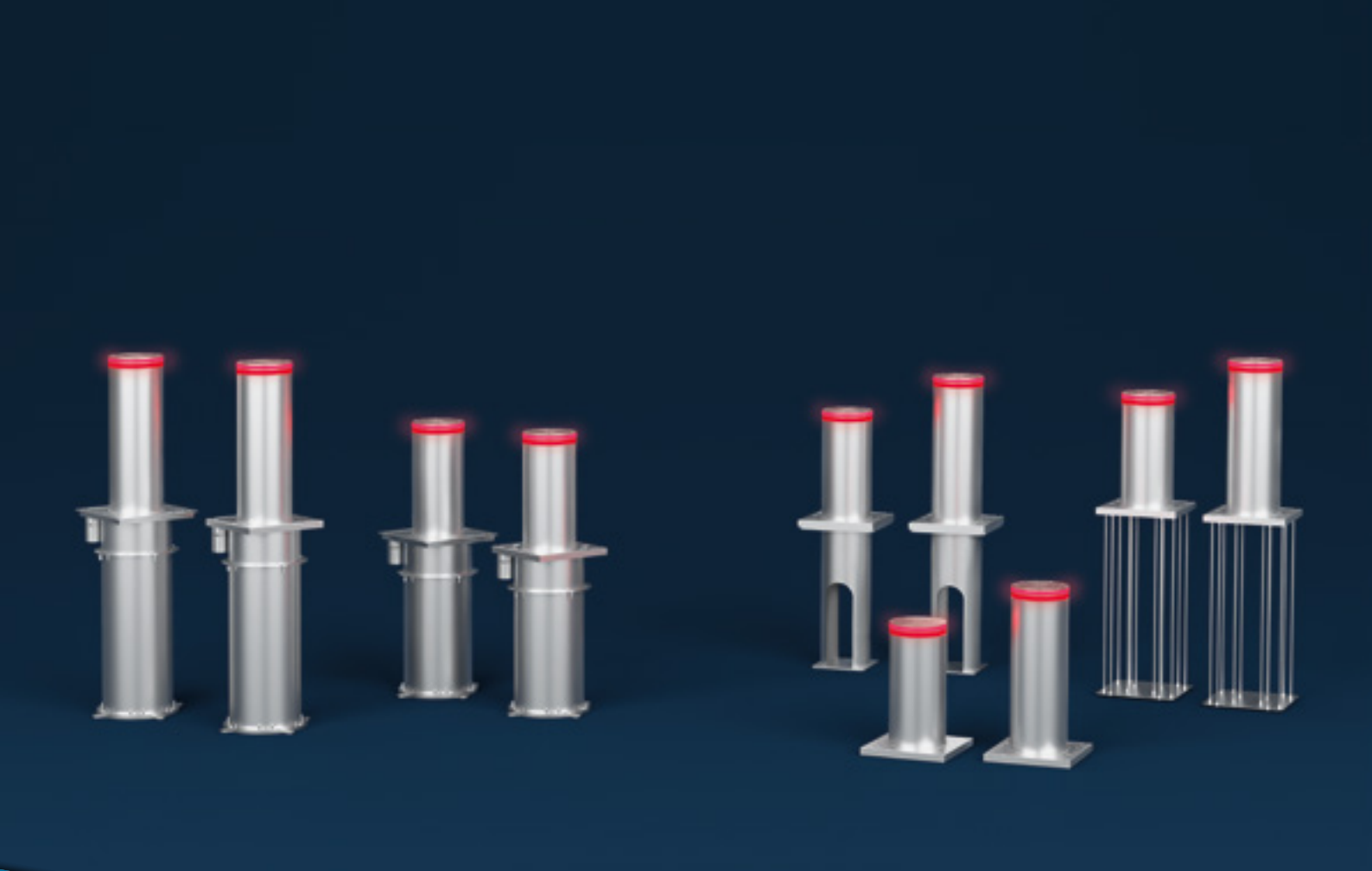


ELKA TRAFFIC BOLLARDS

HIGH QUALITY AND TESTED SAFETY

COMFORTABLE OPERATION AND EASY INSTALLATION

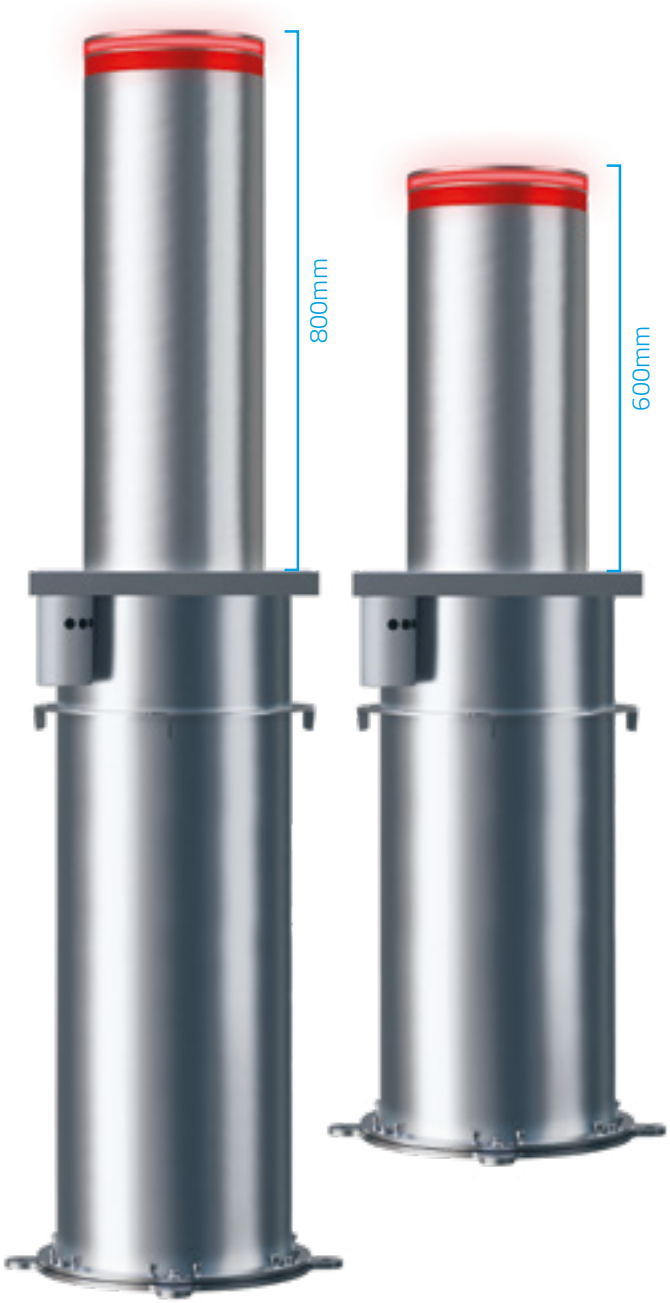
ROBUST, DURABLE AND RELIABLE

ELKA

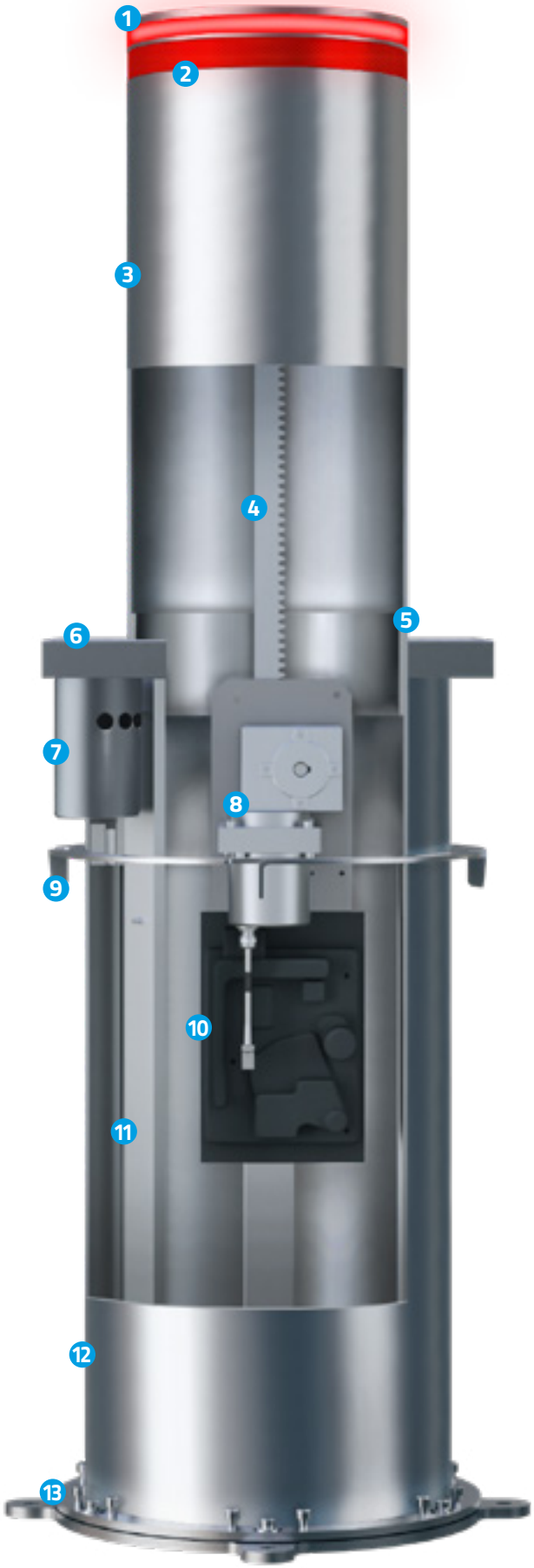
Electromechanical traffic bollards

Traffic bollards EP 600-EM and EP 800-EM
Electromechanical, made of stainless steel (visible components made of V4A)

Discover the electromechanical traffic bollards from ELKA - the perfect solution for efficient traffic control and reliable protective barriers in pedestrian zones, access roads or on commercial properties. Pedestrians and cyclists can pass through unhindered, while vehicles are subject to access control. ELKA traffic bollards are characterized by high quality standards, simple installation and user-friendly operation.



- Stainless steel cylinder height 600mm or 800mm, ø 273mm
- Use of high-quality and weather-resistant materials (e.g. visible components made of V4A stainless steel)
- With maintenance-free BLDC motor and high efficiency
- Waterproof motor and gear unit and encapsulated motor driver (protection class IP68)
- Designed for 5 million cycles (up to 2,000 movement cycles per day possible)
- Manual emergency release (patent pending), e.g. via fire department triangle
- Force monitoring with automatic reversal (protection against overloading, e.g. if a car is parked on the bollard)
