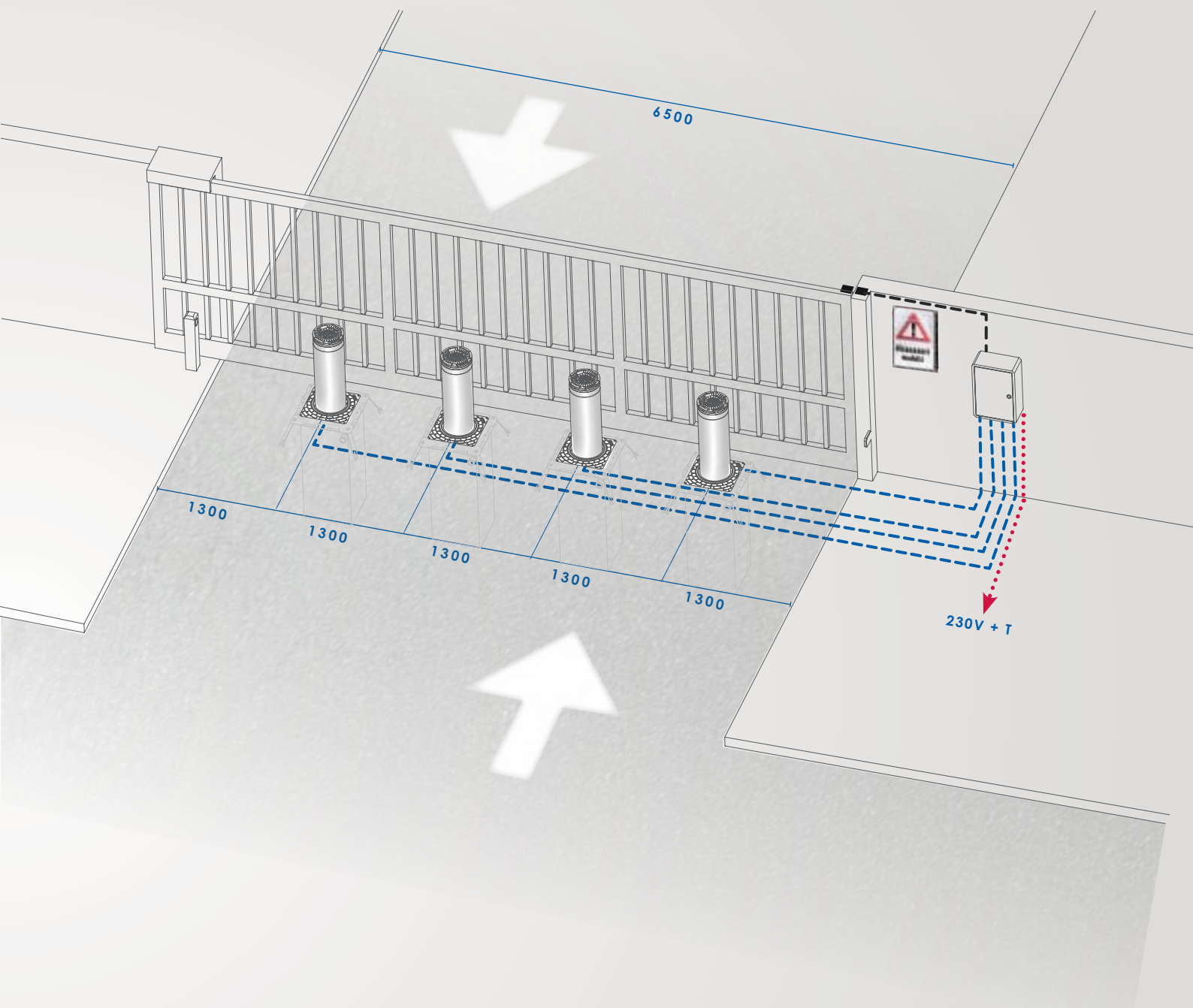


## CONFIGURATION OF THE SYSTEM DISPLAYED

The example of installation displayed is only one of the possible configurations. It is recommended that assessments be made regarding the full range of available options and accessories for the configuration of the system, as executed suggestions.

In the installation example, it is suggested that the automatic PILOMAT be used, and the semi-automatic PILOMAT, for lowering, only in exceptional cases, or laterally, the side that has also assumed the position of one of more fixed PILOMAT.

- no. 2 automatic PILOMAT with integrated flashing light and Foundation pit
- no. 1 metallic column for control unit, with radio receiver
- no. 1 traffic light
- no. 1 signpost (only Italian)
- no. 1 inductive detector for safety one-channel inductive loop with inductive loop - dimension 9,60 m - connection line to control unit: 15 m
- no. 1 semi-automatic PILOMAT with Foundation pit
- no. 1 Fixed PL series PILOMAT

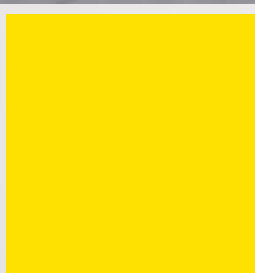


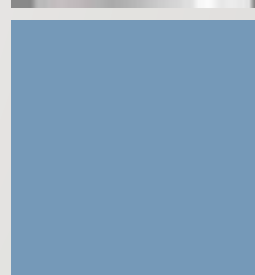
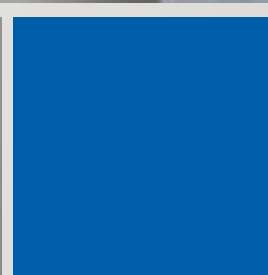
### CONFIGURATION OF THE SYSTEM DISPLAYED

The example of installation displayed is only one of the possible configurations. It is recommended that assessments be made regarding the full range of available options and accessories for the configuration of the system, as executed suggestions.

- no. 4 automatic PILOMAT with Foundation pit
- no. 1 control unit
- no. 1 sigpost (only italian)
- no. 1 closed gate detection sensor









## PL SERIES

127/PL 500SA – 127/PL 600SA – 220/PL 600SA  
275/PL 500SA – 275/PL 600SA – 275/PL 800SA – 355/PL 600SA

The semiautomatic PL SERIES PILOMAT with single gas actuator is designed and built with architectural appearance similar to that of the automatic PILOMAT and therefore also allows the combined use of both versions. The current models are the result of the development of more than 20 years of experience.

### GENERAL FEATURES

The Semiautomatic PILOMAT are used to define or prevent the stationing or transit of vehicles in pedestrian or private areas. Because of the procedure of parking, it is advised that the semi-automatic PILOMAT be used only if the amount of daily movements is limited (if not, the automatic PILOMAT should be used).

### ACTION

- **The rising** of the semiautomatic pilomat comes using the mechanical key that unlocks the restraint, resulting in automatic bollard rise due to the gas-embedded actuator; a high bollard restraint system locks in place, preventing the possibility of lowering to the people without the key.
- **The lowering** is carried out through the release of the restraint with the use of the mechanical key and the resulting push to the ground, acting with the foot on the head of the bollard; when the bollard is completely down the restraint system automatically locked, preventing the possibility of it being raised.
- **Choice of optional configurations:** FE370 or AISI 304 stainless steel moving cylinders, custom colours, Flashing lights integrated in the head, individual mechanical keys.







# SEMI-AUTOMATIC





**127/PL 500SA**

**127/PL 600SA**

**220/PL 600SA**

**275/PL 500SA**

	127/PL 500SA	127/PL 600SA	220/PL 600SA	275/PL 500SA
MOVING CYLINDER	FE 370 STEEL – AISI 304 / 316 STAINLESS STEEL			
MOVING CYLINDER NOMINAL DIAMETER	127 mm		220 mm	275 mm
MOVING CYLINDER HEIGHT	500 mm	600 mm	600 mm	500 mm
MOVING CYLINDER FE 370 STEEL THICKNESS	6 mm		4 mm	6 mm
MOVING CYLINDER STAINLESS STEEL THICKNESS	6 mm		4 mm	6 mm
MOVING CYLINDER FE 370 STEEL FINISH	POLYESTER POWDER PAINT - STANDARD GREY ANTHRACITE			
MOVING CYLINDER STAINLESS STEEL FINISH	POLYESTER POWDER PAINT - STANDARD GREY ANTHRACITE OR BRUSHED			
REFLECTING ADHESIVE STRIP	YES – HEIGHT 23 mm		YES – HEIGHT 55 mm	
IMPACT RESISTANCE (WITHOUT DEFORMATION)	30.000 J			40.000 J
BREAKOUT RESISTANCE	150.000 J			250.000 J





**275/PL 600SA**



**275/PL 800SA**



**355/PL 600SA**

	<b>275/PL 600SA</b>	<b>275/PL 800SA</b>	<b>355/PL 600SA</b>
MOVING CYLINDER	FE 370 STEEL – AISI 304 / 316 STAINLESS STEEL	AISI 304 / 316 STAINLESS STEEL	FE 370 STEEL
MOVING CYLINDER NOMINAL DIAMETER	275 mm		355 mm
MOVING CYLINDER HEIGHT	600 mm	800 mm	600 mm
MOVING CYLINDER FE 370 STEEL THICKNESS	6 mm	-	6 mm
MOVING CYLINDER STAINLESS STEEL THICKNESS	6 mm		-
MOVING CYLINDER FE 370 STEEL FINISH	POLYESTER POWDER PAINT - STANDARD GREY ANTHRACITE	-	POLYESTER POWDER PAINT - STANDARD GREY ANTHRACITE
MOVING CYLINDER STAINLESS STEEL FINISH	POLYESTER POWDER PAINT STANDARD GREY ANTHRACITE OR BRUSHED		-
REFLECTING ADHESIVE STRIP	YES – HEIGHT 55 mm		
IMPACT RESISTANCE (WITHOUT DEFORMATION)	40.000 J		
BREAKOUT RESISTANCE	250.000 J		200.000 J

## PL SERIES

127/PL 500F – 127/PL 600F – 127/PL 800F – 220/PL 600F  
275/PL 500F – 275/PL 600F – 275/PL 800F

## PF SERIES

127/PF 500F – 127/PF 600F – 127/PF 800F – 220/PF 600F  
275/PF 500F – 275/PF 600F – 275/PF 800F – 355/PF 600F

The Fixed PL and PF SERIES PILOMAT have been designed and built with architectural appearance similar to that of the mobile PILOMAT and therefore also allows the combined use of both versions. The current models are the result of the development of more than 20 years of experience.

### GENERAL FEATURES

The Fixed PILOMAT are used in public or private areas in order to define or prevent the parking of vehicles, for preventing access to vehicles in pedestrian areas.

The range of Fixed PILOMAT includes:

- PL SERIES: These items, with a counterFrame to wall, in addition to the architectural appearance of the automatic PILOMAT, allow the removal of the bollard in the event of such a removal being needed, or if impact has occurred.
- PF SERIES: These items can be cemented to the ground (in this case, the resistance to breakage depends on the depth to which it is anchored into the ground) or be secured in place by chemical anchors in places where you cannot make the same anchor, or where masonry is already completed.
- Choice of optional configurations: FE370 or AISI 304 stainless steel moving cylinders – custom colours – Flashing lights integrated in the head.







