

## Retractable bollards 2

### Installation instructions



VERSION	MODIFICATIONS
1.0	First edition
1.1	Editorial changes
1.2	Changing lubricating oil (P34;S37 / 19.09.23 roen)

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## 1 General information

### 1.1 Marking concept for hazards and hints

 **Hazard**

Hazardous situation which will cause serious injury or even death if it is not prevented.

 **Caution**

Hazardous situation which could cause slight to moderate injury if it is not prevented.

 **Hint**

Indicates information which does not concern personal injury, e.g. hints in respect of material damage.

 **Protective measures**

Increase safety by applying a protective measure.

### 1.2 Responsibilities of the operator

 **Caution**

The instructions must be strictly observed to prevent personal injury. Incorrect assembly or incorrect operation of the product may result in serious injury.

- Make sure that this document is always kept in a safe place in a legible form together with the product.
- Read these instructions carefully before first start-up of the product.
- This product has been developed and produced exclusively for the use indicated in these documents. Every other use, which is not mentioned explicitly, could affect the intactness of the product and/or could constitute a source of danger.
- The manufacturer rejects any liability for damage which has been caused by incorrect or non-intended use of the product.
- In countries, which do not belong to the European Community, the national legal reference regulations as well as the standards and regulations applicable in these countries have to be observed for warranty of a corresponding safety level.
- The installation has to be carried out according to the applicable regulations.
- The manufacturer assumes no liability for inexperienced execution of installation as well as deformations which may occur during operation.
- The electric power supply has to be switched off before executing any action on the installation.
- Exclusively original parts of the manufacturer shall be used for maintenance. Maintenance work may be carried out by qualified staff only.
- All procedures which are not explicitly mentioned by the manufacturer in the instructions are not permitted.
- The packing material must not be stored within the reach of children as it could be a potential source of danger.

### 1.3 Labelling of your product



The CE mark proves that your device meets the safety requirements of the EU Directives 2014/53/EU (Radio Equipment R&TTE), 2014/35/EU (Low Voltage Directive) and 2014/30/EU (EMC).

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## 2 Introduction

To ensure proper installation, the following steps and notes must be complied with under all circumstances. Only this way can it be ensured that the product will work to complete satisfaction.

### Hint

Read all instructions before starting installation. Our sales department will be happy to answer any questions you may have.

### 2.1 Product properties and features

The basic properties and advantages of the Retractable bollards 2 are the following:

- Rust-proof stainless steel surface (1.4301), matt brushed
- Electromechanical drive (geared motor on spindles)
- Load capacity C250
- Sturdy, easy to handle and safe to operate
- Perfect visual fit in overall surroundings
- Minimal maintenance / servicing costs
- Resistant to environmental conditions
- Radar modules for collision prevention at close range

### 2.2 Areas of application

The GIFAS retractable bollard 2 can be used to prevent access to or parking on areas such as footpaths or cycle paths, pedestrian zones, private property or parking areas; however, it still allows unrestricted pedestrian access.

#### Hazard

The retractable bollard may not be assembled in environments where there is a risk of explosion. Flammable gases or smoke constitute a serious safety risk.

#### Hazard

Before attempting any work on the retractable bollard, it is compelling that you disconnect it from electric power.

### Hint

Despite the retractable bollard being equipped for very demanding environmental conditions, it has to be made sure that it is used in conformity with protection class IP66 in order to avoid damage and malfunction.

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### 2.3 Scope of delivery

GIFAS retractable bollard 2 including guide cage, junction box, mounting frame and cover. The concrete tube and connection cable are not supplied and must be ordered separately.



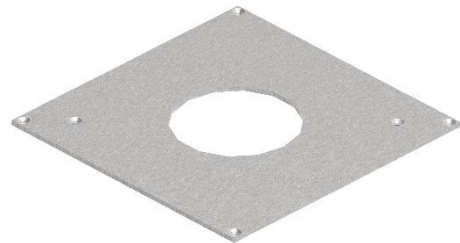
Retractable bollard ready for connection



Concrete tube  $\text{Ø}400 \times 1030 \text{mm}$   
Wall thickness 50mm



Retractable bollard, square, V2A  
1.4301 510x510x66mm



Cover, square, V2A 1.4301  
494x494x8mm

### 2.4 Transport

No additional measures are required for transport.

### 2.5 Storage

No additional measures are required for storage. With regard to packaging, pay attention to protection against damage.

### 2.6 Cleaning

If dirty, only clean the housing with a cleaning cloth or brush. Do not use abrasives or solvents! The cleaning and maintenance procedure is described in Chapter 10.0.

### 2.7 Disposal of the device



This product must not be thrown in the garbage.

In accordance with official local and national regulations, this product is to be recycled appropriately.



European directive 2012/19/EU; waste electrical and electronic equipment (WEEE).