- Optional start-up function (patent pending)
- Optional icebreaker function (patent pending)
- Connection options for e.g. optional radio remote control, induction loops and safety devices Performance Level C
- Particularly shallow installation depth (852mm - 1,052mm, depending on the cylinder height)



1. Cover with programmable LED lighting and access to manual emergency release (patent pending)
2. Red reflective strip
3. Cylinder made of V4A stainless steel (wall thickness 4 mm)
4. Toothed rack
5. 4mm reinforcement in the highly loaded area (total wall thickness 8mm)
6. Base plate with transparent wiper ring (LED lighting is still visible when the bollard is retracted)
7. Junction box for the connection cables (to be sealed after installation, sealing gel is included in the scope of delivery)
8. Waterproof motor and gear unit (protection class IP 68)
9. Anchor ring for improved anchoring in the foundation
10. Encapsulated motor driver
11. Cable channel
12. Ground socket made of V2A stainless steel (is embedded in the ground)
13. Base plate with attachment points for optional mounting on foundation

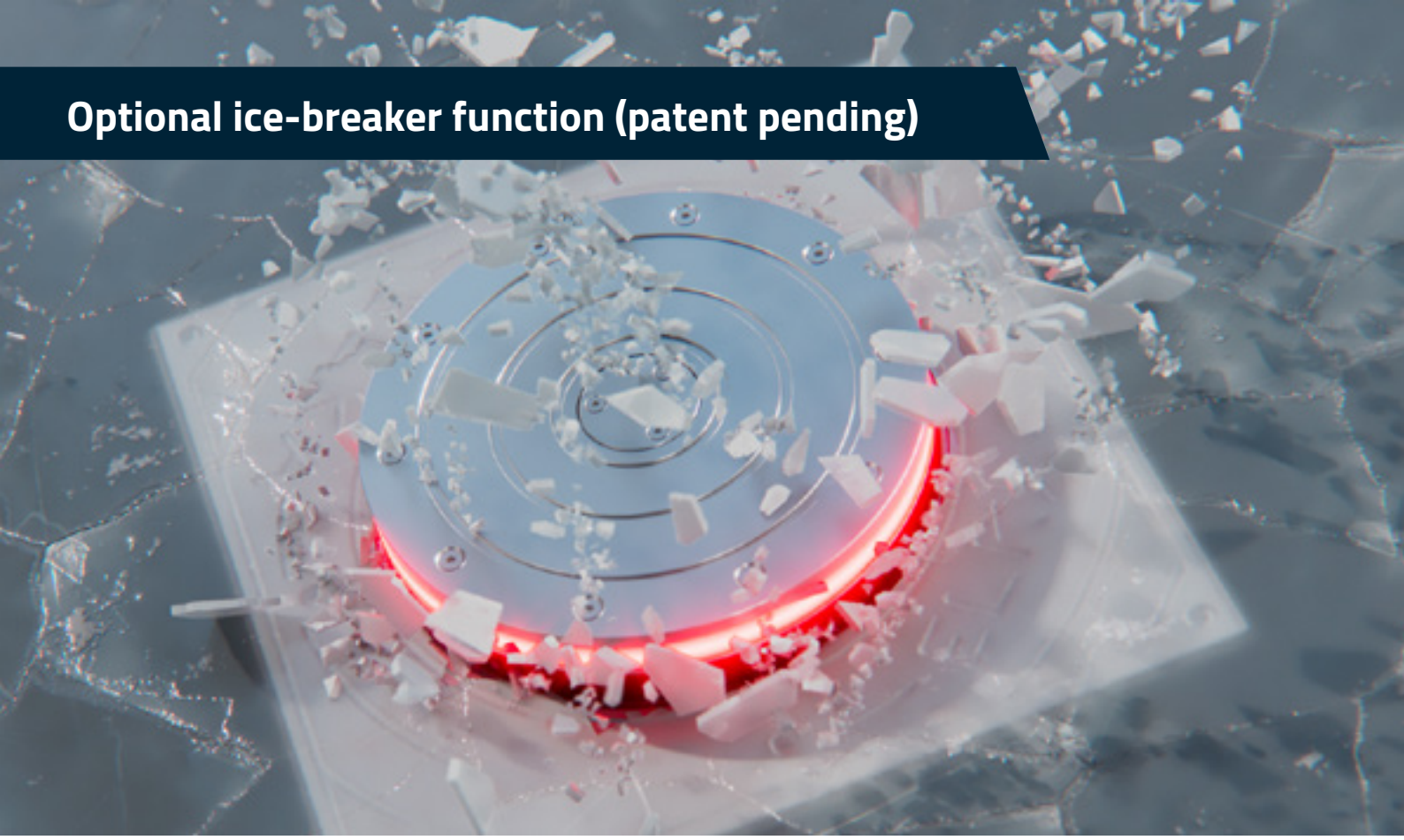
Manual emergency release (patent pending)

The manual emergency release takes place directly on the cover of the bollard. The smaller cover is removed, using a fire department triangle for example. The emergency release rod is pulled out at the pull loop and the bollard drops down immediately.