FIXED



**127/PL 500-600-800F**



**220/PL 600F**



**275/PL 500-600-800F**

	127/PL 500-600-800F	220/PL 600F	275/PL 500-600-800F
FIXED CYLINDER	FE 370 STEEL – AISI 304 / 316 STAINLESS STEEL		
FIXED CYLINDER NOMINAL DIAMETER	127 mm	220 mm	275 mm
FIXED CYLINDER HEIGHT	500 - 600 - 800 mm	600 mm	500 - 600 - 800 mm
FIXED CYLINDER FE 370 STEEL THICKNESS	6 mm	4 mm	6 mm
FIXED CYLINDER STAINLESS STEEL THICKNESS	6 mm	4 mm	6 mm
FIXED CYLINDER FE 370 STEEL FINISH	POLYESTER POWDER PAINT - STANDARD GREY ANTHRACITE		
FIXED CYLINDER STAINLESS STEEL FINISH	POLYESTER POWDER PAINT - STANDARD GREY ANTHRACITE OR BRUSHED		
REFLECTING ADHESIVE STRIP	YES – HEIGHT 23 mm	YES – HEIGHT 55 mm	
IMPACT RESISTANCE (WITHOUT DEFORMATION)	30.000 J		40.000 J
BREAKOUT RESISTANCE	150.000 J		250.000 J





**127/PF 500-600-800F**



**220/PF 600F**



**275/PF 500-600-800F**



**355/PF 600F**

	127/PF 500-600-800F	220/PF 600F	275/PF 500-600-800F	355/PF 600F
FIXED CYLINDER	FE 370 STEEL – AISI 304 / 316 STAINLESS STEEL			FE 370 STEEL
FIXED CYLINDER NOMINAL DIAMETER	127 mm	220 mm	275 mm	355 mm
FIXED CYLINDER HEIGHT	500 - 600 - 800 mm	600 mm	500 - 600 - 800 mm	600 mm
FIXED CYLINDER FE 370 STEEL THICKNESS	6 mm	4 mm	6 mm	
FIXED CYLINDER STAINLESS STEEL THICKNESS	6 mm	4 mm	6 mm	-
FIXED CYLINDER FE 370 STEEL FINISH	POLYESTER POWDER PAINT - STANDARD GREY ANTHRACITE			
FIXED CYLINDER STAINLESS STEEL FINISH	POLYESTER POWDER PAINT - STANDARD GREY ANTHRACITE OR BRUSHED			-
REFLECTING ADHESIVE STRIP	YES - HEIGHT 23 mm		YES - HEIGHT 55 mm	
IMPACT RESISTANCE (WITHOUT DEFORMATION)	30.000 J		40.000 J	
BREAKOUT RESISTANCE	150.000 J		250.000 J	200.000 J

**K4 ANTI-TERRORISM SERIES**  
**275/K4 700F**

**K4FB/M30FB ANTI-TERRORISM SERIES**  
**275/K4FB 700F - 275/K4FB 900F - 275/M30FB 1200F**

**K12FB/M50FB ANTI-TERRORISM SERIES**  
**275/K12FB 900F - 275/M50FB 1200F**

The Fixed K/M and KFB/MFB SERIES PILOMAT have been designed and built with architectural appearance similar to that of the mobile PILOMAT and therefore also allows the combined use of both versions. The current models are the result of the development of more than 20 years of experience.







# FIXED ANTI-TERRORISM







**275/K4 700F**

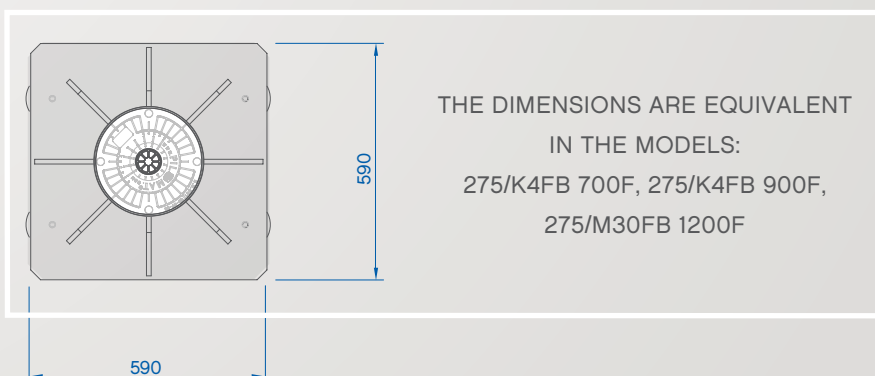
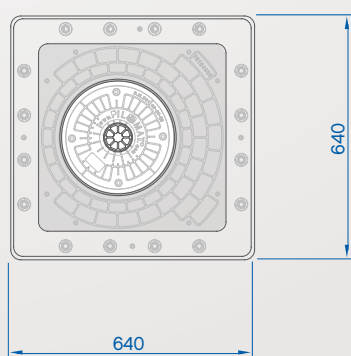
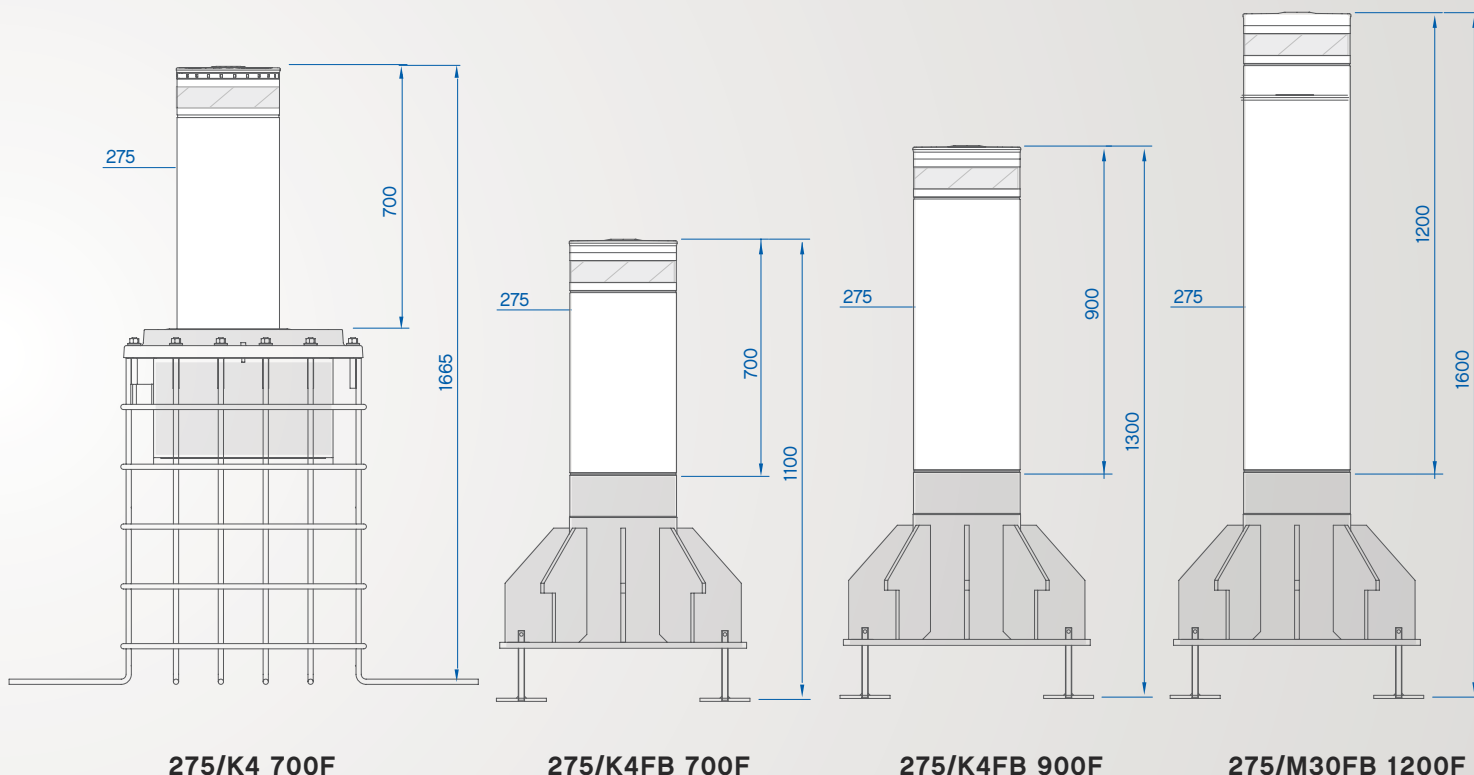


**275/K4FB 700F**  
**275/K4FB 900F**



**275/M30FB 1200F**

	275/K4 700F	275/K4FB 700F	275/K4FB 900F	275/M30FB 1200F
FIXED CYLINDER	FE 510 STEEL			
FIXED CYLINDER NOMINAL DIAMETER	275 mm			
FIXED CYLINDER HEIGHT	700 mm		900 mm	1200 mm
FIXED CYLINDER FE 510 STEEL THICKNESS	10 mm			15 mm
FIXED CYLINDER FE 510 STEEL FINISH	POLYESTER POWDER PAINT - STANDARD GREY ANTHRACITE			
OTHER FIXED CYLINDER FINISH	RIBS ON CYLINDERS SURFACE - 316 AISI STAINLESS STEEL BRUSHED COVERING 1,5 mm			
REFLECTING ADHESIVE STRIP	YES - HEIGHT 55 mm			
IMPACT RESISTANCE (WITHOUT DEFORMATION)	150.000 J			700.000 J
BREAKOUT RESISTANCE	700.000 J			1.200.000 J