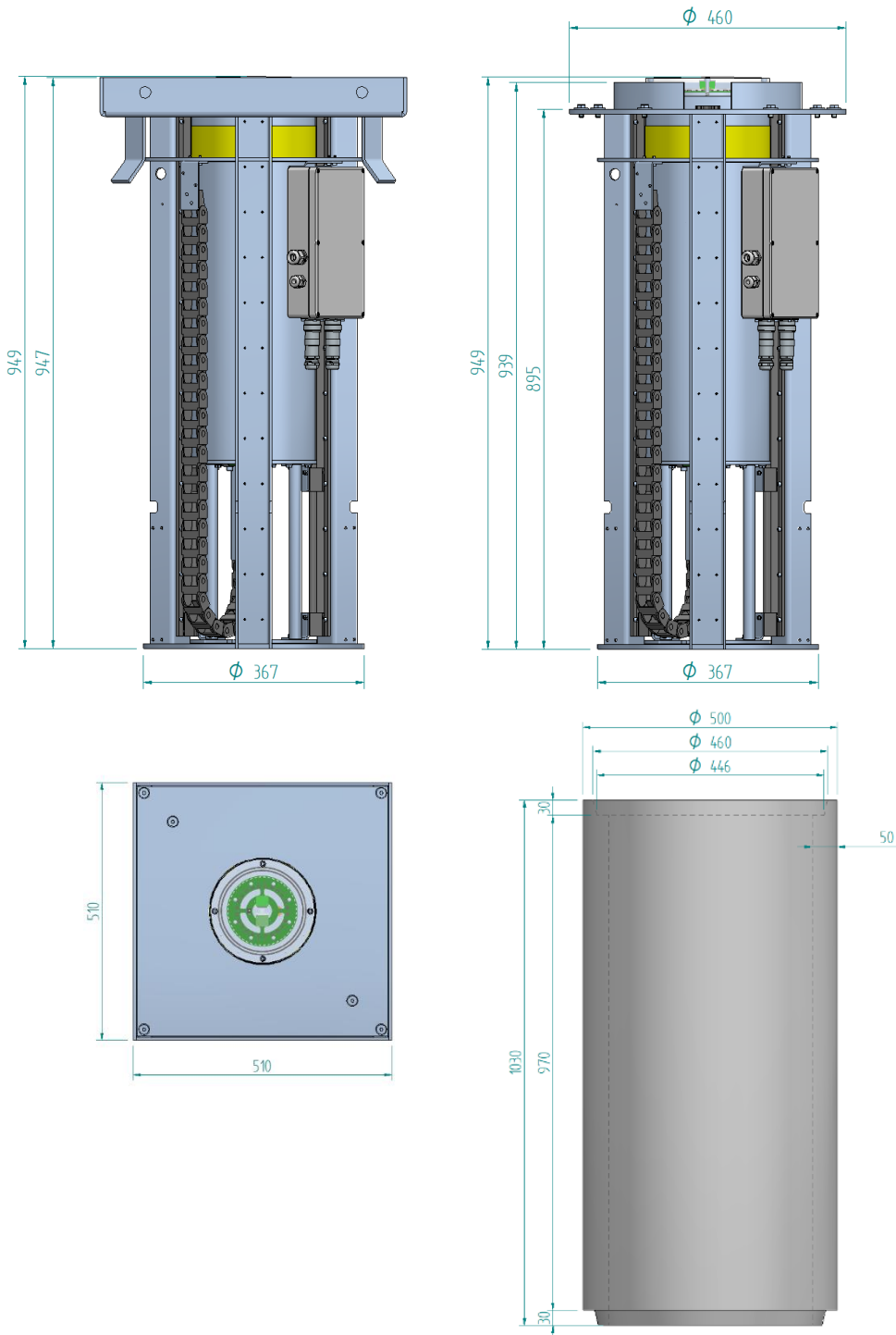


### 3 Product

#### 3.1 Technical information

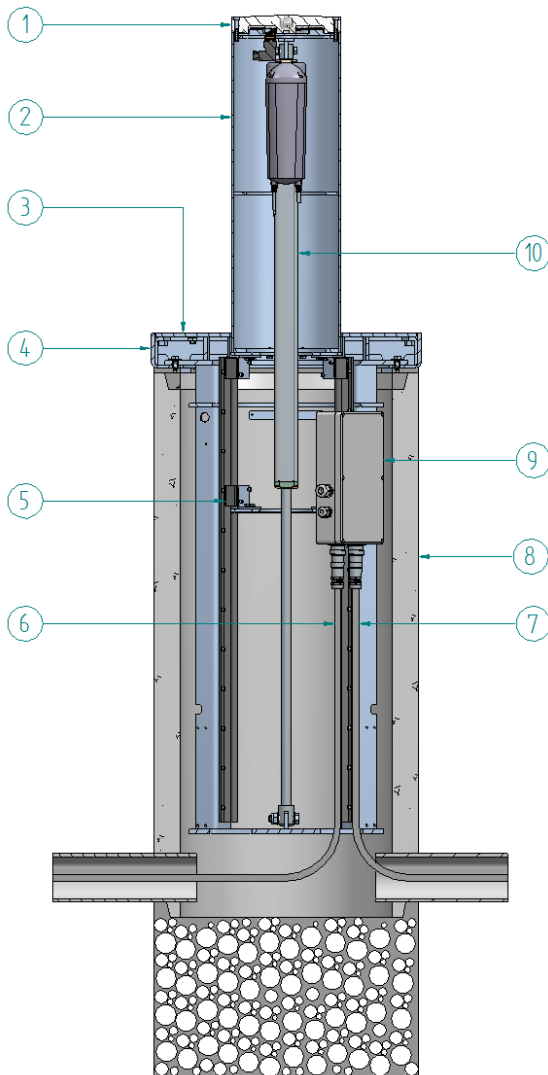
Surface:	Stainless steel (1.4301), cross-hatched finish K24, skid resistance R13
Drive:	Electromechanical (Linear drive)
Speed:	approx. 100 mm/sec
Travel time:	approx. 6 sec.
Mains voltage:	230 VAC
Fuse protection:	B6A/D16A (depending on the size of the installation and feed-in cable length) in accordance with the local regulations
Operating voltage:	24 VDC
Control:	12-230VAC/DC
Protection class:	IP66
Load capacity:	C250
Weight:	36 kg
Height of bollard unit:	923 mm (bollard retracted)
Stroke:	600 mm
Bollard diameter:	206 mm
Diameter of bollard unit:	400 mm
Manual reset	Reset via screw on the linear drive (see Chapter 10.7)
Safety concept:	Adjustable radar sensor for close and long-range (24 GHz, certified), integrated warning light in bollard head (flashes during travel and permanently on when extended to end position);
Assembly:	In standard commercial concrete pipe (CH standard) Di x Do x H: 400 x 500 x 1000 mm (accessory)
Cover:	Mounting frame and cover in V2A stainless steel, square
Heating:	Drive is equipped with heating
Control unit:	Control unit for operation incl. radar monitoring and LED operating light already integrated in the retractable bollard
Radar:	2 radar modules, one in each driving direction / 24GHz

