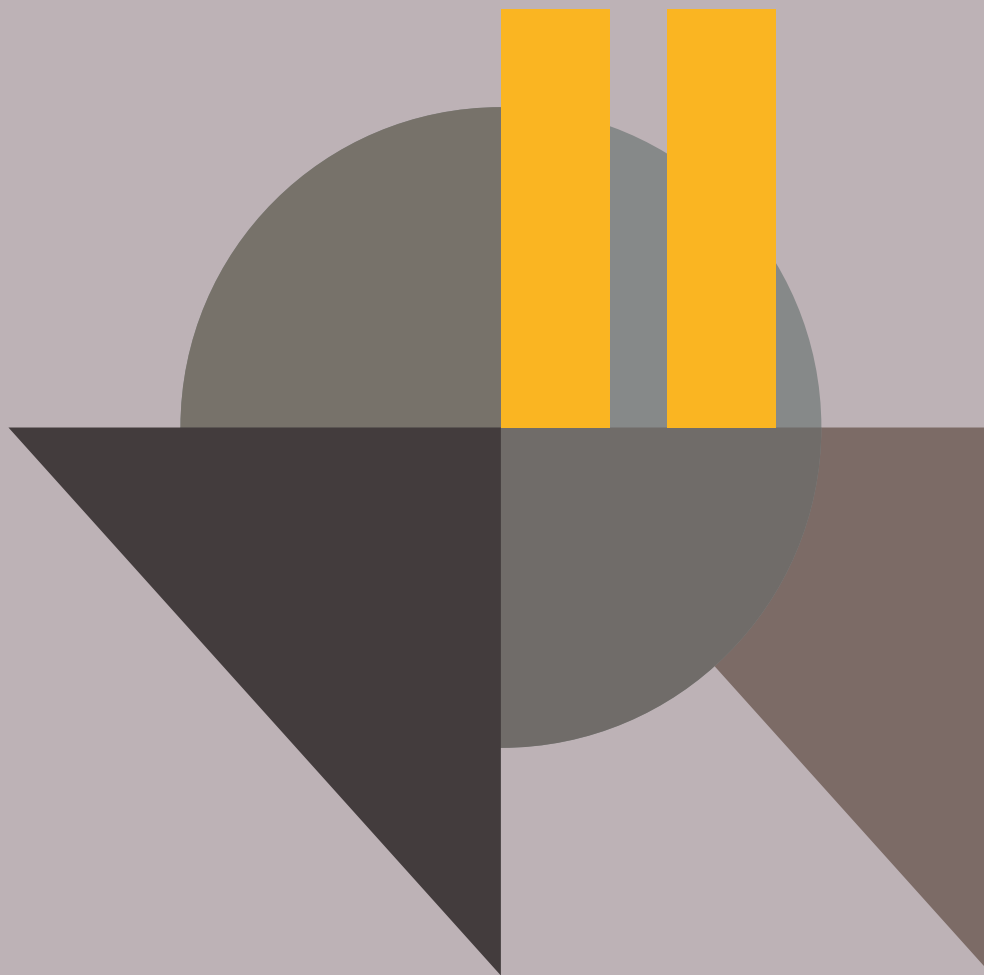
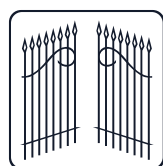




OIL-HYDRAULIC RETRACTABLE BOLLARDS
AUTOMATIC, SEMIAUTOMATIC, REMOVABLE AND FIXED

CATALOGUE
11.2021



FADINI®
l'apricancello

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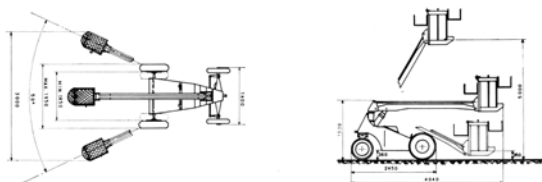


Creativity is imagining tomorrow. Projects where design and quality are the answer to your questions. Without a past there can be no future. FADINI automation, history is not fantasy. It all began in 1967, when the three FADINI brothers put up a small mechanical workshop specialized in oil-hydraulic agriculture machines. The transformation from a family business into an industrial group occurred though in the late 70s when an increasingly growing process started and the company became worldwide known in gate automation. Since 2010 the three founders are supported by their sons. FADINI is a reality today, that finds its place among the main players in the world in manufacturing and trading automatic systems for gates, doors of any kind, garages, road barriers, automatic, semiautomatic, removable and fixed bollards. The company's philosophy has been the same since the foundation and is characterized by a balanced combination of tradition and modernity, quality and reliability. FADINI, an exclusive though unmistakable product.



1969

Meccanica Fadini produces and puts on the market CIGNO:
an oil-hydraulic platform for pruning and picking up fruits





Head offices
manufacturing factory

THE COMPANY

Meccanica FADINI s.n.c. is a leading company in Europe and the world in gate automation, with sales and assistance outlets in more than 60 nations. The main seat is in Cerea (VR) and spreads over a total surface of more than 130.000 m², 30.000 m² of which are ruffed, where automatic systems for gates, garage doors, industrial doors and road barriers are designed, manufactured and tested, including also a vast range of bollards, oil-hydraulic and automatic models, but also semiautomatic, removable and fixed. Other two factories in Vicenza province are dedicated to the production of control and safety systems.

More than 45 years of ideas, dedication and success.

The history of Meccanica Fadini is a path marked by a constant evolution towards new technological and marketing frontiers.

Yesterday, today and

**19
91**



STRABUC 918

Meccanica Fadini proves to be once again a company keen to meet the market requirements. It starts in this period to produce and trade the first oil-hydraulic automatic bollards.

SIBLI 17

First high security, ram-raïd preventing, removable, post. AISI 304 stainless steel external finish. Functional answer to those sites where a casing to sink in the ground or lack of electric power are the problem.

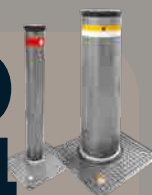
**20
02**



**20
04**

CORAL / VIGILO

A range of posts dedicated to the residential and collective markets are presented into the market. The posts are 100 or 200 mm in diameter, various heights available. LED lights on request. The new intuition and technical innovation consist in bringing the hydraulic unit out of the post, into the top of the ground casing in order to facilitate the access to it for installation or maintenance purposes.



MASPI 241

The first Fadini manual bollard is developed. Initially a mechanical spring inside the post helps pulling up, today the GASPO 252 model is operated by two gas springs.

**20
05**



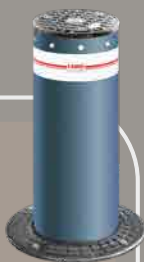
**19
74**

MEC 400

First operator for sliding gates. Meccanica Fadini is a pioneer in Italy and in the world in producing and trading automatic gate systems.

..... *in the future*

**20
06**



STRABUC 930 OPINAT

is approved and certified by the Ministry of Traffic of Italy in terms of safety, security and quality. The success of this bollard is testified by hundreds of units that daily work in the squares, city centres, pedestrian areas of small and large Italian cities.

TALOS

Fully retractable oil-hydraulic automatic bollard. Studied and made to be the answer to any requirement for quick and reliable protection of private or public accesses.

The Talos series includes also a complete range of semiautomatic and fixed bollards.

**20
16**



THE VALUES OF INNOVATION

Mechanics is our creed. Meccanica FADINI has made significant investments in technology: today the most modern and efficient CNC machines of the latest generation can be found inside our factories.

OIL-HYDRAULIC TECHNOLOGY

The perfect solution for all those technical requirements that demand safety, quietness, smooth movements, precision and reliability. A successful market response, the high standards of performance and long life of FADINI installations are the real witnesses of such technical intuition: oil-hydraulic technology as a synonym for timeless quality.



CHOOSING FADINI MEANS CHOOSING QUALITY

Meccanica Fadini develops and produces all its products inside its own factories where the most advanced technologies are used to maintain the acknowledged levels of quality and reliability that only made in Italy products can offer. Materials of high quality standards and a strictly controlled manufacturing process ensure reliability and long lasting performance with all the actuators. All the mechanical, electromechanical and electronic parts undergo severe control during the various machining phases, assembling and final testing. Meccanica Fadini's products are CE marked and conform to the European safety regulations and installation guidelines.

WWW.FADINI.NET

Meccanica Fadini, in support of the products, also supplies: instructions manuals, technical data sheets, catalogues and brochures; all this literature can be easily consulted in the download section of company's web site. Being attentive to the commercial requirements of the distribution net, Meccanica Fadini can also supply advertising and support material such as: demo-products of various kind, luminous signs and gadgets, and also a line of branded clothing.



RESEARCH AND DEVELOPMENT

Over the latest years the company has registered many European and International patents for its own bollards. In 2016 a specific factory was built entirely dedicated to the production of bollards: from the machining phase and hardware fabrication to the assembly phase and final testing.



TOTAL QUALITY CONTROL

100% accurate inspections to get each single bollard approved



100% PERFORMANCE TESTS

Each bollard is tested for one day long during which real situations are simulated and complete rising and lowering heavy duty cycles are performed. Endurance tests are also carried out through complete working cycles to detect possible malfunctions and faults or any need of special maintenance.

CLIMATIC CHAMBER

The bollards are tested in extreme temperature conditions (-45 °C and +80 °C) to assess the correct functioning and long life features of their oil-hydraulic component parts.

QUALITY

All Fadini bollards come complete with a foundation pit, that is hot dip galvanized in compliance with the UNI EN ISO 1461 standards; moving cylinder is made of steel, cataphoresis treated and polyester powder coating is certified in compliance with the EN ISO 9227 standards.



CRASH TEST



The bollards undergo crash tests by means of specific equipment designed and made in our workshops. For instance, an enormous pendulum, consisting of a non deformable mass of 1.000 kg, allows to calculate the values of resistance to impact and breakout, and tests the quality of the structural components of the bollards. The structural calculations related to some models are available on request. They have been made by professional and independent engineers who are qualified to assess and certify the structural features and resistance values of bollards.

For those installations where the utmost in security level is to met, FADINI can provide bollards with EFO features (Emergency Fast Operation), fast rising.

SECURITY CERTIFICATES

Crash tests carried out by the most accredited verification bodies, according to the European and International most important norms.

TALOS M50

March 30, 2016

AISICO S.r.l. Crash Test Laboratory, Italy.

Tested to stop a 7.5-ton truck travelling at 80 km/h

Performance classifications: K12 / M50 / C750

Certificates

- ASTM F2656-15 C750
- PAS 68:2013 V/7500 (N3)/80
- IWA 14-1:2013 V/7200 [N3C]/80

TALOS C730

January 9, 2020

AISICO S.r.l. Crash Test Laboratory, Italy.

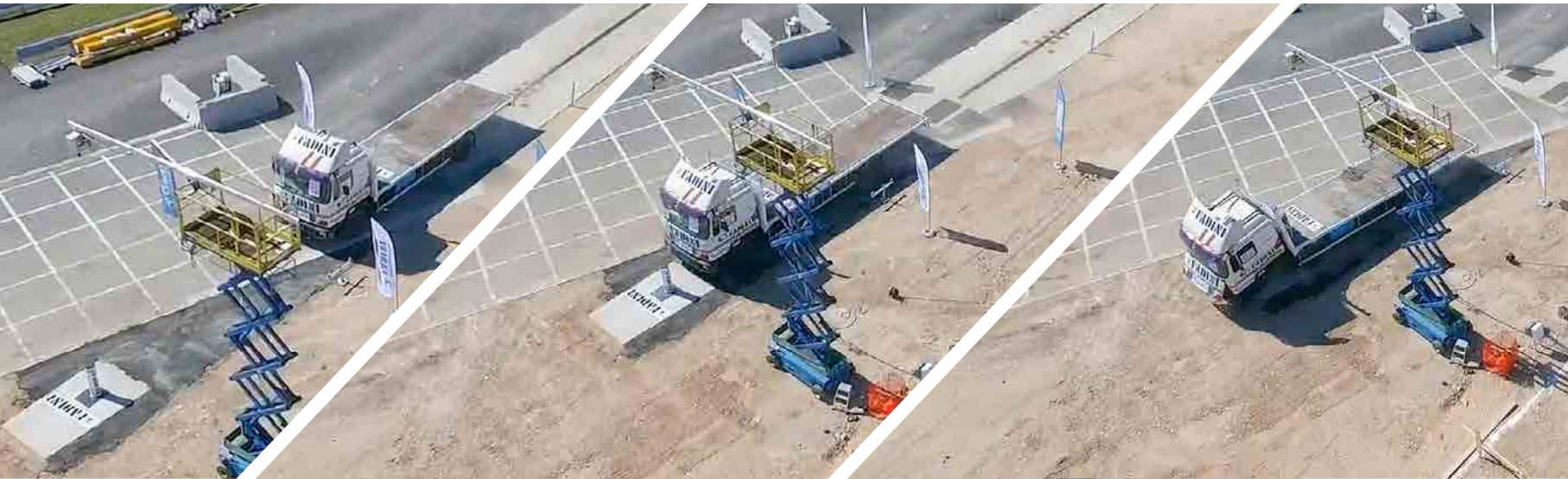
Tested to stop a 7.5-ton truck travelling at 48 km/h

Performance classifications: K4 / M30 / C730

Certificates

- ASTM F2656-18A C730
- PAS 68:2013 V/7500 (N3)/48
- IWA 14-1:2013 V/7200 [N3C]/48

	ASTM	PAS 68	IWA:14
TALOS C730	7,2 t – 48 km/h • 16.000 lb – 30 mph	7,5 t – 48 km/h • 16.000 lb – 30 mph	7,2 t – 48 km/h • 16.000 lb – 30 mph
K4	6.800 kg – 50 km/h • 15.000 lb – 30 mph	6.800 kg – 48 km/h • 15.000 lb – 30 mph	6.800 kg – 48 km/h • 15.000 lb – 30 mph
TALOS M50	7,2 t – 80 km/h • 16.000 lb – 30 mph	7,5 t – 80 km/h • 16.000 lb – 30 mph	7,2 t – 80 km/h • 16.000 lb – 30 mph
K12	6.800 kg – 80 km/h • 15.000 lb – 30 mph	6.800 kg – 80 km/h • 15.000 lb – 30 mph	6.800 kg – 80 km/h • 15.000 lb – 30 mph





STRABUC 930 OPINAT an automatic bollard approved by the Ministry of Transport of Italy, Road Transport Department, General Directorate, (D.D. 25477 of 09.08.2006).

SOIL PERMEABILITY

Before installing the bollards, check the type of soil and above all its permeability. Practical Test: it is advisable that an excavation in the ground and a suitable drainage bottom be provided, and check that the water is able to flow out adequately and in a short time (50 liters / 13,2 gal of water must escape in no more than 30/40 minutes). Otherwise it is useful to have the water conveyed into a separate tank and in case make all necessary arrangements for an electric pump.



MAINTENANCE

Fadini automatic and semiautomatic bollards do not require any particular maintenance, as they are designed and built following high quality standards and for intensive and prolonged use. However, it is recommended that periodic inspections are carried out on a time schedule as general maintenance of the bollard, depending on the characteristics and type of installation. For further information about maintenance, always refer to the instructions manual supplied with the bollard.



If necessary, for all Fadini bollards, always use original spare parts, available and guaranteed over time.



PROTECTION

All of the bollards are equipped with a manual release device allowing for the lowering of the cylinder in case of an emergency by means of a spanner. It is advisable that the installation area be adequately protected by specific accessories, such as loop detectors, photocells, warning signs, warning beepers, etc. E.A.R. 35 is such a device that allows for the bollard to lower and clear the gateway to rescue teams when their bitonal sirens are on. The bollards that are fitted with a solenoid valve lower automatically in case the electric power supply fails or is disconnected. The bollards can be controlled by several kinds of devices: remote controls, key-switches, transponders, etc.

PERFORMANCE

The data of each bollard are merely indicative, as they can be affected by various environmental conditions, compaction indexes, soil permeability coefficients and types of concrete. The maximum frequency of use as indicated (cycles/day) refers to optimal installations in ideal environmental conditions.

TALOS C730

NEW

Automatic bollard for perimeter protection against terrorist attacks. On Jan 9th, 2020 at AISICO S.r.l. Test Lab, TALOS C730 was tested to stop a 7.5-ton truck travelling at 48 km/h.

Performance classifications: K4 / M30 / C730

Certificates:

ASTM F2656-18A C730

PAS 68:2013 V/7500 (N3)/48

IWA 14-1:2013 V/7200 [N3C]/48



TALOS M50.EFO

NEW

Automatic bollard for perimeter protection against terrorist attacks. Fitted with EFO (Emergency Fast Operation) device allowing the bollard rising in slightly more than 1,5 seconds.

**THE UTMOST PROTECTION IN SITUATIONS
OF EXTREME NECESSITY AND EMERGENCY.**



~ 1,5 s



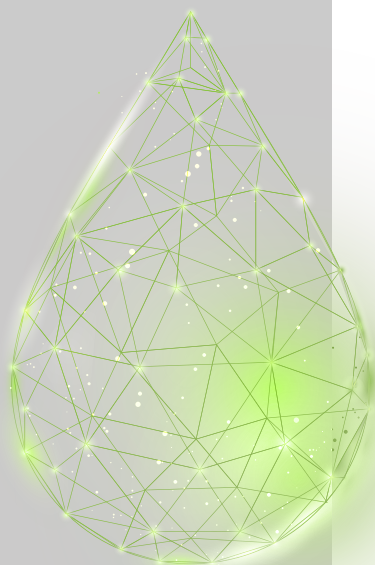
UP&DOWN DRILL

NEW

It is possible to operate the bollard manually in an emergency, for instance in case of power failure.

It is possible to raise and lower the bollard from the outside by using a screwdriver drill. Available for the models TALOS automatic.





Eco-friendly, biodegradable oil for automatic bollards. Developed in co-operation with one of the most important company in the world in the field of high performance lubricants. It provides a very good solution for all those bollards that are required to operate in temperature sensitive areas and environments.



RESIDENTIAL AND COLLECTIVE USE



INDUSTRIAL USE



URBAN APPLICATIONS



RETRACTABLE OIL-HYDRAULIC AUTOMATIC BOLLARDS

Mobile system used to restrict access to vehicles or parking; an actuator is fitted inside and it uses a system of movement transmission by means of oil under pressure.



SEMI-AUTOMATIC BOLLARDS

Mobile system, manually operated, to restrict access to vehicles or parking; an actuator is fitted inside and it uses a system of movement transmission by means of gas springs.



REMOVABLE BOLLARDS

Mobile system, possibility of removal from its seat, to restrict access in those places where traffic frequency is low or where excavation depth is limited.



SEMI-AUTOMATIC BOLLARDS FOR ELECTRIC POWER SUPPLY

Mobile system, manually operated, for electric power supply; an actuator is fitted inside and it uses a system of movement transmission by means of gas springs.



FIXED BOLLARDS

Device that can be installed directly into the ground delimiting public or private areas, preventing vehicles from accessing gateways or parking, protecting shop windows from ram raiding.



CRASH TEST

Bollard having a certified crash test.



In case of power failure the bollard lowers automatically.



Automatic bollard with EFO (Emergency fast Operation) device allowing quick rising in an emergency.



LED

The LED technology allows to save 95% of energy and duration is 50 times higher than an incandescent lamp. High luminosity and visibility. Environment friendly, being in compliance with 2005/32/CE Directive.



-40 °C

Technology allowing the operator to be used in environments with extremely low temperatures, -40 °C and lower, without risk of freezing.



HRC

In the HRC version (High Resistance Cylinder) the bollard (in raised position) stays embedded into the pit 40 cm (constraint) rather than 20 cm as in the standard version, thus ensuring a higher degree of resistance to impact and breakout.

HOW TO READ THE CATALOGUE

The catalogue is meant to be quick to consult and lead to the correct choice of the bollard type that most suits your needs.

If the name of the bollard is not known, it is advisable to see the *index* on page 1, that indicates the page where the required type of bollard is featured.

If the product code number is already known, it is advisable to see the pages 106-107 showing the *progressive index of codes*.

If you are looking for the ideal solution to your project, but you do not know either the name or the code number of the product, see the *pages guide to choice* at the beginning of each section of the catalogue.

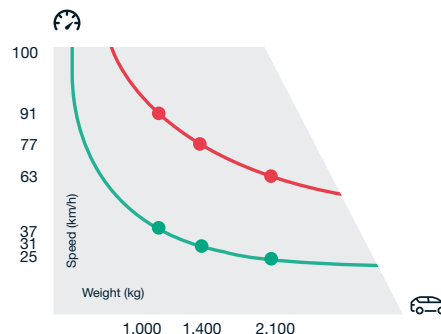
It is also possible to see the pages 102-105 and find the *installation diagrams* related to the various types of bollards.

CAPTIONS

- Ø is the diameter of the moving cylinder (post) of the bollard
- h is the height, from ground level, of the moving cylinder (post) of the bollard
- δ is the thickness of the moving cylinder (post) of the bollard

HOW TO READ THE CHARTS

- 320.000 J
Breakout resistance
- 52.000 J
Impact resistance



BREAKOUT RESISTANCE

In case of impact with a vehicle, the bollard is damaged to such an extent that functioning is jeopardized. The vehicle cannot overcome the bollard though. Service is needed.



IMPACT RESISTANCE

In case of impact with a vehicle, the bollard is damaged but it is still able to operate properly. A general inspection is advisable to assess the status of the installation.

SECURITY FOR PRIVATE AND PUBLIC AREAS

A vast choice of models having various dimensions and technical features; numerous optional accessories.

AUTOMATIC BOLLARDS

Crash tested, made to protect sensitive places where a high level of perimeter security is required against terrorist attacks.





MANUAL OPERATIONS

A vast choice of semiautomatic, removable and fixed bollards, whose design is similar to that of the automatic bollards; suitable to any architectural context.

ACCESS CONTROL

Automatic bollards to control vehicle traffic in public roads and streets. To delimit pedestrian areas and control access in areas restricted to traffic. Minimum architectural, urban and environmental impact.



AUTOMATIC BOLLARDS

retractable
oil-hydraulic





CORAL

24

VIGILO

28

TALOS 94 series

32

TALOS 96 series

36

TALOS M30

40

TALOS C730

44

TALOS M50

46

STRABUC 930 OPINAT

48





GUIDE TO CHOICE

RETRACTABLE OIL-HYDRAULIC AUTOMATIC BOLLARDS

CORAL

ø 100 mm
h 500/600/800 mm
δ 5 mm

VIGILO

ø 200 mm
h 500/600/800 mm
δ 4 mm

⊞ inox AISI 304

TALOS

94 series
ø 275 mm
h 500/600/700/800 mm
δ 4 mm

⊞ inox AISI 304
inox AISI 316

TALOS

96 series
ø 275 mm
h 500/600/700/800 mm
δ 12 mm

⊞ inox AISI 304





GUIDE TO CHOICE

RETRACTABLE OIL-HYDRAULIC AUTOMATIC BOLLARDS

TALOS M30

ø 275 mm
h 800 mm
δ 12 mm

☰ inox AISI 304



TALOS C730

ø 275 mm
h 1.000 mm
δ 12 mm

☰ inox AISI 304



TALOS M50 TALOS M50.EFO

ø 275 mm
h 1.000 mm
δ 20 mm

☰ inox AISI 304



STRABUC 930 OPINAT

ø 275 mm
h 700 mm
δ 12 mm





CORAL

FULLY RETRACTABLE BOLLARD FOR ACCESS CONTROL

TYPE

Automatic oil-hydraulic system, 230 Vac

DIMENSIONS (mm)

ø 100
h 500/600/800
δ 5



DESIGN AND MANUFACTURING

Recommended to control access to residential areas and also for commercial and industrial applications.

OIL-HYDRAULIC

Hydraulic locking device in standing position (standard) and emergency manual lowering by a release spanner supplied with the equipment. Solenoid valve (as an option) for automatic lowering in case of power failure. Tested for heavy duty service even in low and high temperature conditions.

EASY ACCESS TO THE OIL-HYDRAULIC COMPONENTS

The handy housing position of the motor pump and oil-hydraulic actuator inside the bollard allows for easy maintenance and reduces service and installation times. In this way the components are also more protected, rust and other factors of deterioration are prevented.

SIMPLE AND QUICK TO INSTALL

Reduced weight of the pit so that no particular excavation or brick works are needed. Cathaphoresis treated and polyester powder coated scratch-proof steel cylinder, head with rubber edge. Hall effect limit switch sensors, LED lights (optional).

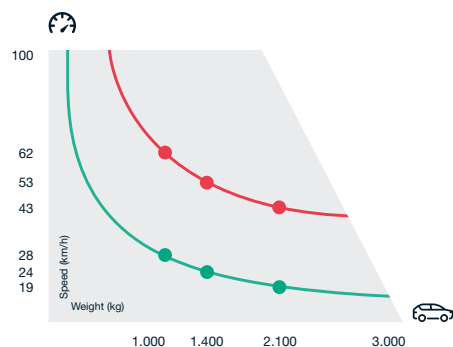
VERSATILE

A vast range of command and safety accessories allow for reliable and precise control of the installations. The electronic control unit can be set so that it can manage several bollards at a time.