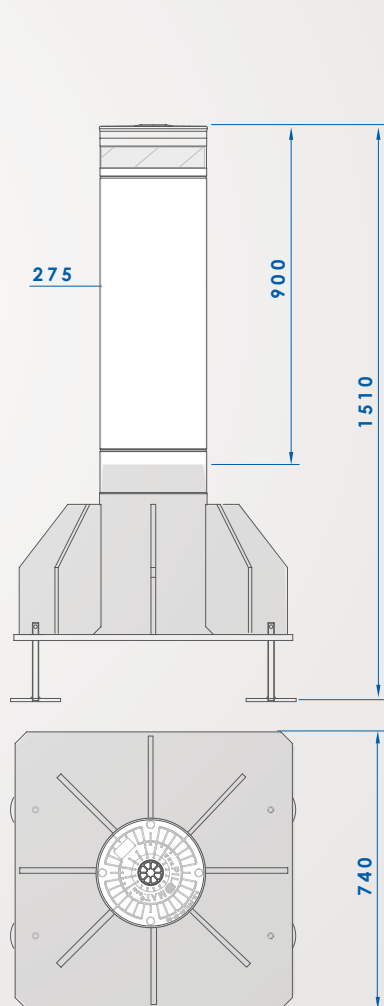


275/K12FB 900F

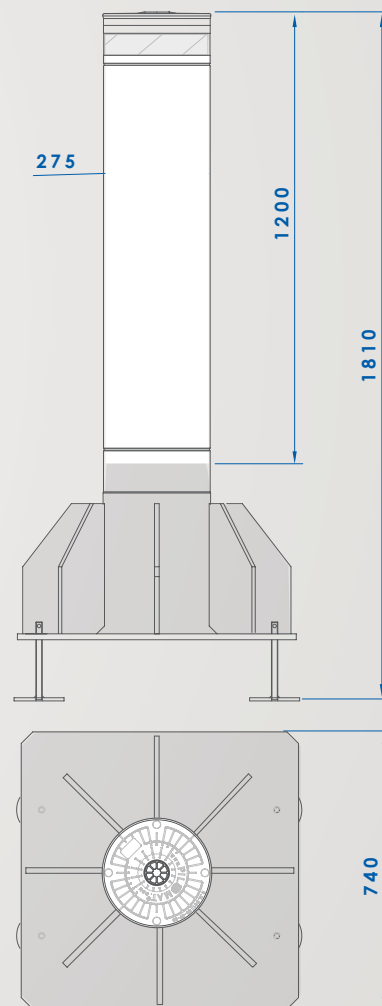


275/M50FB 1200F

	275/K12FB 900F	275/M50FB 1200F
FIXED CYLINDER	FE 510 STEEL	
FIXED CYLINDER NOMINAL DIAMETER	275 mm	
FIXED CYLINDER HEIGHT	900 mm	1200 mm
FIXED CYLINDER FE 510 STEEL THICKNESS	25 mm	
FIXED CYLINDER FE 510 STEEL FINISH	POLYESTER POWDER PAINT - STANDARD GREY ANTHRACITE	
OTHER FIXED CYLINDER FINISH	RIBS ON CYLINDERS SURFACE - 316 AISI STAINLESS STEEL BRUSHED COVERING 1,5 mm	
REFLECTING ADHESIVE STRIP	YES - HEIGHT 55 mm	
IMPACT RESISTANCE (WITHOUT DEFORMATION)	700.000 J	
BREAKOUT RESISTANCE	2.000.000 J	



275/K12FB 900F



275/M50FB 1200F

The Fixed PILOMAT LUX PL, LUX PF, LUX K4 and LUX K12 are designed and manufactured to combine the typical breakout resistance of Fixed bollards and the lighting. The result is a bollard that contributes to the protection of pedestrian and perimetral areas, Furthermore it illuminates the surrounding area.



#### GENERAL FEATURES

The Fixed PILOMAT LUX PL and LUX PF are designed to be used in public or private places to light up, delimit and prevent the access or the parking to vehicles in pedestrian and perimetral areas.

**LUX PL SERIES:** these items, with a counter frame to wall, allow the removal of the bollard in case of need or if an impact occurs. The breakout resistance is 150,000 Joules For the 220/PL and 250,000 Joules For the 275/PL.

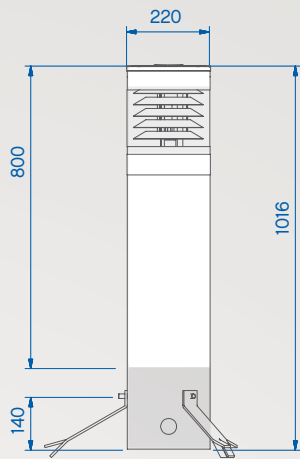
**LUX PF SERIES:** These items must be cemented into the ground. The breakout resistance is 150,000 Joules For the 220/PF and 250,000 Joules For the 275/PF.

The Fixed PILOMAT LUX K4FB and LUX K12FB are designed to ensure an anti-terrorism defense and to be used in public or private places to light up, delimit and prevent vehicles to tear down perimetral areas of: Research centers - Embassies - Police Headquarters - Military bases - Ministerial Palaces - Sensitive sites.

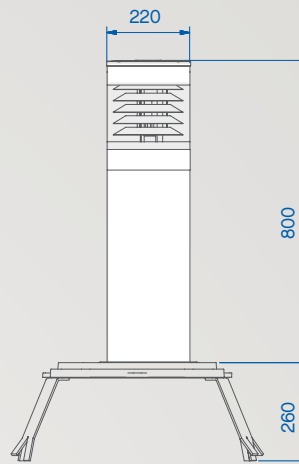
**LUX K4FB SERIES:** These items must be cemented into the ground at a depth that counters the breakout resistance of 700,000 Joules.

**LUX K12FB SERIES:** These items must be cemented into the ground at a depth that counters the breakout resistance of 2,000,000 Joules.

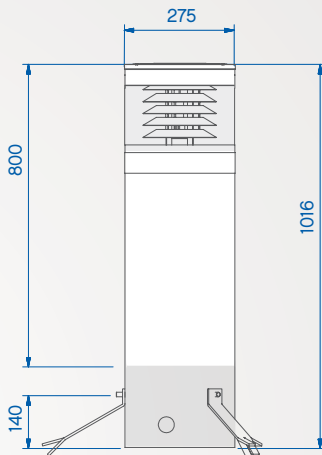




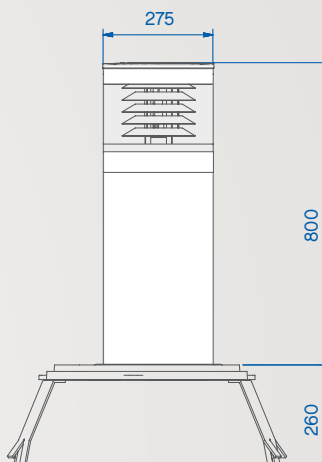
**LUX 220/PF**



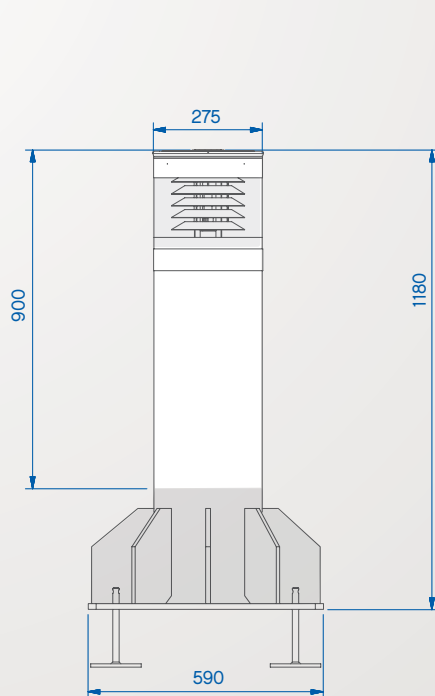
**LUX 220/PL**



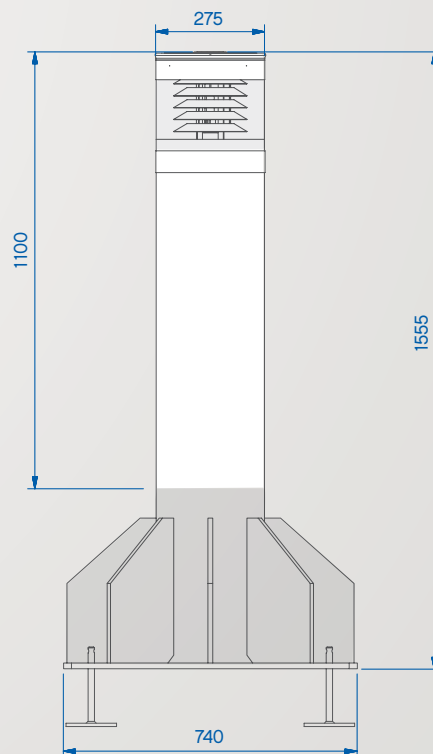
**LUX 275/PF**



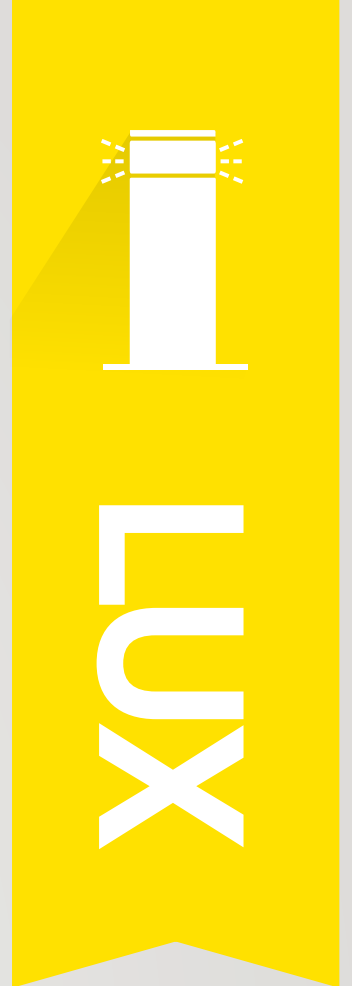
**LUX 275/PL**



**LUX 275/K4FB**



**LUX 275/K12FB**



**275/RM 600**  
**120/RM 800**

The REMOVABLE PILOMAT are typically used to prevent the parking of unauthorised vehicles, transit and access by unauthorised vehicles in driveways, and protection of shatter-proof windows. Because of the procedure of parking, it is advised that the REMOVABLE PILOMAT be used only if the amount of daily movements is limited (if not, the automatic PILOMAT should be used) or when the depth of installation does not allow for the installation of the mobile PILOMAT.





# REMOVABLE

## PILOMAT 275 RM

The 275 RM removable PILOMAT have been designed and built with architectural appearance similar to that of the retractable PILOMAT and therefore also allow for the combined use of both versions.

The 275 RM PILOMAT removable bollards are available in the standard version or with a safety lock to prevent the easy removal of the bollard by unauthorised persons.

The removal of the bollard is carried out using a mechanical key that unlocks the restraint system, allowing for the lifting and removal from the base of the bollard previously cemented into the ground. The base is made up of an integrated enclosure and, once removed, the bollard should only be moved and eventually placed in another stand at the side of the point that is protected.

## PILOMAT 120 RM

The 120 RM removable PILOMAT have a square base, in the interior there is reinforced steel meant to ensure high resistance to breakage.

The 120 RM removable PILOMAT are complete with safety lock, round handle and the roller is placed at the base for easy relocation.

The removal of the bollard is carried out using a mechanical key that unlocks the restraint system, allowing for the lifting and removal from the base of the bollard previously cemented into the ground (in addition a plate enclosure base is provided). Once removed, the bollard can be moved and placed on its pedestal at the side of the point protected.