3.2 Dimensions



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### 3.3 Set up / components



1. LED operating light incl. radar sensor
2. Extending / retractable bollard tube
3. Cover, skid resistance R13
4. Mounting frame
5. Guide casing
6. Daisy chain cable, 12 poles, for max. 6 additional retractable bollards
7. Connection cable, 12 poles
8. Standard concrete tube
9. Connection and control unit housing
10. Linear drive, stroke 600mm, 24VDC, 500N

### 3.4 Functional

The unit is safe to operate, user-friendly and low-maintenance. The electrical control unit and the 24VDC voltage supply are already integrated in the connector housing. An additional control unit is not required and the installation work is thereby minimised. The control unit only requires a connection to the 230VAC/50Hz supply.

An extension command is required in addition to the 230V/50Hz supply. The voltage for the extension command must be within the range of 12-230VAC/DC. The wide AC and DC voltage range enables the retractable bollard to be controlled with 230VAC in simple installations. An external higher-level control system is required if a complex retractable bollard system with additional functions is desired. Peripherals such as a detector loop, control points, wireless, batch, area radar units, building automation, timer functions, fire alarm circuit, etc. can be integrated in this. This can be optionally provided with AC or DC depending on the requirements of the control unit.

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## 4 Safety

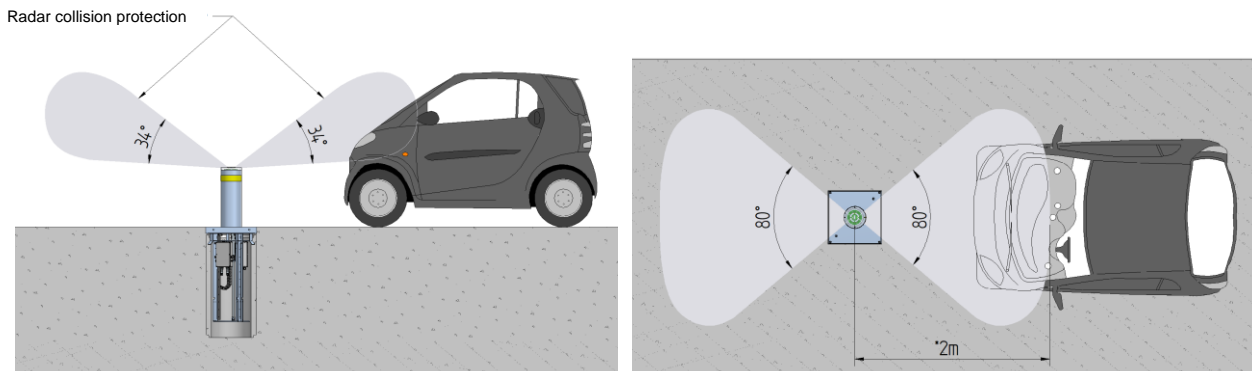
### 4.1 Personnel requirements

- This retractable bollard must be installed by qualified professionals.
- Only qualified professionals may perform servicing tasks on the retractable bollard.
- The manufacturer assumes no liability if the device is not correctly assembled or operated.

### 4.2 Safety components

#### 4.2.1 Collision protection

The retractable bollard is equipped with radar sensors. The radar sensors check the surrounding area for any moving objects during the extension process. Objects up to a distance of 2m are detected. If a moving object is detected in the area, the retractable bollard interrupts the extension process and moves to the lower end position. The retractable bollard attempts to repeat the extension process after 10 sec. If the obstacle is still present after a repeated lifting process, the time until the next extension process is doubled. This continues until the max. waiting time of 15min has been reached.



\*Distance can be adjusted

Waiting times after obstacle detection:

Number of obstacle detections:	Waiting time:
1. Obstacle	10 sec
2. Obstacle	20 sec
3. Obstacle	40 sec
4. Obstacle	1min 20 sec
5. Obstacle	2min 40 sec
6. Obstacle	5min 20 sec
7. Obstacle	10min 40 sec
8. Obstacle	15min
9. Obstacle	15min (no doubling of the time)

#### 4.2.2 Safety lighting

The retractable bollard is equipped with multi-colour LEDs (360°) for greater safety. The following setting options are available:

- colour (red, green, blue)
- brightness 0-100% in 1% steps, 0% corresponds OFF
- frequency 0-3Hz in 0.25Hz steps, 0% corresponds to continuous lighting



Red



Blue



Green

The retractable bollard is delivered with the following basic settings:

- Retracted: colour green, permanently lit
- Prior warning of the extension process:: colour orange; blinking frequency 1Hz
- Extension process: colour orange; blinking frequency 1Hz
- Extended: colour red, permanently lit
- Retraction process: colour orange; blinking frequency 1Hz

Furthermore, the LED operating light can be individually parameterised. The parameterisation can only be customised by trained and qualified personnel or beforehand at the factory.