Waterproof

Motor, gear and motor driver of the bollard are waterproof (protection class IP68).
Operation is also possible after briefly standing under water.

Optional ice-breaker function (patent pending)

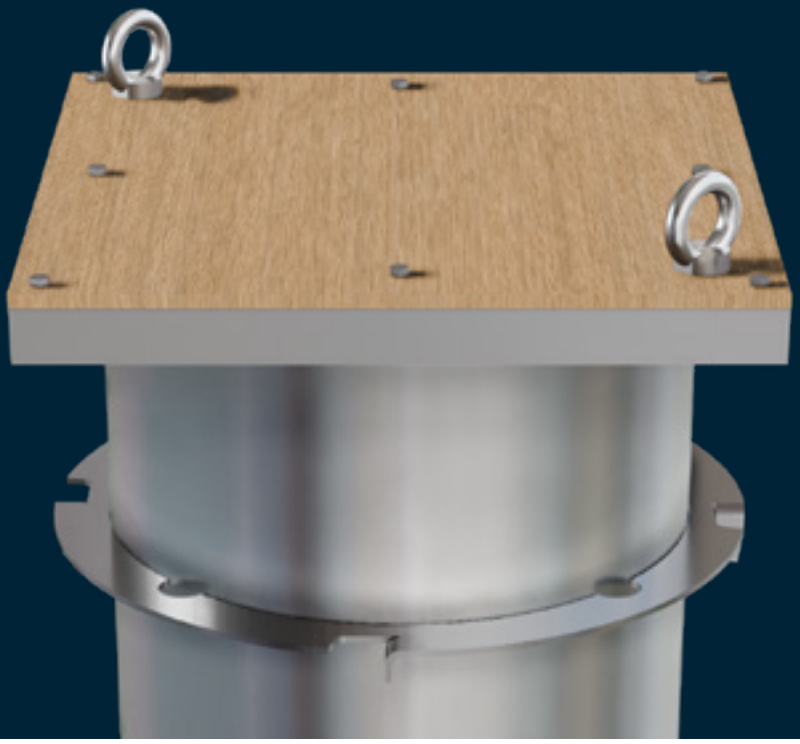


If a thin layer of ice has formed on the ground in cold weather, the bollard lifts briefly with greater force.
The ice breaks and the bollard can be raised properly.

Optional start-up function (patent pending)

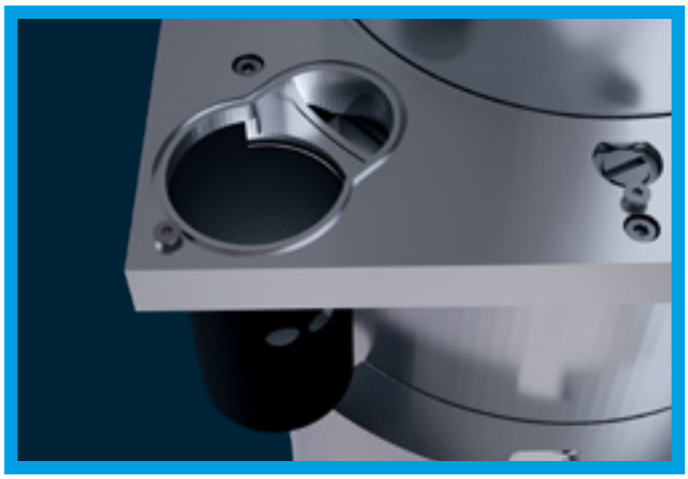
The bollard rises a few centimeters during the upward movement. The LED lighting becomes visible to traffic and flashes. The bollard only raises fully after a set waiting time.

Installation

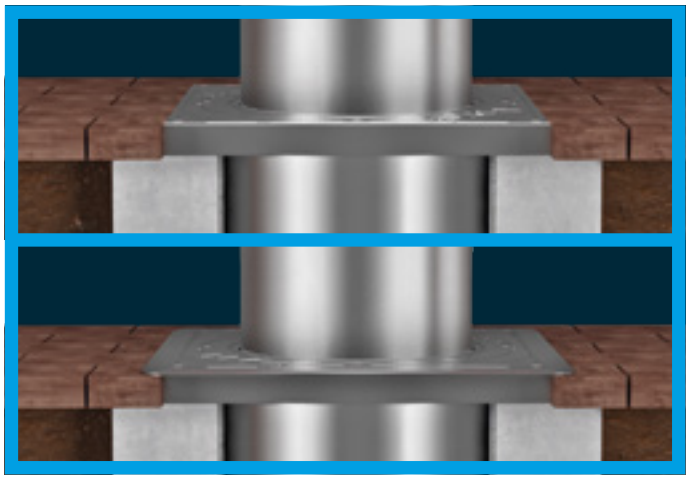


ELKA traffic bollards have a particularly low installation depth (852mm - 1,052mm, depending on the height of the cylinder).

Additional eyelets are attached to the bollard for installation, allowing the bollard to be easily transported and lowered into a prepared recess (with sand, concrete or even without a foundation). The anchor ring provides more stability in the ground.



All connection cables can be conveniently accessed via the junction box. A sealing gel for on-site sealing (waterproof, IP68) is included in the scope of delivery.



Choose your suitable base plate for installation at ground level or above the surrounding road surface. ELKA supplies an optional reusable installation protection.