● 150.000 J

● 30.000 J

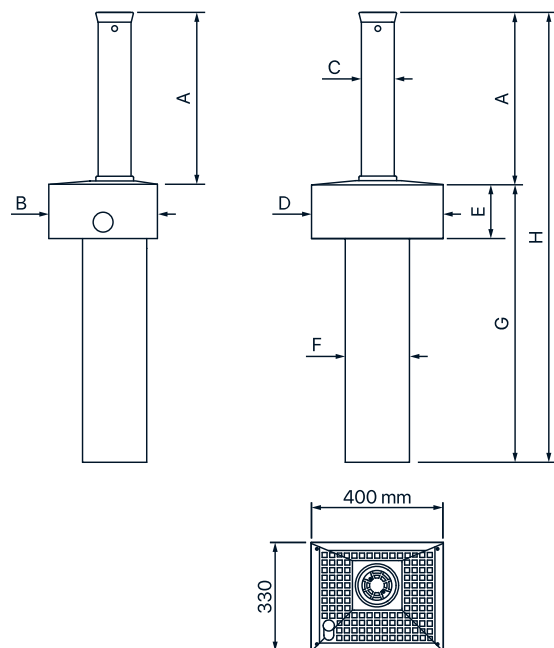


Various factors such as the compaction index, soil permeability coefficient and kind of concrete may reduce the values indicated in the diagram even significantly. Always check soil natural permeability and in case provide a rain water drain system at the base of the pit.



CORAL

OVERALL DIMENSIONS



OVERALL MEASUREMENTS (mm)

A	B	C	D	E	F	G	H
500	330	ø 100	400	170	ø 195	850	1.350
600	330	ø 100	400	170	ø 195	960	1.560
800	330	ø 100	400	170	ø 195	1.140	1.940

LIST OF SPECIFICATIONS

Fully retractable, heavy duty, automatic bollard consisting of an oil-hydraulic motor-pump unit incorporated inside the main structure and an oil-hydraulic actuator inside the moving cylinder. Suitable to meet residential, commercial and industrial requirements and urban applications. IP 67. Height from ground level can be 500, 600 or 800 mm. Scratch-proof S235JRH steel moving cylinder, thickness 5 mm and ø 100 mm, cataphoresis treated and polyester powder coated. Cylinder head made of aluminium with rubber edge, cataphoresis treated aluminium cover plate. Head and cover plate are slip-proof and tread resistant. Moving cylinder fitted with an approved, retro-reflecting, high intensity, micro-prismatic, high intensity adhesive film (h 80 mm), available with No. 4 amber-colour signalling LED lights flashing and radially fitted, 10 m electric cable. Hot-dip galvanized steel pit. Cover plate allowing access to the hydraulic release device for the manual lowering of the bollard by a special spanner in an emergency. Impact resistance 30.000 J, breakout resistance 150.000 J, static load max 1.600 kg (bollard in raised position), max 20.000 kg (in lowered position). Working temperature -40 ÷ +80 °C. Supply voltage 230 Vac ± 10%, 50 Hz. Absorbed power 330 W. Rising time ~ 4,7 s [h 500 mm from ground level], ~ 5,6 s [h 600 mm from ground level] ~ 7,5 s [h 800 mm from ground level]. Intensive use, 2.000 cycles/a day.

TECHNICAL DATA

Cylinder diameter (mm)	100
Cylinder thickness (mm)	5
Cylinder height from ground (mm)	500/600/800
Cylinder material	S235JRH steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 7016
Pit	hot dip galvanization
Working temperature (°C)	-20 ÷ +80 -40 [A]
Oil type	708L
Power supply (Vac – Hz)	230 - 50
Absorbed power (W)	330
Absorbed current (A)	1,8
Power yield (kW / HP)	0,25 / 0,33
Grade of protection IP of the hydraulic motor-pump	67
Frequency of use (cycles/day)	heavy duty / 2.000
Impact resistance (J)	30.000
Breakout resistance (J)	150.000
Maximum static load (kg)	20.000



CORAL

• standard - not available

CODE	HEIGHT (mm)	LED LIGHTS <i>[B]</i>	SOLENOID VALVE <i>[C]</i>	WEIGHT (kg)	RIISING TIME (s) SPEED [cm/s]	LOWERING TIME (s) SPEED [cm/s]
1050L	500	-	-	86	(~4,7) [11]	(~4,4) [12]
1052L	500	-	•	86	(~4,7) [11]	(~4,4) [12]
1054L	500	•	-	86	(~4,7) [11]	(~4,4) [12]
1057L	500	•	•	86	(~4,7) [11]	(~4,4) [12]
1059L	600	-	-	90	(~5,6) [11]	(~5,1) [12]
1063L	600	-	•	90	(~5,6) [11]	(~5,1) [12]
1064L	600	•	-	90	(~5,6) [11]	(~5,1) [12]
1067L	600	•	•	90	(~5,6) [11]	(~5,1) [12]
1080L	800	-	-	104	(~7,5) [11]	(~6,6) [12]
1082L	800	-	•	104	(~7,5) [11]	(~6,6) [12]
1084L	800	•	-	104	(~7,5) [11]	(~6,6) [12]
1087L	800	•	•	104	(~7,5) [11]	(~6,6) [12]



CORAL

Chart on page 26 refers:
Each item includes an automatic bollard complete with pit, cover plate, moving cylinder made of cataphoresis treated steel and polyester powder coated in RAL 7016 anthracite grey, complete with head and rubber edge, approved retro-reflecting micro-prismatic high intensity adhesive film, electrolytic galvanized steel housing assembly with an oil-hydraulic actuator and motor-pump drive unit, two limit switch sensors (bollard in standing and lowered positions), release spanner, 10 m electric cable to power supply the hydraulic motor-pump drive unit and the limit switches. LED lights and 24 Vdc solenoid valve, with 10 m electric cable, only for the items as indicated in the table.

TECHNICAL NOTES

[A]: Possibility to install the automatic bollard in very cold areas, -40 °C and even less, without freezing problems. Refer to code No. 2590L or, as an alternative for existing installations, code No. 2746L.
[B]: In the moving cylinder there are plastic plugs whose design is the same as the LED lights. The LED lights are factory fitted to the bollards exclusively for the items indicated in the chart on page 26.
[C]: The 24 Vdc voltage stabilizer code No. 9321L must be used for the power supply of the solenoid valve fitted into the bollard.

	7278L ELPRO S20	7280L ELPRO S40



VIGILO

FULLY RETRACTABLE BOLLARD FOR ACCESS CONTROL

TYPE

Automatic oil-hydraulic system, 230 Vac

DIMENSIONS (mm)

ø 200
h 500/600/800
δ 4



DESIGN AND MANUFACTURING

Recommended to control access to residential areas and also in commercial and industrial applications.

OIL-HYDRAULIC

Hydraulic locking device in standing position (standard) and emergency manual lowering by a release spanner supplied with the equipment. Solenoid valve (as an option) for automatic lowering in case of power failure. Tested for heavy duty service even in low and high temperature conditions.

EASY ACCESS TO THE OIL-HYDRAULIC COMPONENTS

The handy housing position of the motor pump and oil-hydraulic actuator inside the bollard allows for easy maintenance and reduces service and installation times. In this way the components are also more protected, rust and other factors of

deterioration are prevented.

SIMPLE AND QUICK TO INSTALL

Reduced weight of the pit so that no particular excavation or brick works are needed. Cathaphoresis treated and polyester powder coated scratch-proof steel cylinder. Available option in AISI 304 brushed stainless steel. Hall effect limit switch sensors, head with rubber edge, LED lights (optional).

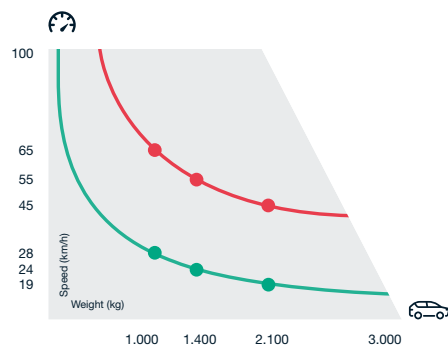
VERSATILE

A vast range of command and safety accessories allow for reliable and precise control of the installations. The electronic control unit can be set so that it can manage several bollards at a time.



● 160.000 J

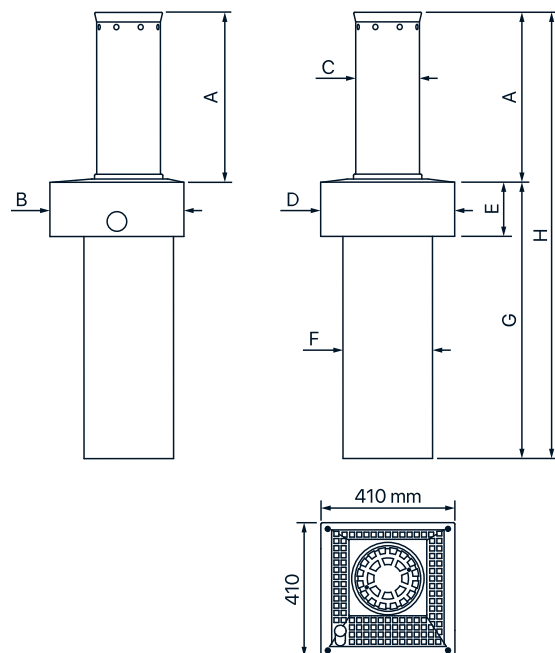
● 30.000 J



Various factors such as the compaction index, soil permeability coefficient and kind of concrete may reduce the values indicated in the diagram even significantly. Always check soil natural permeability and in case provide a rain water drain system at the base of the pit.



OVERALL DIMENSIONS



OVERALL MEASUREMENTS (mm)

A	B	C	D	E	F	G	H
500	410	ø 200	410	170	ø 275	850	1.350
600	410	ø 200	410	170	ø 275	960	1.560
800	410	ø 200	410	170	ø 275	1.140	1.940

LIST OF SPECIFICATIONS

Fully retractable, heavy duty, automatic bollard consisting of an oil-hydraulic motor-pump unit incorporated inside the main structure and an oil-hydraulic actuator inside the moving cylinder. Suitable to meet residential, commercial and industrial requirements and urban applications. IP 67. Height from ground level can be 500, 600 or 800 mm. Scratch-proof S235JRH steel moving cylinder, thickness 4 mm and ø 200 mm, cataphoresis treated and polyester powder coated, or AISI 304 brushed stainless steel option. Aluminium head with rubber edge, cataphoresis treated aluminium cover plate. Head and cover plate are slip-proof and tread resistant. Moving cylinder fitted with an approved retro-reflecting, high intensity micro-prismatic adhesive film (h 80 mm), available with No. 8 amber-colour signalling LED lights, 10 m electric cable. Hot-dip galvanized steel pit, cover plate allowing access to the hydraulic release device for the manual lowering of the bollard by a special spanner in an emergency. Impact resistance 30.000 J, breakout resistance 160.000 J, static load max 1.600 kg (bollard in raised position), max 20.000 kg (in lowered position). Working temperature -40 ÷ +80 °C. Supply voltage 230 Vac ± 10%, 50 Hz. Absorbed power 330 W. Rising time ~ 5,1 s [h 500 mm from ground level], ~ 5,9 s [h 600 mm from ground level] ~ 7,7 s [h 800 mm from ground level]. Intensive use, 2.000 cycles/a day.

TECHNICAL DATA

Cylinder diameter (mm)	200
Cylinder thickness (mm)	4
Cylinder height from ground (mm)	500/600/800
Cylinder material	S235JRH steel stainless steel AISI 304
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 7016 brushed
Pit	hot dip galvanization
Working temperature (°C)	-20 ÷ +80 -40 [A]
Oil type	708L
Power supply (Vac – Hz)	230 - 50
Absorbed power (W)	330
Absorbed current (A)	1,8
Power yield (kW / HP)	0,25 / 0,33
Grade of protection IP of the hydraulic motor-pump	67
Frequency of use (cycles/day)	heavy duty / 2.000
Impact resistance (J)	30.000
Breakout resistance (J)	160.000
Maximum static load (kg)	20.000



CODE	HEIGHT (mm)	CYLINDER	LED LIGHTS [B]	SOLENOID VALVE [C]	WEIGHT (kg)	RISING TIME (s) SPEED [cm/s]	LOWERING TIME (s) SPEED [cm/s]
2250L	500	RAL 7016	-	-	102	(~5,1) [10]	(~4,3) [12]
2252L	500	RAL 7016	-	•	122	(~5,1) [10]	(~4,3) [12]
2264L	500	RAL 7016	•	-	102	(~5,1) [10]	(~4,3) [12]
2267L	500	RAL 7016	•	•	122	(~5,1) [10]	(~4,3) [12]
2255L	500	inox AISI 304	-	-	102	(~5,1) [10]	(~4,3) [12]
2257L	500	inox AISI 304	-	•	122	(~5,1) [10]	(~4,3) [12]
2266L	500	inox AISI 304	•	-	102	(~5,1) [10]	(~4,3) [12]
2268L	500	inox AISI 304	•	•	122	(~5,1) [10]	(~4,3) [12]
2263L	600	RAL 7016	-	-	110	(~5,9) [10]	(~5,2) [12]
2273L	600	RAL 7016	-	•	130	(~5,9) [10]	(~5,2) [12]
2271L	600	RAL 7016	•	-	110	(~5,9) [10]	(~5,2) [12]
2279L	600	RAL 7016	•	•	130	(~5,9) [10]	(~5,2) [12]
2274L	600	inox AISI 304	-	-	110	(~5,9) [10]	(~5,2) [12]
2276L	600	inox AISI 304	-	•	130	(~5,9) [10]	(~5,2) [12]
2277L	600	inox AISI 304	•	-	110	(~5,9) [10]	(~5,2) [12]
2299L	600	inox AISI 304	•	•	130	(~5,9) [10]	(~5,2) [12]
2280L	800	RAL 7016	-	-	131	(~7,7) [10]	(~7,0) [12]
2282L	800	RAL 7016	-	•	151	(~7,7) [10]	(~7,0) [12]
2294L	800	RAL 7016	•	-	131	(~7,7) [10]	(~7,0) [12]
2297L	800	RAL 7016	•	•	151	(~7,7) [10]	(~7,0) [12]
2288L	800	inox AISI 304	-	-	131	(~7,7) [10]	(~7,0) [12]
2289L	800	inox AISI 304	-	•	151	(~7,7) [10]	(~7,0) [12]
2296L	800	inox AISI 304	•	-	131	(~7,7) [10]	(~7,0) [12]
2298L	800	inox AISI 304	•	•	151	(~7,7) [10]	(~7,0) [12]



VIGILO

Chart on page 30 refers:
each item includes an automatic bollard complete with pit, cover plate, moving cylinder made of cataphoresis treated steel and polyester powder coated in RAL 7016 anthracite grey, complete with head and rubber edge, approved retro-reflecting micro-prismatic high intensity adhesive film, electrolytic galvanized steel housing assembly with an oil-hydraulic actuator and motor-pump drive unit, two limit switch sensors (bollard in standing and lowered positions), release spanner, 10 m electric cable to power supply the hydraulic motor-pump drive unit and the limit switches. LED lights and 24 Vdc solenoid valve, with 10 m electric cable, only for the items as indicated in the table. The AISI 304 brushed stainless steel scratch-proof cylinder only for the item code numbers in the chart.

TECHNICAL NOTES

[A]: Possibility to install the automatic bollard in very cold areas, -40 °C and even less, without freezing problems. Refer to code No. 2590L or, as an alternative for existing installations, code No. 2746L.
[B]: In the moving cylinder there are plastic plugs whose design is the same as the LED lights. The LED lights are factory fitted to the bollards exclusively for the items indicated in the chart on page 30.
[C]: The 24 Vdc voltage stabilizer code No. 9321L must be used for the power supply of the solenoid valve fitted into the bollard.

	7278L	7280L
	ELPRO S20	ELPRO S40



TALOS 94 series

FULLY RETRACTABLE AUTOMATIC BOLLARD FOR TRAFFIC CONTROL

TYPE

Automatic oil-hydraulic system, 230 Vac

DIMENSIONS (mm)

ø 275
h 500/600/700/800
δ 4



DESIGN AND MANUFACTURING

Recommended to control access to residential areas and also for commercial, industrial and urban applications requiring a high number of operations a day.

OIL-HYDRAULIC

Hydraulic locking device in standing position (standard) and emergency manual lowering by a release spanner supplied with the equipment. Solenoid valve (as an option) for automatic lowering in case of power failure. Obstacle detector to prevent the bollard from rising when an obstacle is on it. Heating device for applications in cold climates (-40 °C).

EASY ACCESS TO THE OIL-HYDRAULIC COMPONENTS

The handy housing position of the motor pump and oil-hydraulic actuator inside the bollard allows for easy maintenance and reduces service and installation times. In this way the components

are also more protected, rust and other factors of deterioration are prevented.

STRONG

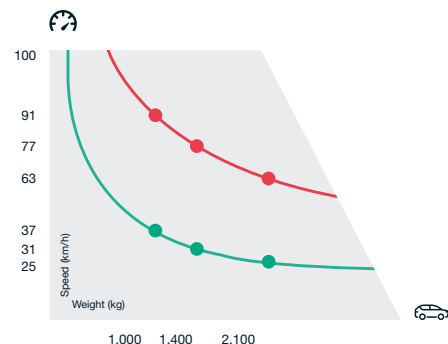
Scratch-proof cataphoresis treated and polyester powder coated steel rising cylinder. Available also in AISI 304 and AISI 316 brushed stainless steel options. HRC models (High Resistance Cylinder) for a greater resistance to breakout: 420.000 J. Connector and junction box IP 66 for cabling. Hall effect limit switch sensors, cylinder head with rubber edge and integrated LED lights.

VERSATILE

A vast range of command and safety accessories allow for reliable and precise control of the installations. Beeper to signal the movements. The electronic control unit can be set so that it can manage several bollards at a time.

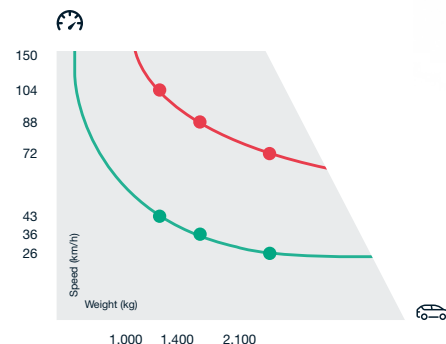


- 320.000 J
- 52.000 J



HRC

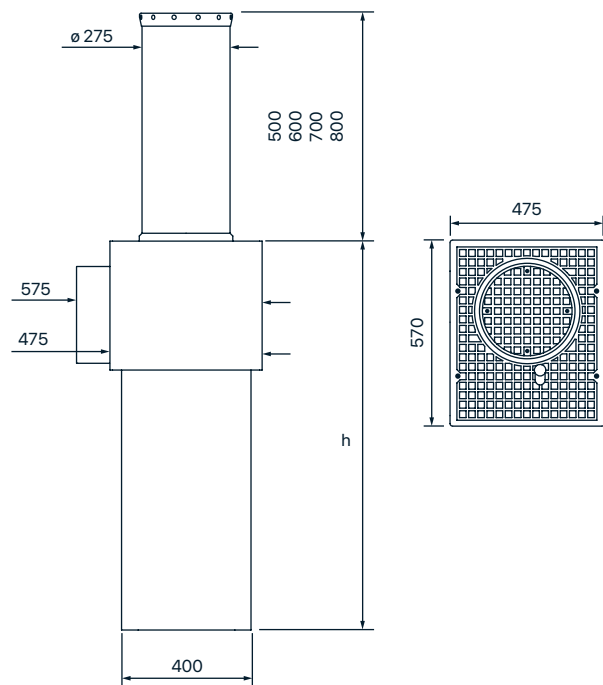
- 420.000 J
- 70.000 J



Various factors such as the compaction index, soil permeability coefficient and kind of concrete may reduce the values indicated in the diagram even significantly. Always check soil natural permeability and in case provide a rain water drain system at the base of the pit.



OVERALL DIMENSIONS



OVERALL MEASUREMENTS (mm)

HEIGHT	CONSTRAINT	h
500	200	830
	400	1.010
600	200	1.010
	400	1.210
700	200	1.010
	400	1.210
800	200	1.210
	400	1.310

TECHNICAL DATA

Cylinder diameter (mm)	275
Cylinder thickness (mm)	4
Cylinder height from ground (mm)	500/600/700/800
Cylinder material	S235JRH steel stainless steel AISI 304 stainless steel AISI 316
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 1028 brushed brushed
Pit	hot dip galvanization
Working temperature (°C)	-20 ÷ +80 (-40 with heater)
Oil type	708L
Power supply (Vac – Hz)	230 - 50
Absorbed power (W)	1.100
Absorbed current (A)	1,8 ÷ 3,5
Power yield (kW / HP)	0,25 / 0,33
Grade of protection IP/motor-pump	67
Frequency of use (cycles/day)	heavy duty / 2.000
Impact resistance (J)	52.000 70.000 - HRC
Breakout resistance (J)	320.000 420.000 - HRC
Maximum static load (kg)	20.000

LIST OF SPECIFICATIONS

Fully retractable, heavy duty, automatic bollard consisting of an oil-hydraulic motor-pump unit incorporated inside the main structure and an oil-hydraulic actuator inside the moving cylinder. Suitable to meet residential, commercial and industrial requirements and urban applications. IP 67. Height from ground level can be 500, 600, 700 or 800 mm. Scratch-proof S235JRH steel moving cylinder, thickness 4 mm and $\varnothing 275$ mm, cataphoresis treated and polyester powder coated, AISI 304 or AISI 316 brushed stainless steel options available. Cylinder head made of aluminium fitted with rubber edge and 12 amber-colour integrated LED lights. Cathaphoresis treated aluminium cover plate. Head and cover plate are slip-proof and tread resistant. Moving cylinder fitted with an approved retro-reflecting, high intensity micro-prismatic adhesive film (h 80 mm). Hot-dip galvanized steel pit. Access to the hydraulic release device for emergency manual lowering of the bollard by a special spanner with a triangular socket. Impact resistance 52.000 J [HRC: 70.000 J], breakout resistance 320.000 J [HRC: 420.000 J], static load max 1.500 kg (bollard in raised position), max 20.000 kg (in lowered position). Working temperature -40 ÷ +80 °C. Supply voltage 230 Vac $\pm$ 10%, 50 Hz. Absorbed power 1.100 W. Rising time ~ 2,14 s [h 500 mm from ground level], ~ 2,57 s [h 600 mm from ground level], ~ 3,0 s [h 700 mm from ground level], ~ 3,42 s [h 800 mm from ground level]. Intensive use 2.000 cycles/a day.



TALOS 94 series

• standard - not available

CODE	HEIGHT (mm)	CONSTRAINT (mm)	CYLINDER	WEIGHT (kg)	RISE TIME (s) SPEED [cm/s]	LOWERING TIME (s) SPEED [cm/s]
9450L	500	200	RAL 1028	196	(~2,14) [23]	(~2,00) [25]
9450HL	500	 400	RAL 1028	202	(~2,14) [23]	(~2,00) [25]
9450A4L	500	200	inox AISI 304	196	(~2,14) [23]	(~2,00) [25]
9450A4HL	500	 400	inox AISI 304	202	(~2,14) [23]	(~2,00) [25]
9450A6L	500	200	inox AISI 316	196	(~2,14) [23]	(~2,00) [25]
9450A6HL	500	 400	inox AISI 316	202	(~2,14) [23]	(~2,00) [25]
9460L	600	200	RAL 1028	226	(~2,57) [23]	(~2,40) [25]
9460HL	600	 400	RAL 1028	234	(~2,57) [23]	(~2,40) [25]
9460A4L	600	200	inox AISI 304	226	(~2,57) [23]	(~2,40) [25]
9460A4HL	600	 400	inox AISI 304	235	(~2,57) [23]	(~2,40) [25]
9460A6L	600	200	inox AISI 316	226	(~2,57) [23]	(~2,40) [25]
9460A6HL	600	 400	inox AISI 316	226	(~2,57) [23]	(~2,40) [25]
9470L	700	200	RAL 1028	232	(~3,00) [23]	(~2,80) [25]
9470HL	700	 400	RAL 1028	240	(~3,00) [23]	(~2,80) [25]
9470A4L	700	200	inox AISI 304	232	(~3,00) [23]	(~2,80) [25]
9470A4HL	700	 400	inox AISI 304	242	(~3,00) [23]	(~2,80) [25]
9470A6L	700	200	inox AISI 316	232	(~3,00) [23]	(~2,80) [25]
9470A6HL	700	 400	inox AISI 316	234	(~3,00) [23]	(~2,80) [25]
9480L	800	200	RAL 1028	240	(~3,42) [23]	(~3,20) [25]
9480HL	800	 400	RAL 1028	246	(~3,42) [23]	(~3,20) [25]
9480A4L	800	200	inox AISI 304	245	(~3,42) [23]	(~3,20) [25]
9480A4HL	800	 400	inox AISI 304	248	(~3,42) [23]	(~3,20) [25]
9480A6L	800	200	inox AISI 316	240	(~3,42) [23]	(~3,20) [25]
9480A6HL	800	 400	inox AISI 316	246	(~3,42) [23]	(~3,20) [25]



TALOS 94 series

Chart on page 34 refers:
each item includes an automatic bollard complete with pit, cover plate, steel moving cylinder, cataphoresis treated and polyester powder coated in RAL 1028 melon yellow, with head and rubber edge and 12 integrated amber-colour LED lights, approved retro-reflecting micro-prismatic high intensity adhesive film, electrolytic galvanized steel housing assembly with an oil-hydraulic actuator and motor-pump drive unit, two limit switch sensors (bollard in standing and lowered positions), release spanner with triangular socket. The cylinder type HRC or the AISI 304 and AISI 316 brushed stainless steel scratch-proof cylinder options only with the specific item code numbers as indicated in the table. The power supply cable is not included, it is though available in the section of the catalogue dedicated to the bollard accessories. The power supply cable is not included, it is though available in the section of the catalogue dedicated to the bollard accessories.