#### 4.2.3 Overload protection of the drive

The retractable bollard is monitored for overcurrent and overload during the extension or retraction process. If the retractable bollard strikes an obstacle in spite of the radar, the drive is deactivated by the overload protection function, in order to prevent damage/defects. The drive is also equipped with an integrated slipping clutch.

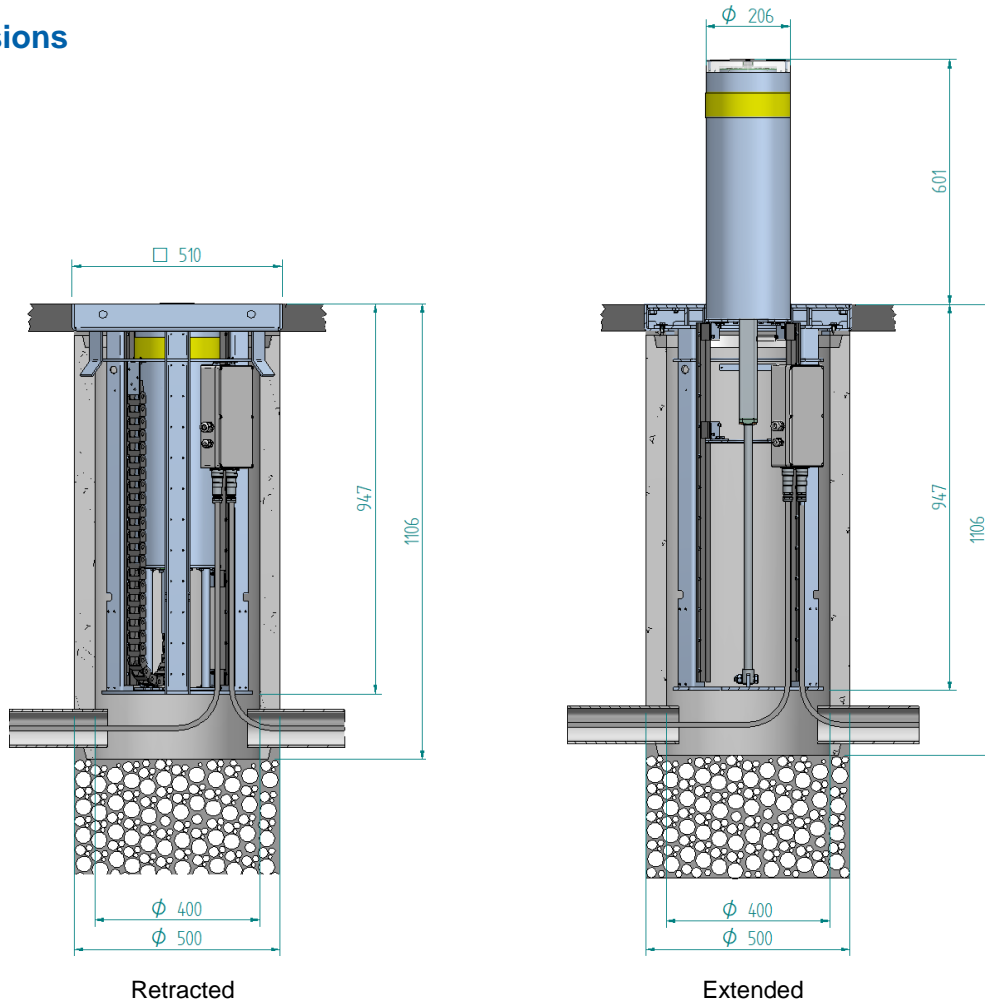
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## 5 Assembly conditions

### 5.1 Special tools, machines, materials

Machines and materials for the set-up, assembly and installation are provided by the customer.

### 5.2 Dimensions



### 5.3 Weight

- Weight retractable bollard: 36kg
- Weight fitting frame: 18kg
- Weight cover: 13.3kg
- Weight of standard concrete tube: 172kg

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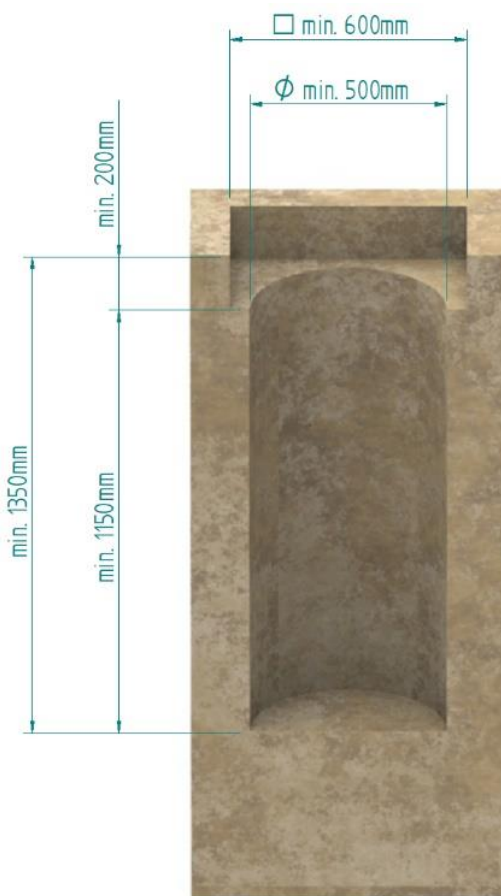
## 5.4 Excavation