275/RM 600

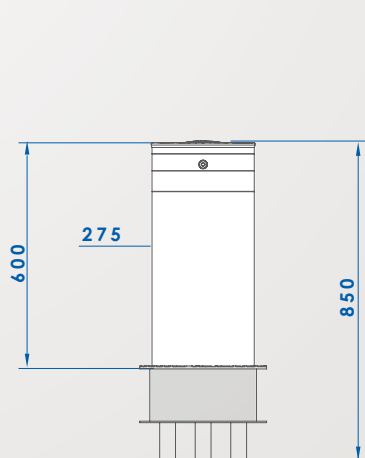


120/RM 800

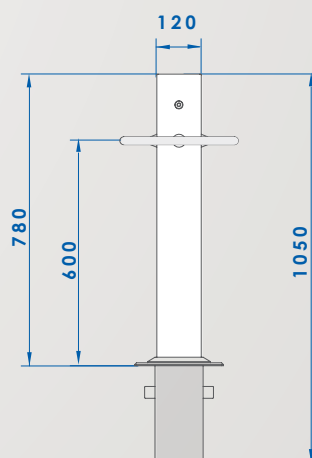
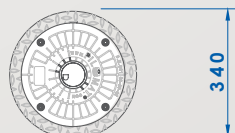




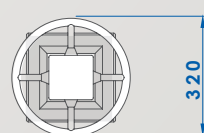
	275/RM 600	120/RM 800
REMOVABLE PILOMAT	FE 370 NORMAL STEEL - AISI 304 STAINLESS STEEL	AISI 304 STAINLESS STEEL
REMOVABLE PILOMAT DIMENSION	Ø 275 mm	120 x 120 mm
REMOVABLE PILOMAT HEIGHT	600 mm	780 mm
REMOVABLE PILOMAT THICKNESS	5 mm	10 mm
REMOVABLE PILOMAT FINISH	POLYESTER POWDER PAINT STANDARD GREY ANTHRACITE	BRUSHED
REFLECTING ADHESIVE STRIP	YES – HEIGHT 55 mm	NO
IMPACT RESISTANCE (WITHOUT DEFORMATION)	40.000 J	20.000 J
BREAKOUT RESISTANCE	200.000 J	250.000 J
NOMINAL PILOMAT WEIGHT (WITHOUT BASEMENT)	27 kg	35 kg



275/RM 600



120/RM 800



The motorized platforms, in general called road blockers, use electrohydraulic movement and are available in two different mechanical toughness and different lengths, in order to meet all market requirements, from company driveways to the highest level of anti-terrorism protection. Many optional items are available for PILOMAT ROAD BLOCKER in order to configure each individual system.

PILOMAT ROAD BLOCKERS are built at "low outline" for limiting the depth of the basement compartment underground and to avoid the main problems of laying in presence of public services (cables ducts, drainage systems, and similar); moreover it is possible to install the road blocker "on ground level" by using a slope.

## 500 SERIES

### PILOMAT ROAD BLOCKER basic

is the basic version, not certified, typically used for perimeter protection of companies, hotels, convention centers and similar. The 500 series requires the installation of a basement compartment of about 200 mm; it rises from the ground 500 mm and the lengths available are : 2.000 mm, 3.000 mm and 4.000 mm (greater lengths are available on request).

## 1000 SERIES

### PILOMAT ROAD BLOCKER high security

is the high security certified version (PAS68:2013 English Certification concerning a Crash test done with a 7500 Kg truck at 80 Km/h), typically used for the anti-terrorism protection at the highest levels. The 1000 series requires the installation of a basement compartment of about 400 mm; it rises from the ground 1000 mm and the lengths available are : 2.000 mm, 3.000 mm, 4.000 mm (greater lengths available on request).

### CERTIFIED

**PAS68:2013 ROAD BLOCKER V/7500(N3)/80 (K12) RATING**



# ROAD BLOCKER



	<b>RB 500</b>	<b>RB 1000</b>
PLATFORM HEIGHT FROM THE GROUND	500 mm	1000 mm
PLATFORM LENGTH	STANDARD: 2,00 m - 3,00 m - 4,00 m (non-standard sizes evaluable)	
IMPACT RESISTANCE (WITHOUT DEFORMATION)	150.000 J	700.000 J
BREAKOUT RESISTANCE	700.000 J	2.000.000 J (PAS68:2013 ROAD BLOCKER V/7500(N3)/80 (K12) RATING)
MOVEMENT MECHANISM	HYDRAULIC	
LIFTING TIME	7" (WITH OPTIONAL PUMP 4")	8"
LOWERING TIME	4' (WITH OPTIONAL PUMP 3")	8"
E.F.O. CIRCUIT FOR EMERGENCY LIFTING	YES (OPTIONAL)	
ROAD BLOCKER FINISHING	POLYESTER POWDER PAINT	
FINISHING OF THE TOP PLATFORM	ALUMINUM SLIP	
LOADING CLASS	STANDARD U.N.I. CLASS D400	
LAYING DEPTH	500 mm (DI CUI 200 mm DI FONDAZIONE IN CALCESTRUZZO)	
TYPE OF USE	INTENSIVE	
POWER SUPPLY	230V - 50/60HZ	





PILOMAT TYRE KILLER is composed by heavy duty spikes that rise from the ground; it operates like an access control barrier, it prevents the passage of unauthorized vehicles or it allows the exit from a supervised area. It can be installed with other access control elements (for example PILOMAT bollards, PILOMAT road blocker or gates) in order to achieve an access control check-point at the highest level of security. Many optional items are available for PILOMAT TYRE KILLER in order to configure each individual system.

## SMALL

**Security system with steel spikes 150 mm high.**

PILOMAT TYRE KILLER SMALL uses mechanical movement and return with spring, it is used to allow only the exit of vehicles from a supervised area but to prevent the entrance to unauthorized ones; it is typically used for perimeter protection at the exit of companies, hotels, convention centers and similar.

The lengths available are : 2.000 mm, 3.000 mm, 4.000 mm, 5.000 mm and 6.000 mm .

## BIG

**Security system with steel spikes 475 mm high.**

PILOMAT TYRE KILLER BIG, electro hydraulically operated, is completed with hydraulic pump in outside cabinet and a control switch; PILOMAT TYRE KILLER BIG is an effective way to stop even wider vehicles than cars. When closed, tyre killer is totally hidden in the street surface, so it allows the drive to all vehicles; when raised, it can stop even great trucks at a speed of 80 Km/h. it is typically used for perimeter protection of military bases, embassies, government buildings, airports and some other important public service places, in car parking and as an anti-terrorism measure.

The lengths available are : 2.000 mm, 3.000 mm, 4.000 mm, 5.000 mm and 6.000 mm .



# TYRE KILLER



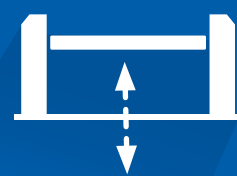


	SMALL	BIG
BLOCKING SPIKES HEIGHT FROM THE GROUND	70 mm	450 mm
TYRE KILLER LENGTH	STANDARD: 2,00 - 3,00 - 4,00 - 5,00 - 6,00 m (NON-STANDARD SIZES EVALUABLE)	
DISTANCE BETWEEN BLOCKING SPIKES	100mm (E.G: TYRE KILLER 2m: 21 BLOCKING SPIKES)	200 mm (E.G: TYRE KILLER 2m: 11 BLOCKING SPIKES)
BLOCKING SPIKES SHIM	10mm	20 mm
PIT DIMENSIONS	LENGTH 2m: H160X310X2.320mm (FOR OTHER LENGHTS ADD 1MT-MODULES E.G: LENGHT 6m: 6.320mm)	LENGTH 2m: H700X1000X2.250mm (FOR OTHER LENGHTS ADD 1MT-MODULES E.G: LENGHT 6m: 6.250mm)
USED MOVEMENT	SPRING RETURN TO ALLOW ONLY THE EXIT	HYDRAULIC
LIFTING TIME	-	4"
E.F.O. CIRCUIT FOR EMERGENCY LIFTING	-	YES (OPTIONAL)
TYRE KILLER FINISH	POLYESTER POWDER PAINT – GREY ANTHRACITE – RED BLOCKING SPIKES	
LOADING CLASS	REGULATION U.N.I. C250	STANDARD U.N.I. CLASS D400
TYPE OF USE	INTENSIVE	
POWER SUPPLY	230V - 50/60HZ	
EMERGENCY MANUAL LOWERING	-	YES
DEVICE FOR MANUAL HANDLING	-	YES (OPTIONAL)
LOCK IN LOW POSITION FOR FREE TRANSIT	SI (ALIMENTAZIONE 24V. D.C.)YES (SUPPLY 24V. D.C.)	-

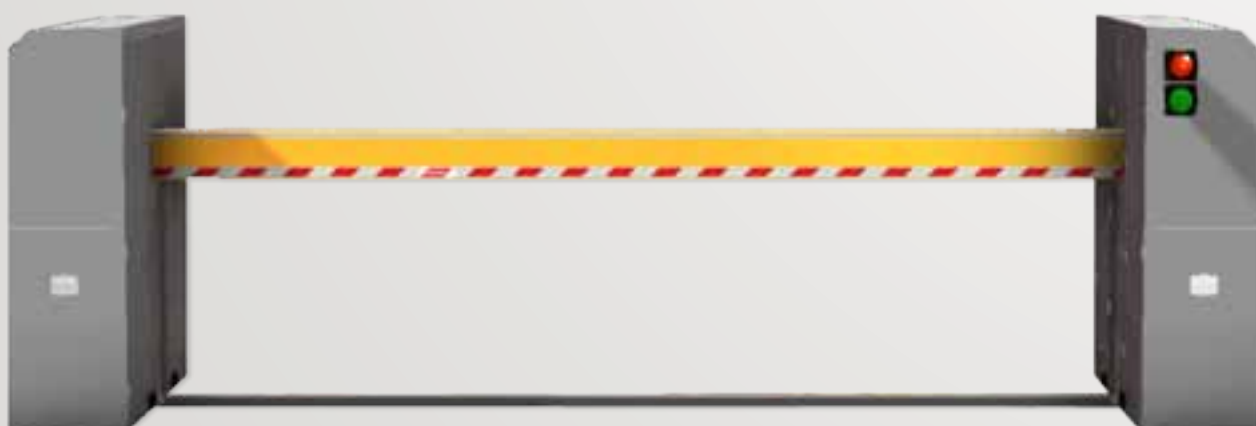
Motorized barriers with vertical movement, called PILOMAT BARRIER, are available, depending on installation requirements, in different lengths (From 3 meters to 7 meters, with a modules of 50 cm) they have a considerable mechanical strength to meet the highest anti-terrorism security because they are designed to resist to a breakout of a truck having a weight of 6.800Kg which impacts at 80Km/h (according to legislation USA SD-STD-02.01 - today ASTM F2656-07).

#### GENERAL FEATURES

- hydraulic movement: the most reliable technology at all temperatures and weather conditions but especially for the intensive use;
- built-in hydraulic pump: this philosophy offers many advantages, especially in installations in places with severe winter temperatures or when the installation requires a considerable distance (up to 80 meters) between the PILOMAT and the control unit;
- wide range of optional configurations: custom colors, EFO circuit for emergency rising in a second, acoustic signal, heating resistance, ups group, command equipment (see optional items and accessories).