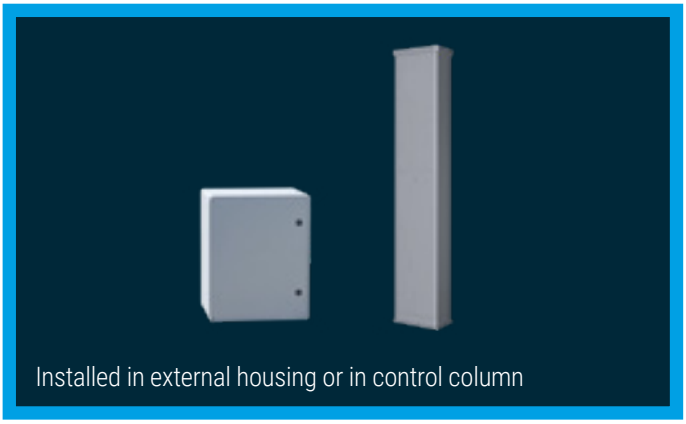
Controller M1

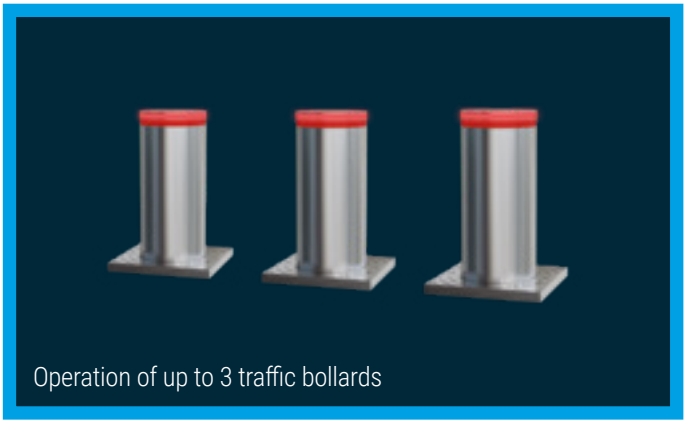
For 1-3 electromechanical traffic bollards

Experience the flexible control technology from ELKA, optionally installed in an external housing (e.g. for wall mounting) or in the elegant ELKA control column. It offers the power and versatility to operate up to three bollards (also separately adjustable).

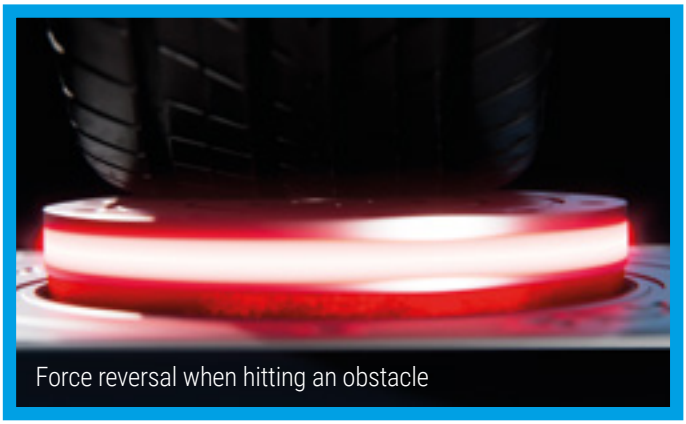
Our control system is equipped with extensive connection options, including induction loops, radio receivers, lights and various safety devices. It meets Performance Level C and offers digital and analog safety-related inputs for e.g. laser scanners, dead man's mode and light barriers with an activatable test function.

- ✔ Adjustable individual operation of up to 3 bollards
- ✔ Parallel operation possible (master-slave)
- ✔ Simple programming
- ✔ Force monitoring during upward movement incl. adjustable force reversal when hitting an obstacle


Installed in external housing or in control column


Operation of up to 3 traffic bollards

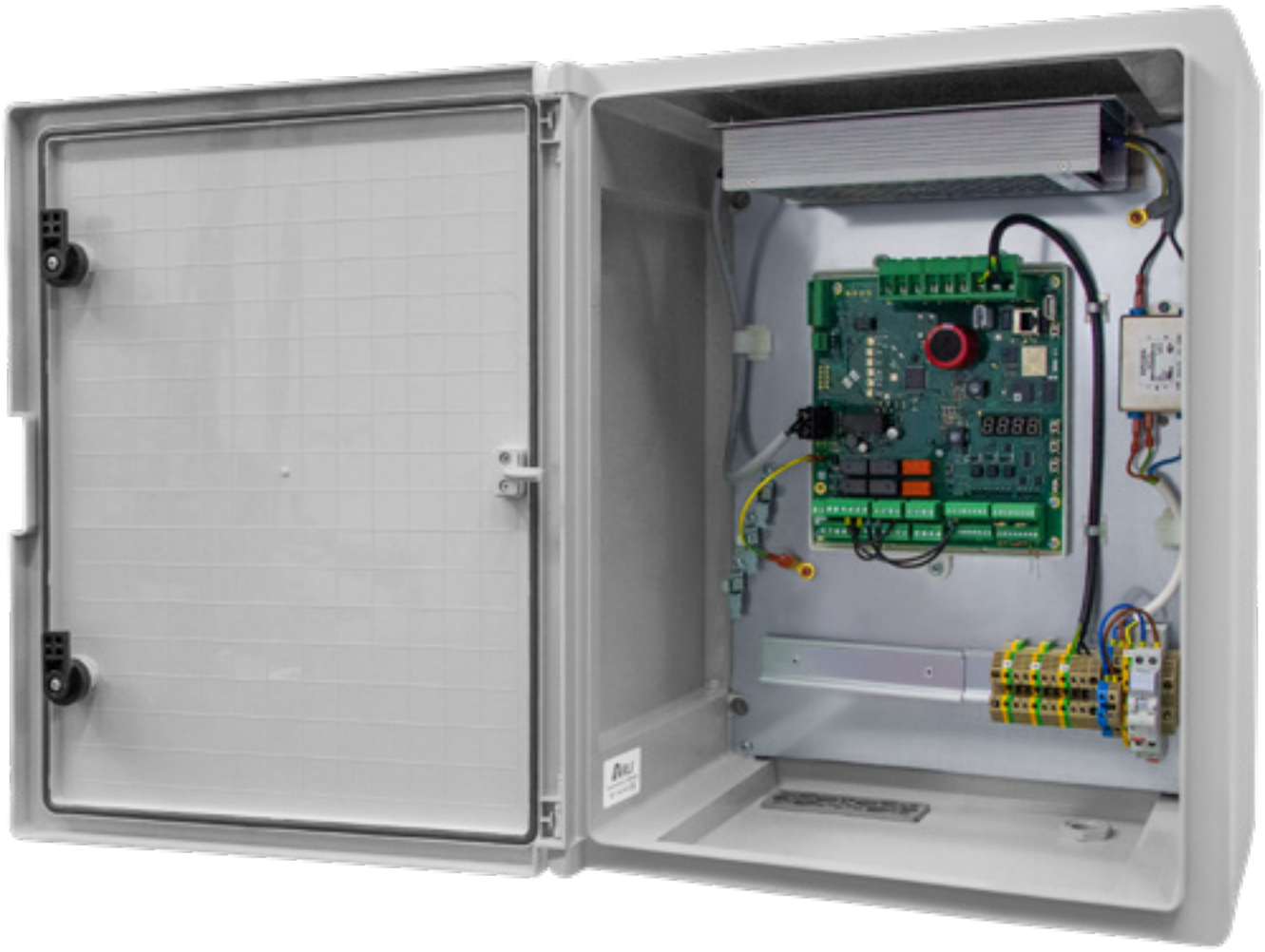

Performance level C


Force reversal when hitting an obstacle

Controller M1-G in a plastic housing

For the operation of traffic bollards

The convenient plastic housing measures 400 x 500 x 245 mm (W x H x D) and can be quickly and easily attached anywhere.



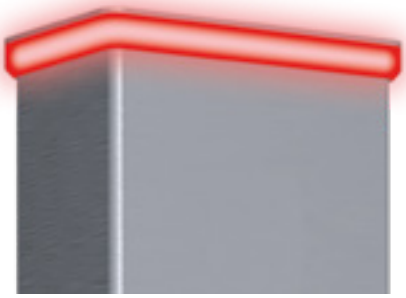
- ✔ Convenient plastic housing, IP54
- ✔ Dimensions 400 x 500 x 245mm (W x H x D)
- ✔ Incl. mounting plate, terminal row and power supply
- ✔ Pre-wired controller M1 for electromechanical traffic bollards

Controller M1-S in aluminium column

For the operation of traffic bollards

Our elegant control column is made of aluminium and can be supplied up to a height of 1,800 mm. These dimensions offer plenty of space for various additional installations. With optional RAL custom colours and cut-outs for built-in items, you can customize the control column to suit your individual requirements.