**i Hint**

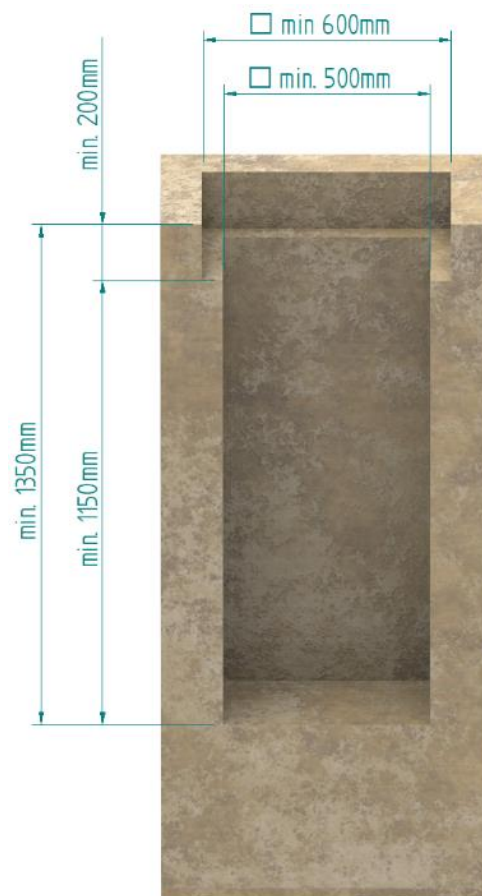
It must be ensured that the bollard shaft does not serve as a drain for surface water. This can cause considerable soiling of the moving parts of the bollard and significantly reduce operational safety. Ensure that the installation position of the retractable bollard is not located in a depression (sink). If this is the case, the retractable bollard must be protected by an all-round drainage line with a grating. Max. water column of 30mm in the bottom of the shaft.

The excavation can be square and have a min. side length of 50cm. However, it can also be executed to a depth of 135cm with a drill with a min. diameter of 50cm and extended to form a square with a min. side length of 60cm in the last 20-30cm.

Excavation round:



Excavation square:



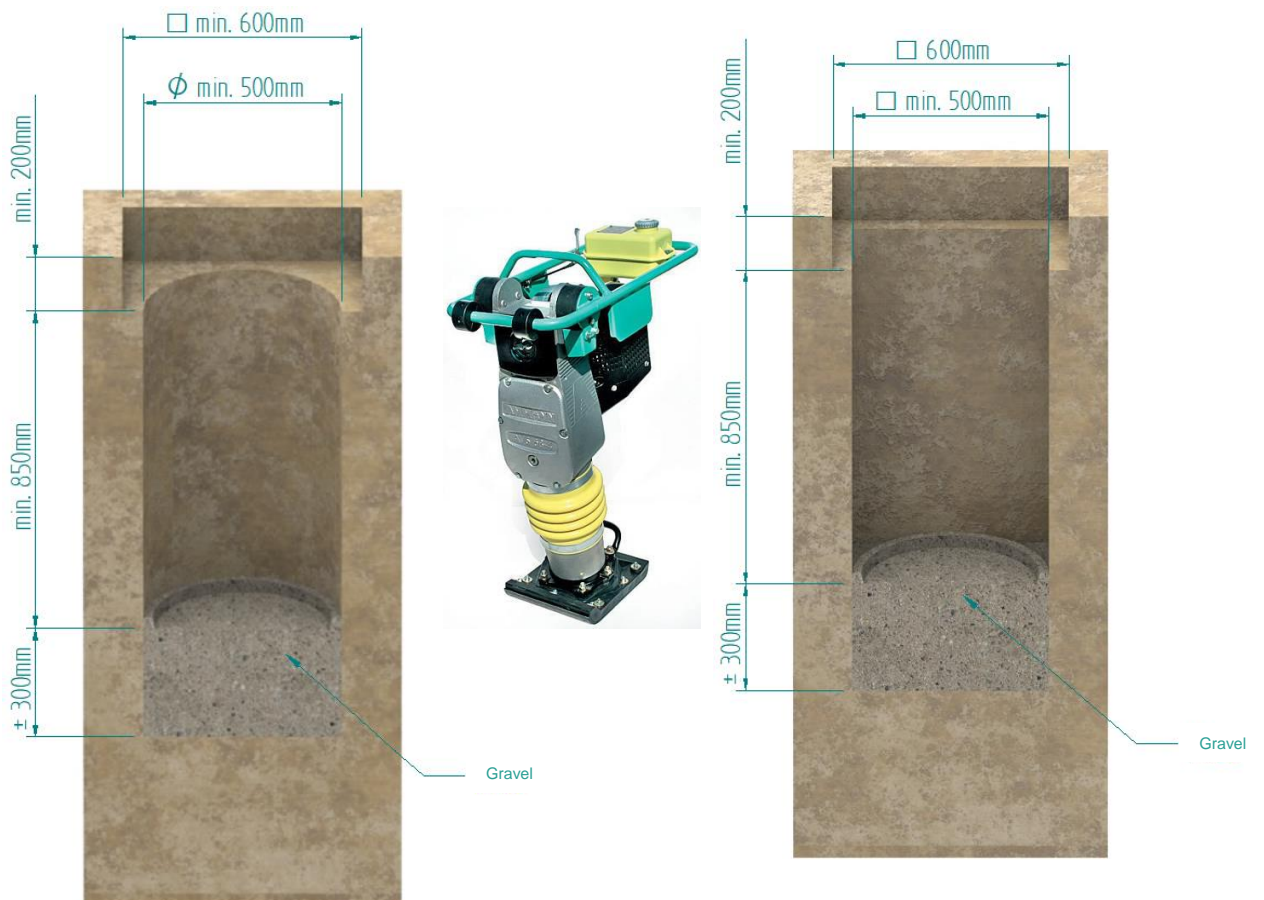
### 5.5 Drainage system

Ensure that the ground has good drainage.

To this end, pour about 40 litres of water into the pit and ensure that it flows away within 30 minutes. If it does not, a drainage pipe must be fitted and connected with the sewerage system or a drain shaft; the drainage pit must be deeper than the bollard pit or must be fitted with a non-return valve.

### 5.6 Foundation

To prevent the bollard system from sinking in future as a result of settling, the pit must be filled to a height of approx. 30 cm with gravel (size approx. 20 mm) and compacted.