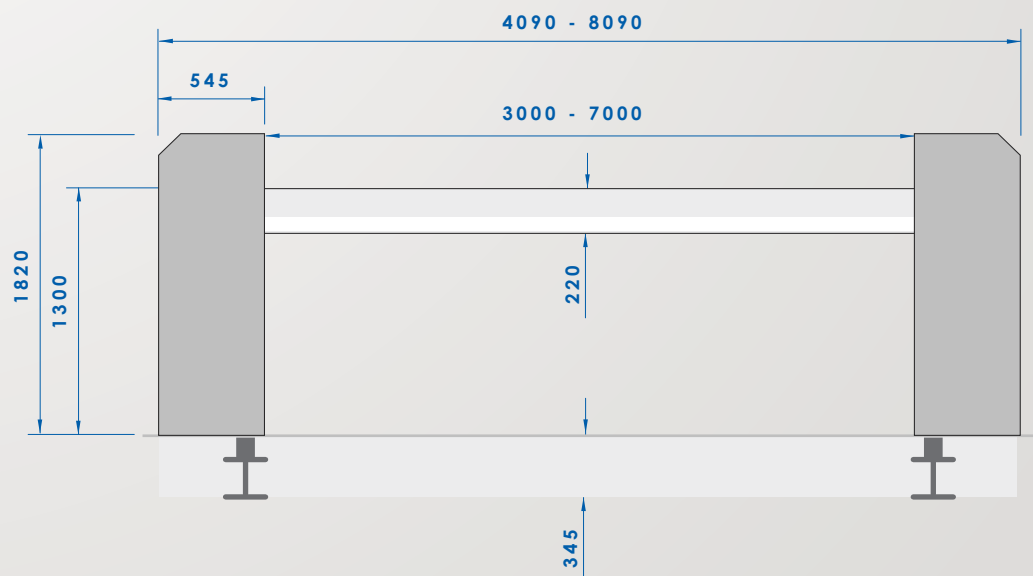


# BARRIER



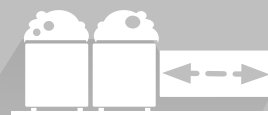


BARRIER HEIGHT FROM THE GROUND	1300 mm
BARRIER LENGTH	FROM 3,00 m TO 7,00 m (WITH STEP OF 0,5 m)
IMPACT RESISTANCE (WITHOUT DEFORMATION)	350.000 J
BREAKOUT RESISTANCE	2.000.000 J
MOVEMENT MECHANISM	HYDRAULIC
LIFTING TIME	10"
LOWERING TIME	3"
E.F.O. CIRCUIT FOR EMERGENCY LIFTING 2"	YES
BARRIER FINISHING	POLYESTER POWDER PAINT
TYPE OF USE	INTENSIVE



PILOMAT CITY GATE, the planter becomes a moving sliding barrier to control the traffic.

PILOMAT CITY GATE is a moving motorized barrier with unilateral or bilateral sliding; it consists of a metal planter with rectangular base and adjustable ground supports. Characterized by a large perimeter edge, with the function of delimiting the containment tank of the planter's earth and to cover the sliding mechanism, it is equipped with a moving barrier to hurdle, housed internally between the tank and the external side of the planter. The barrier flowing parallel to the planter, comes out creating an extension of the planter itself, blocking the vehicular traffic. It is supplied completely wired, assembled and tested, it is equipped with safety laser photocell, limiting mechanism of the forces, integrated sound and intermittent light signal, manual unblocking and automatic opening in the case of a power failure. There are many optional items to configure each system.



# CITY GATE

## GENERAL FEATURES

### ONE SLIDE

- SMALL SX version, 2 modules  
(cm 160x67x90h), sliding barrier from 120 cm.
- SMALL DX version, 2 modules  
(cm 160x67x90h), sliding barrier from 120 cm.
- BIG SX version, 3 modules  
(cm 235x67x90h), sliding barrier from 170 cm.
- BIG DX version, 3 modules  
(cm 235x67x90h), sliding barrier from 170 cm.

### TWO SLIDES

- BIG version, 3 modules  
(cm 235x67x90h) - 2 sliding barriers from 170 cm.

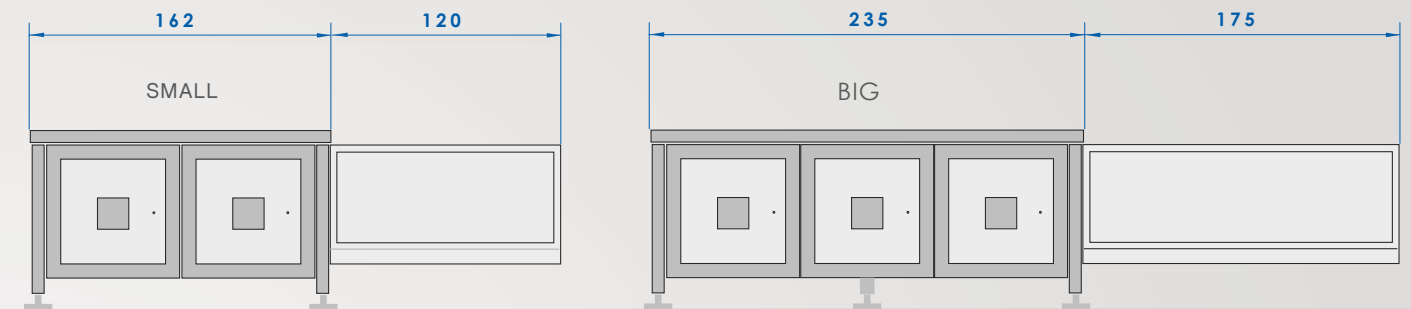
### FIXED

Fixed planters to match with moving barriers for delimitation of transit areas.

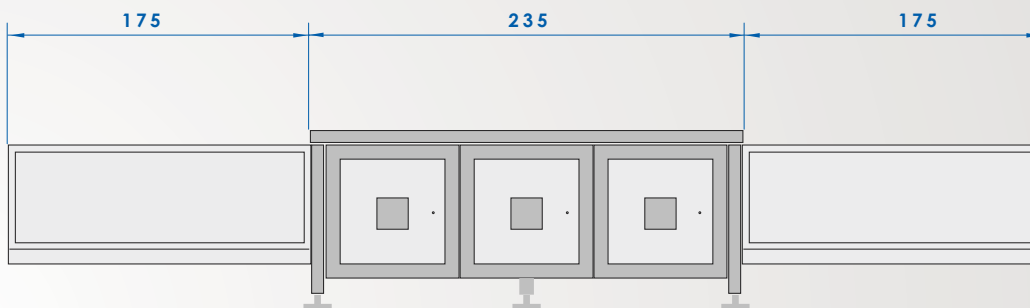
- SMALL FIX version, 1 module (cm 67x67x90 h).
- BIG FIX version, 1 module (cm 89x89x90 h).



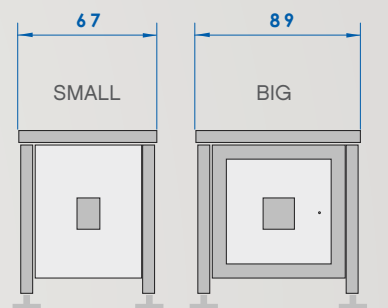
## SLIDING VERSION WITH ONE SLIDE



## SLIDING VERSION WITH TWO SLIDES



## FIXED VERSION

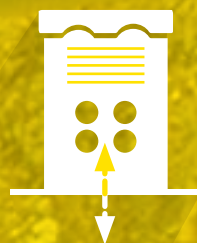


**B3020 60 - B4030 60 - B4040 55  
LONDON 6040 - LONDON 8050**

The semiautomatic PILOMAT ENERGY towers series are designed to provide complementary services such as electricity and telephone communications, compressed air and water. They are used in those places typically used for parking or pedestrian areas, and sometimes used as market areas and places for events, concerts and similar. The use of PILOMAT ENERGY prevents the laying of cables and tubes, guaranteeing greater security for its users. The current models are the result of the development of more than 20 years of experience.







# ENERGY

## TOWERS



### B3020 60 - B4030 60

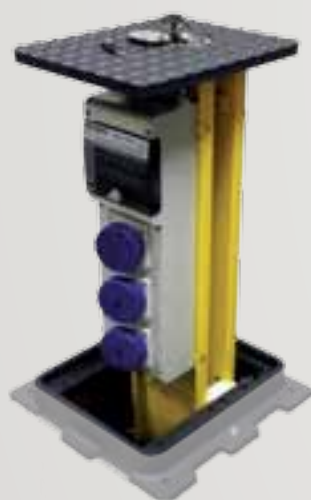
The PILOMAT ENERGY B3020 60 and B4030 60 towers with manual movement allow the installation of electrical sockets, single and/or three phase 16A, in compliance with regulations EN 60301-1 and EN 60301-2 and related circuit breakers. The cover plate placed at the top of the tower is in compliance with regulation UNI EN 124 with load class C250.

### B4040 55

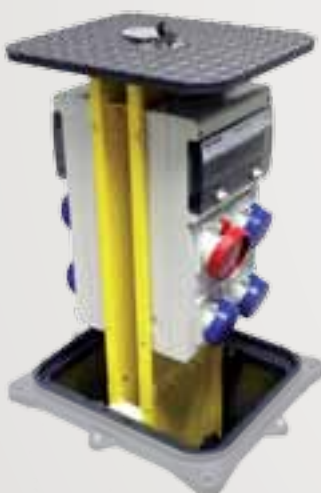
The PILOMAT ENERGY B4040 55 towers, at semiautomatic movement, allow for multiple installations of single-phase and/or three-phase 16A, 32A, and 63A, in accordance with EN 60301-1 EN 60301-2 regulations and related protective circuit breakers. The coverplate at the top of the movement tower is in compliance with UNI EN 124 regulations with load class C250 or D400.

General Features: B4040 55 PILOMAT ENERGY towers are semiautomatic with incorporated gas actuators; the procedure is similar to semi-automatic PILOMAT bollards (p. 60).

Choice of optional configurations: mobile FE370 towers, steel or stainless steel, AISI 304 – FE 370 pits with anti-corrosion steel or stainless steel, AISI 304 – Standard coverplate, or fillable with C250 or D400 class load.