	7278L	7280L
	ELPRO S20	ELPRO S40



TALOS 96 series

FULLY RETRACTABLE AUTOMATIC BOLLARD FOR TRAFFIC CONTROL

TYPE

Automatic oil-hydraulic system, 230 Vac

DIMENSIONS (mm)

ø 275
h 500/600/700/800
δ 12



ARMoured SECURITY

Constructed to protect places where a high level of breakout resistance against ram-raids is demanded and many operations a day are required, such as commercial centers, banks, car showrooms, etc. Ideal to control access in residential, commercial and industrial areas.

OIL-HYDRAULIC

Hydraulic locking device in standing position (standard) and emergency manual lowering by a release spanner supplied with the equipment. Solenoid valve (as an option) for automatic lowering in case of power failure. Obstacle detector to prevent the bollard from rising when an obstacle is on it. Heating device for applications in cold climates (-40 °C).

EASY ACCESS TO THE OIL-HYDRAULIC COMPONENTS

The handy housing position of the motor pump and oil-hydraulic actuator inside the bollard allows for easy maintenance and reduces service and

installation times. In this way the components are also more protected, rust and other factors of deterioration are prevented.

STRONG

Scratch-proof cataphoresis treated and polyester powder coated steel rising cylinder. Available also with an AISI 304 brushed stainless steel cover sleeve, thickness 12/10. HRC models (High Resistance Cylinder) for a greater resistance to breakout: 550.000 J. Connector and junction box IP 66 for cabling. Hall effect limit switch sensors, cylinder head with rubber edge and integrated LED lights.

VERSATILE

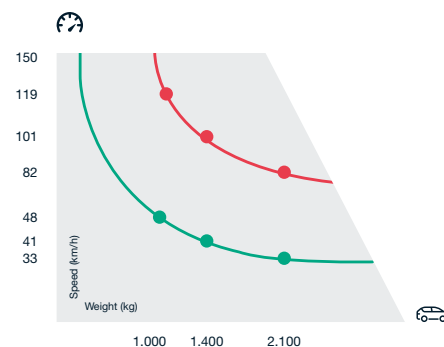
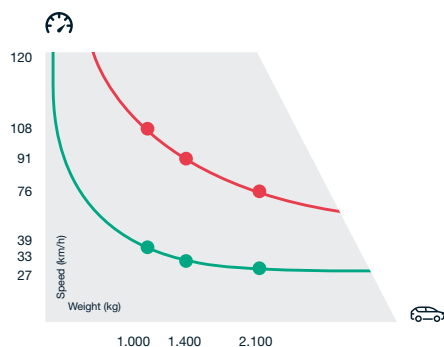
A vast range of command and safety accessories allow for reliable and precise control of the installations. Beeper to signal the movements. The electronic control unit can be set so that it can manage several bollards at a time.



HRC

● 550.000 J
● 90.000 J

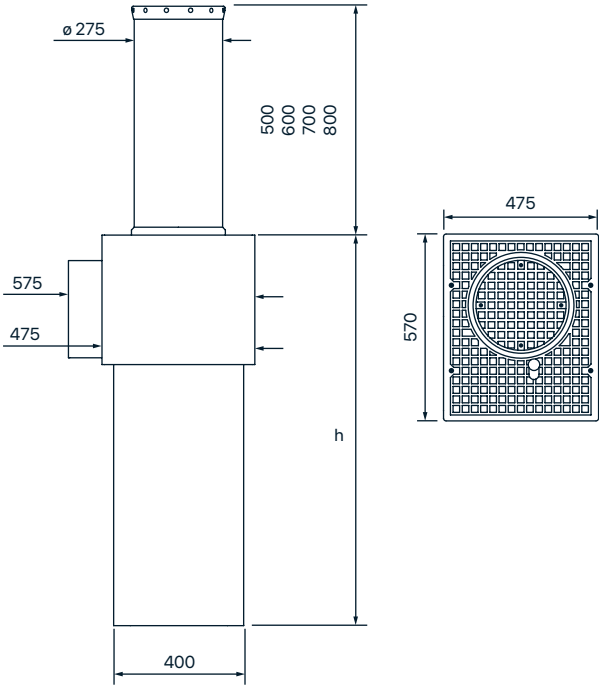
● 450.000 J
● 60.000 J



Various factors such as the compaction index, soil permeability coefficient and kind of concrete may reduce the values indicated in the diagram even significantly. Always check soil natural permeability and in case provide a rain water drain system at the base of the pit.



OVERALL DIMENSIONS



OVERALL MEASUREMENTS (mm)

HEIGHT	CONSTRAINT	h
500	200	830
	400	1.010
600	200	1.010
	400	1.210
700	200	1.010
	400	1.210
800	200	1.210
	400	1.310

TECHNICAL DATA

Cylinder diameter (mm)	275
Cylinder thickness (mm)	12
Cylinder height from ground (mm)	500/600/700/800
Cylinder material	S355J2H steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 7016 AISI 304 brushed SS steel sleeve
Pit	hot dip galvanization
Working temperature (°C)	-20 ÷ +80 (-40 with heater)
Oil type	708L
Power supply (Vac – Hz)	230 - 50
Absorbed power (W)	1.100
Absorbed current (A)	1,8
Power yield (kW / HP)	0,25 / 0,33
Grade of protection IP/motor-pump	67
Frequency of use (cycles/day)	heavy duty / 2.000
Impact resistance (J)	60.000 90.000 - HRC
Breakout resistance (J)	450.000 550.000 - HRC
Maximum static load (kg)	20.000

LIST OF SPECIFICATIONS

Fully retractable, heavy duty, automatic bollard consisting of an oil-hydraulic motor-pump unit incorporated inside the main structure and an oil-hydraulic actuator inside the moving cylinder. Suitable to meet residential, commercial and industrial applications and urban applications. IP 67. Height from ground level can be 500, 600, 700 or 800 mm. Scratch-proof S355J2H steel moving cylinder, thickness 12 mm and ø 275 mm, cataphoresis treated and polyester powder coated (an AISI 304 brushed stainless steel cover sleeve available). Cylinder head made of aluminium fitted with rubber edge and 12 amber-colour integrated LED lights. Cataphoresis treated aluminium cover plate. Head and cover plate are slip-proof and tread resistant. Moving cylinder fitted with an approved retro-reflecting, high intensity micro-prismatic adhesive film (h 80 mm). Hot-dip galvanized steel pit. Access to the hydraulic release device for emergency manual lowering of the bollard by a special spanner with a triangular socket. Impact resistance 60.000 J [HRC: 90.000 J], breakout resistance 450.000 J [HRC: 550.000 J], static load max 1.500 kg (bollard in raised position), max 20.000 kg (lowered). Working temperature -40 ÷ +80 °C. Supply voltage 230 Vac ± 10%, 50 Hz. Absorbed power 1.100 W. Rising time ~ 2,80 s [h 500 mm from ground level], ~ 3,40 s [h 600 mm from ground level], ~ 4,0 s [h 700 mm from ground level], ~ 4,50 s [h 800 mm from ground level]. Intensive use 2.000 cycles/a day.



TALOS 96 series

• standard - not available

CODE	HEIGHT (mm)	CONSTRAINT (mm)	WEIGHT (kg)	RISING TIME (s) SPEED [cm/s]	LOWERING TIME (s) SPEED [cm/s]
9651L	500	200	234	(~2,80) [18]	(~2,14) [23]
9651HL	500	 400	252	(~2,80) [18]	(~2,14) [23]
9661L	600	200	258	(~3,40) [18]	(~2,57) [23]
9661HL	600	 400	266	(~3,40) [18]	(~2,57) [23]
9671L	700	200	263	(~4,00) [18]	(~3,00) [23]
9671HL	700	 400	275	(~4,00) [18]	(~3,00) [23]
9681L	800	200	288	(~4,50) [18]	(~3,42) [23]
9681HL	800	 400	291	(~4,50) [18]	(~3,42) [23]



TALOS 96 series

Chart on page 38 refers:
each item includes an automatic bollard complete with pit, cover plate, steel moving cylinder, cataphoresis treated and polyester powder coated in RAL 7016 anthracite grey, head and rubber edge and 12 integrated amber-colour LED lights, approved retro-reflecting micro-prismatic high intensity adhesive film, electrolytic galvanized steel housing assembly with an oil-hydraulic actuator and motor-pump drive unit, two limit switch sensors (bollard in standing and lowered positions), release spanner with triangular socket. The cylinder type HRC only with the specific item code numbers as indicated in the table. The power supply cable is not included, it is though available in the section of the catalogue dedicated to the bollard accessories.

	7278L ELPRO S20	7280L ELPRO S40



TALOS M30

AUTOMATIC BOLLARD FOR PERIMETER SECURITY

TYPE

Automatic oil-hydraulic system, 230 Vac

DIMENSIONS (mm)

ø 275
h 800
δ 12



PERIMETER SECURITY

Intended for traffic control and protection of those sensitive areas where a high level of perimeter security is needed. Designed on the basis of the ASTM F2656-07, PAS 68:2013, IWA 14-1 specifications.

OIL-HYDRAULIC

Hydraulic locking device in standing position (standard) and emergency manual lowering by a release spanner supplied with the equipment. Burglar-proof cover plate preventing the release system from being accessed and thus the bollard from being lowered.

STRONG

Scratch-proof cathaphoresis treated and polyester powder coated steel rising cylinder. Available also with an AISI 304 stainless steel cover sleeve, thickness 12/10. Breakout resistance: 700.000 J. Connector and junction box IP 66 for cabling. Hall effect limit switch sensors, cylinder head with rubber edge and incorporated LED lights.

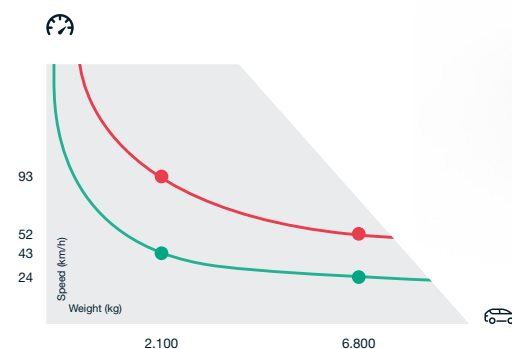
LIST OF SPECIFICATIONS

Fully retractable, heavy duty, automatic bollard consisting of an oil-hydraulic motor-pump unit incorporated inside the main structure and an oil-hydraulic actuator inside the moving cylinder. Suitable for the protection of sensitive areas where a high level of perimeter security is needed, designed to withstand a vehicle of 6.8 t at a speed of 50 km/h. IP 67. Height is 800 mm from ground level. Scratch-proof S355J2H steel cylinder, thickness 12 mm and ø 275 mm, cathaphoresis treated and polyester powder coated (an AISI 304 brushed stainless steel cover sleeve also available). Cylinder head made of aluminium fitted with rubber edge and 12 amber-colour integrated LED lights, burglar-proof cover plate made of cathaphoresis treated aluminium. Head and cover plate are slip-proof and tread resistant. Moving cylinder fitted with an approved retro-reflecting, high intensity micro-prismatic adhesive film (h 80 mm). Hot-dip galvanized steel pit. Release spanner with a triangular socket allowing manual lowering in an emergency. Impact resistance 150.000 J, breakout resistance 700.000 J, static load max 1.500 kg (bollards in raised position), max 20.000 kg (lowered). Working temperature -40 ÷ +80 °C. Supply voltage 230 Vac ± 10%, 50 Hz. Absorbed power 1.100 W. Rising time ~ 4,50 s. Intensive use 2.000 cycles/a day.

VERSATILE

A vast range of command and safety accessories allow for reliable and precise control of the installations. Beeper to signal the movements. Heating device for installations in very low temperature conditions -40 °C where snow and ice are frequent. The electronic control unit can be set so that it can manage several bollards at a time.

- 700.000 J
- 150.000 J

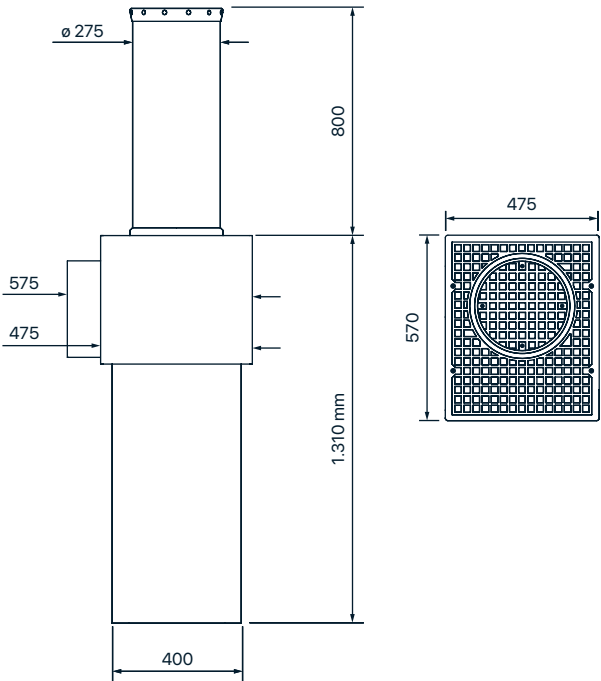


Various factors such as the compaction index, soil permeability coefficient and kind of concrete may reduce the values indicated in the diagram even significantly. Always check soil natural permeability and in case provide a rain water drain system at the base of the pit.



TALOS M30

OVERALL DIMENSIONS



TECHNICAL DATA

Cylinder diameter (mm)	275
Cylinder thickness (mm)	12
Cylinder height from ground (mm)	800
Cylinder material	S355J2H steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 7016 AISI 304 brushed SS steel sleeve
Pit	hot dip galvanization
Rising time (s) [cm/s]	~4,50 [18]
Lowering time (s) [cm/s]	~3,42 [23]
Working temperature (°C)	-20 ÷ +80 (-40 with heater)
Oil type	708L
Power supply (Vac – Hz)	230 - 50
Absorbed power (W)	1.100
Absorbed current (A)	1,8 ÷ 3.5
Grade of protection IP/motor-pump	67
Frequency of use (cycles/day)	heavy duty / 2.000
Impact resistance (J)	150.000
Breakout resistance (J)	700.000
Maximum static load (kg)	20.000

CODE	HEIGHT (mm)	CONSTRAINT (mm)	WEIGHT (kg)	RISING TIME (s) SPEED [cm/s]	LOWERING TIME (s) SPEED [cm/s]
9682L	800	 400	291	(~4,50) [18]	(~3,42) [23]

Each item includes an automatic bollard complete with pit, moving cylinder made of cataphoresis treated steel, polyester powder coated in RAL 7016 anthracite grey, complete with head and rubber edge and No. 12 amber-colour integrated LED lights, approved retro-reflecting high intensity micro-prismatic adhesive film, electrolytic galvanized steel housing assembly with an oil-hydraulic actuator and drive unit, two limit switch sensors (bollard in standing and lowered positions), burglar-proof cover plate and release spanner with triangular socket. The power supply cable is not included, it is though available in the section of the catalogue dedicated to the bollard accessories.



7278L
ELPRO S20

7280L
ELPRO S40







TALOS C730

AUTOMATIC BOLLARD FOR PERIMETER SECURITY

TYPE

Automatic oil-hydraulic system, 230 Vac

DIMENSIONS (mm)

ø 275
h 1.000
δ 12

PERIMETER SECURITY

Intended for traffic control and protection of those sensitive areas (military stations, police headquarters, airports, etc.), where a high level of perimeter security is needed against terrorist attacks. Designed and tested to withstand, in a single bollard configuration, a vehicle of 7,5 t at a speed of 48 km/h.

OIL-HYDRAULIC

Hydraulic locking device in standing position (standard) and emergency manual lowering by a release spanner supplied with the equipment. Burglar-proof cover plate preventing the release system from being accessed and thus the bollard from being lowered.

STRONG

Scratch-proof cataphoresis treated and polyester powder coated steel rising cylinder. Available

LIST OF SPECIFICATIONS

Fully retractable, heavy duty, automatic bollard consisting of an oil-hydraulic motor-pump unit incorporated inside the main structure and an oil-hydraulic actuator inside the moving cylinder. Suitable for the protection of sensitive areas where a high level of perimeter security is needed. Tested and certified in compliance with ASTM F2656-18A C730, PAS 68:2013 V/7500 (N3)/48 and IWA 14-1:2013 V/7200 [N3C]/48 Norms. IP 67 and designed to withstand, in a single bollard configuration, a vehicle of 7,5 t at a speed of 48 km/h. Height from ground level is 1.000 mm. Scratch-proof S355J2H steel cylinder, thickness 12 mm and ø 275 mm, cataphoresis treated and polyester powder coated (an AISI 304 brushed stainless steel cover sleeve available). Cylinder head made of aluminium fitted with rubber edge and 12 amber-colour integrated LED lights, burglar-proof cataphoresis treated aluminium cover plate. Head and cover plate are slip-proof and tread resistant. Moving cylinder fitted with an approved retro-reflecting, high intensity micro-prismatic adhesive film (h 80 mm). Hot-dip galvanized steel pit. Release spanner with a triangular socket allowing manual lowering in an emergency. Impact resistance 250.000 J, breakout resistance 750.000 J, static load max 1.500 kg (bollards in raised position), max 20.000 kg (lowered). Working temperature -40 ÷ +80 °C. Supply voltage 230 Vac ± 10%, 50 Hz. Absorbed power 1.850 W. Rising time ~ 5,00 s. Intensive use 2.000 cycles/a day.

also with an AISI 304 stainless steel cover sleeve, thickness 12/10. Breakout resistance: 750.000 J. Connector and junction box IP 66 for cabling. Hall effect limit switch sensors, cylinder head with rubber edge and incorporated LED lights.

VERSATILE

A vast range of command and safety accessories allow for reliable and precise control of the installations. Beeper to signal the movements. Heating device for installations in very low temperature conditions (-40 °C) where snow and ice are frequent. The electronic control unit can be set so that it can manage several bollards at a time.

CERTIFICATES

Classes of performance: K4 / M30 / C730

Certified:

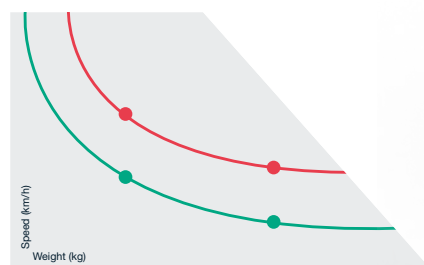
ASTM F2656-18A C730

PAS 68:2013 V/7500 (N3)/48

IWA 14-1:2013 V/7200 [N3C]/48

● 750.000 J

● 250.000 J

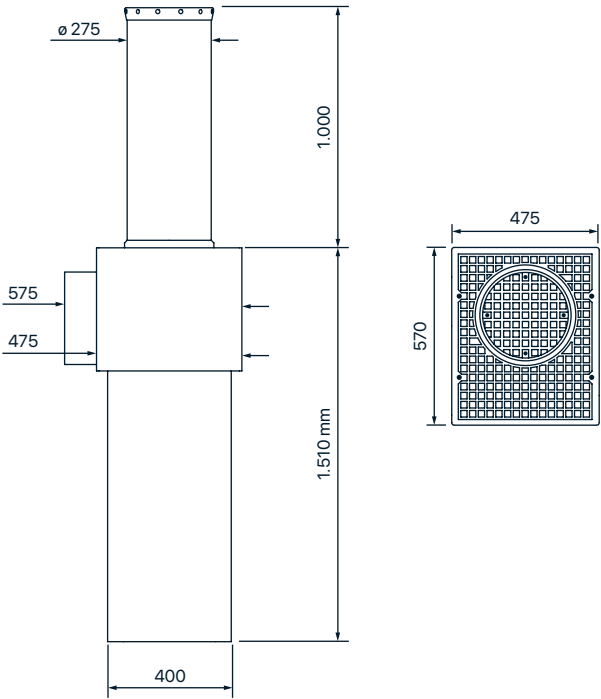


Various factors such as the compaction index, soil permeability coefficient and kind of concrete may reduce the values indicated in the diagram even significantly. Always check soil natural permeability and in case provide a rain water drain system at the base of the pit.



TALOS C730

OVERALL DIMENSIONS



TECHNICAL DATA

Cylinder diameter (mm)	275
Cylinder thickness (mm)	12
Cylinder height from ground (mm)	1.000
Cylinder material	S355J2H steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 7016 AISI 304 brushed SS steel sleeve
Pit	hot dip galvanization
Rising time (s) [cm/s]	~5,00 [20]
Lowering time (s) [cm/s]	~4,20 [23]
Working temperature (°C)	-20 ÷ +80 (-40 with heater)
Oil type	708L
Power supply (Vac – Hz)	230 - 50
Absorbed power (W)	1.850
Absorbed current (A)	5
Grade of protection IP/motor-pump	67
Frequency of use (cycles/day)	heavy duty / 2.000
Impact resistance (J)	250.000
Breakout resistance (J)	750.000
Maximum static load (kg)	20.000

CODE	HEIGHT (mm)	CONSTRAINT (mm)	WEIGHT (kg)	RISING TIME (s) SPEED [cm/s]	LOWERING TIME (s) SPEED [cm/s]
9685L	1.000	 400	360	(~5,00) [20]	(~4,20) [23]

Each item includes an automatic bollard complete with pit, moving cylinder made of cataphoresis treated steel, polyester powder coated in RAL 7016 anthracite grey, complete with head and rubber edge and No. 12 amber-colour integrated LED lights, approved retro-reflecting high intensity micro-prismatic adhesive film, electrolytic galvanized steel housing assembly with an oil-hydraulic actuator and drive unit, two limit switch sensors (bollard in standing and lowered positions), burglar-proof cover plate and release spanner with triangular socket. The power supply cable is not included, it is though available in the section of the catalogue dedicated to the bollard accessories.



7278L
ELPRO S20

7280L
ELPRO S40



TALOS M50

AUTOMATIC BOLLARD FOR PERIMETER SECURITY

TYPE

Automatic oil-hydraulic system, 230 Vac

PERIMETER SECURITY

Intended for traffic control and protection of those sensitive areas (embassies, military bases, government palaces, banks, etc.), where a high level of perimeter security is needed against terrorist attacks. Designed and tested to safely withstand, in a single bollard configuration, a vehicle of 7,5 t at a speed of 80 km/h and stay intact and fully operative. EFO (Emergency Fast Operation) version also available for quick rising in an emergency.

OIL-HYDRAULIC

Hydraulic locking device in standing position (standard) and emergency manual lowering by a release spanner supplied with the equipment. Drive unit with two lobe pumps. Burglar-proof cover plate preventing the release system from being accessed and thus the bollard from being lowered.

LIST OF SPECIFICATIONS

Fully retractable, heavy duty, automatic bollard consisting of an oil-hydraulic drive unit incorporated inside the main structure and an oil-hydraulic actuator inside the moving cylinder. Suitable for the protection of sensitive areas where a high level of perimeter security is needed. Certified and tested as per ASTM F2656-15 C750, PAS 68:2013 V/7500 (N3)/80 and IWA 14-1:2013 V/7200 [N3C]/80 norms. Designed to stop, in a single bollard configuration, a vehicle of 7,5 t at a speed of 80 km/h. IP 67. Height from ground level 1.000 mm. Scratch-proof S355K2H steel rising cylinder, thickness 20 mm and ϕ 275 mm, cataphoresis treated and polyester powder coated (an AISI 304 brushed stainless steel cover sleeve also available). Cylinder head made of aluminium fitted with rubber edge and 12 amber-colour integrated LED lights, burglar-proof cataphoresis treated aluminium cover plate. Head and cover plate are slip-proof and tread resistant. Moving cylinder fitted with an approved retro-reflecting, high intensity micro-prismatic adhesive film (h 80 mm). Hot-dip galvanized steel pit. EFO (Emergency Fast Operation) version available for quick rising in an emergency. Impact resistance 700.000 J, breakout resistance 2.000.000 J, static load max 2.800 kg (cylinder in raised position), max 20.000 kg (lowered). Working temperature $-40 \div +80$ °C. Supply voltage 230 Vac $\pm$ 10%, 50 Hz. Absorbed power 3.100 W. Rising time ~ 5 s. Intensive use 2.000 cycles/a day.