- ✔ Elegant control column made of aluminium (press blank)
- ✔ Standard dimensions 280 x 165 x 1,200mm (W x H x D), further heights up to max. 1,800 mm on request
- ✔ Customized cut-outs optionally possible



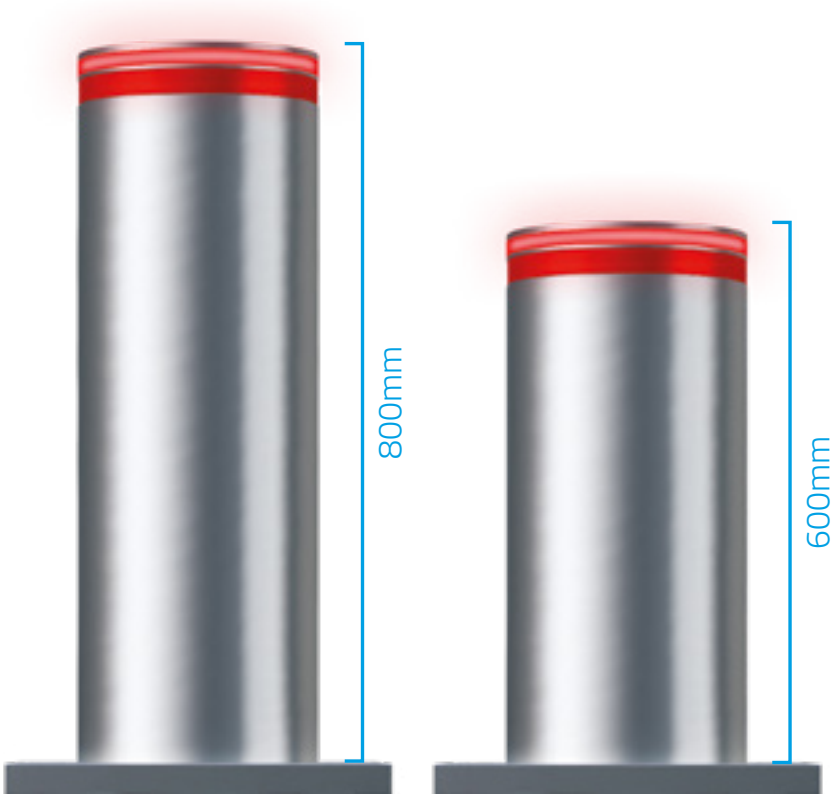
Optional LED light element

Optionally available in all RAL colours

Fixed traffic bollards

Traffic bollards EP 600-FIX and EP 800-FIX
Fixed, made of stainless steel (visible components made of V4A stainless steel)

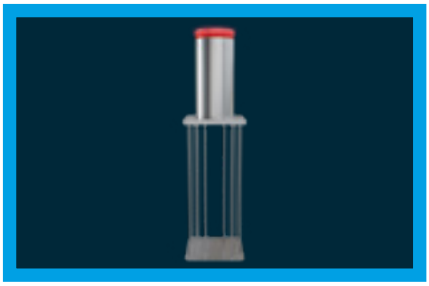
Discover the fixed traffic bollards from ELKA - the perfect complement to electromechanical traffic bollards in pedestrian zones, driveways or on commercial properties. ELKA traffic bollards are characterized by high quality standards and easy installation.



- ✔ Fixed traffic bollard made of stainless steel
- ✔ Stainless steel cylinder height 600mm or 800mm, ø 273mm
- ✔ Use of high-quality and weather-resistant materials (e.g. visible components made of V4A stainless steel)
- ✔ Wall thickness of 4mm
- ✔ Optional programmable LED lighting
- ✔ Optional foundation bracket or foundation kit for fixing in concrete

Standard screw-on installation

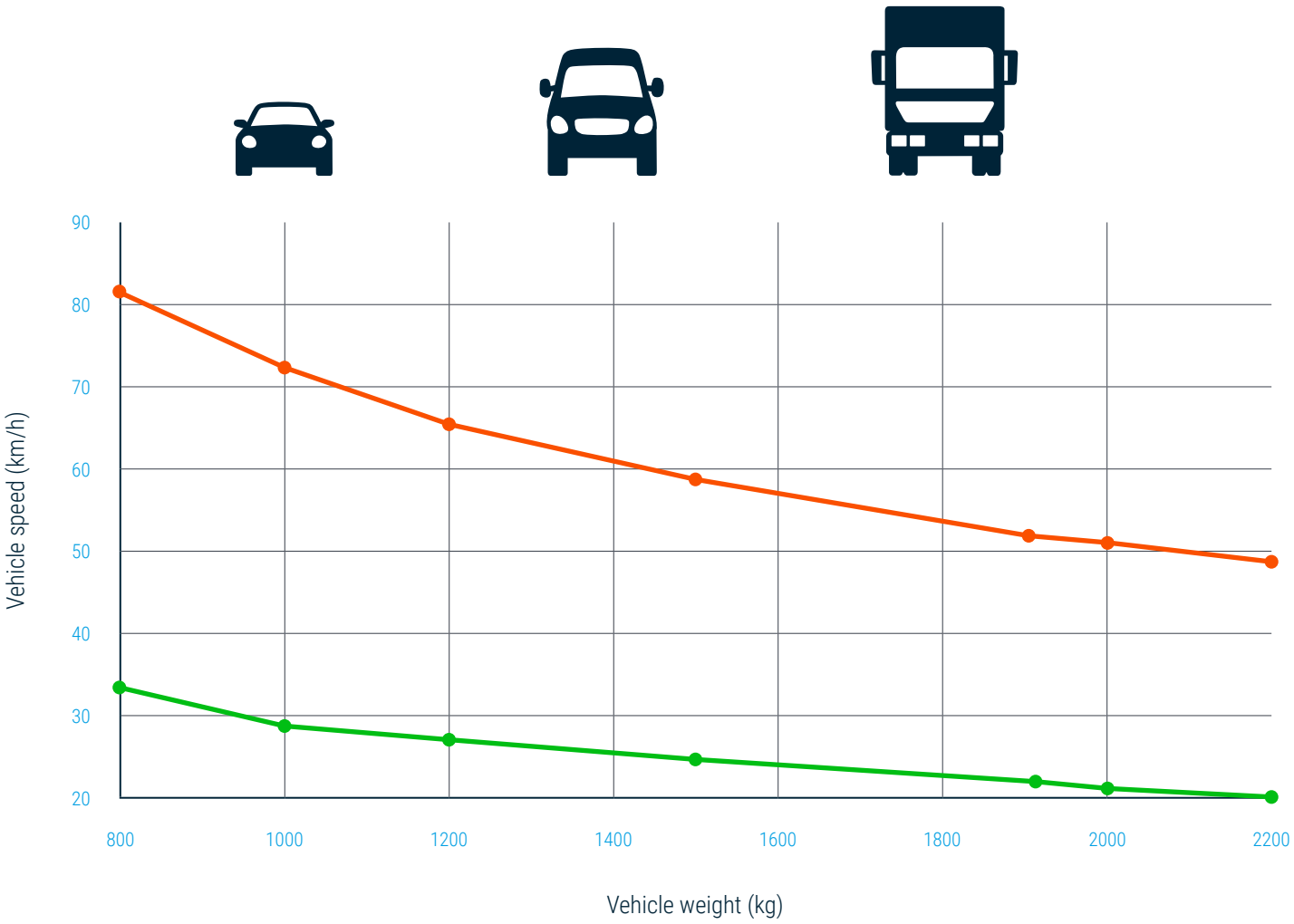
Installation with foundation bracket



Installation with foundation kit

Impact loads

The values in the diagram show which impact loads occur at which vehicle speed and vehicle weight. Analytically, the destructive energy is 200,000 J (with a corresponding foundation).