**B3020 60**



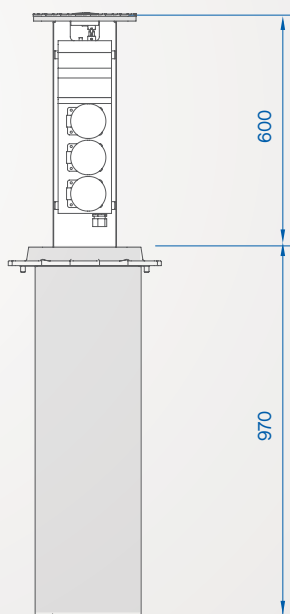
**B4030 60**



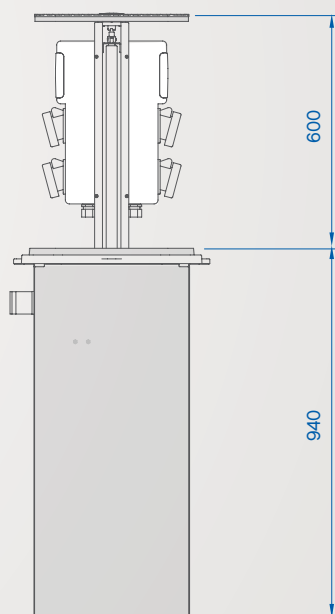
**B4040 55**

	B3020 60	B4030 60	B4040 55
MOVING TOWER	FE 510 NORMAL STEEL		FE 510 NORMAL STEEL AISI 304 STAINLESS STEEL
MOVING TOWER DIMENSIONS	300 x 200 mm	400 x 300 mm	400 x 400 mm
MOVING TOWER HEIGHT	600 mm		550 mm
MOVING TOWER FINISH	POLYESTER POWDER PAINT- STANDARD YELLOW		
CONNECTION LINE OUT OF THE TOWER	-		STANDARD 3 m
PROTECTION CLASS ELECTRIC COMPONENTS	IP 66		IP 66 - IP 67
COVERPLATE LOAD CLASS	C250		C250 - D400
POSSIBILITY OF FILLABLE COVERPLATE	NO		YES

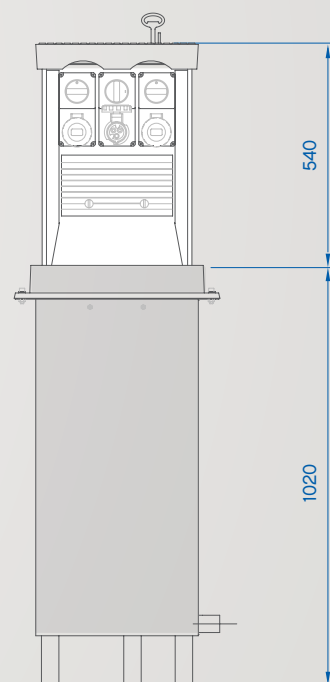




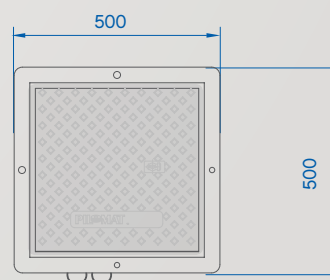
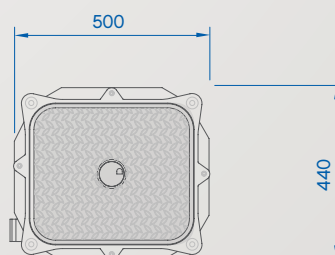
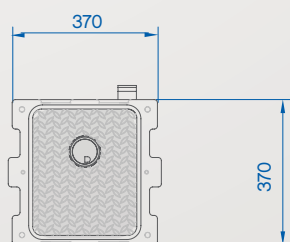
**B3020 60**



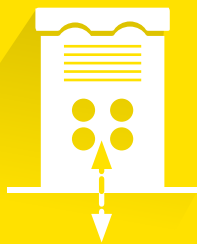
**B4030 60**



**B4040 55**



## LONDON



The pilomat energy LONDON towers, at semiautomatic movement, allow for multiple installations of single-phase and/or three-phase 16A and 32A in accordance with EN 60301-1 EN 60301-2 regulations and related protective circuit breakers. The driveway coverplate at the top of the moving tower is compliant with UNI EN 124 regulations with load class D400.

**General Features:** the pilomat energy LONDON are semiautomatic, with incorporated gas actuator. The design of pilomat energy LONDON allows for the creation of structures that allow the connection of users and the subsequent closure of the upper structure, allowing for total drive ability in the area.

**Action:** the pilomat energy LONDON structures, semi-automatic movement, are operated using a mechanical key that unlocks the restraint, resulting in automatic 90° opening from the coverplate due to the incorporated gas actuator.

The closure of the structure is carried out by pushing it toward the ground, acting with the foot on the coverplate with the 90° opening from the ground; a cover totally below the restraint system is automatically locked, preventing the possibility of lifting.

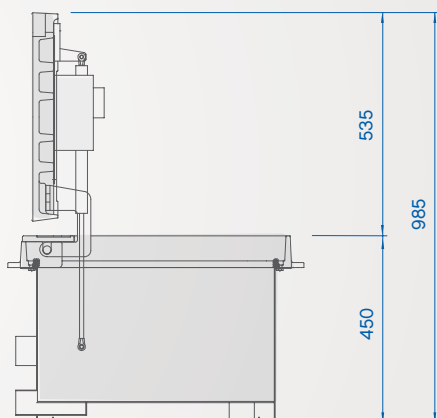


LONDON 6040

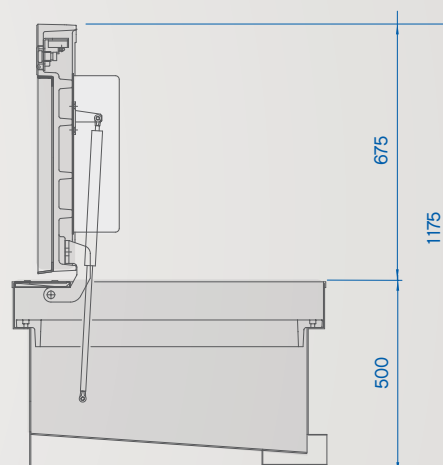
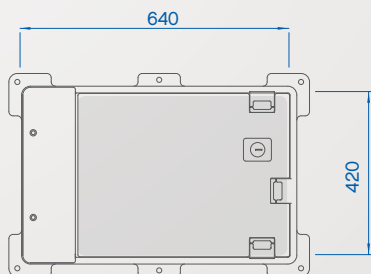


LONDON 8050

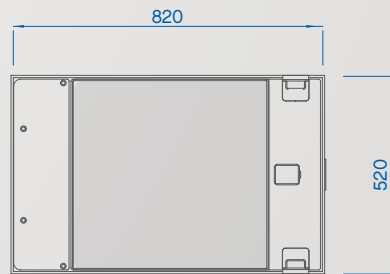
	LONDON 6040	LONDON 8050
MOVING STRUCTURE	PEARLITIC IRON	
MOVING STRUCTURE DIMENSION	640 x 420 x 450 mm	820 x 520 x 500 mm
MOVING STRUCTURE HEIGHT	535 mm	675 mm
MOVING STRUCTURE FINISH	POLYESTER POWDER PAINT – STANDARD GREY ANTHRACITE	
CONNECTION LINE OUT OF THE TOWER	STANDARD 3 m	
PROTECTION CLASS ELECTRIC COMPONENTS	IP 66 - IP 67	
CLASS OF LOAD	D400	
POSSIBILITY OF FILLABLE COVERPLATE	NO	STANDARD



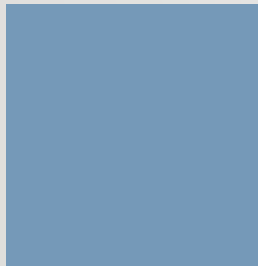
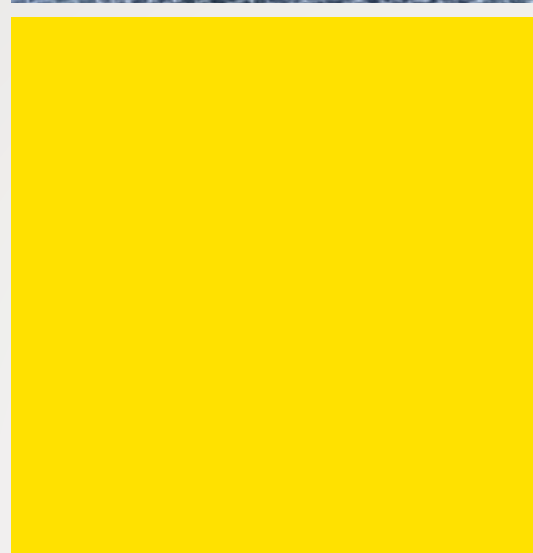
**LONDON 6040**



**LONDON 8050**
















The department of research and development of PILOMAT, always careful to what the synergy of market offers, continuously select products that enrich and complete the PILOMAT program; typically the complements are cheaper products, which help to bring a more complete program.

### **PILOMAT FLEX CITY AND FLEX ROAD**

Designed specifically for highways, borders and urban environments, it recalls the traditional metallic bollards but as it is made in deformable polyurethane, provides a cheaper alternative, with the added bonus of very low maintenance.

### **PILOMAT CHAIN**

The new automatic barrier with moving chain with electromechanical movement to mark driveways and private parking places.

### **PILOMAT PARKY**

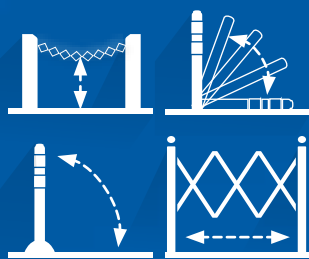
Includes a wide range of manual parking barriers for the protection of the single parking space.

### **PILOMAT MULTI GATE**

A security portable fence is to use in various applications, such as: blocking traffic in pedestrian areas and subsidiaries; safe of assembling areas, checkpoints, parking and similars.

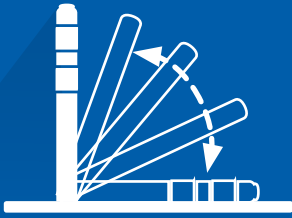






# COMPLEMENTS

## FLEX CITY



The Fixed bollards PILOMAT FLEX CITY, designed specifically for urban areas, are available in two heights: 800mm - 1000mm and 2 diameters: 80mm - 130mm. PILOMAT FLEX CITY typically have two high-visibility reflective strips and two rings with reflective beads, one in the upper part and the other in the lower one.



The appearance of PILOMAT FLEX CITY recalls the traditional metallic bollards but as it is made in deformable polyurethane, provides a cheaper alternative, with the added bonus of very low maintenance. In case of special events, PILOMAT FLEX CITY can be easily and quickly removed, using the special tools for installation (supplied separately).

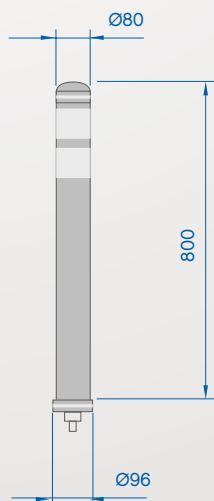
### GENERAL FEATURES

- made with high quality polyurethane: PILOMAT FLEX CITY after being hit, run over and crushed by the car back to its original position;
- the reflective strips and reflective beads help night driving;
- the appearance of the various PILOMAT FLEX CITY emphasize the classical style and for that, are ideal for use especially in the Old Towns;
- high corrosion resistance against chloride, calcium and other chemical elements, typically used in snowy areas;
- PILOMAT FLEX CITY thanks to the special internal construction does not allow to be bent by hand, giving a more secure solution than competitive soft flex products.