DIMENSIONS (mm)

ϕ 275
h 1.000
 δ 20

STRONG

Scratch-proof cataphoresis treated and polyester powder coated steel rising cylinder. Available also with an AISI 304 stainless steel cover sleeve, thickness 12/10. Breakout resistance: 2.000.000 J. Connector and junction box IP 66 for cabling. Hall effect limit switch sensors, cylinder head with rubber edge and incorporated LED lights.

VERSATILE

A vast range of command and safety accessories allow for reliable and precise control of the installations. Beeper to signal the movements. Heating device for installations in very low temperature conditions -40 °C, where snow and ice are frequent. The electronic control unit can be set so that it can manage several bollards at a time.

CERTIFICATES

Classes of performance: K12 / M50 / C750

Certified:

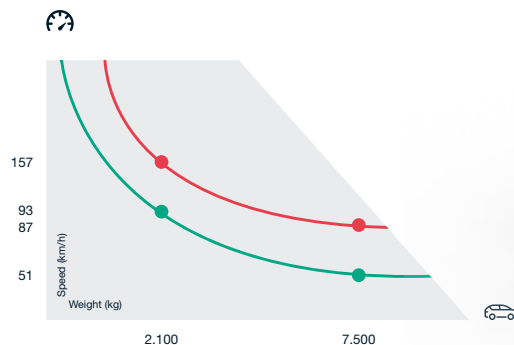
ASTM F2656-15 C750

PAS 68:2013 V/7500 (N3)/80

IWA 14-1:2013 V/7200 [N3C]/80

● 2.000.000 J

● 700.000 J

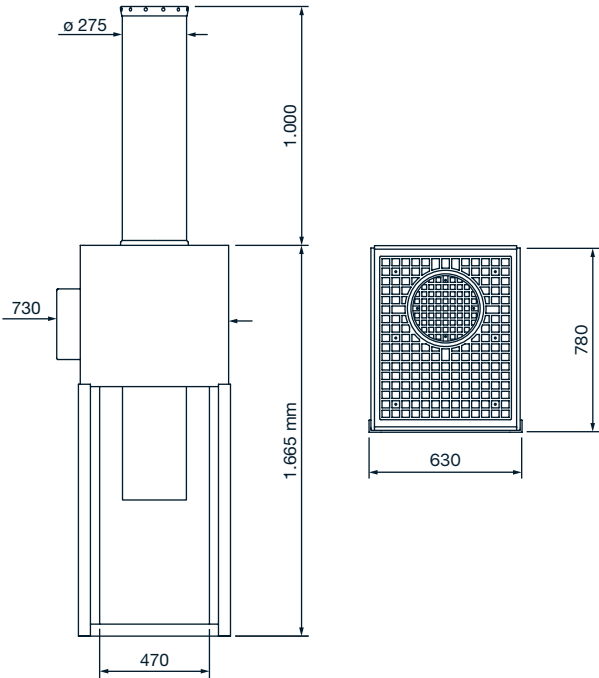


Various factors such as the compaction index, soil permeability coefficient and kind of concrete may reduce the values indicated in the diagram even significantly. Always check soil natural permeability and in case provide a rain water drain system at the base of the pit.



TALOS M50

OVERALL DIMENSIONS



TECHNICAL DATA

Cylinder diameter (mm)	275
Cylinder thickness (mm)	20
Cylinder height from ground (mm)	1.000
Cylinder material	S355K2H steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 7016 AISI 304 brushed SS steel sleeve
Pit	hot dip galvanization
Rising time (s) [cm/s]	~5,00 [20]
Lowering time (s) [cm/s]	~3,20 [31]
Working temperature (°C)	-20 ÷ +80 (-40 with heater)
Oil type	708L
Power supply (Vac – Hz)	230 - 50
Absorbed power (W)	3.100 (1.550 + 1.550)
Absorbed current (A)	10 ÷ 13
Grade of protection IP/motor-pump	67
Frequency of use (cycles/day)	heavy duty / 2.000
Impact resistance (J)	700.000
Breakout resistance (J)	2.000.000
Maximum static load (kg)	20.000

CODE	MODEL	EFO	HEIGHT (mm)	CONSTRAINT (mm)	WEIGHT (kg)	• standard	- not available
						• standard	- not available
9690L	TALOS M50	-	1.000	500	770	(~5,00) [20]	(~3,2) [31]
9689L	TALOS M50.EFO	•	1.000	500	770	(~1,5) [50]	(~3,2) [31]

Each item includes an automatic bollard complete with pit, moving cylinder made of cataphoresis treated steel, polyester powder coated in RAL 7016 anthracite grey, complete with head and rubber edge and No. 12 amber-colour integrated LED lights, approved retro-reflecting high intensity micro-prismatic adhesive film, electrolytic galvanized steel housing assembly with an oil-hydraulic actuator and drive unit, two limit switch sensors (bollard in standing and lowered positions), burglar-proof cover plate and release spanner with triangular socket. The power supply cable is not included, it is though available in the section of the catalogue dedicated to the bollard accessories.



9097L

ELPRO S50-T1

9098L

ELPRO S50-T2

9099L

ELPRO S50-T3

9101L

ELPRO S50-T4

9093L

ELPRO S50-T1.EFO

9094L

ELPRO S50-T2.EFO



STRABUC 930 OPINAT

FULLY RETRACTABLE AUTOMATIC BOLLARD FOR TRAFFIC CONTROL

TYPE

automatic oil-hydraulic system, 230 Vac

DIMENSIONS (mm)

ø 275
h 700
δ 12

URBAN APPLICATIONS AND SECURITY

Designed to control vehicle traffic and access to streets, squares, historic centres, lanes, Limited Traffic Zones, pedestrian areas or municipal parking areas. Minimum architectural, urban and environmental impact.

OIL-HYDRAULIC

Drive unit and actuator integrated inside the bollard structure and cylinder. Solenoid valve for lowering within a time of 5 s in case of electric power failure.

STRONG

Dimensions: ø 275 x h 700 mm (from ground level). Made of steel with polyester powder coated finishing, 9 incorporated LED lights, slip-proof, tread resistant and cataphoresis treated aluminium head with rubber edge. Mechanical limit switches, release spanner supplied with the equipment. Tested for heavy duty applications.

LIST OF SPECIFICATIONS

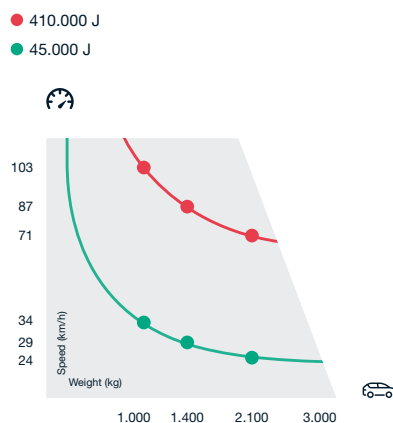
Fully retractable automatic bollard for heavy duty applications, approved by Decree D.D. 25477 dated 09.08.2006 of the Ministry of Transport. Suitable for installations in public areas, for perimeter applications in squares and historic city centers, for access control to lanes, Limited Traffic Zones, pedestrian areas or municipal parking areas. A bollard consisting of an oil-hydraulic motor-pump unit incorporated inside the main structure and an oil-hydraulic actuator inside the moving cylinder. IP 67. Height from ground is 700 mm. Cylinder made of S355J2H steel, thickness 12 mm and ø 275 mm, cataphoresis treated and polyester powder coated. Aluminium cylinder head with rubber edge. Cataphoresis treated aluminium collar. Head and collar are slip-proof and tread resistant. Moving cylinder fitted with an approved retro-reflecting, high intensity micro-prismatic adhesive film (h 80 mm), and 9 radially fitted amber-colour LED lights. Spontaneous descent of the bollard in case of power failure. Beeper signalling the movements of the cylinder. Hot dip galvanized, steel ground casing. Head with access to the hydraulic release device allowing the manual lowering in an emergency by means of a spanner with triangular socket. Impact resistance 45.000 J, breakout resistance 410.000 J, static load max 1.600 kg bollard in raised position, max 20.000 kg in lowered position. Working temperature -40 ÷ +80 °C. Supply voltage 230 Vac ± 10%, 50 Hz. Absorbed power 330 W. Rising time ~ 11,6 s. Intensive use 2.000 cycles/a day.

CERTIFIED SECURITY

Complete range of accessories to achieve a certified installation: loop detector for metallic masses, traffic lights, warning sign, emergency and automatic command by breaking the glass, E.A.R. 35 acoustic device detecting the sirens of the vehicles for public security and roadside emergency and so allowing immediate lowering of the bollard. Movement signalling Beeper. STRABUC 930 OPINAT is reserved only and exclusively for the Italian market.

VERSATILE

The electronic control unit can be set so that it can manage several bollards at a time.



Various factors such as the compaction index, soil permeability coefficient and kind of concrete may reduce the values indicated in the diagram even significantly. Always check soil natural permeability and in case provide a rain water drain system at the base of the pit.



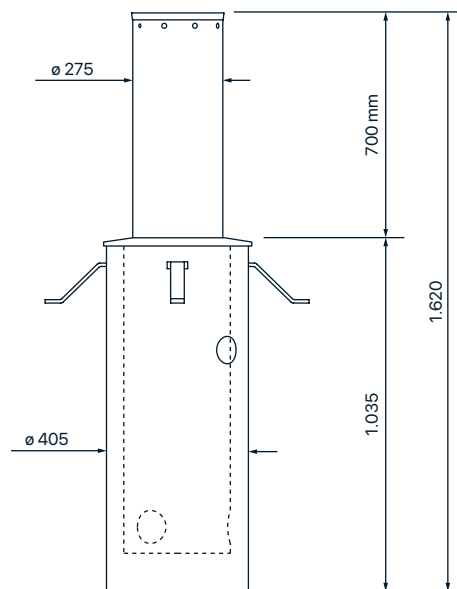
D.D. 25477
09/08/2006





STRABUC 930 OPINAT

OVERALL DIMENSIONS



TECHNICAL DATA

Cylinder diameter (mm)	275
Cylinder thickness (mm)	12
Cylinder height from ground (mm)	700
Cylinder material	S355J2H steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 7016
Pit	hot dip galvanization
Rising time (s) [cm/s]	~11,6 [6]
Lowering time (s) [cm/s]	~9,9 [7]
Working temperature (°C)	-20 ÷ +80 (-40) [A]
Oil type	708L
Power supply (Vac – Hz)	230 - 50
Absorbed power (W)	330
Absorbed current (A)	1,8
Power yield (kW / HP)	0,25 / 0,33
Grade of protection IP/motor-pump	67
Frequency of use (cycles/day)	heavy duty / 2.000
Impact resistance (J)	45.000
Breakout resistance (J)	410.000
Maximum static load (kg)	20.000
Bollard weight (kg)	180

CODE DESCRIPTION

9328L STRABUC 930 OPINAT, h 700 mm thickness 12 mm, automatic bollard complete with steel moving cylinder, cataphoresis treated and polyester powder coated in RAL 7016 anthracite grey, rubber edge, approved retro-reflecting, high intensity micro-prismatic adhesive film, LED lights, housing assembly with an oil-hydraulic actuator and motor-pump drive unit, two limit switch sensors (bollard in standing and lowered positions), movement signalling beeper, solenoid valve, release spanner with triangular socket, 10 m of electric cable for the power supply of the oil-hydraulic motor-pump and solenoid valve, 10 m of cable for the limit switches. Approved by Ministerial Decree D.D. 25477 dated 09/08/2006

9330L Kit STRABUC 930 OPINAT complete with 1x 9328L, 1x 142L, 1x 2032L, 1x 3203L, 1x 3220L, 1x 7280L, 1x 7282L, 1x 7285L, 1x 7288L, 1x 9321L, 1x 9331L, 1x 9555L

Code 9330L includes all of the accessories required by the Ministerial Decree D.D. 25477 dtd 09/08/2006 for the installation of one STRABUC 930 OPINAT on one single urban gateway for traffic control.

[A]: Possibility to install the automatic bollard in very cold areas, -40 °C and even less, without freezing problems. Refer to code 2590L or, as an alternative for existing installations, code 2746L.



9555L
Pit with anchoring plates,
hot dip galvanization



9191L
Metal cover for the pit code 9555L

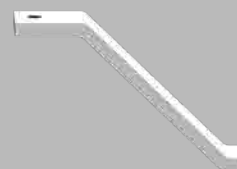


940EL
STRABUC fixed bollard made of steel, polyester powder coated in RAL 7016, complete with 9 led lights and flange with fixing plates



7278L
ELPRO S20

7280L
ELPRO S40





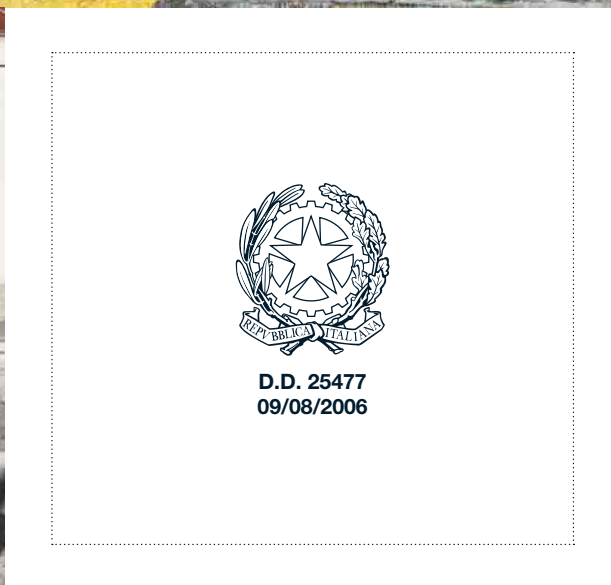
BERGAMO



JESOLO (VE)



MENAGGIO (CO)



D.D. 25477
09/08/2006



VERONA

SEMIAUTOMATIC BOLLARDS





GASPO 252

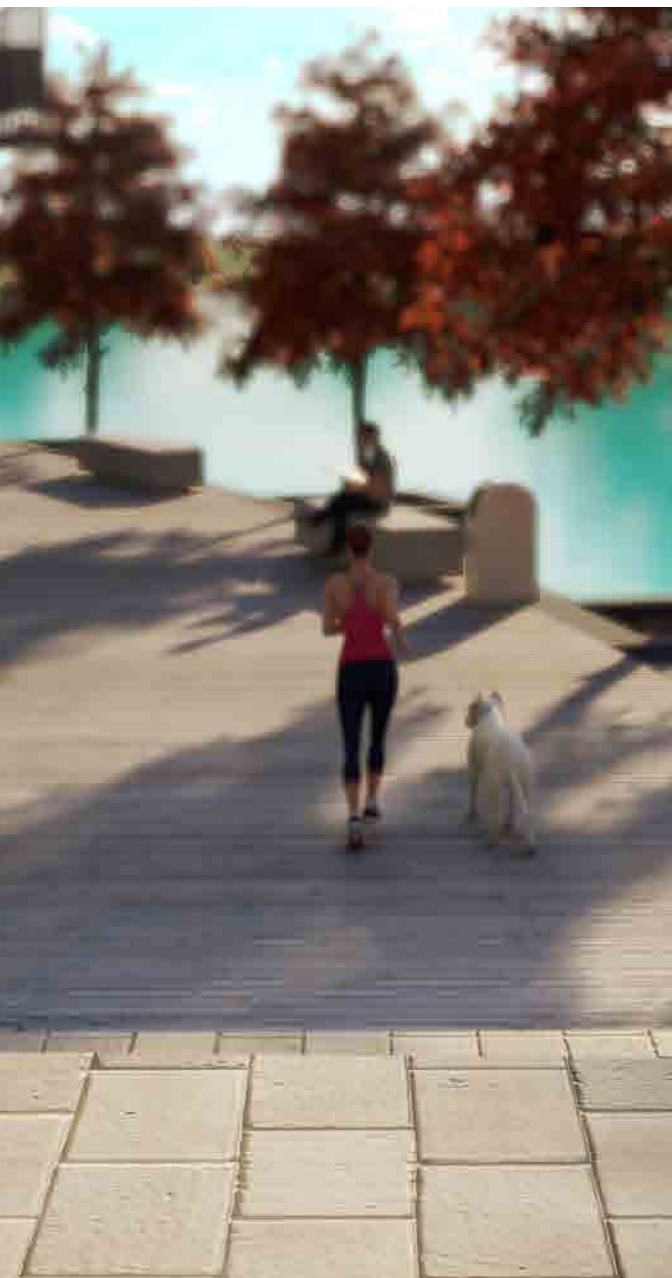
56

GASPO 254

58

TALOS 94 series

60





GUIDE TO CHOICE

SEMI-AUTOMATIC BOLLARDS

GASPO 252

ø 200 mm
h 500 mm
δ 4 mm

⊞ AISI 304 stainless steel

GASPO 254

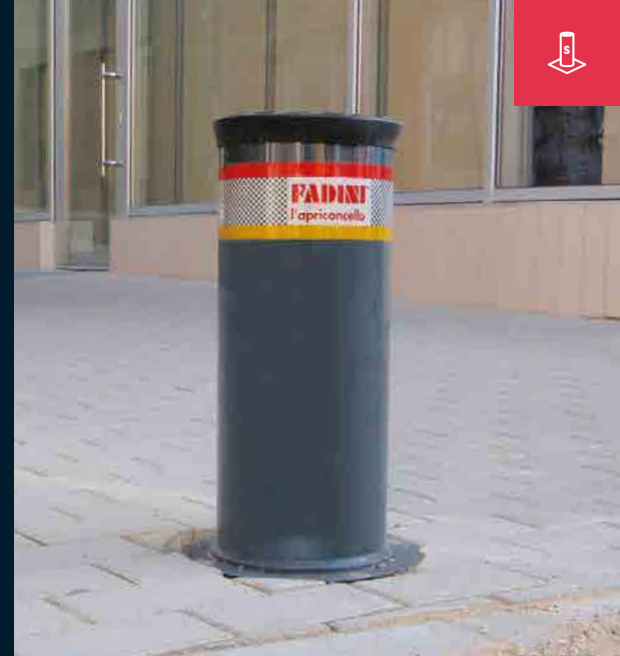
ø 200 mm
h 500 mm
δ 4 mm
for electric power supply

TALOS

94 series
ø 275 mm
h 500/600/700/800 mm
δ 4 mm

⊞ AISI 304 stainless steel







GASPO 252

RETRACTABLE SEMIAUTOMATIC BOLLARD

TYPE

System operated by gas springs

DIMENSIONS (mm)

ø 200
h 500
δ 4



EASY

No particular adjusting or setting required, quick installation: no power supply or wiring to deal with. Carriageable bollard with slip-proof, tread resistant finish.

SECURE

Mechanical lock to prevent the bollard from disengaging accidentally, both in lowered and standing positions. It is operated by a spanner (triangular profile as an option). The rising movement of the cylinder is assisted by the gas springs, while lowering requires pressing on the head.

ROBUST

Scratch-proof, cataphoresis treated and polyester powder coated steel cylinder or AISI 304 brushed stainless steel option. The head is fitted with a rubber edge cushioning violent impacts, and the bollard has an approved, retro-reflecting, high intensity, micro-prismatic adhesive film to improve its visibility in dark conditions. Hot dip galvanized steel pit.

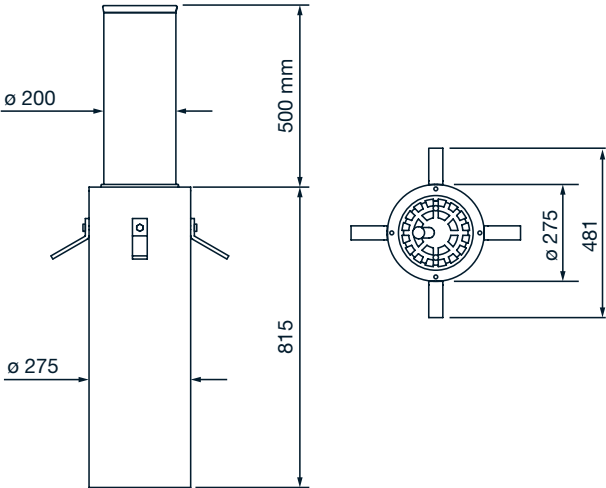


LIST OF SPECIFICATIONS

Retractable semiautomatic bollard for traffic control in residential, commercial, industrial and urban applications. Height from ground level is 500 mm. Scratch-proof S235JRH steel cylinder, ø 200 and 4 mm thickness, cataphoresis treated and powder coated, or brushed AISI 304 stainless steel option. Cylinder head made of aluminium, slip-proof and tread resistant, with a rubber edge. Cylinder with an approved, retro-reflecting, high intensity, micro-prismatic adhesive film (h 80 mm). The foundation pit is made of steel and hot dip galvanized. Movements are by gas springs. Head allowing access to the release device by a spanner for manual lowering. Breakout resistance 160.000 J.

GASPO 252

OVERALL DIMENSIONS



CODE	FINISHING
2520L	RAL 7016
2524L	inox AISI 304
2528L	inox AISI 304

Each item code number includes a semiautomatic bollard, foundation pit with four anchoring plates, gas operated steel cylinder, cataphoresis treated and polyester powder coated in RAL 7016 anthracite grey complete with head and rubber edge, approved retro-reflecting, high intensity, micro-prismatic adhesive film and release spanner. The scratch-proof AISI 304 brushed stainless steel cylinder only for those code numbers as indicated in the chart. Item code 2528L, in addition to the features indicated before, includes the inner structure, the locking rod and the gas operated cylinder in AISI 304 stainless steel.

TECHNICAL DATA

Cylinder diameter (mm)	200
Cylinder thickness (mm)	4
Cylinder height from ground (mm)	500
Cylinder material	S235JRH steel
	AISI 304 stainless steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 7016
	brushed
Pit	hot dip galvanization
Impact resistance (J)	30.000
Breakout resistance (J)	160.000
Weight (kg)	63



GASPO 254

RETRACTABLE SEMIAUTOMATIC BOLLARD FOR POWER SUPPLY

TYPE

System operated by gas springs

UTILITY

Two x 230 Vac electric sockets

USEFUL

Quick and easy installation. Energy on demand: two x 230 Vac single-phase sockets are incorporated in the moving cylinder as a standard (1 x 230 Vac single-phase and 1 x 400 Vac three-phase as an option). Carriageable bollard with slip-proof, tread resistant finish.

RELIABLE

Mechanical locking device to prevent the cylinder from accidental disengaging either in standing or lowered positions. Operations are by a release spanner (triangular profile on request). Movements are by gas operated springs: assisted rising of the cylinder, while lowering needs pressing on the head.

DIMENSIONS (mm)

ø 200
h 500
δ 4

ROBUST

Scratch-proof, cataphoresis treated and polyester powder coated steel cylinder. The head is fitted with a rubber edge cushioning violent impacts. Foundation pit made of steel and hot dip galvanized.



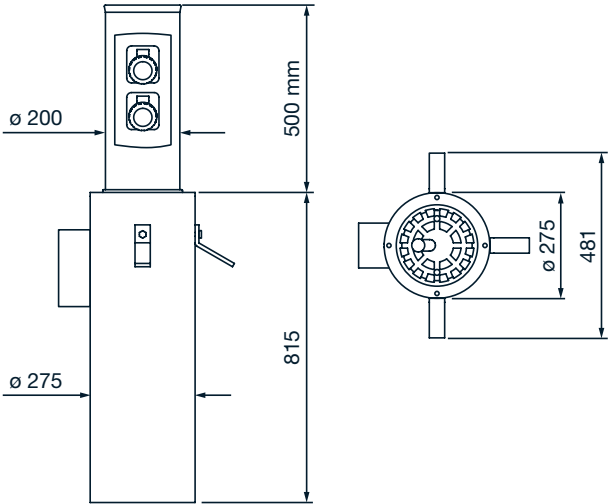
LIST OF SPECIFICATIONS

Retractable semiautomatic bollard for power supply. Suitable for residential, commercial, industrial and urban applications. Scratch-proof S235JRH steel cylinder, ø 200 x h 500 mm (from ground level) and 4 mm thickness. Cataphoresis treated and powder coated. Cylinder head made of aluminium, slip-proof and tread resistant, fitted with a rubber edge. Hot dip galvanized steel pit. Movements of the cylinder by gas springs. Two x 230 Vac single-phase incorporated sockets. Head allows access to the release device by spanner for manual operations. Breakout resistance 160.000 J.