Impact load with destruction = 200,000 J

The value indicates the speed at which the impact of a vehicle is stopped by the bollard. The passage of the vehicle is prevented, but the bollard suffers permanent damage to its mechanics and construction, so that it must be replaced to ensure its function and safety.

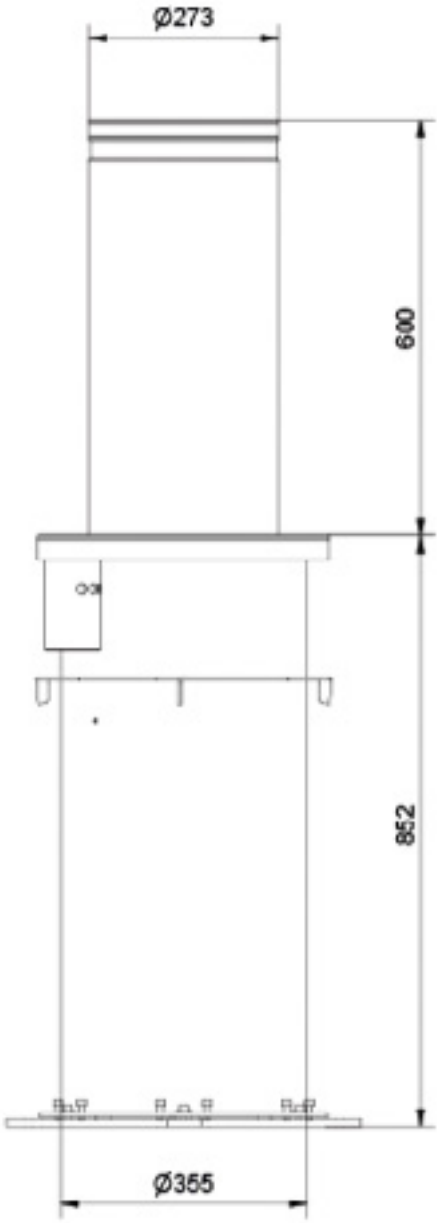
Impact load without destruction = 33,500 J

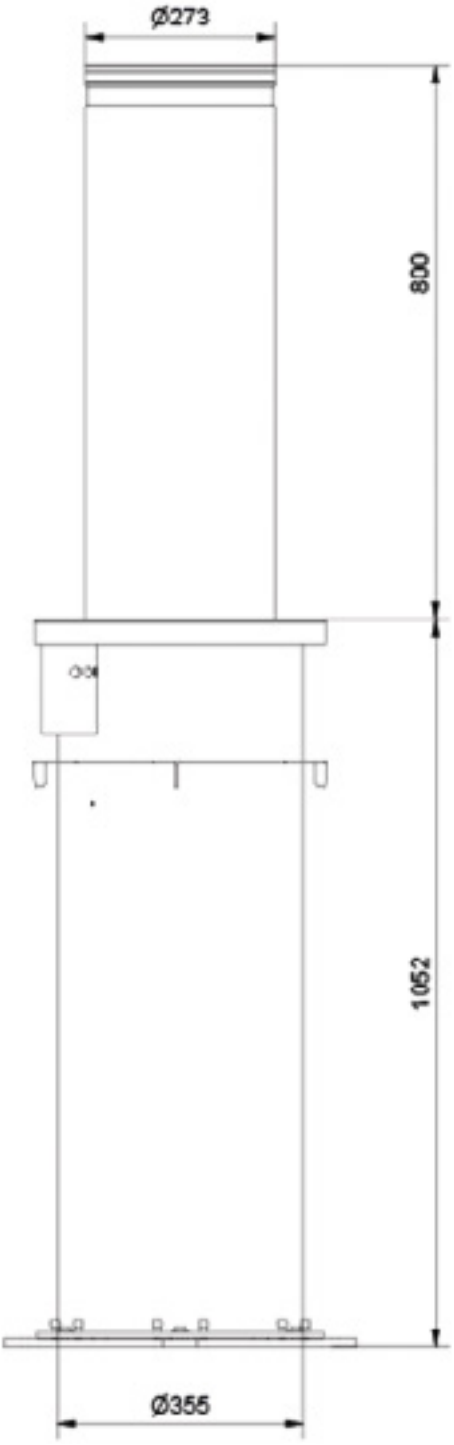
The value indicates the speed at which the impact of a vehicle is stopped by the bollard without causing significant damage to the mechanics or construction. The passage of the vehicle is prevented and the function and safety of the bollard are still guaranteed.

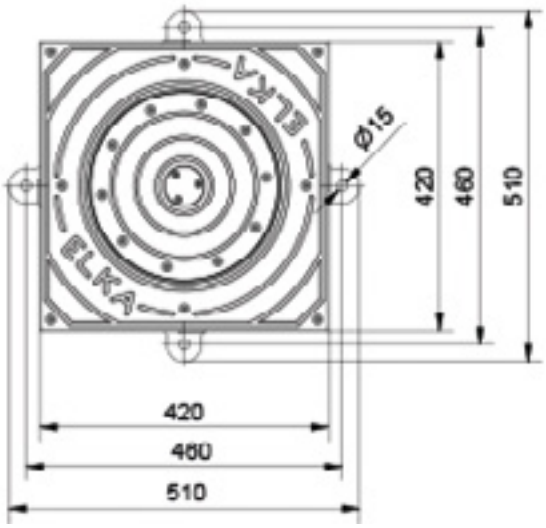
Technical data

Technical data	EP 600-EM	EP 800-EM	EP 600-FIX	EP 800-FIX
Cylinder height	600mm	800mm	600mm	800mm
ø Cylinder	273mm			
LED lighting	Programmable, at the upper end of the cylinder (clearly visible even when retracted due to translucent wiper ring)		Optional, at the upper end of the cylinder	
ø Ground socket	355mm		-	
Wall thickness	4mm (8mm in high loaded area)		4mm	
Dimensions of base plate for paving	420mm x 420mm			
Dimensions of base plate for paving underneath	470mm x 470mm			
Installation depth	852mm	1,052mm	-	
Material	V4A stainless steel			
Running time from approx.	4.0s	5.0s	-	
Cycles/day max.	2,000		-	
Controller	M1 (up to 3 bollards can be controlled)		-	
Connection cable between controller and bollard, max. length	80m		-	
Mains voltage	100-240Vac / 50-60Hz		-	
Protection class	IP68			
Impact load	33,000J without destruction 200,000J with destruction			
Emergency release	Manual, via smaller cover		-	
Network connection	via TCP/IP interface and WLAN		-	
Performance level	PLc		-	
Connection options	e.g. laser scanner, dead man's mode, photoelectric barrier with activatable test function		-	
Weight approx.	140kg	160kg	140kg	160kg
Temperature range	-20°C to +50°C			