	PFC-8BS-M80-W	PFC-7BS-M100-W	PFC-7BS-M87-W-BL	PFC-7BS-M100-W-BL	PFC-7BS-SL80-W
COLOR	GREY ANTHRACITE				SILVER
HEIGHT	800 mm	1000 mm	870 mm	1000 mm	800 mm
DIAMETER	130 mm	80 mm	80 mm	80 mm	80 mm
FINISH TOP PART	CUPOLA		BALL		CUPOLA



SILVER



Diameter 80 or 130

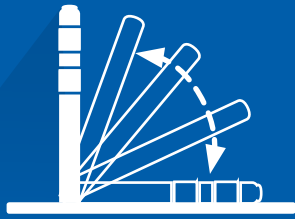


Diameter 80  
with ball on top

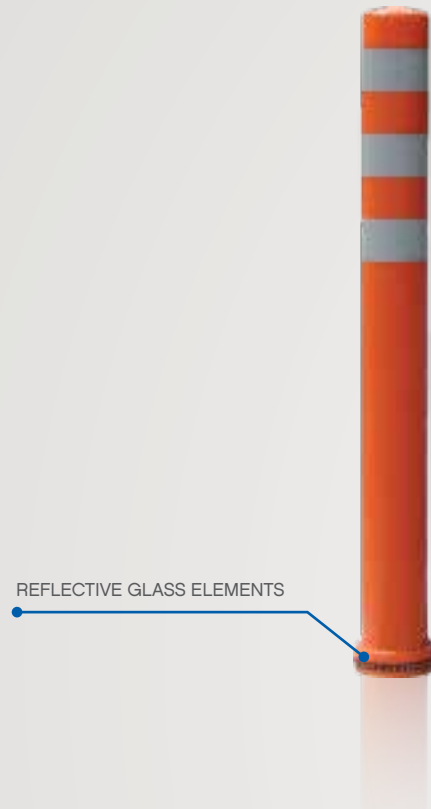


Diameter 130  
with two ring top part

## FLEX ROAD



The Fixed bollards PILOMAT FLEX ROAD, designed specifically for highways, borders and urban environments, are made of 80mm diameter and 800mm height. Typically PILOMAT FLEX ROAD have three high-visibility reflective strips and a lower ring of reflective beads.



REFLECTIVE GLASS ELEMENTS

The appearance of PILOMAT FLEX ROAD recalls the traditional metallic bollard but as it is made of deformable polyurethane, provides a cheaper alternative, with the added bonus of very low maintenance. In case of special events, PILOMAT FLEX ROAD can be easily and quickly removed, using the special tools for installation (supplied separately).

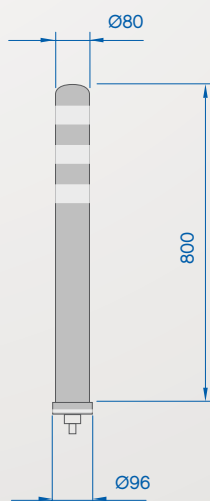
### GENERAL FEATURES

- made with high quality polyurethane: PILOMAT FLEX ROAD after being hit, run over and crushed by the car back to its original position;
- the reflective strips and reflective beads help night driving;
- PILOMAT FLEX ROAD are available in various colors: orange, green, black and white;
- high corrosion resistance against chloride, calcium and other chemicals, typically used in snowy areas;
- PILOMAT FLEX ROAD thanks to the special internal construction does not allow to be bent by hand, giving a more secure solution than competitive soft flex products.



	PFR-80NSRW	PFR-80NSGW	PFR-80NSBLW	PFR-80NSWHW	PFR-80NFRW-N *
COLOR	ORANGE	GREEN	BLACK	WHITE	ORANGE
HEIGHT	800 mm				
DIAMETER	80 mm				
FINISH TOP PART	STRAIGHT				

\* larger basement diameter 300mm to anchor to the ground with epossidic glue



orange x white



green x white



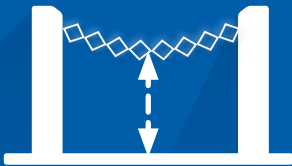
black x white



white x white



## CHAIN



PILOMAT CHAIN is the new automatic barrier with moving chain with electromechanical movement to mark driveways and private parking places.

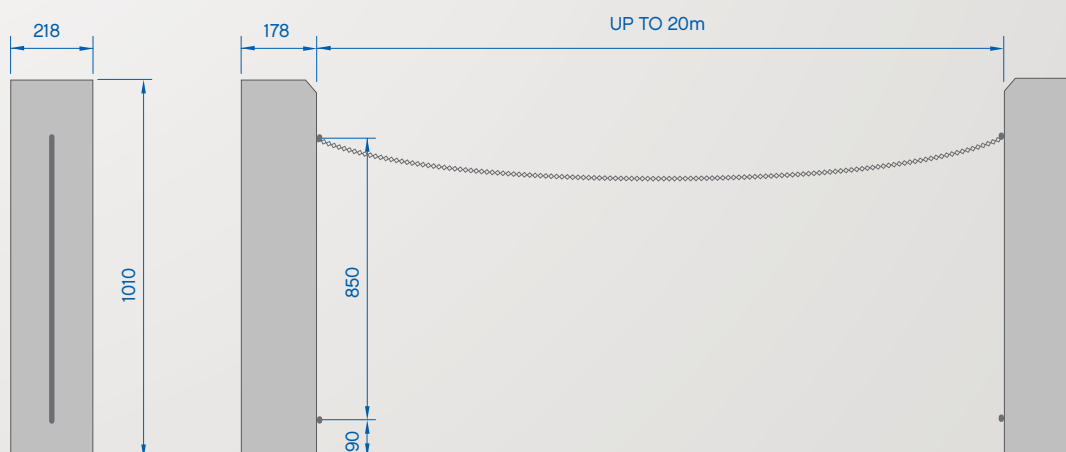


### GENERAL FEATURES

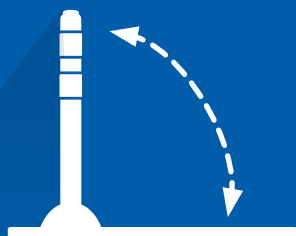
- large delimitation: PILOMAT CHAIN allows the delimitation of areas up to 20m;
- linear and powerful moving: PILOMAT CHAIN has two 24V motors (one in each column) that give to the chain a linear movement and allow to lift chains up to 8Kg;
- safe operation: PILOMAT CHAIN is equipped with a impact analysis sensor to ensure the maximum safety in the operation;
- underground guide: an optional item is available (recommended) which consists of a U-guide to ground below the perpendicular of the chain, to allow the placing of the chain when lowered;
- operation in power failure: there is an additional item which is a power supply unit with battery accumulator to allow the temporary operation of PILOMAT CHAIN in case of temporary power failure;



POWER SUPPLY	230 V – 50 HZ
POWER CONSUMPTION OF 2 MOTORS	2,0 A
POWER OF EACH MOTOR	60 W
OPERATING TEMPERATURE	-20°C + 55°C
PROTECTION CLASS	IP 34
LUBRIFICATION	PERMANENT
NOMINAL WEIGHT OF EACH COLUMN	25 Kg
MAXIMUM CHAIN LENGTH	20 m
MAXIMUM CHAIN WEIGHT	8 kg
CONTROL UNIT	INTEGRATED IN A COLUMN



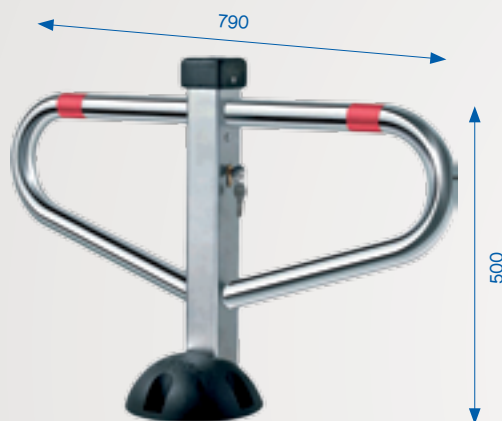
## PARKY



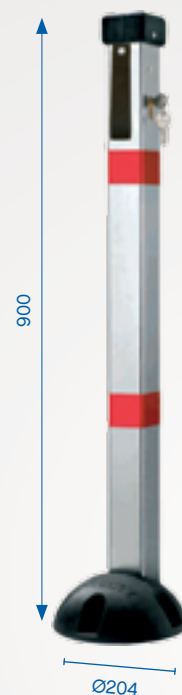
PILOMAT PARKY includes a wide range of manual parking barriers for the protection of the single parking space.



AR100



AR600



AR700

### GENERAL FEATURES



- PILOMAT PARKY are made in steel with anti-corrosion protection treatment in electro - galvanized;
- the Foot Fixing has a shell shape made of NYLON with FIBER GLASS which gives the Foot Fixing a lot of resistance;
- all shapes are rounded to a refined design and in compliance with safety regulations;
- the closing of PILOMAT PARKY includes the following types: European cylinder with different keys, European cylinder with the same keys, predisposition for the use of a common padlock;
- the model ARB580 includes a base to ground, made with elastomers recycled to obtain the complete placing of the barrier when the same is in the open position.



AR050	VERSION WITH PADLOCK (PADLOCK NOT INCLUDED)
AR100	WITH UNBLOCKING LOCK - CYLINDER EUROPEAN PROFILE (OPTION TO HAVE SAME KEYS)
AR200	VERSION WITH PADLOCK (PADLOCK NOT INCLUDED)
AR580	WITH UNBLOCKING LOCK - CYLINDER EUROPEAN PROFILE (OPTION TO HAVE SAME KEYS)
ARB580	AS VERSION AR580 BUT WITH BASEMENT TO GROUND
AR600	WITH UNBLOCKING LOCK - CYLINDER EUROPEAN PROFILE (OPTION TO HAVE SAME KEYS)
AR700	WITH UNBLOCKING LOCK - CYLINDER EUROPEAN PROFILE (OPTION TO HAVE SAME KEYS)