GASPO 254

OVERALL DIMENSIONS



CODE	HEIGHT (mm)	CYLINDER
2527L	500	RAL 1028

Each item code number includes a semiautomatic bollard, foundation pit with three anchoring plates, gas operated steel cylinder, cataphoresis treated and polyester powder coated in RAL 1028 melon yellow, complete with head and rubber edge, release spanner and two x 230 Vac single-phase sockets.

TECHNICAL DATA

Cylinder diameter (mm)	200
Cylinder thickness (mm)	4
Cylinder height from ground (mm)	500
Cylinder material	S235JRH steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 1028
Pit	hot dip galvanization
Impact resistance (J)	30.000
Breakout resistance (J)	160.000
Weight (kg)	68



TALOS 94 series

RETRACTABLE SEMIAUTOMATIC BOLLARD

TYPE

System operated by gas springs

DIMENSIONS (mm)

ø 275
h 500/600/700/800
δ 4



MATCHING DESIGN

It has the same design as TALOS automatic bollards 94 and 96 series, to which it can be combined in perimeter applications or driveways to stop vehicles from transiting in both public and private areas. No particular setting or adjusting required, quick and easy to install: no electric supply and cabling required.

RELIABLE

Mechanical locking device to prevent the cylinder from accidentally disengaging either in standing or lowered positions. Operations are by a release spanner (triangular profile on request). Movements are by gas operated springs: assisted rising of the cylinder, while lowering needs pressing on the bollard head.

ROBUST

Scratch-proof, cataphoresis treated and polyester powder coated steel cylinder. An AISI 304 brushed 12/10 thick stainless steel cover sleeve can be factory fitted on to it, on request. Cylinder head fitted with a rubber edge cushioning violent impacts. The bollard has an approved, retro-reflecting, high intensity, micro-prismatic adhesive film to improve its visibility in dark conditions. Ground pit made of steel and hot dip galvanized, slip-proof tread resistant cover plate.

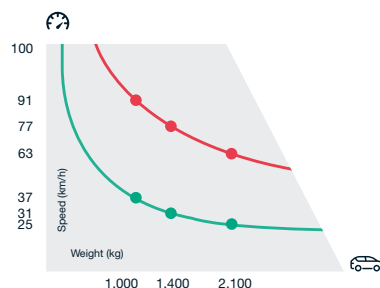
VERSATILE

It is possible to decide at a later stage to replace the semiautomatic model with the equivalent TALOS automatic; the ground pit is in fact the same.

LIST OF SPECIFICATIONS

Retractable semiautomatic bollard suitable for residential, commercial, industrial installations and urban applications. Height from ground level can be 500/600/700/800 mm. Scratch-proof S235JRH steel cylinder, ø 275 mm and 4 mm thickness, cataphoresis treated and polyester powder coated (an AISI 304 brushed stainless steel cover sleeve available). Aluminium cylinder head with rubber edge (available also with integrated led lights). Cataphoresis treated aluminium cover plate. Head and cover plate are slip-proof and tread resistant. Approved, retro-reflecting, high intensity, micro-prismatic adhesive film (h 80 mm) fitted on to the cylinder. Hot dip galvanized steel pit. Movements of the cylinder by gas springs. Head allowing access to the release device by a spanner for manual lowering. Breakout resistance 320.000 J.

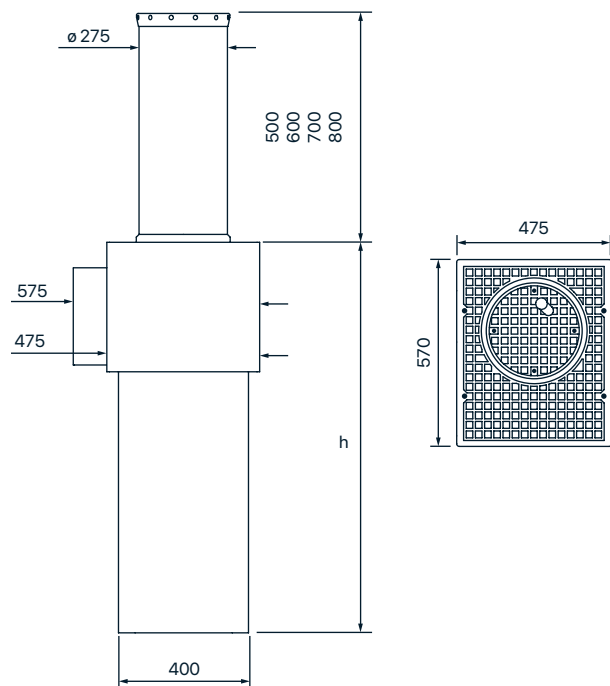
- 320.000 J
- 52.000 J



Various factors such as the compaction index, soil permeability coefficient and kind of concrete may reduce the values indicated in the diagram even significantly. Always check soil natural permeability and in case provide a rain water drain system at the base of the pit.



OVERALL DIMENSIONS



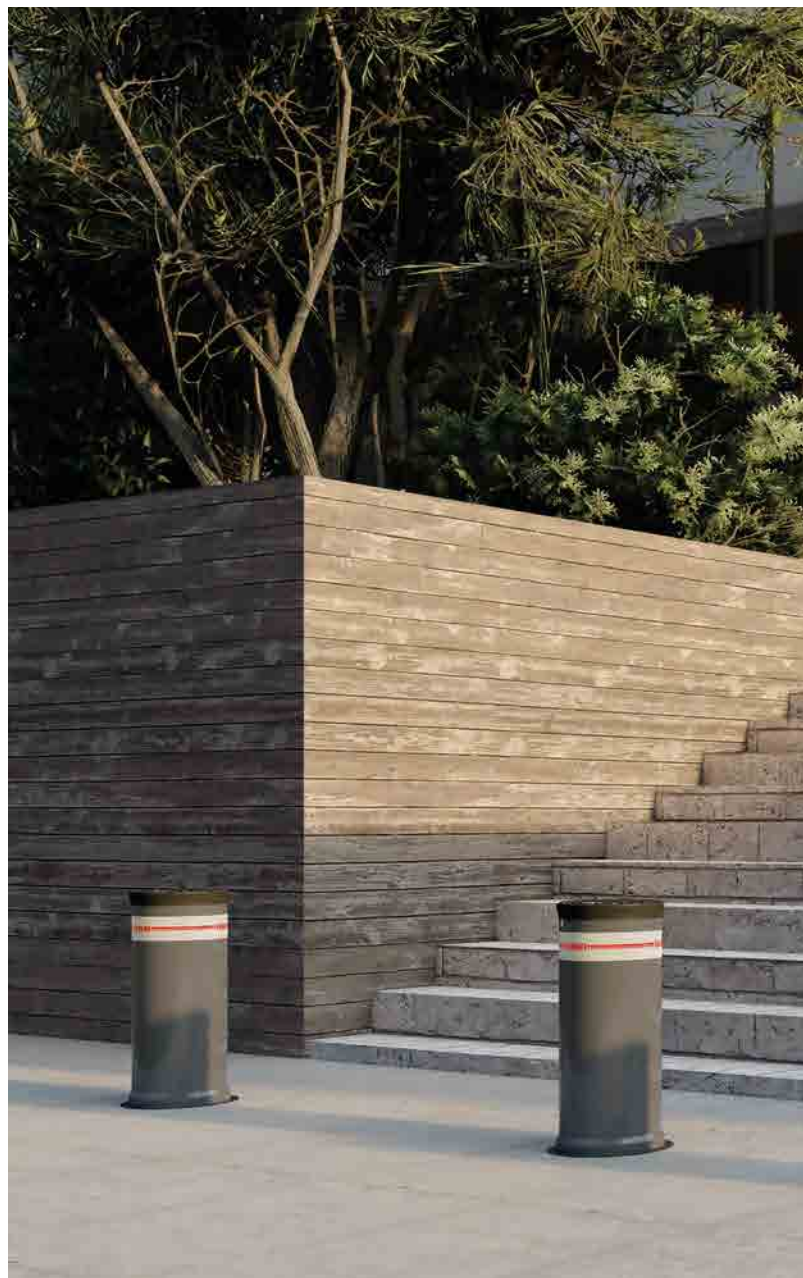
TECHNICAL DATA

Cylinder diameter (mm)	275
Cylinder thickness (mm)	4
Cylinder height from ground (mm)	500/600/700/800
Cylinder material	S235JRH steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 1028
	AISI 304 brushed SS steel sleeve
Pit	hot dip galvanization
Impact resistance (J)	52.000
Breakout resistance (J)	320.000
Maximum static load (kg)	20.000

CODE	HEIGHT (mm)	CYLINDER	LED LIGHTS	h (mm)	WEIGHT (kg)
9451L	500	RAL 1028	-	830	167
9451EL	500	RAL 1028	•	830	167
9451A4L	500	c. inox AISI 304	-	830	177
9451A4EL	500	c. inox AISI 304	•	830	177
9461L	600	RAL 1028	-	1.010	185
9461EL	600	RAL 1028	•	1.010	185
9461A4L	600	c. inox AISI 304	-	1.010	195
9461A4EL	600	c. inox AISI 304	•	1.010	195
9471L	700	RAL 1028	-	1.010	192
9471EL	700	RAL 1028	•	1.010	192
9471A4L	700	c. inox AISI 304	-	1.010	202
9471A4EL	700	c. inox AISI 304	•	1.010	202
9481L	800	RAL 1028	-	1.210	205
9481EL	800	RAL 1028	•	1.210	205
9481A4L	800	c. inox AISI 304	-	1.210	215
9481A4EL	800	c. inox AISI 304	•	1.210	215

Each item code number includes a semiautomatic bollard complete with foundation pit, gas operated steel cylinder, cataphoresis treated and polyester powder coated in RAL 1028 melon yellow, with head and rubber edge and, an approved, retro-reflecting, high intensity, micro-prismatic adhesive film and a release spanner. The led lights and the AISI 304 brushed stainless steel cover sleeve only with those code numbers as indicated in the chart.

REMOVABLE BOLLARDS





POSTO

66

SIBLI 17

67

VIMARI 2316

68

STRAMARI 2320

69





GUIDE TO CHOICE

REMOVABLE BOLLARDS

POSTO 20 / POSTO 22

□ 50x50 mm
h 920 mm
δ 4 mm

⊞ AISI 304 stainless steel

SIBLI 17

□ 120x120 mm
h 780 mm
δ 4 mm
inox AISI 304 brushed
ram-raïd preventing

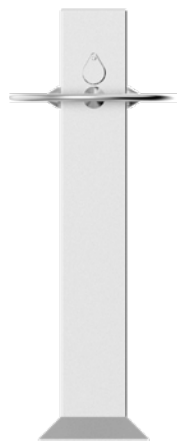
VIMARI 2316

ø 200 mm
h 500/800 mm
δ 4 mm

⊞ AISI 304 stainless steel

STRAMARI 2320

ø 275 mm
h 700 mm
δ 4 mm







POSTO

COLLAPSIBLE BOLLARD

DIMENSIONS (mm)

50x50
h 920
6 4



EASY TO USE

Suitable to reserve car parking bays or stop unauthorized vehicles from accessing driveways. Suitable for block of flats, residential and private areas. Ideal for sites where limited depth requirements do not allow for an automatic bollard.

STRONG

A key allows for the locking device to be released and fold the bollard down to the ground level. It comes either in cataphoresis treated steel, polyester powder coated finishing, or brushed AISI 304 stainless steel.

LIST OF SPECIFICATIONS

Collapsible bollard. Cataphoresis treated steel and polyester powder coat finishing option or brushed AISI 304 stainless steel option. Height (from ground) 920 mm. 50 x 50 mm square section tube, 4 mm thickness. Complete with keys and handles. Suitable for private, commercial applications and city centres.



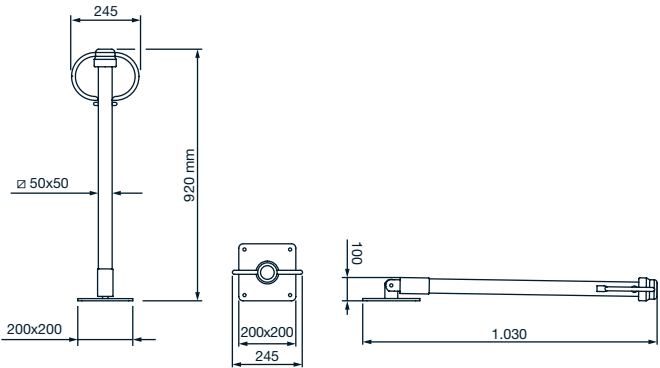
CODE	HEIGHT (mm)	SQUARE TUBE
185L	920	inox AISI 304
186L	920	RAL 2002 orange red

Each item code number includes a complete collapsible bollard and two keys.

TECHNICAL DATA

Square section tube (mm)	50x50
Thickness (mm)	4
Height from ground (mm)	920
Tube treatment and material	cataphoresis and polyester powder coated steel, RAL 2002 AISI 304 brushed stainless steel
Weight (kg)	11

OVERALL DIMENSIONS



SIBLI 17

REMOVABLE BOLLARD

DIMENSIONS (mm)

□ 120x120
h 780
δ 4



ARMoured SECURITY

It can be used in ram-raid preventing applications in front of shop windows, or to stop unauthorized vehicles from transiting in restricted areas or accessing gateways. Ideal in installations where limited depth requirements do not allow for an automatic bollard.

EASY

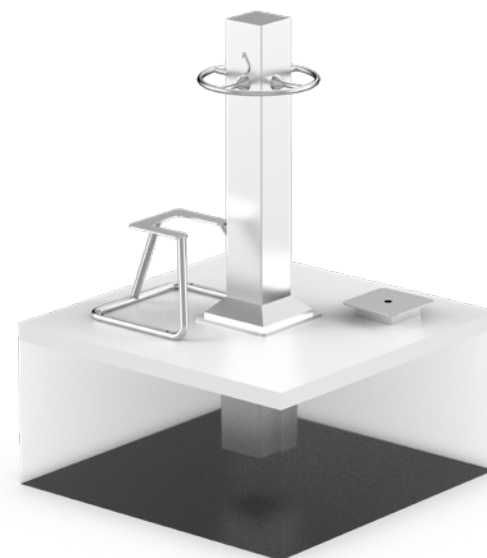
No particular adjusting or setting required, quick to install: electric power supply and cabling are not necessary. By a security key it is possible to unlock the system allowing in this way for the bollard to be lifted and removed from the cemented pit (a plate comes with the equipment to cover the pit). Once the bollard has been removed, it can be rolled away, by a roller under it, and stored in a resting cradle.

LIST OF SPECIFICATIONS

Anti ram-raid armoured removable bollard. Reinforced steel inner core 100x100, thickness 6 mm. AISI 304 brushed stainless steel external finishing. Height of bollard from ground level 780 mm. Square section tube, 120 x 120 mm, 4 mm thickness. Key with high security lock barrel allowing release and removal operations. AISI 304 stainless steel pit and cover plate. Complete with security lock, lifting ring and roller at the bottom to facilitate moving away. Cataphoresis treated Fe storing cradle. Breakout resistance 250.000 J. Suitable for private, commercial applications and city centres.

CODE	HEIGHT (mm)	SQUARE TUBE
170L	780	inox AISI 304

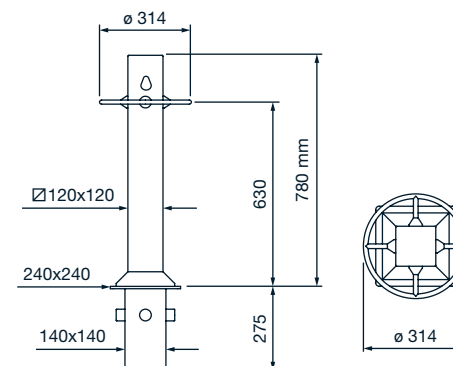
Each item code number includes a removable bollard complete with pit and cover both in AISI 304 stainless steel, a resting cradle, lock barrel with two keys.



TECHNICAL DATA

Square section tube (mm)	120x120
Thickness (mm)	4
Height from ground (mm)	780
Tube material and treatment	AISI 304 brushed stainless steel
Pit	AISI 304 stainless steel
Impact resistance (J)	20.000
Breakout resistance (J)	250.000
Weight (kg)	39

OVERALL DIMENSIONS





VIMARI 2316

REMOVABLE BOLLARD

DIMENSIONS (mm)

ø 200
h 500/800
δ 4



EASY TO USE

No particular adjusting or setting required, quick to install: electric power supply and cabling are not necessary. It can be used to prevent unauthorized vehicles from transiting in restricted areas and parking in driveways. Ideal in installations where limited depth requirements do not allow for automatic bollards. Designed to match the VIGILO automatic range.

SAFE AND SECURE

Operated by a release spanner (triangular profile on request). Head fitted with a rubber edge as a protection from impacts. Approved, retro-reflecting, high intensity, micro-prismatic adhesive film to improve its visibility in dark conditions. Carriageable pit cover with slip-proof and tread resistant finishing.

LIST OF SPECIFICATIONS

Removable bollard, operated by the release spanner provided with the system. Suitable for applications in residential, industrial areas and city centres. Height from ground can be 500 or 800 mm. Cylinder made of S235JRH steel, 4 mm thickness and ø 200 mm, cataphoresis treated and polyester powder coated, or AISI 304 brushed stainless steel option. Cylinder head made of aluminium with rubber edge. Cylinder with an approved, retro-reflecting, high intensity, micro-prismatic adhesive film (h 80 mm). Breakout resistance 150.000 J.

CODE	HEIGHT (mm)	CYLINDER	WEIGHT (kg)
2316L	500	RAL 7016	18
2319L	800	RAL 7016	26
2323L	500	inox AISI 304	18

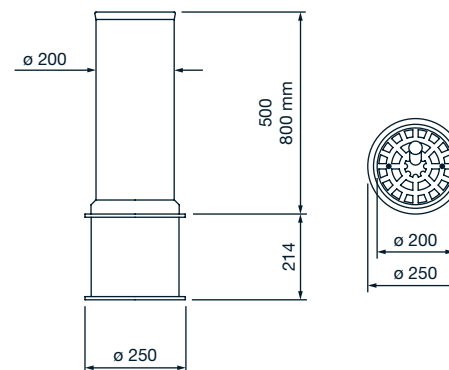
Each item code number includes a removable bollard complete with pit and pit cover, steel cylinder, cataphoresis treated and polyester powder coated in RAL 7016 anthracite grey, head with rubber edge, an approved, retro-reflecting, high intensity, micro-prismatic adhesive film and a release spanner. The AISI 304 brushed stainless steel cylinder only for the code numbers as indicated in the chart.

TECHNICAL DATA

Cylinder diameter (mm)	200
Cylinder thickness (mm)	4
Cylinder height from ground (mm)	500/800
Cylinder material	S235JRH steel AISI 304 stainless steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 7016 brushed
Pit	cataphoresis treated
Impact resistance (J)	30.000
Breakout resistance (J)	150.000



OVERALL DIMENSIONS



STRAMARI 2320

REMOVABLE BOLLARD

EASY TO USE

No particular adjusting or setting required, quick to install: electric power supply and cabling are not necessary. It can be used to prevent unauthorized vehicles from transiting in restricted areas and parking in driveways. Ideal in those installations where limited depth requirements do not allow for automatic bollards. Designed to match the TALOS range of bollards, 94 and 96 series.

SAFE AND SECURE

Operated by a release spanner (triangular profile as an option). Head with a rubber edge as a protection from impacts. Approved, retro-reflecting, high intensity, micro-prismatic adhesive film to improve its visibility in dark conditions. Carriageable pit cover with slip-proof and tread resistant finishing.

DIMENSIONS (mm)

ø 275
h 700
δ 4

LIST OF SPECIFICATIONS

Removable bollard, operated by the release spanner provided with the system. Suitable for applications in residential, industrial areas and city centres. Height, from ground, is 700 mm. Cylinder made of S235JRH steel, 4 mm thickness and ø 275 mm, cataphoresis treated and polyester powder coated. Cylinder head made of aluminium with rubber edge. Cylinder with an approved, retro-reflecting, high intensity, micro-prismatic adhesive film (h 80 mm). Breakout resistance 240.000 J.

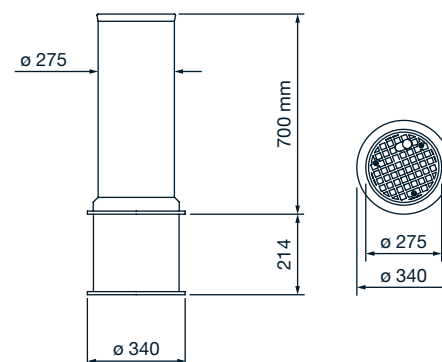
CODE	HEIGHT (mm)	CYLINDER
2320L	700	RAL 7016

Each item code number includes a removable bollard complete with pit and pit cover, steel cylinder, cataphoresis treated and polyester powder coated in RAL 7016 anthracite grey, head with rubber edge, an approved, retro-reflecting, high intensity, micro-prismatic adhesive film and a release spanner.

TECHNICAL DATA

Cylinder diameter (mm)	275
Cylinder thickness (mm)	4
Cylinder height from ground (mm)	700
Cylinder material	S235JRH steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 7016
Pit	cataphoresis treated
Impact resistance (J)	40.000
Breakout resistance (J)	240.000
Weight (kg)	33

OVERALL DIMENSIONS



FIXED BOLLARDS





SICU 18

74

CORAL

75

VIGILO

76

TALOS 94 series

77

TALOS M30

78

TALOS C730

79

TALOS M50

80



GUIDE TO CHOICE

FIXED BOLLARDS

SICU 18

□ 120x120 mm
h 780 mm
δ 5 mm
inox AISI 304

CORAL

ø 100 mm
h 500/600/800 mm
δ 5 mm

VIGILO

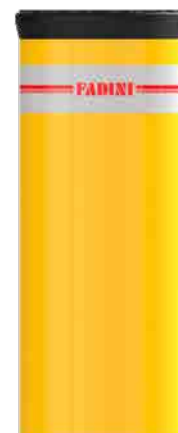
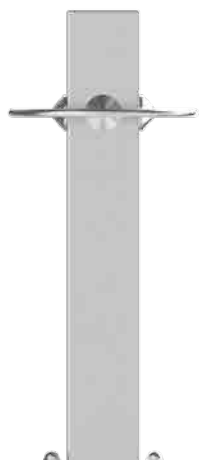
ø 200 mm
h 500/600/800 mm
δ 4 mm

TALOS 94 series

ø 275 mm
h 500/600/700/800 mm
δ 4 mm

⊞ AISI 304 stainless steel

⊞ AISI 304 stainless steel



TALOS M30

ø 275 mm
h 800 mm
δ 12 mm



AISI 304 stainless steel

**TALOS C730**

ø 275 mm
h 1.000 mm
δ 12 mm



AISI 304 stainless steel

**TALOS M50**

ø 275 mm
h 1.000 mm
δ 20 mm



AISI 304 stainless steel



SICU 18

FIX BOLLARD

DIMENSIONS (mm)

$\square$ 120x120
 h 780
 δ 5



ARMoured SECURITY

Used to provide protection to shop windows against ram-raids and to prevent unauthorized vehicles from accessing restricted areas and parking in driveways. Ideal in those installations where limited depth requirements do not allow for automatic bollards. Designed to match SIBLI 17 removable bollard.

EASY TO USE

No particular adjusting or setting required, quick to install: electric power supply and cabling are not necessary.

LIST OF SPECIFICATIONS

Ram-raid preventing armoured bollard. Reinforced inner core, steel 100x100 mm, thickness 6 mm. Outer finish in AISI 304 brushed stainless steel. Bollard height, from ground, is 780 mm. Square section tube 120 x 120 mm, 5 mm thickness, complete with lifting ring. Breakout resistance 250.000 J. Suitable for applications in private, commercial areas and city centres.



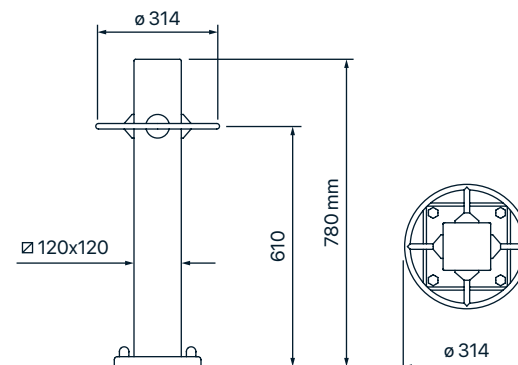
CODE	HEIGHT (mm)	SQUARE TUBE
180L	780	inox AISI 304

Each item code number includes a complete AISI 304 brushed stainless steel fixed bollard.