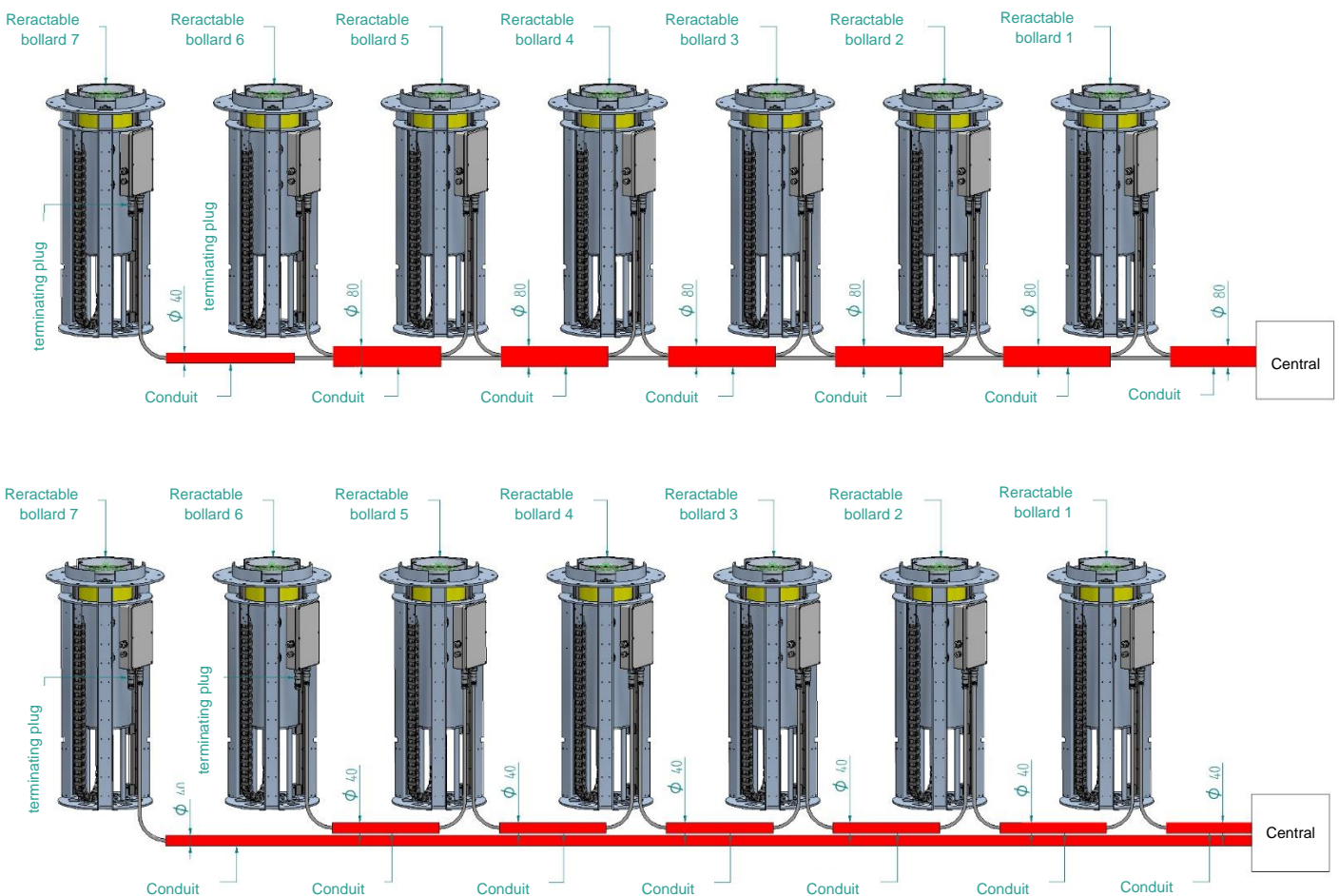


### 5.7 Laying conduit

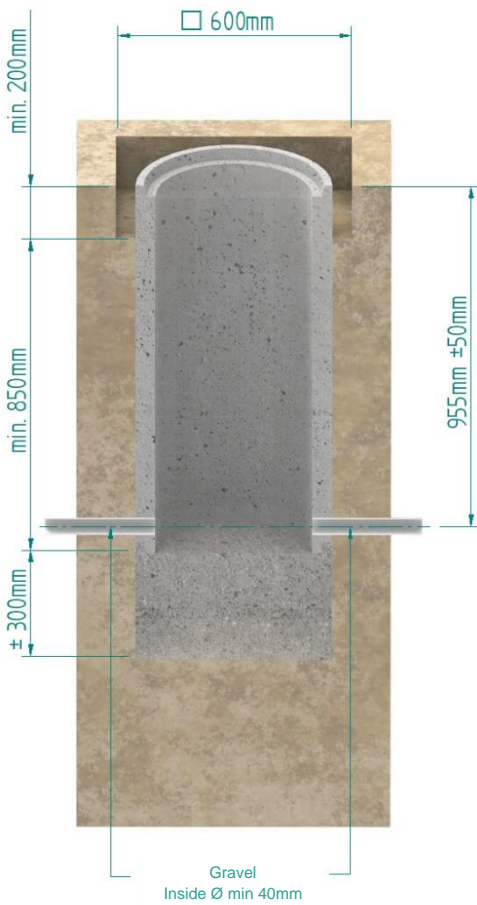
The feeder pipe must have a min. internal diameter of 40mm. If the feeder pipe from the control center to the retractable bollard is long or not straight, it is advisable to increase the pipe diameter, in order to guarantee easier cable insertion with a connector/coupling. The conduit must be inserted in the shaft at a height of between 900-1000mm.

**i Hint**

If several retractable bollards are installed, they can be connected together via a conduit. Use the same pipe diameter with a min. Ø of 40mm in this respect. A max. of 6 retractable bollards can be connected together. If a system consists of more than 6 retractable bollards, an additional separate pipe must be laid from the control center to the 7th retractable bollard for the 7th retractable bollard, or the pipe diameter is increased to Ø 80mm. This enables 2 feeder cables with a connector to be inserted in one pipe.



5.7.1 Position conduit



**i Hint**

If the conduit is inserted above the range of 955mm +/- 50mm, it is imperative that the conduits are shortened flush with the concrete shaft. If this is not the case and the conduits protrude too deeply into the shaft, the retractable bollard cannot be retracted during the assembly.

As a general principle, the conduits should not be inserted above the range, in order to enable quick and easy assembly of the retractable bollard.

### 5.8 Assembly of concrete shaft

To guarantee interruption-free operation, it is essential that the positional tolerances for assembly of the concrete shaft are observed.