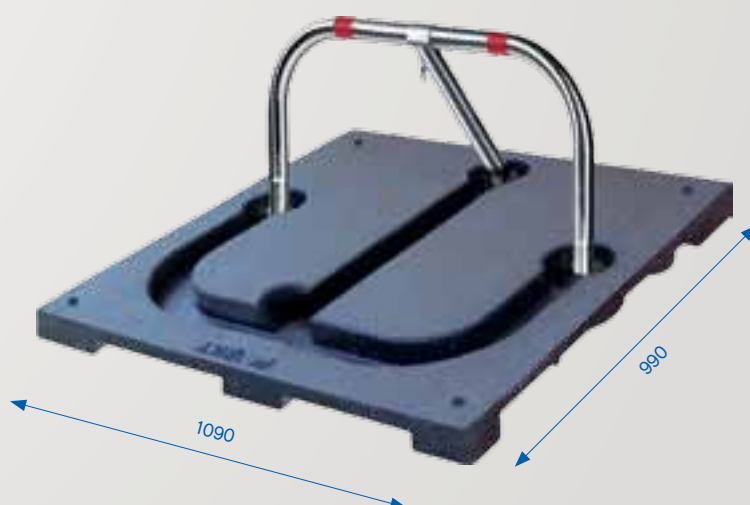
**AR580**



**AR50**

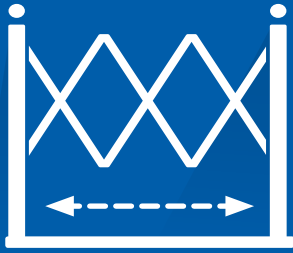


**AR200**

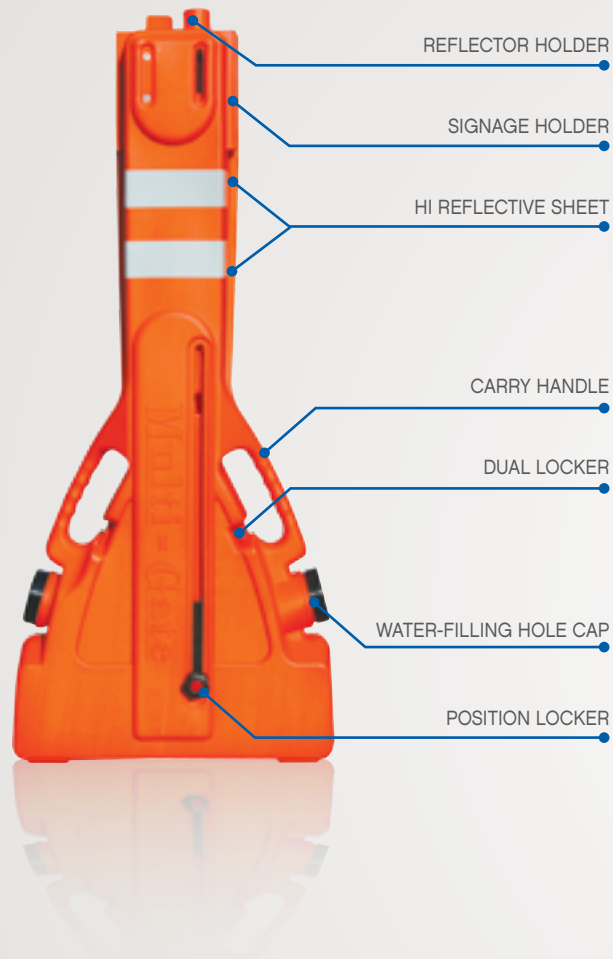


**ARB580**

## MULTI GATE



PILOMAT MULTIGATE is a security portable Fence to use in various applications, such as: blocking traffic in pedestrian areas and subsidiaries; safe of assembling areas, checkpoints, parking and similars.

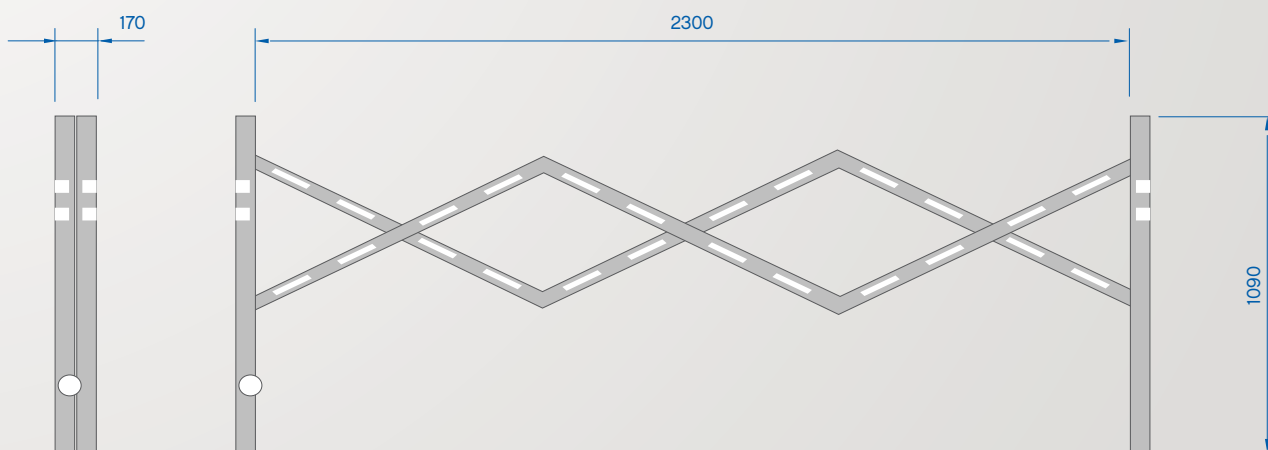


### GENERAL FEATURES

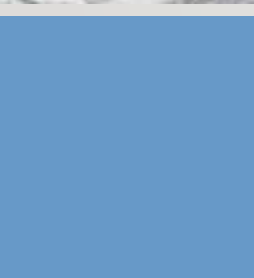
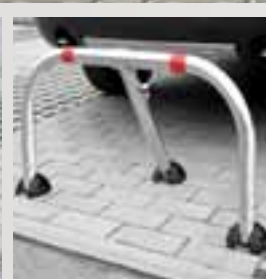
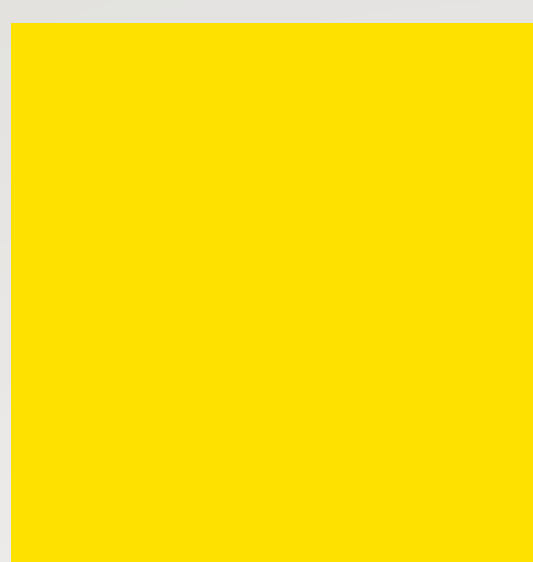
- The Fence PILOMAT MULTI GATE is easily transportable;
- the dimensions of the Fence when is closed are: 170x480x1.090 mm.
- Full extended opening: 2.300 mm.
- Fence with high visibility with 52 intensive reflective sectors.
- High resistance to weathering.
- The side bases have a tank to be Filled with water to ballast the Fence.



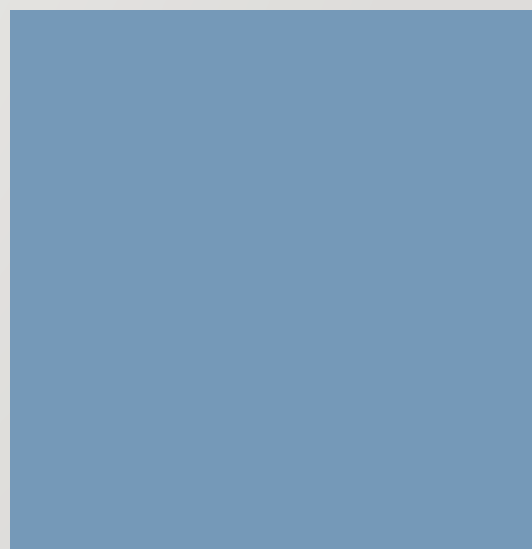
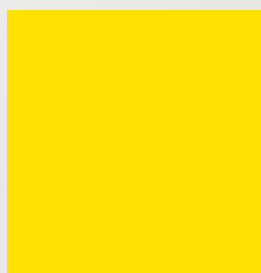
MATERIAL	HDPE (BODY) / ABS (CAP) / HI REFLECTIVES
DIMENSION (L X W X H mm)	170 X 480 X 1 090, MAX EXTENDED SPAN \ 2 300
COLOR	ORANGE (BODY) / BLACK (CAP) / WHITE (REFLECTIVES)











**AUTOMATIC - CL SERIES**
**16**

220/CL 600A

16

275/CL 600A

16

**AUTOMATIC - PL SERIES**
**20**

220/PL 600A

20

275/PL 600A

20

355/PL 600A

20

**AUTOMATIC - P SERIES**
**24**

127/P 600A

24

127/P 800A

24

220/P 600A

24

275/P 400A

28

275/P 500A

28

275/P 600A

28

275/P 800A

28

PARK 275/P 500A

32

275/P10 800A

32

**AUTOMATIC - K/M SERIES ANTI-TERRORISM**
**36**

275/K4 700A

36

275/K4 900A

36

275/M30 1200A

36

275/K12 900A

40

275/M50 1200A

40

**ACCESSORIES**
**44**
**COLUMNS OF CONTROL AND MANAGEMENT**
**48**

FIXED COLUMNS

48

MODULAR COLUMNS

50

**AUTOMATIC NUMBER PLATE READER**
**52**
**SEMI-AUTOMATIC - PL SERIES**
**60**

127/PL 500SA

62

127/PL 600SA

62

220/PL 600SA

62

275/PL 500SA

62

275/PL 600SA

63

275/PL 800SA

63

355/PL 600SA

63



<b>FIXED - PL SERIES</b>	<b>66</b>
127/PL 600F	66
220/PL 600F	66
275/PL 800F	66

<b>FIXED - PF SERIES</b>	<b>67</b>
127/PF 600F	67
220/PF 600F	67
275/PF 600F	67
355/PF 600F	67

<b>FIXED - K/M SERIES ANTI-TERRORISM</b>	<b>68</b>
275/H4 700F	70
275/K4FB 700F	70
275/K4FB 900F	70
275/M30FB 1200F	70
275/K12FB 900F	72
275/M50FB 1200F	72

<b>LUX</b>	<b>74</b>
LUX PL - LUX PF - LUX K4FB - LUX K12FB	74

<b>REMOVABLE</b>	<b>76</b>
275/RM 600	78
120/RM 800	78

<b>ROAD BLOCHER</b>	<b>80</b>
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<b>TYRE KILLER</b>	<b>82</b>
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<b>BARRIER</b>	<b>84</b>
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<b>CITY GATE</b>	<b>86</b>
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<b>PILOMAT ENERGY</b>	<b>88</b>
B3020 60 - B4030 60 - B4040 55	90
LONDON 6040 - LONDON 8050	92

<b>PILOMAT COMPLEMENTS</b>	<b>96</b>
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CEO \_ Bruno Toffetti

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CATALOGUE.15.1

english  
version

Design Alice Lavezzi





english version

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PILOMAT s.r.l.

Via Zanica 17/p, 24050 Grassobbio (BG) Italy

Tel. +39.035.29.72.20 , Fax +39.035.29.70.94

[pilomat@pilomat.com](mailto:pilomat@pilomat.com) [www.pilomat.com](http://www.pilomat.com)

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