Dimensions



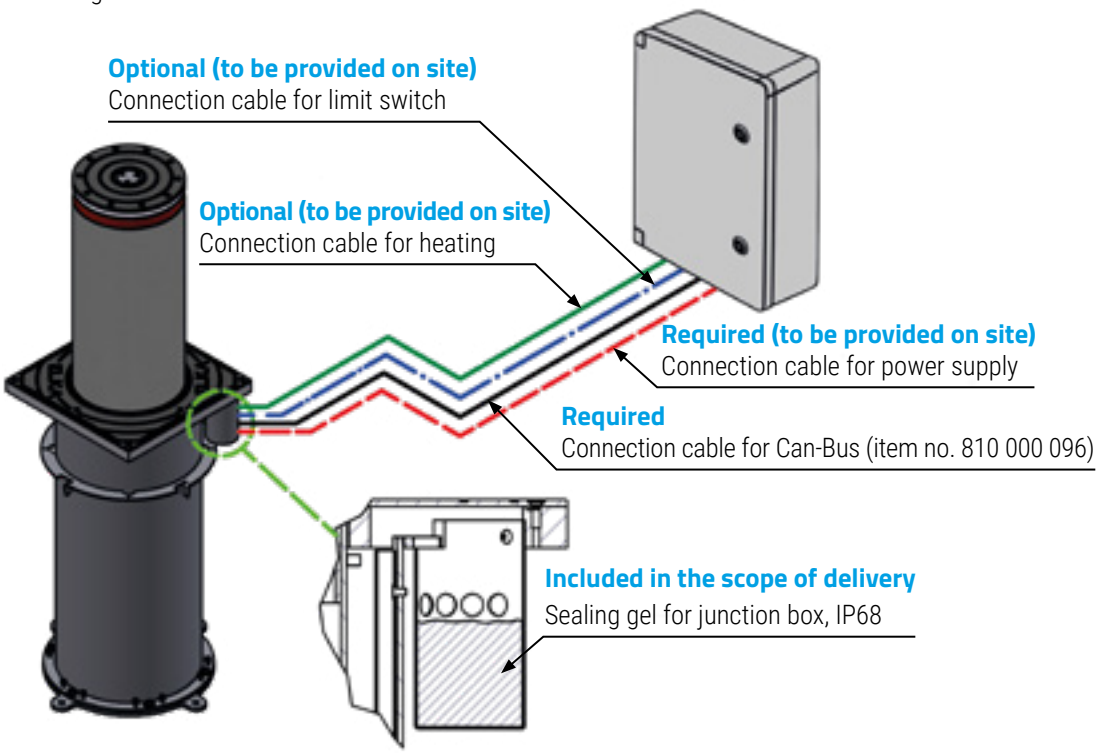




All dimensions in mm.

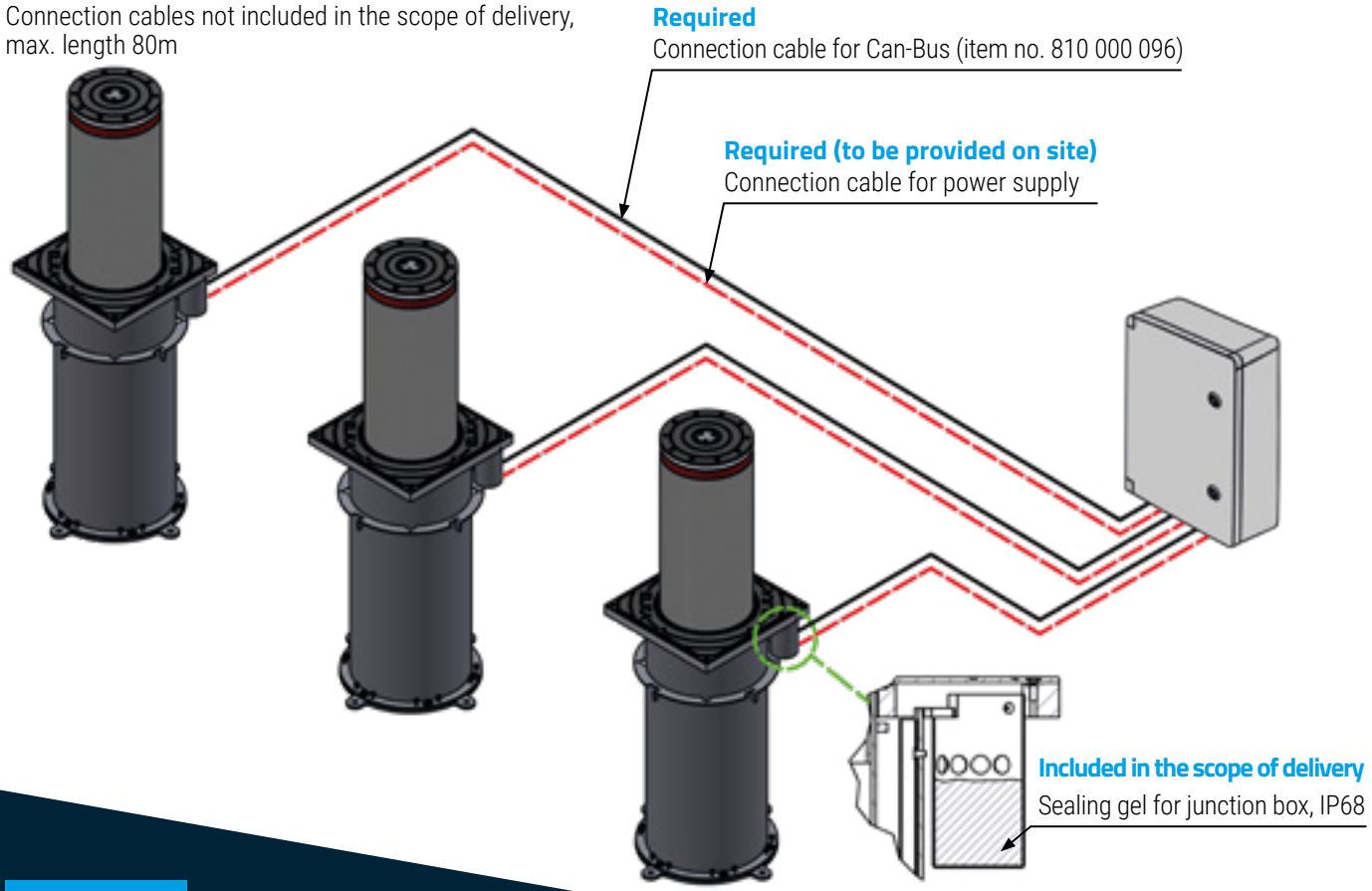
Application example - controller in plastic housing for 1x electromechanical traffic bollard