TECHNICAL DATA

Square section tube (mm)	120x120
Thickness (mm)	5
Height from ground (mm)	780
Tube material and treatment	AISI 304 brushed SS steel
Impact resistance (J)	20.000
Breakout resistance (J)	250.000
Weight (kg)	31

OVERALL DIMENSIONS



DIMENSIONS (mm)

ø 100
h 500/600/800
δ 5

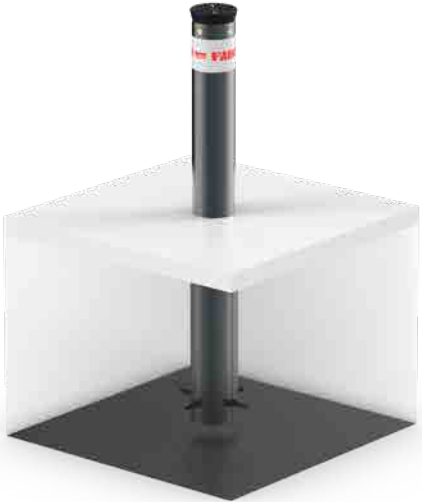


FEATURES

The CORAL fixed range of bollards have been designed and constructed to match CORAL automatic bollards, allowing in this way the combined installation of both versions. The fixed bollards can be sunk straight into a concrete foundation in the ground at various heights (impact resistance depends on anchoring depth). 4 amber colour signalling LED lights are available on request and radially fitted on to the bollards. Suitable for perimeter installations in public or private areas, as well as for traffic control.

LIST OF SPECIFICATIONS

Fixed bollard for traffic control. The recommended height from ground level to match the automatic ones, can be 500, 600 or 800 mm. S235JRH steel cylinder, 5 mm thickness and ø 100 mm, cataphoresis treated and polyester powder coated. Cylinder head made of aluminium with rubber edge. Cylinder with an approved, retro-reflecting, high intensity, micro-prismatic adhesive film (h 80 mm), designed to take 4 amber colour signalling LED lights, radially fitted. Breakout resistance 150.000 J. Ideal for installations in private, commercial areas and city centres.



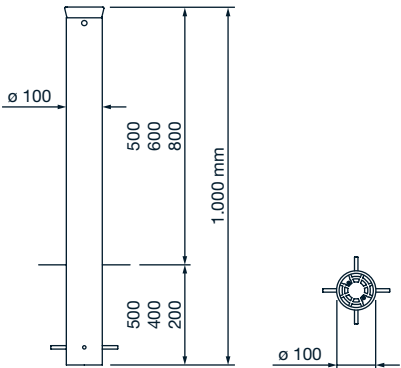
CODE	LENGTH (mm)	CYLINDER
2541L	1.000	RAL 7016

Each item code number includes a fixed bollard, made of cataphoresis treated steel and polyester powder coated in RAL 7016 anthracite grey, complete with head and a rubber edge, and an approved, retro-reflecting, high intensity, micro-prismatic adhesive film. As a standard, the holes are blanked with plastic plugs whose design is the same as the LED lights.

TECHNICAL DATA

Cylinder diameter (mm)	100
Cylinder thickness (mm)	5
Cylinder length (mm)	1.000
Cylinder height from ground (mm)	500/600/800
Cylinder material	S235JRH steel
Treatment and finishing	cataphoresis and polyester powder coating RAL 7016
Impact resistance (J)	30.000
Breakout resistance (J)	150.000
Weight (kg)	10

OVERALL DIMENSIONS



FIXED BOLLARDS

DIMENSIONS (mm)

$\varnothing$ 200
 h 500/600/800
 δ 4



FEATURES

The VIGILO fixed range of bollards have been designed and constructed to match VIGILO automatic bollards, allowing in this way the combined installation of both versions. The fixed bollards can be sunk straight into a concrete foundation in the ground at various heights (impact resistance depends on anchoring depth), 8 amber colour signalling LED lights are available on request and radially fitted on to the bollards. Ideal for perimeter installations in public or private areas, as well as for traffic control.

LIST OF SPECIFICATIONS

Fixed bollard for traffic control. The recommended height from ground level to match the automatic ones, can be 500, 600 or 800 mm. S235JRH steel cylinder, 4 mm thickness and $\varnothing$ 200 mm, cataphoresis treated and polyester powder coated or AISI 304 brushed stainless steel. Cylinder head made of aluminium with rubber edge. Cylinder with an approved, retro-reflecting, high intensity, micro-prismatic adhesive film (h 80 mm), designed to take 8 amber colour signalling LED lights, radially fitted. Breakout resistance 150.000 J. Suitable for installations in private, commercial areas and city centres.

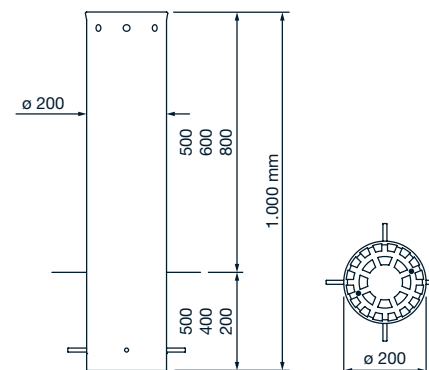
CODE	LENGTH (mm)	CYLINDER
2586L	1.000	RAL 7016
2588L	1.000	inox AISI 304

Each item code number includes a fixed bollard, made of cataphoresis treated steel and polyester powder coated in RAL 7016 anthracite grey, complete with head and a rubber edge, and an approved, retro-reflecting, high intensity, micro-prismatic adhesive film. The AISI 304 brushed stainless steel only for the code numbers as indicated in the chart. As a standard, the holes are blanked with plastic plugs whose design is the same as the LED lights.

TECHNICAL DATA

Cylinder diameter (mm)	200
Cylinder thickness (mm)	4
Cylinder length (mm)	1.000
Cylinder height from ground (mm)	500/600/800
Cylinder material	S235JRH steel
	AISI 304 stainless steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 7016
	brushed
Impact resistance (J)	30.000
Breakout resistance (J)	150.000
Weight (kg)	21

OVERALL DIMENSIONS



DIMENSIONS (mm)

ø 275
h 500/600/700/800
δ 4



FEATURES

The TALOS 94 series fixed range of bollards have been designed and constructed to match TALOS automatic bollards 94 series, allowing in this way the combined use of both versions. The fixed bollards can be installed straight into a ground foundation at various heights (impact resistance depends on anchoring depth). A version with 12 amber colour signalling LED lights in the rubber edge also available. Ideal for perimeter applications to delimit public or private areas, as well as for traffic control applications.

LIST OF SPECIFICATIONS

Fixed bollard for traffic control. The recommended height from ground level to match the automatic ones, can be 500, 600, 700 or 800 mm. S235JRH steel cylinder, 4 mm thickness and ø 275 mm, cataphoresis treated and polyester powder coated or AISI 304 brushed stainless steel. Cylinder head made of aluminium with rubber edge (integrated led lights also available). Cylinder with an approved, retro-reflecting, high intensity, micro-prismatic adhesive film (h 80 mm). Breakout resistance 250.000 J. Suitable for installations in private, commercial areas and city centres.

• standard - not available

CODE	LENGTH (mm)	LED LIGHTS	CYLINDER
9643L	1.000	-	RAL 1028
9643EL	1.000	•	RAL 1028
9656L	1.000	-	inox AISI 304
9656EL	1.000	•	inox AISI 304

Each item code number includes a fixed bollard, made of cataphoresis treated steel and polyester powder coated in RAL 1028 melon yellow, complete with head and a rubber edge, and an approved, retro-reflecting, high intensity, micro-prismatic adhesive film. The led lights and the AISI 304 brushed stainless steel cylinder only for the code numbers as indicated in the chart.

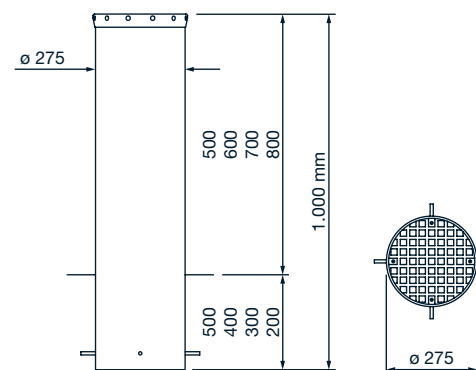
Further TALOS fixed models are available, for information contact Meccanica Fadini technical office.

TECHNICAL DATA

Cylinder diameter (mm)	275
Cylinder thickness (mm)	4
Cylinder length (mm)	1.000
Cylinder height from ground (mm)	500/600/700/800
Cylinder material	S235JRH steel
	AISI 304 stainless steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 1028
	brushed
Impact resistance (J)	40.000
Breakout resistance (J)	250.000
Peso (kg)	28



OVERALL DIMENSIONS



TALOS M30

FIXED BOLLARDS FOR PERIMETER SECURITY

DIMENSIONS (mm)

ø 275
h 800
δ 12



FEATURES

TALOS M30 fixed bollards have been designed and constructed to match TALOS M30 automatic bollards, the combined application of both versions is thus possible. The fixed bollards are to be set into a concrete foundation with a proper iron reinforcement enabling the bollards to meet the breakout resistance value as specified. A version with 12 amber colour signalling LED lights incorporated in the rubber edge also available. Ideal for perimeter security in public or private areas, as well as for traffic control applications.

LIST OF SPECIFICATIONS

Fixed bollard for perimeter security. Designed and constructed to meet the ASTM F2656-07, PAS 68:2013 and IWA 14-1 standards. Height from ground is 800 mm. S355J2H steel cylinder, thickness 12 mm and ø 275 mm, cataphoresis treated and polyester powder coated (an AISI 304 brushed stainless steel cover sleeve also available). Aluminium cylinder head with rubber edge (integrated led lights also available). Cylinder with an approved, retro-reflecting, high intensity, micro-prismatic adhesive film (h 80 mm). Breakout resistance 700.000 J.

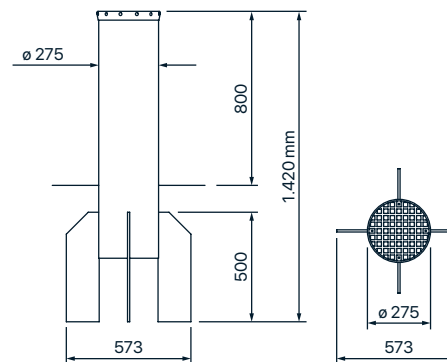
CODE	HEIGHT (mm)	LED LIGHTS	CYLINDER
			• standard - not available
9697L	800	-	RAL 7016 anthracite grey
9697EL	800	•	RAL 7016 anthracite grey

Each item code number includes a fixed bollard, made of cataphoresis treated steel and polyester powder coated in RAL 7016 anthracite grey, complete with head and a rubber edge, and an approved, retro-reflecting, high intensity, micro-prismatic adhesive film. The led lights only for the code number as indicated in the chart.

TECHNICAL DATA

Cylinder diameter (mm)	275
Cylinder thickness (mm)	12
Cylinder height from ground (mm)	800
Cylinder material	S355J2H steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 7016 AISI 304 brushed SS steel sleeve
Impact resistance (J)	150.000
Breakout resistance (J)	700.000
Weight (kg)	116

OVERALL DIMENSIONS



TALOS C730

FIXED BOLLARDS FOR PERIMETER SECURITY

FEATURES

TALOS C730 fixed bollards have been designed and constructed to match TALOS C730 automatic bollards, the combined application of both versions is thus possible. The fixed bollards are to be set into a concrete foundation with a proper iron reinforcement enabling the bollards to meet the breakout resistance value as specified. A version with 12 amber colour signalling LED light incorporated in the rubber edge also available. Ideal for perimeter security in public or private areas, as well as for traffic control applications.

LIST OF SPECIFICATIONS

Fixed bollard for perimeter security. Designed and constructed to meet the ASTM F2656-18A C730, PAS 68:2013 V/7500 (N3)/48 and IWA 14-1:2013 V/7200 [N3C]/48 standards to stop a vehicle of 7,5 t travelling at a speed of 48 km/h. It is suitable for the protection of driveways to sensitive sites such as military bases, embassies, banks, ministerial bodies, etc. Height of the bollard from ground is 1.000 mm. S355J2H steel cylinder, thickness 12 mm and ø 275 mm, cataphoresis treated and polyester powder coated (an AISI 304 brushed stainless steel cover sleeve also available). Aluminium cylinder head with rubber edge (integrated led lights also available). Cylinder with an approved, retro-reflecting, high intensity, micro-prismatic adhesive film (h 80 mm). Breakout resistance 750.000 J.

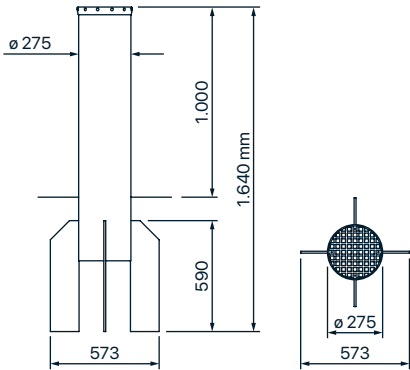
CODE	HEIGHT (mm)	LED LIGHTS	• standard - not available
			CYLINDER
9687L	1.000	-	RAL 7016 anthracite grey
9687EL	1.000	•	RAL 7016 anthracite grey

Each item code number includes a fixed bollard, made of cataphoresis treated steel and polyester powder coated in RAL 7016 anthracite grey, complete with head and a rubber edge, and an approved, retro-reflecting, high intensity, micro-prismatic adhesive film. The led lights only for the code number as indicated in the chart.

TECHNICAL DATA

Cylinder diameter (mm)	275
Cylinder thickness (mm)	12
Cylinder height from ground (mm)	1.000
Cylinder material	S355J2H steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 7016 AISI 304 brushed SS steel sleeve
Impact resistance (J)	250.000
Breakout resistance (J)	750.000
Weight (kg)	140

OVERALL DIMENSIONS



TALOS M50

FIXED BOLLARDS FOR PERIMETER SECURITY

FEATURES

TALOS M50 fixed bollards have been designed and constructed to match TALOS M50 automatic bollards, the combined application of both versions is thus possible. The fixed bollards are to be set into a concrete foundation with a proper iron reinforcement enabling the bollards to meet the breakout resistance value as specified. Option also available with 12 amber colour signalling LED lights integrated in the rubber edge. Ideal for perimeter security in public or private areas, as well as for traffic control.

DIMENSIONS (mm)

ø 275
h 1.000
δ 20

LIST OF SPECIFICATIONS

Fixed bollard for perimeter security. Designed and constructed to meet the ASTM F2656-15 C750, PAS 68:2013 V/7500 (N3)/80 and IWA 14-1:2013 V/7200 [N3C]/80 standards to stop a vehicle of 7,5 t travelling at a speed of 80 km/h. It is suitable for the protection of driveways to sensitive sites such as military bases, embassies, banks, ministerial bodies, etc. Height of the bollard from ground is 1.000 mm. S355K2H steel cylinder, 20 mm thickness and ø 275 mm, cataphoresis treated and polyester powder coated (a cover sleeve made of brushed AISI 304 stainless steel also available). Aluminium cylinder head with rubber edge (integrated led lights also available). Cylinder with an approved, retro-reflecting, high intensity, micro-prismatic adhesive film (h 80 mm). Breakout resistance 2.000.000 J.

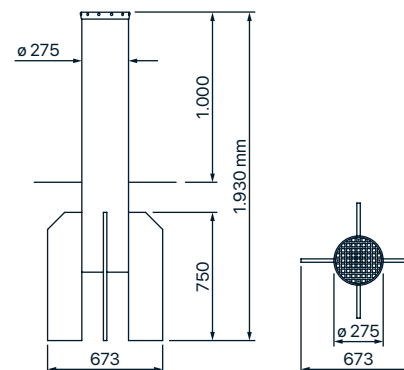
CODE	HEIGHT (mm)	LED LIGHTS	CYLINDER
			• standard - not available
9695L	1.000	-	RAL 7016 anthracite grey
9695EL	1.000	•	RAL 7016 anthracite grey

Each item code number includes a fixed bollard, made of cataphoresis treated steel and polyester powder coated in RAL 7016 anthracite grey, complete with head and a rubber edge, and an approved, retro-reflecting, high intensity, micro-prismatic adhesive film. The led lights only for the code number as indicated in the chart.

TECHNICAL DATA

Cylinder diameter (mm)	275
Cylinder thickness (mm)	20
Cylinder height from ground (mm)	1.000
Cylinder material	S355K2H steel
Cylinder treatment and finishing	cataphoresis and polyester powder coating RAL 7016 AISI 304 brushed SS steel sleeve
Impact resistance (J)	700.000
Breakout resistance (J)	2.000.000
Weight (kg)	300

OVERALL DIMENSIONS



ACCESSORIES





VISUAL 344

84

ACCESSORIES AND COMPLEMENTARY ELEMENTS FOR AUTOMATIC, SEMIAUTOMATIC, REMOVABLE AND FIXED BOLLARDS

86

COMMAND, SEFETY AND SIGNALLING DEVICES

90





VISUAL 344

MODULAR HOUSING POST FOR ACCESS CONTROL SYSTEMS

DIMENSIONS (mm)

ø 275
h 1.350/1.890/2.155
6 4

ACCESS CONTROL EQUIPMENT

Utility post in support of installations where road barriers or automatic, retractable bollards are used as it provides room inside it for the command and safety accessories.

VERSATILE

It consists of stackable modules, either having a lockable door and the inside is accessed by a coded key, or having one or two aluminium front panels to fit various command and safety accessories into them, as well as two- or three-head LED traffic lights. It is made of cataphoresis treated and powder coated S235JRH steel well withstanding the atmospheric agents.

LISTS OF SPECIFICATIONS

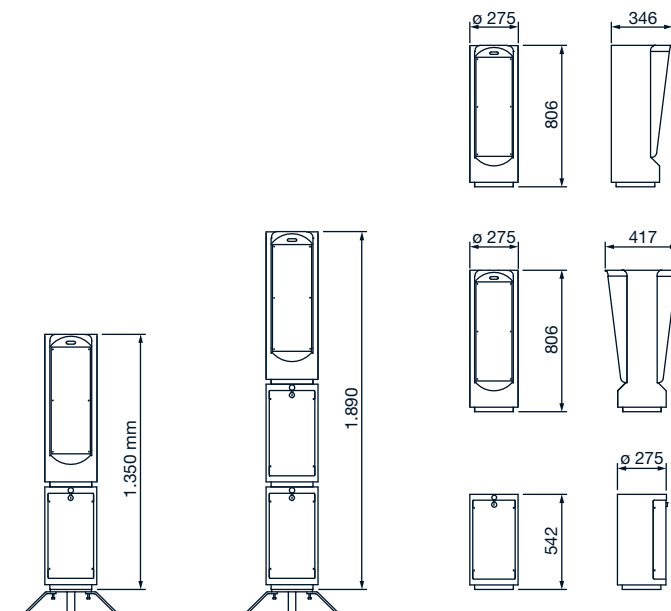
Utility post in support of access control installations for urban, residential, commercial and industrial areas. It consists of a number of stackable modules made of cataphoresis treated and powder coated S235JRH steel to best withstand the atmospheric agents. The modules can be either fitted with a lockable door accessible by key or with aluminium front panel/s to take various accessories.

TECHNICAL DATA

Diameter (mm)	275
Thickness (mm)	4
Height from ground (mm)	1.350 / 1.890 / 2.155
Material	S235JRH steel
Treatment and finishing	cataphoresis and polyester powder coating RAL 7016
Panel	anodized aluminium 206x564 mm
Grade of protection IP	53
Weight of 2 modules (kg)	50
Weight of 3 modules (kg)	70



OVERALL DIMENSIONS



VISUAL 344

CODE	HEIGHT (mm)	COMPOSITION			
		3450L (pcs)	3452L (pcs)	3456L (pcs)	3462L (pcs)
3446L	1.350	1	1	1	-
3448L	1.890	1	1	2	-
3460L	2.155	1	1	1	1

Each item includes a modular post in the configuration as described in the chart.

MODULES



3450L
Upper module made of steel, cataphoresis treated and powder coated in RAL 7016 anthracite grey, with one aluminium front panel.
Dimensions (mm): ø 275x806



3456L
Base module with door, made of steel, cataphoresis treated and powder coated in RAL 7016 anthracite grey, with lock and two keys.
Dimensions (mm): ø 275x542



3462L
Intermediate module made of steel, cataphoresis treated and powder coated in RAL 7016 anthracite grey, with an aluminium front panel.
Dimensions (mm): ø 275x806



3466L
Upper module made of steel, cataphoresis treated and powder coated in RAL 7016 anthracite grey, with two aluminium front panels.
Dimensions (mm): ø 275x806

SPECIFIC ACCESSORIES

CODE	DESCRIPTION
3452L	Flange with anchoring plates and fixing screws
3457L	Powder coated steel cover for VISUAL 344 modules, code 3456L - 3462L
3214L	Traffic lights, red and green, lens ø 125 mm, LED 5 W 24 Vac/dc. Factory-fitted
3215L	Traffic lights, red and green, lens ø 125 mm, LED 5 W 230 Vac. Factory-fitted
3216L	Traffic lights, red, yellow and green, lens ø 125 mm, LED 5 W 24 Vac/dc. Factory-fitted
3217L	Traffic lights, red, yellow and green, lens ø 125 mm, LED 5 W 230 Vac. Factory-fitted



ACCESSORIES AND COMPLEMENTARY ELEMENTS FOR AUTOMATIC, SEMIAUTOMATIC, REMOVABLE AND FIXED BOLLARDS



60L

Customized powder coating. RAL colours



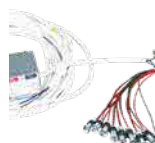
85L

Hydraulic "FADINI HF.PLI.BIO oil", in 2-litre container, 100% biodegradable



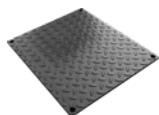
708L

Hydraulic "FADINI HF.PLI oil", in 2-litre container



1062L

4 signalling leds x 12 Vdc, transformer 230 Vac - 12 Vdc and 10 m of electric cable for power supply. Only for cylinder ø 100 mm



1068L

Pit metal cover, cataphoresis treated. Available only for CORAL automatic bollards



1078L

Burglar-proof pit cover plate, cataphoresis treated aluminium. It does not allow access to the manual release device preventing the bollard from being lowered. Available only for CORAL automatic bollards



2249L

Kit of stainless steel burglar-proof screws. Available only for CORAL and VIGILO automatic bollards



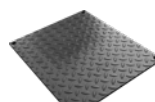
2557L

Approved, retro-reflecting, high intensity, micro-prismatic adhesive film (330 x 80 mm), to suit the ø 100 mm cylinder



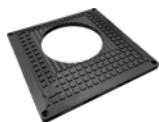
2558L

Approved, retro-reflecting, high intensity, micro-prismatic adhesive film (630 x 80 mm), to suit the ø 200 mm cylinder



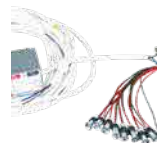
2560L

Pit metal cover, cataphoresis treated. Available only for VIGILO automatic bollards



2567L

Burglar-proof pit cover plate, cataphoresis treated aluminium. It does not allow access to the manual release device preventing the bollard from being lowered. Available only for VIGILO automatic bollards



2572L

8 signalling leds x 12 Vdc, transformer 230 Vac - 12 Vdc and 10 m of electric cable for power supply. Only for cylinder ø 200 mm



2590L

Heating cable KIT including 230 Vac x 3 m electric cable, 10 m power supply cable and 3 m aluminium adhesive tape. Available only for CORAL, VIGILO and STRABUC 930 OPINAT automatic bollards



9200L

Manual release system with triangular profile, complete with spanner. Available only for the models GASPO 252, GASPO 254, VIMARI 2316, STRAMARI 2320, TALOS automatic 94 series, 96 series, M30, C730 and for the models TALOS semiautomatic. Factory pre-assembled



9315L

Kit of stainless steel burglar-proof screws. Available only for GASPO 252 and GASPO 254



9540L

Sloping cover. The head of the moving cylinder and the cover plate of the pit are designed and constructed to meet the requirements of a sloping road. Only for the TALOS automatic range 94 series, 96 series, M30 and C730



9560L

Pit h 1.010 mm, hot dip galvanizing treatment, with aluminium, cataphoresis treated plate and bored cover plate. Available only for item code Nos.: 9450L - 9460L - 9470L - 9450HL - 9450A4L - 9460A4L - 9470A4L - 9450A4HL - 9450A6L - 9460A6L - 9470A6L - 9450A6HL - 9651L - 9661L - 9671L - 9651HL



9561L

Pit h 1.210 mm, hot dip galvanizing treatment, with aluminium, cataphoresis treated plate and bored cover plate. Available only for item code Nos.: 9480L - 9460HL - 9470HL - 9480A4L - 9460A4HL - 9470A4HL - 9480A6L - 9460A6HL - 9470A6HL - 9681L - 9661HL - 9671HL



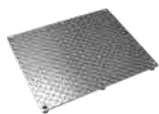
9562L

Pit h 1.310 mm, hot dip galvanizing treatment, with aluminium, cataphoresis treated plate and bored cover plate. Available only for item code Nos.: 9480HL - 9480A4HL - 9480A6HL - 9681HL



9563L

Pit h 830 mm, hot dip galvanizing treatment, with aluminium, cataphoresis treated plate and bored cover plate. Available only for item code Nos.: 9450L - 9450A4L - 9450A6L - 9651L

**9564L**

Pit metal cover, cataphoresis treated.
Available only for TALOS automatic bollards 94 series, 96 series, M30, C730 and for TALOS semiautomatic bollards

**9565L**

RAL 1028 melon yellow polyester powder coating.
Available only for the ø 275 mm cylinder

**9566L**

RAL 7016 anthracite grey polyester powder coating.
Available only for the ø 275 mm cylinder

**9567L**

Warning sound.