Connection cables not included in the scope of delivery, max. length 80m



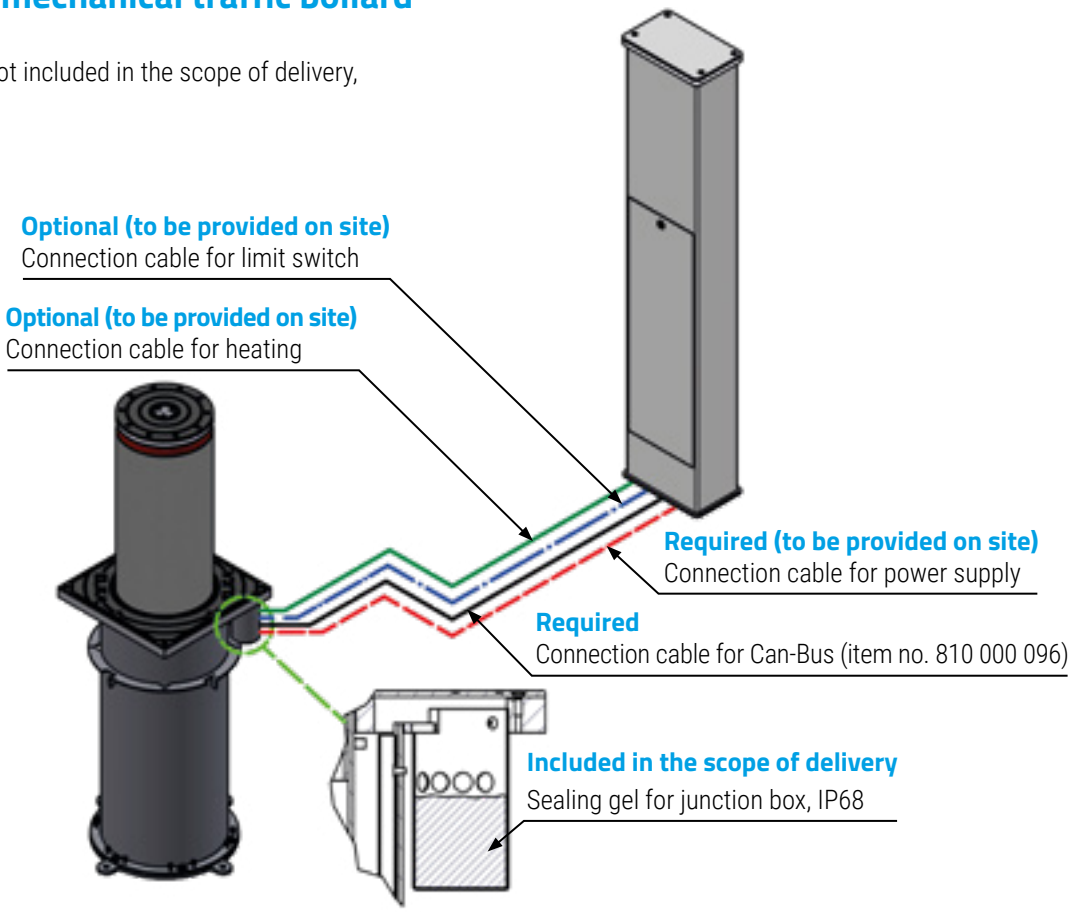
Application example - controller in plastic housing for 3x electromechanical traffic bollards

Connection cables not included in the scope of delivery, max. length 80m



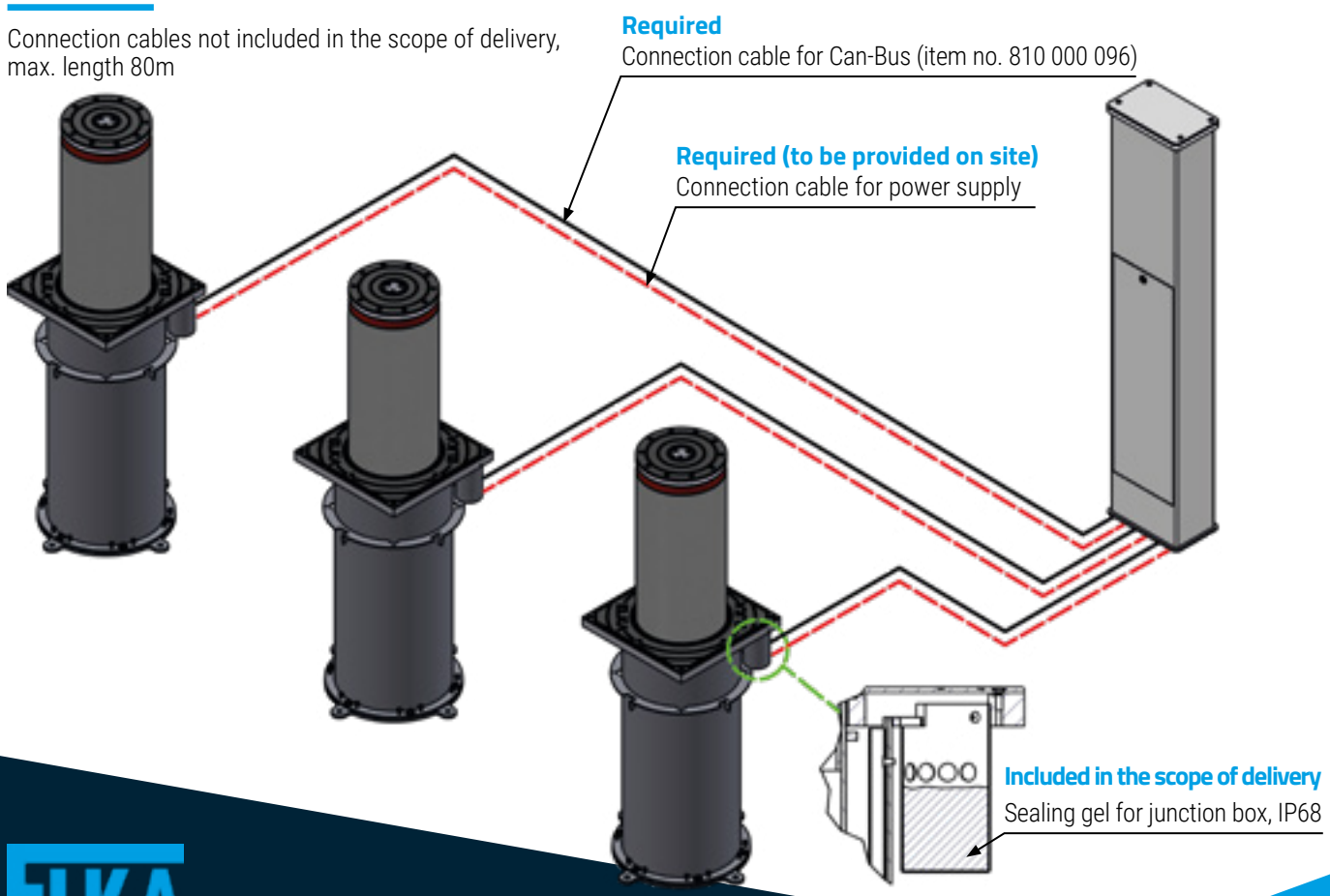
Application example - controller in control column for 1x electromechanical traffic bollard

Connection cables not included in the scope of delivery, max. length 80m



Application example - controller in control column for 3x electromechanical traffic bollards

Connection cables not included in the scope of delivery, max. length 80m



05/2025

ELKA-Torantriebe GmbH u. Co. Betriebs KG

Dithmarscher Str. 9, 25832 Tönning / Germany

info@elka.eu **+49 (0) 4861 - 9690 - 0**

www.elka.eu **+49 (0) 4861 - 9690 - 90**