A beeper warning of the movements of the automatic bollard. Only for the VIGILO and TALOS automatic bollards 94 series, 96 series, M30, C730 and M50.
The device is factory fitted

**9568L**

Automatic lowering.

Obstacle detector preventing the bollard from rising in case of an obstacle or reversing travel into lowering if the obstacle is detected on rising phase. Only for the TALOS automatic bollards 94 series, 96 series, M30 and C730.
The device is factory fitted

**9569L**

Blackout device.

24 Vdc solenoid valve allowing the bollard to lower automatically in the event of a power failure. Always to be used with the voltage stabilizer item code 9321L, for proper operations of the system. Only with the TALOS automatic bollards 94 series, 96 series, M30 and C730.
The device is factory fitted

**9570L**

Heating device.

It is designed for the automatic bollards in order to expand their application range down to -40 °C in those areas where snow and ice are very frequent. Only for the TALOS automatic bollards 94 series, 96 series, M30, C730 and M50. The device is factory fitted

**9571L**

Thermostat to activate and power supply one heating device item code 9570L, complete with temperature probe

**9572L**

Thermostat to activate and power supply three heating devices item code 9570L, complete with temperature probe

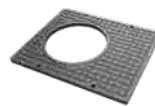
**9573L**

Kit of stainless steel burglar-proof screws. Available only for TALOS automatic bollards 94 series, 96 series, M30, C730 and for the TALOS semiautomatic bollards



9574L

Approved, retro-reflecting, high intensity, micro-prismatic adhesive film (875 x 80 mm), to suit the ø 275 mm cylinder



9575L

Burglar-proof pit cover plate, cataphoresis treated aluminium. It does not allow access to the manual release device preventing the bollard from being lowered. Available only for TALOS automatic bollards 94 series, 96 series and for the TALOS semiautomatic bollards



9576L

Multipole cable type BUT FLESSIBILE FG 70R 12x1,5 mm².

For the TALOS bollards:

- in the standard version, without additional accessories;
 - in the version with max. one additional accessory, fitted (e.g. solenoid valve, obstacle detector and heating device).
- N.W. The presence or not of the beeper on the TALOS bollard does not affect cable choice



9577L

Multipole cable type BUT FLESSIBILE FG 70R 16x1,5 mm².

For the TALOS bollards:

- in the version with two or all of the three additional accessories, fitted (e.g. solenoid valve, obstacle detector and heating device).

N.W. The presence or not of the beeper on the TALOS bollard does not affect cable choice



9578L

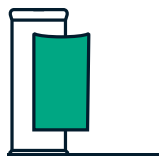
Kit of stainless steel burglar-proof screws.

Available only for TALOS M50 automatic bollards



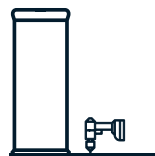
9579L

Reed magnetic contacts to be used to transmit a security signal to the bollard with cylinder in raised and lowered positions. Available only for the models TALOS semiautomatic. Factory fitted



9580L

Polymeric adhesive film, protected with either glossy or matt transparent lamination, in four-colour print and directly applied to the cylinder of the bollard. Design and graphic layout can be fully customized. Available only for the TALOS automatic bollards 94 series, 96 series, M30, C730, M50 and for the TALOS semiautomatic and fixed bollards



9581L

Up&down drill device.

It is possible to manually operate the bollards in an emergency, either raising or lowering, by means of a screwdriver drill (socket insert with triangular profile, available). Only with TALOS automatic 94 series, 96 series, M30, C730 and M50. The device is factory fitted



9684L

Cover sleeve in AISI 304 brushed stainless steel, thickness 12/10. Available only for the automatic, semiautomatic and fixed bollards with ø 275 mm cylinder and up to 800 mm height (from ground). Factory fitted



9688L

Cover sleeve in AISI 304 brushed stainless steel, thickness 12/10. Available only for the automatic, semiautomatic and fixed bollards with ø 275 mm cylinder and 1.000 mm height (from ground). Factory fitted



COMMAND, SECURITY AND SIGNALLING DEVICES



2032L

Magnetic loop detector for automatic gates, barriers and bollards. Technical data: two magnetic loops with two relay outputs and one alarm output, 24 Vac/dc



2037L

6 m circumference, pre-assembled loop with 10 m power supply cable



2042L

12 m circumference, pre-assembled loop with 15 m power supply cable



3206L

Pair of brackets to fasten the traffic lights to the round pole



3203L

Traffic lights with red and green lights and extruded aluminium body, lens ø 125 mm, 70 W 230 Vac lamp, two wall fixing brackets with expanding bolts and screws



3204L

Traffic lights with red, yellow and green lights and extruded aluminium body, lens ø 125 mm, 70 W 230 Vac lamp, two wall fixing brackets with expanding bolts and screws



3210L

Traffic lights with red and green lights and extruded aluminium body, lens ø 125 mm, led 5 W 230 Vac, two wall fixing brackets with expanding bolts and screws



3219L

Traffic lights with red, yellow and green lights and extruded aluminium body, lens ø 125 mm, led 5 W 230 Vac, two wall fixing brackets with expanding bolts and screws

3218L

Traffic lights with red and green lights and extruded aluminium body, lens ø 125 mm, led 5 W 24 Vac/dc, two wall fixing brackets with expanding bolts and screws

3221L

Traffic lights with red, yellow and green lights and extruded aluminium body, lens ø 125 mm, led 5 W 24 Vac/dc, two wall fixing brackets with expanding bolts and screws



3212L

Control board for traffic lights with two or three lights in car parks, residences or in all those places where vehicle accessing needs regulated management



3220L

Hazard road sign: bollard in motion. Box section sheet metal with reflecting film (400x600x17 mm). Complete with fastening brackets, screws and pole



7288L

E.A.R. 35 - Emergency Acoustic Receiver to detect the bitonal signal of the sirens approved by the Ministry of Transports and mounted on to the vehicles of public rescue teams and police. In emergency situations, once a siren is detected, it commands the bollards to lower and clear the driveway



9321L

Voltage stabilizer: input 230 Vac / output 24 Vdc. It is to be used with the automatic bollards fitted with emergency solenoid valve; one stabilizer with each bollard



9331L

Emergency control in watertight box with illuminable button and two contacts

ELECTRONIC CONTROL UNITS





ELPRO S20

96

ELPRO S40

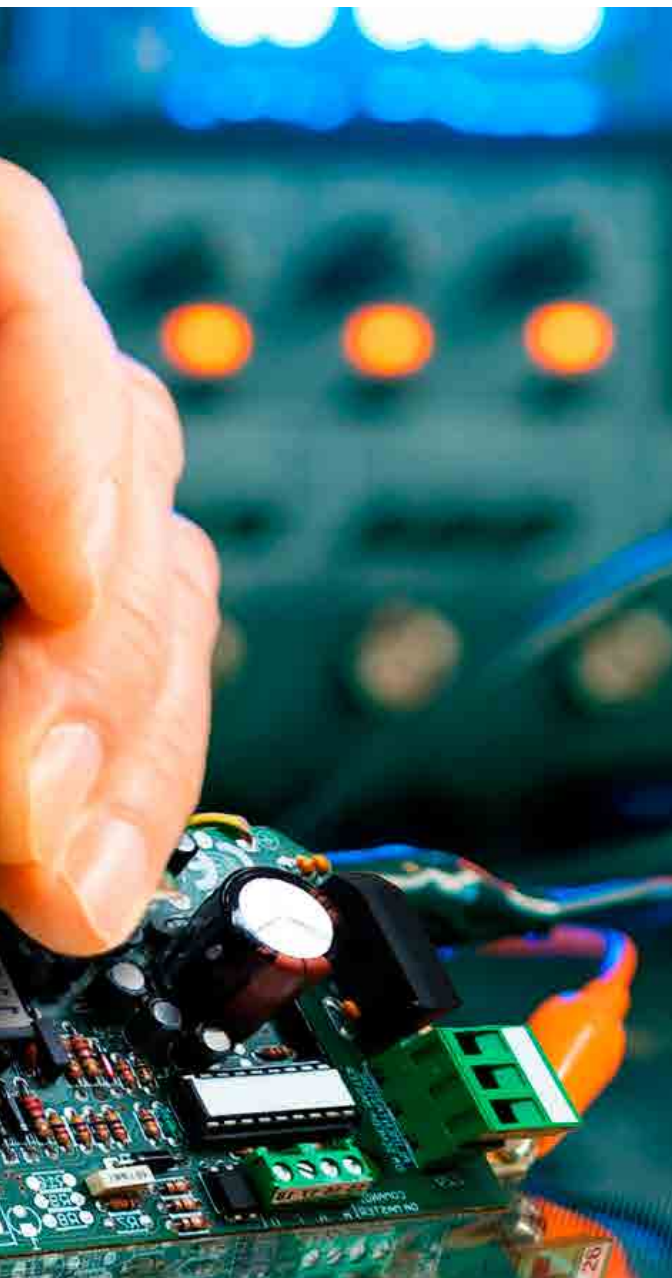
97

ELPRO S50

98

ACCESSORIES FOR ELECTRONIC BOARDS

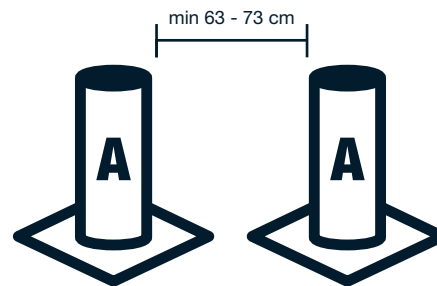
99





GUIDE TO CHOICE

ELPRO S20

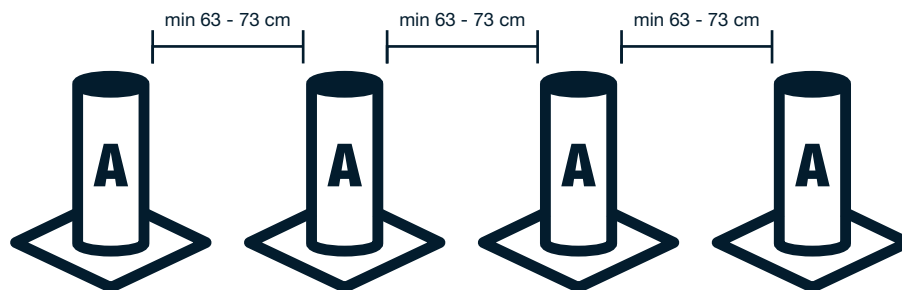


max 50 m
ø 1,5 mm



CORAL
VIGILO
TALOS 94 series
TALOS 96 series
TALOS M30
TALOS C730

ELPRO S40

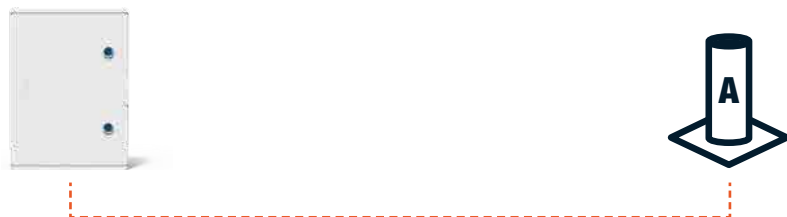


max 50 m
ø 1,5 mm



CORAL
VIGILO
TALOS 94 series
TALOS 96 series
TALOS M30
TALOS C730

ELPRO S50-T1 / ELPRO S50-T1.EFO



max 50 m
ø 1,5 mm

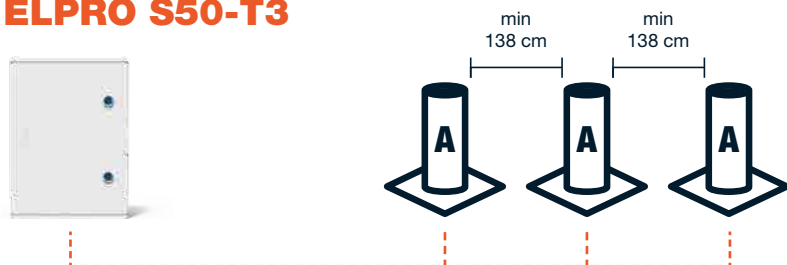


TALOS M50
TALOS M50.EFO

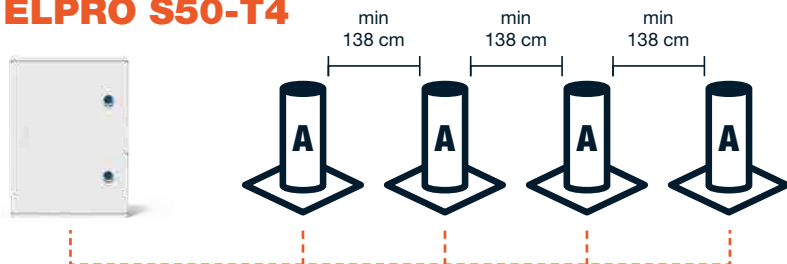
ELPRO S50-T2 / ELPRO S50-T2.EFO



ELPRO S50-T3



ELPRO S50-T4





ELPRO S20

7278L

COMPATIBILITY

Electronic control unit for the automatic bollards type CORAL, VIGILO, STRABUC 930 OPINAT, TALOS 94 series, 96 series, M30 and C730.

INTEGRATED CONTROL FUNCTIONS

Up to two automatic bollards.

OPERATING MODES

Automatic, semiautomatic, automatic step by step, deadman control, pedestrian for single bollard and pre-flashing.

MAIN FUNCTIONS

Intuitive adjusting operations by trimmers and dip-switches: preset for an external clock, traffic lights card, plug-in radio receiver card, bollard status indication, C.S.I. Control of the System Integrity. 230 Vac single-phase power supply.



TECHNICAL FEATURES

Supply of single-phase board (Vac – Hz)	230 - 50
Supply of three-phase board	-
Motor max. power (W)	1.200
Courtesy light output	-
Photocells/key-switch/receiver output (Vdc – mA)	24 - 250
Pilot light output (Vac – W)	24 - 3
DSA control output	-
Flashing light output (Vac – W)	230 - 100
Motor run time (s)	1 - 22
Dwell time (s)	1 - 180
Closing gate delay time	-
Pedestrian opening time	-
Box dimensions (mm)	210x295x110
Grade of protection IP	64
Working temperature (°C)	-20 ÷ +55
Solenoid valve supply (Vac – Hz)	230 - 50
Movement beeper output (Vac – W)	230 - 100

ELPRO S40

7280L

COMPATIBILITY

Electronic control unit for the automatic bollards type CORAL, VIGILO, STRABUC 930 OPINAT, TALOS 94 series, 96 series, M30 and C730.

INTEGRATED CONTROL FUNCTIONS

Up to four automatic bollards.

OPERATING MODES

Automatic, semiautomatic, automatic step by step, deadman control, pedestrian for single bollard and pre-flashing.

MAIN FUNCTIONS

Intuitive adjusting operations by trimmers and dip-switches: preset for an external clock, traffic lights card, plug-in radio receiver card, bollard status indication, C.S.I. Control of the System Integrity. 230 Vac single-phase power supply.



TECHNICAL FEATURES

Supply of single-phase board (Vac – Hz)	230 - 50
Supply of three-phase board	-
Motor max. power (W)	2.400
Courtesy light output	-
Photocells/key-switch/receiver output (Vdc – mA)	24 - 250
Pilot light output (Vac – W)	24 - 3
DSA control output	-
Flashing light output (Vac – W)	230 - 100
Motor run time (s)	1 - 22
Dwell time (s)	1 - 180
Closing gate delay time	-
Pedestrian opening time	-
Box dimensions (mm)	210x295x110
Grade of protection IP	64
Working temperature (°C)	-20 ÷ +55
Solenoid valve supply (Vac – Hz)	230 - 50
Movement beeper output (Vac – W)	230 - 100



ELPRO S50

COMPATIBILITY

Electronic control unit for the automatic bollard type TALOS M50.

INTEGRATED CONTROL FUNCTIONS

Up to four automatic bollards.

OPERATING MODES

Automatic, semiautomatic, automatic step by step, deadman control, pedestrian for single bollard and pre-flashing.

MAIN FUNCTIONS

Intuitive adjusting operations by trimmers and dip-switches: preset for an external clock, traffic lights card, plug-in radio receiver card, bollard status indication, C.S.I. Control of the System Integrity.

230 Vac single-phase power supply.



CODE	DESCRIPTION
9097L	ELPRO S50-T1 control unit for one TALOS M50 automatic bollard
9098L	ELPRO S50-T2 control unit for two TALOS M50 automatic bollards
9099L	ELPRO S50-T3 control unit for three TALOS M50 automatic bollards
9101L	ELPRO S50-T4 control unit for four TALOS M50 automatic bollards
9093L	ELPRO S50-T1.EFO control unit for one TALOS M50.EFO automatic bollard
9094L	ELPRO S50-T2.EFO control unit for two TALOS M50.EFO automatic bollards

TECHNICAL FEATURES	ELPRO S50-T1	ELPRO S50-T2	ELPRO S50-T3	ELPRO S50-T4	ELPRO S50-T1.EFO	ELPRO S50-T2.EFO
Supply of single-phase board (Vac – Hz)	230 - 50	230 - 50	230 - 50	230 - 50	230 - 50	230 - 50
Supply of three-phase board	-	-	400 - 50	400 - 50	-	-
Motor max. power (W)	3.500	3.500	3.500	3.500	3.500	3.500
Courtesy light output	-	-	-	-	-	-
Photocells/key-switch/ receiver output (Vdc – mA)	24 - 250	24 - 250	24 - 250	24 - 250	24 - 250	24 - 250
Pilot light output (Vac – W)	24 - 3	24 - 3	24 - 3	24 - 3	24 - 3	24 - 3
DSA control output	-	-	-	-	-	-
Flashing light output (Vac – W)	230 - 100	230 - 100	230 - 100	230 - 100	230 - 100	230 - 100
Motor run time (s)	1 - 22	1 - 22	1 - 22	1 - 22	1 - 22	1 - 22
Dwell time (s)	1 - 180	1 - 180	1 - 180	1 - 180	1 - 180	1 - 180
Closing gate delay time	-	-	-	-	-	-
Pedestrian opening time	-	-	-	-	-	-
Box dimensions (mm)	310x425x160	405x500x200	405x500x200	405x500x200	405x500x200	405x650x200
Grade of protection IP	66	66	66	66	66	66
Working temperature (°C)	-20 ÷ +55	-20 ÷ +55	-20 ÷ +55	-20 ÷ +55	-20 ÷ +55	-20 ÷ +55
Solenoid valve supply (Vac – Hz)	230 - 50	230 - 50	230 - 50	230 - 50	230 - 50	230 - 50
Movement beeper output (Vac – W)	230 - 100	230 - 100	230 - 100	230 - 100	230 - 100	230 - 100

ACCESSORIES FOR ELECTRONIC BOARDS

2746L HELIOS 29

COMPATIBILITY

Electronic plug-in pcb for ELPRO27/S40/7RP/XE control units.

MAIN FUNCTIONS

It allows, in the most cold environments (-40 °C), for the oil inside Fadini oil-hydraulic actuators to stay within its normal working temperature range. It is easy to select the temperature at which HELIOS 29 is activated by a trimmer on the board, using the thermostat integrated inside HELIOS 29. Complete with temperature probe with 5 m cable and connector. It is also possible to connect an external thermostat (optional accessory) to take the temperature at a distance from the HELIOS 29 card and therefore pilot the same.
Board size 50x110x160 mm. Probe size 60x67x70 mm



2756L

Temperature probe for HELIOS 29 with 5 m cable and connector.
Probe dimensions 60x67x70 mm



2783L

Kit consisting of two microprocessors and one electronic pcb to connect more electronic control units ELPRO S20/S40/S50, and configure the boards in a master-and-slave way in order to have command over a number of automatic bollards in the same access

7230L DUPCO 72

COMPATIBILITY

Electronic pcb studied and made to suit all of ELPRO control units.

MAIN FUNCTIONS

DUPCO 72 allows the duplication of each input single contact of the limit switches and get two dry output contacts. It is possible to connect up to two automations equipped with limit switches. Dimensions of the pcb 32x61x100 mm



7282L

Electronic pcb to control traffic lights, to be plugged into the ELPRO control units (where applicable)



7285L

Water-tight polyester box, IP 66, type GW46002 (310x425x160 mm) with blind door, fitted with a lock, and inner metal plate



7294L

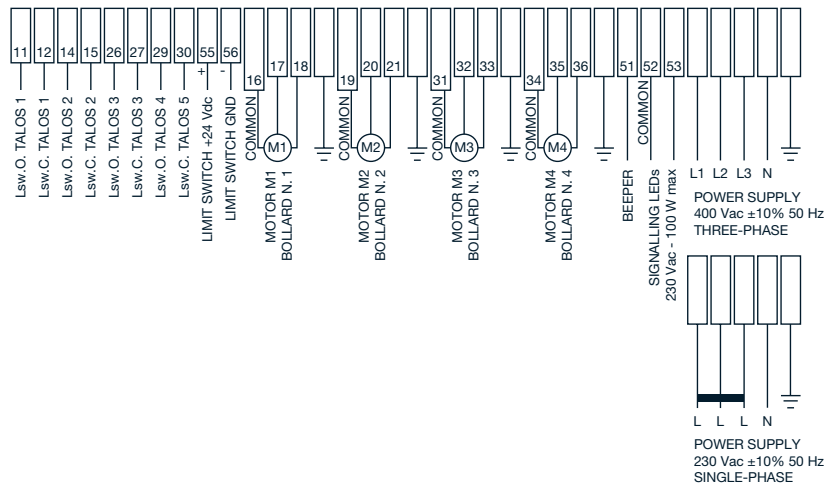
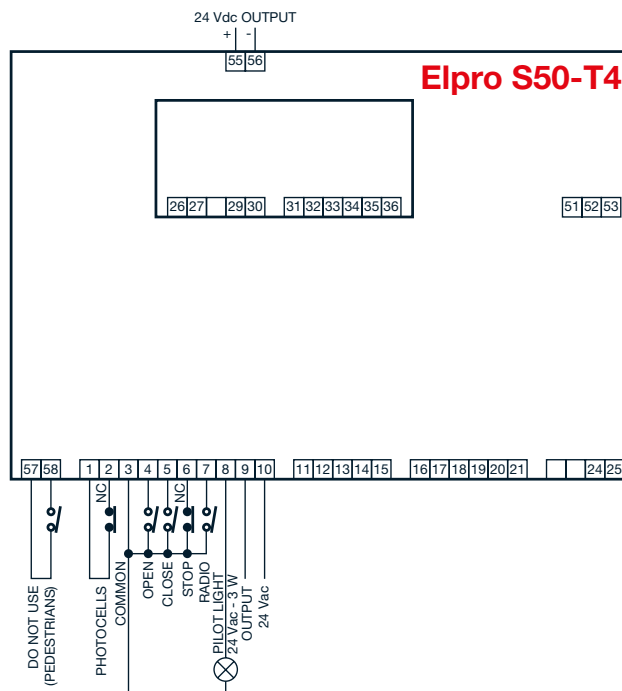
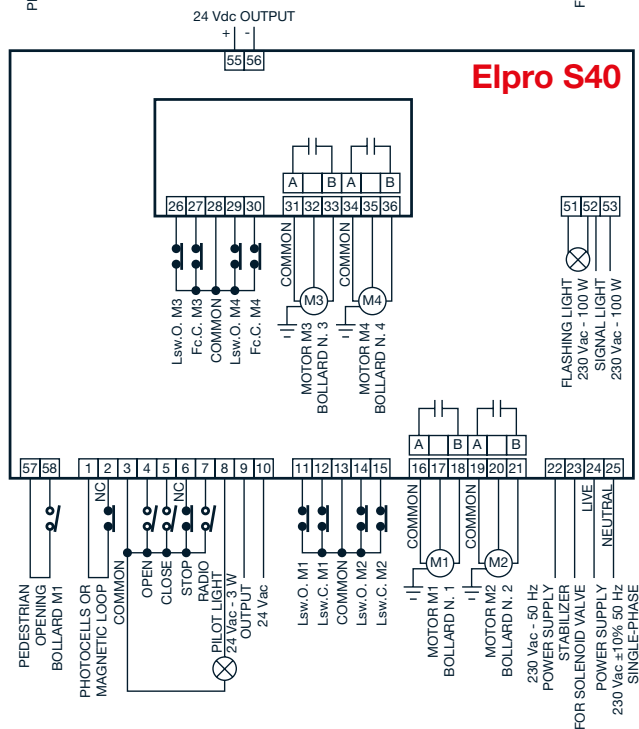
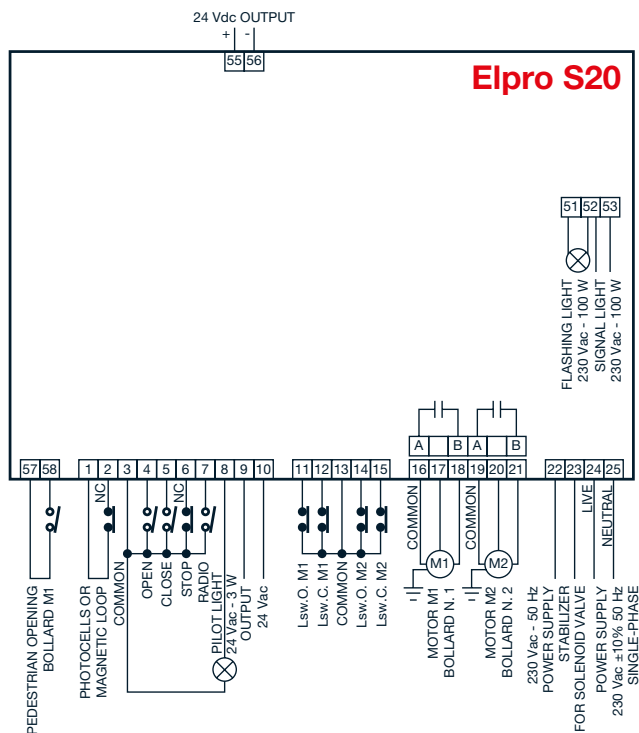
Water-tight polyester box, IP 66, type GW46003 (405x500x200 mm) with blind door, fitted with a lock, and inner metal plate



7295L

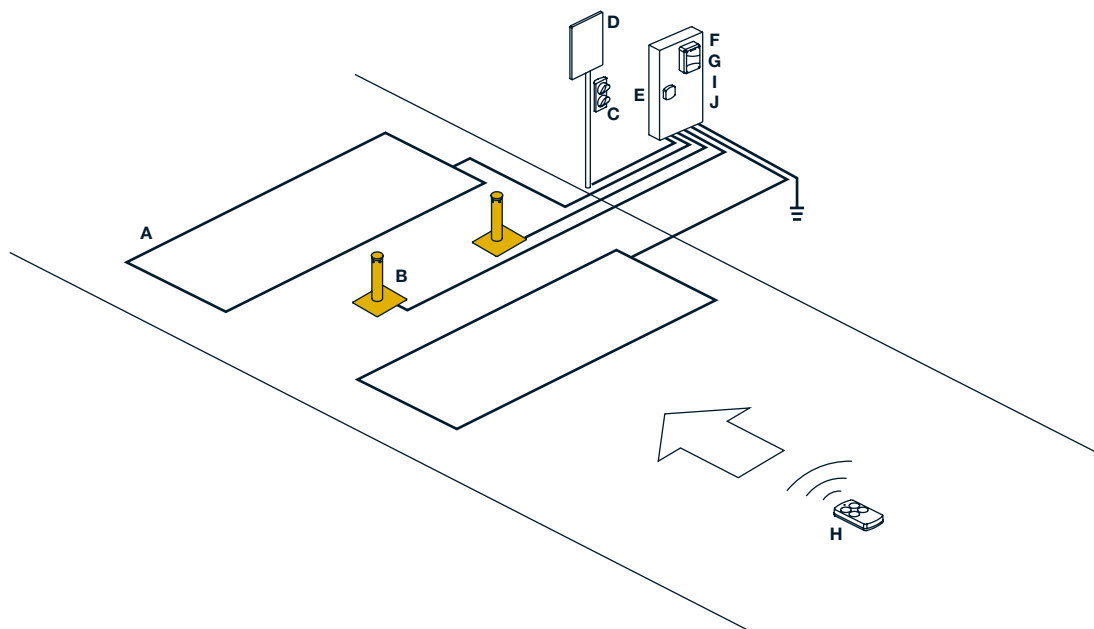
Water-tight polyester box, IP 66, type GW46004 (405x650x200 mm) with blind door, fitted with a lock, and inner metal plate



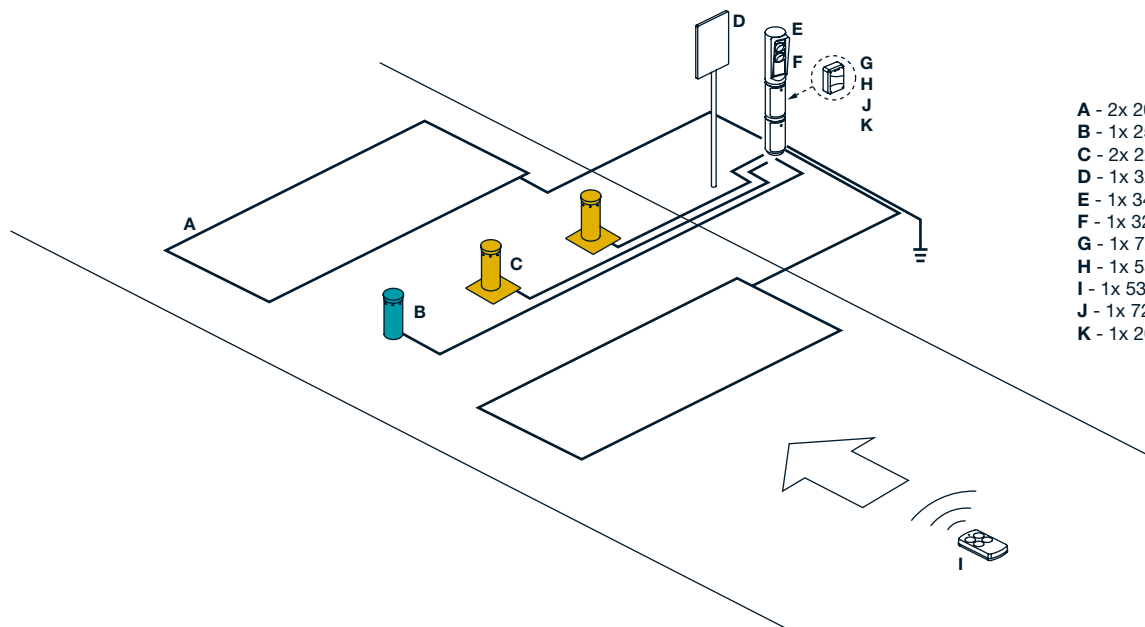




WITH CORAL - VIGILO

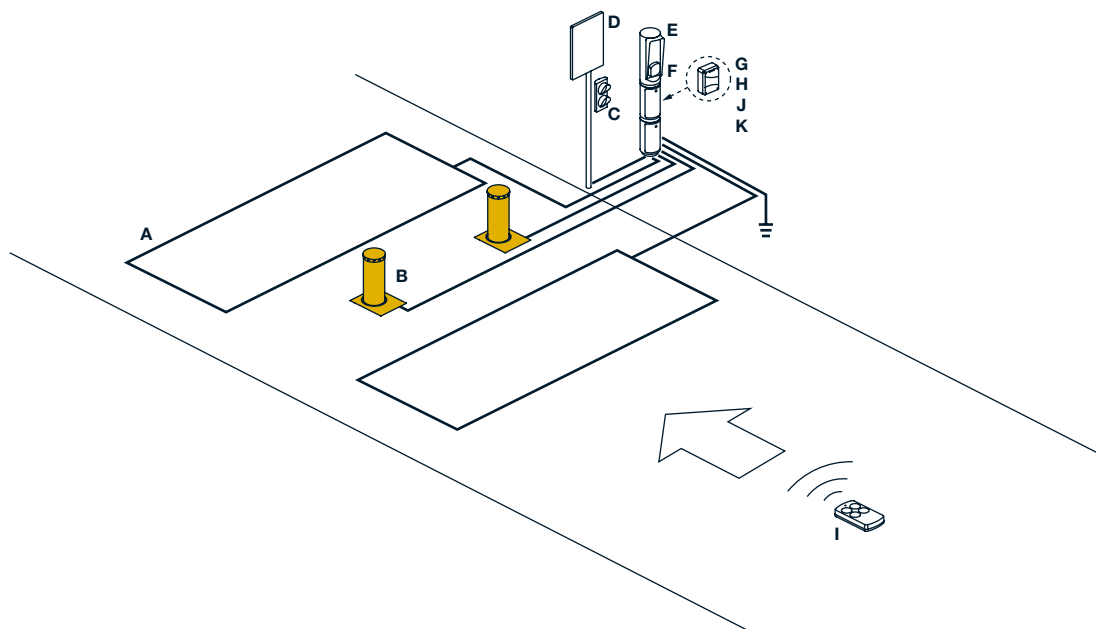


- A - 2x 2042L
- B - 2x 1084L
- C - 1x 3210L
- D - 1x 3220L
- E - 1x 142L
- F - 1x 7280L
- G - 1x 5311L
- H - 1x 5313GL
- I - 1x 7282L
- J - 1x 2032L

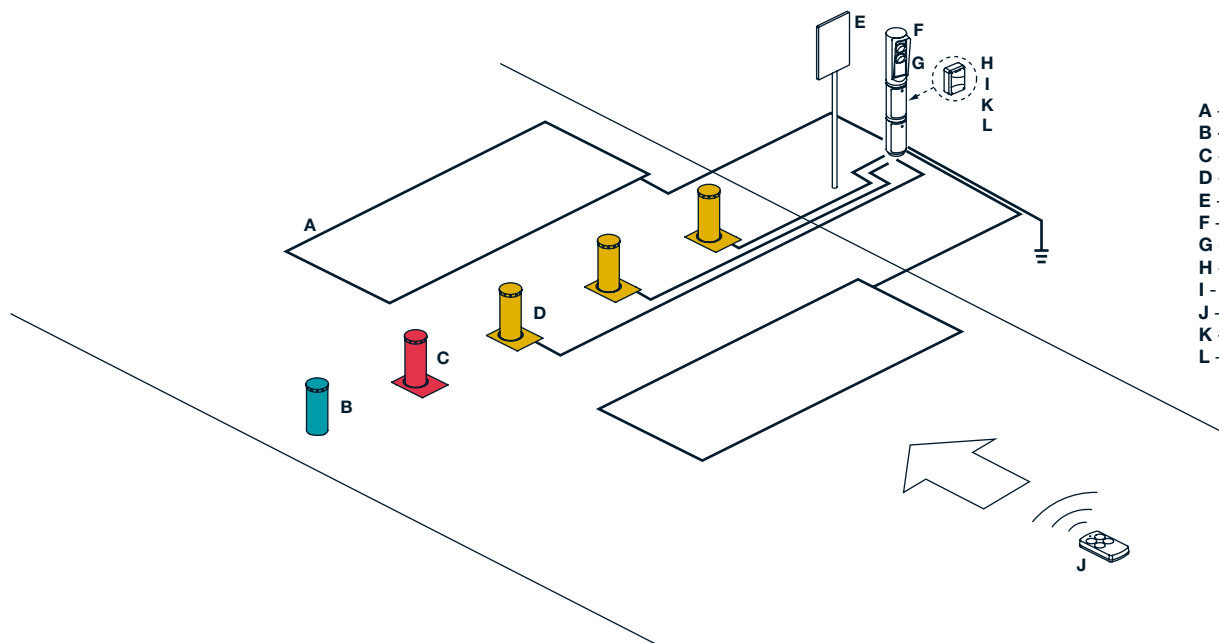


- A - 2x 2042L
- B - 1x 2588L
- C - 2x 2299L
- D - 1x 3220L
- E - 1x 3448L
- F - 1x 3215L
- G - 1x 7280L
- H - 1x 5311L
- I - 1x 5313GL
- J - 1x 7282L
- K - 1x 2032L

WITH TALOS 94 SERIES

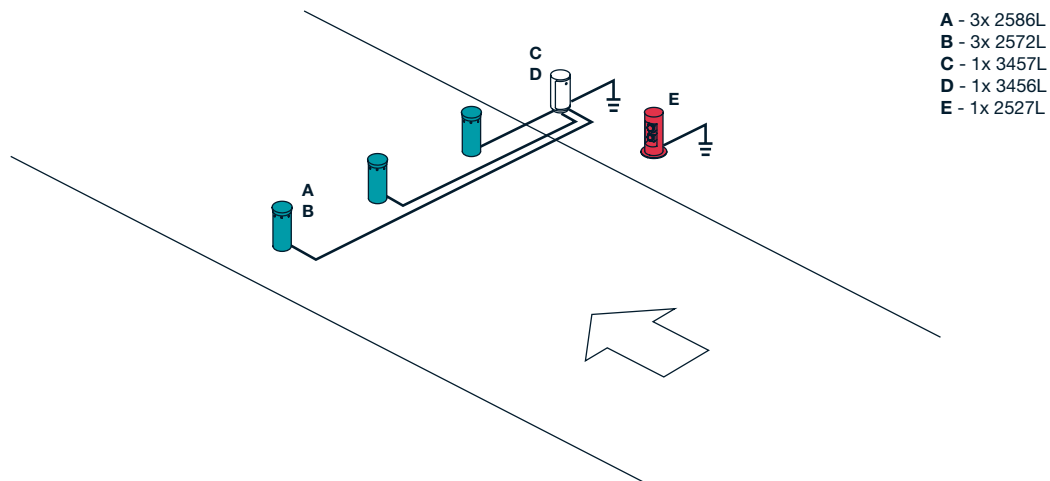
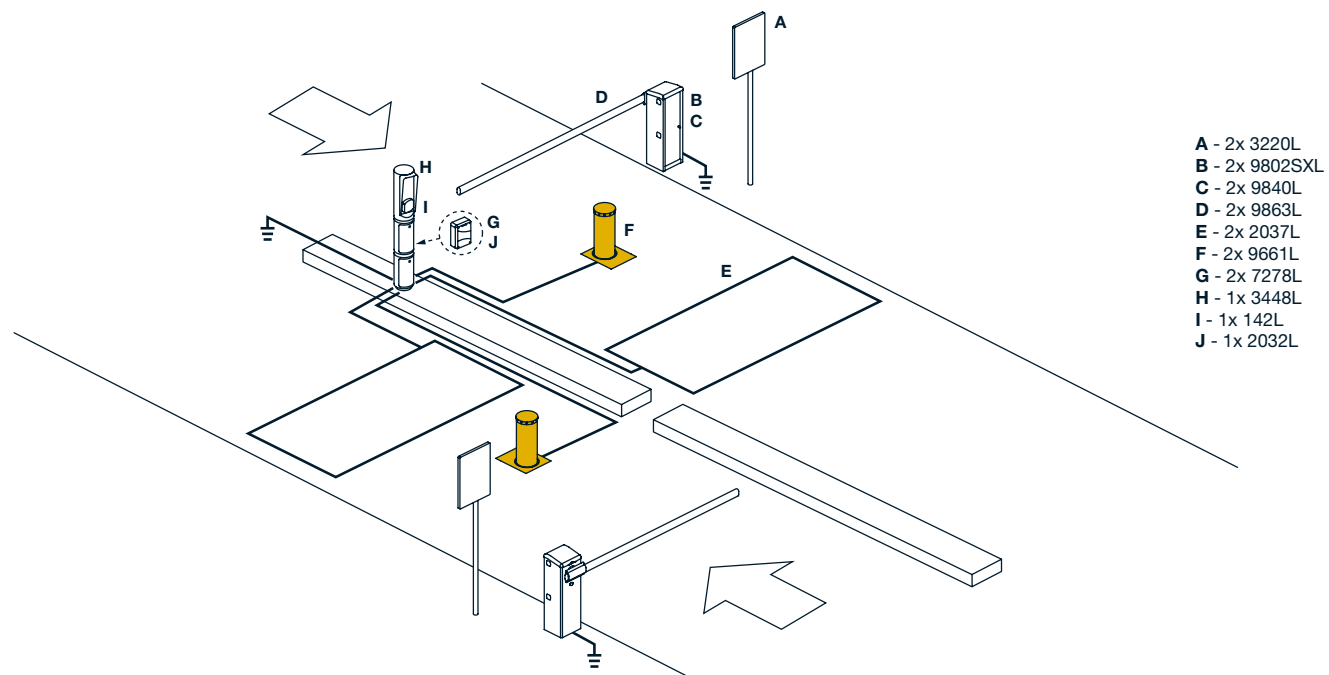


- A - 2x 2042L
- B - 2x 9470HL
- C - 1x 3210L
- D - 1x 3220L
- E - 1x 3448L
- F - 1x 143L
- G - 1x 7278L
- H - 1x 5311L
- I - 1x 5313GL
- J - 1x 7282L
- K - 1x 2032L

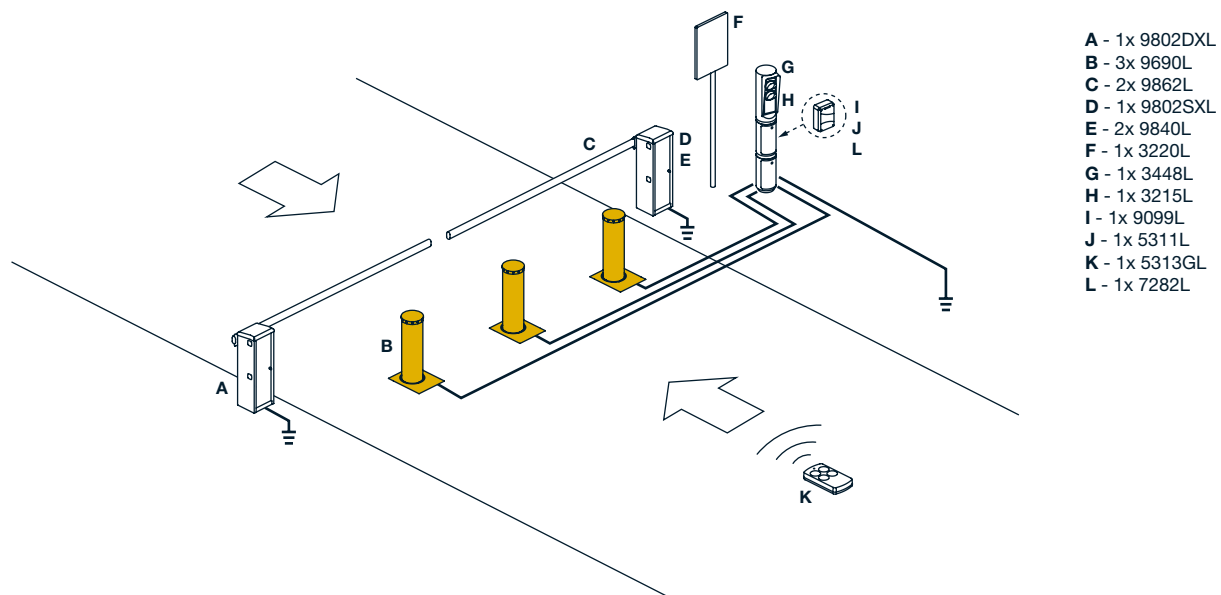
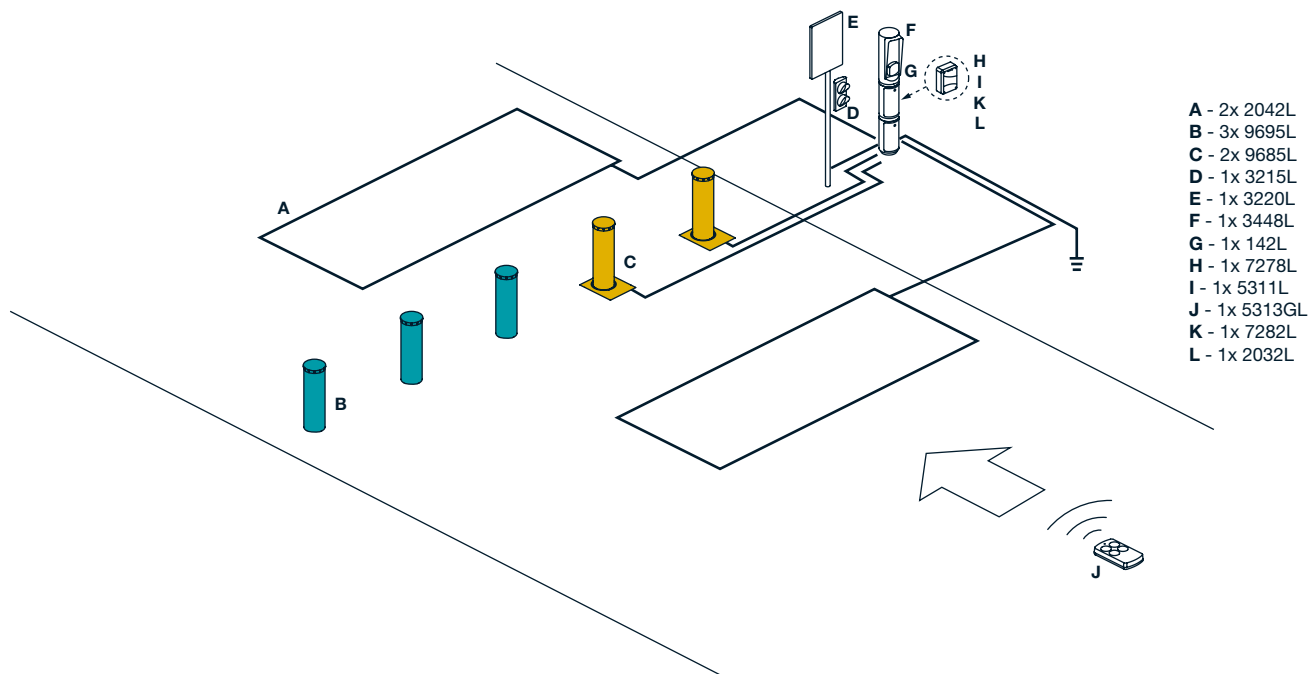


- A - 2x 2042L
- B - 1x 9643L
- C - 1x 9481L
- D - 3x 9480L
- E - 1x 3220L
- F - 1x 3448L
- G - 1x 3215L
- H - 1x 7280L
- I - 1x 5311L
- J - 1x 5313GL
- K - 1x 7282L
- L - 1x 2032L

WITH TALOS 96 SERIES AND GASPO 254 WITH FIXED BOLLARDS



WITH TALOS C730 AND TALOS M50



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180L	74
185L	66
186L	66
708L	86
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1052L	26
1054L	26
1057L	26
1059L	26
1062L	86
1063L	26
1064L	26
1067L	26
1068L	86
1078L	86
1080L	26
1082L	26
1084L	26
1087L	26
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2255L	30

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2756L	99
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3221L	90
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3448L	85
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9330L	49
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9579L	89
9580L	89
9581L	89
9643L	77
9643EL	77

CODE	PAGE
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9661HL	38
9671L	38
9671HL	38
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9681HL	38
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9687EL	79
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9690L	47
9695L	80
9695EL	80
9697L	78
9697EL	78

NOTES INDEX

[A]: Possibility to install the automatic bollard in very cold areas, -40 °C and even less, without freezing problems. Refer to code No. 2590L or, as an alternative for existing installations, code No. 2746L.

[B]: In the moving cylinder there are plastic plugs whose design is the same as the LED lights. The LED lights are factory fitted to the bollards exclusively for the items indicated in the chart.

[C]: The 24 Vdc voltage stabilizer code No. 9321L must be used for the power supply of the solenoid valve fitted into the bollard.

Handwriting practice area consisting of 20 horizontal dotted lines.

Handwriting practice area with 20 horizontal dotted lines.

Handwriting practice area consisting of 20 horizontal dotted lines.

FADINI[®] is also:

Automations for
SLIDING GATES



Automations for
SWINGING GATES



Automations for **INDUSTRIAL AND GARAGE DOORS**



AUTOMATIC BARRIERS



Electronics for **COMMAND AND SAFETY**



Concept
Halfduck

Photos and Graphics
Bronwenir

Technical Design
Little Togno

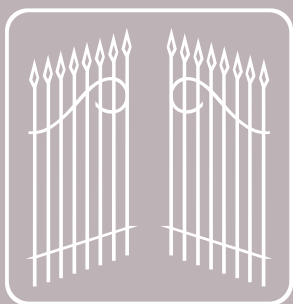
Auditor
Mediator

The catalogue includes texts and technical data updated to the date of publication. The data contained in this catalogue replace in full all the technical or commercial documents existing before this issue.

To achieve an installation in compliance with the applicable norms, it is recommended that the indicated code numbers be properly referred to and that original accessories by Meccanica Fadini be used. It is also advisable that the technical literature of the required products be consulted for a correct installation.

The images in this catalogue are merely indicative. All the data have been accurately verified and controlled. Meccanica Fadini reserves the right to change the products and this catalogue any time and in any way as necessary without previous notice. No responsibility is taken over for possible errors and/or omissions.





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MECCANICA FADINI s.n.c.
Via Mantova 177/A
37053 Cerea VR Italy
Ph. +39 0442 330422
Fax +39 0442 331054
info@fadini.net
www.fadini.net