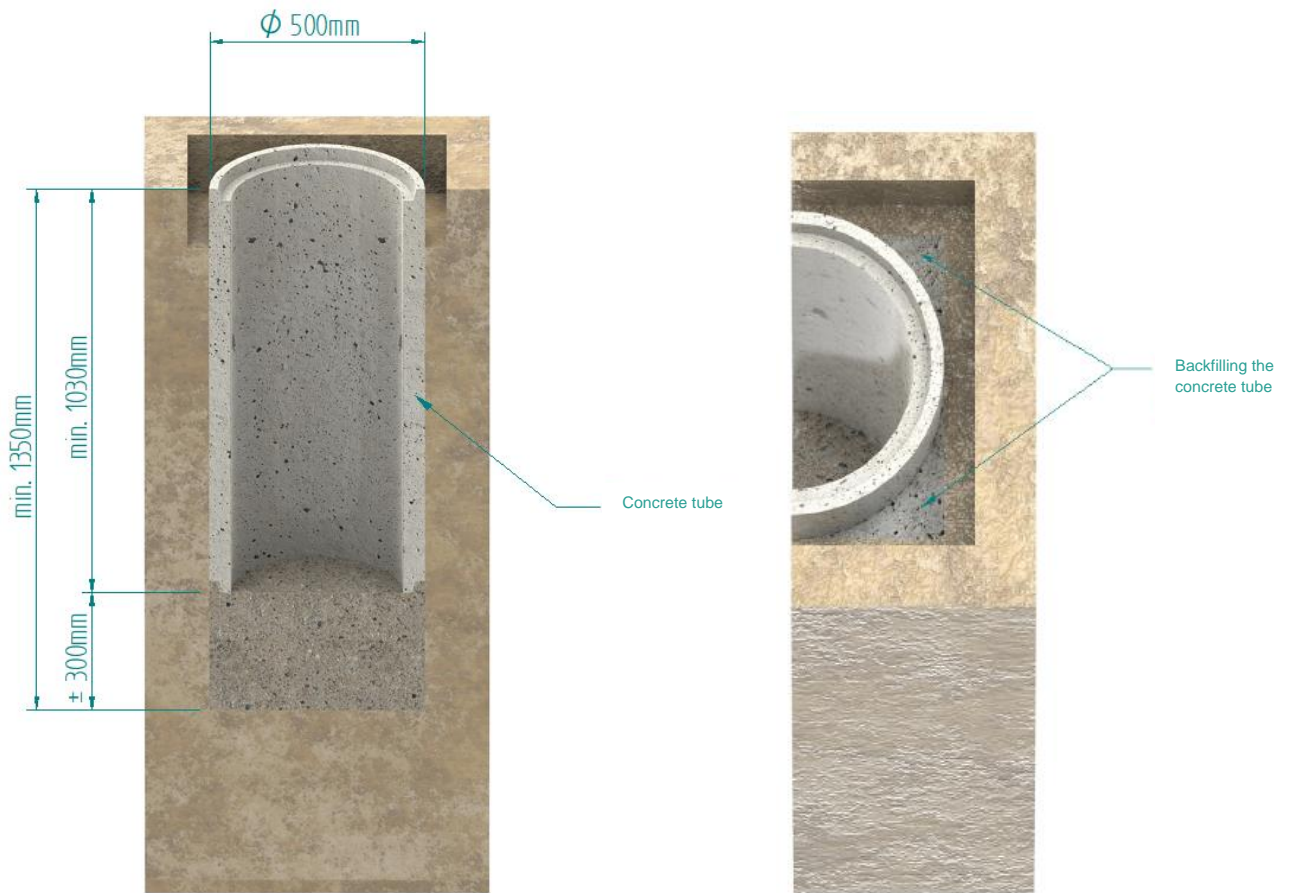


The cast-iron frame and concrete shaft must be joined together with concrete of at least C35/45 EN206 standard.

Tolerances for fitting:

Vertical tolerances for concrete pipe:  $\pm 5 \text{ mm}$  at 1m depth

The concrete tube can subsequently be backfilled if required. This can be done with concrete or soil.



### 5.9 Setting the frame

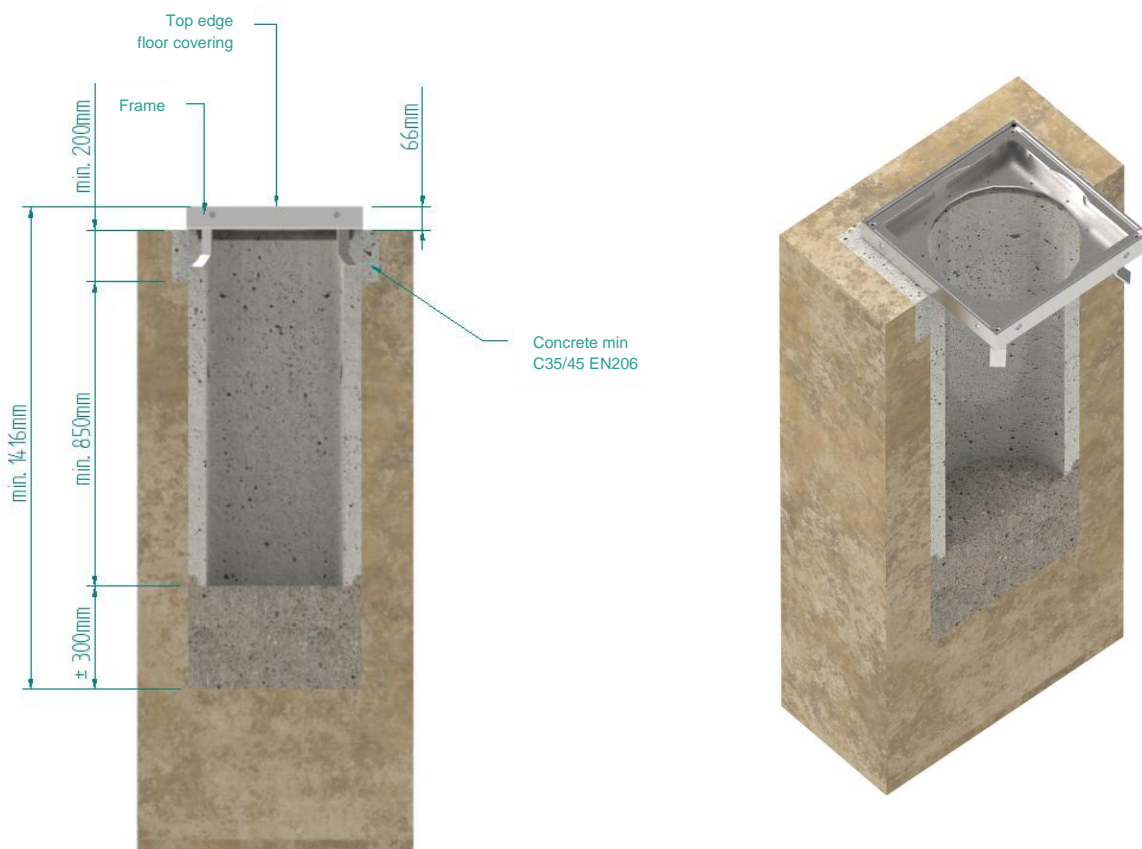
To guarantee interruption-free operation, it is essential that the positional tolerances for assembly of the concrete shaft and the cast-iron frame attachment are observed.



The cast-iron frame and concrete shaft must be joined together with concrete of at least C35/45 EN206 standard.

Tolerances for fitting:

Frame evenness tolerances:	Plumb
Coaxiality of frame and concrete pipe:	± 2.5 mm



### 5.10 Floor level

You subsequently finish the surrounding area, whereby you should make sure that rainwater cannot ingress into the entrance shaft.

If the retractable bollard 2 is not inserted immediately after the shaft installation has been completed, it should be closed with one of the optionally available blind covers without fail for safety reasons.

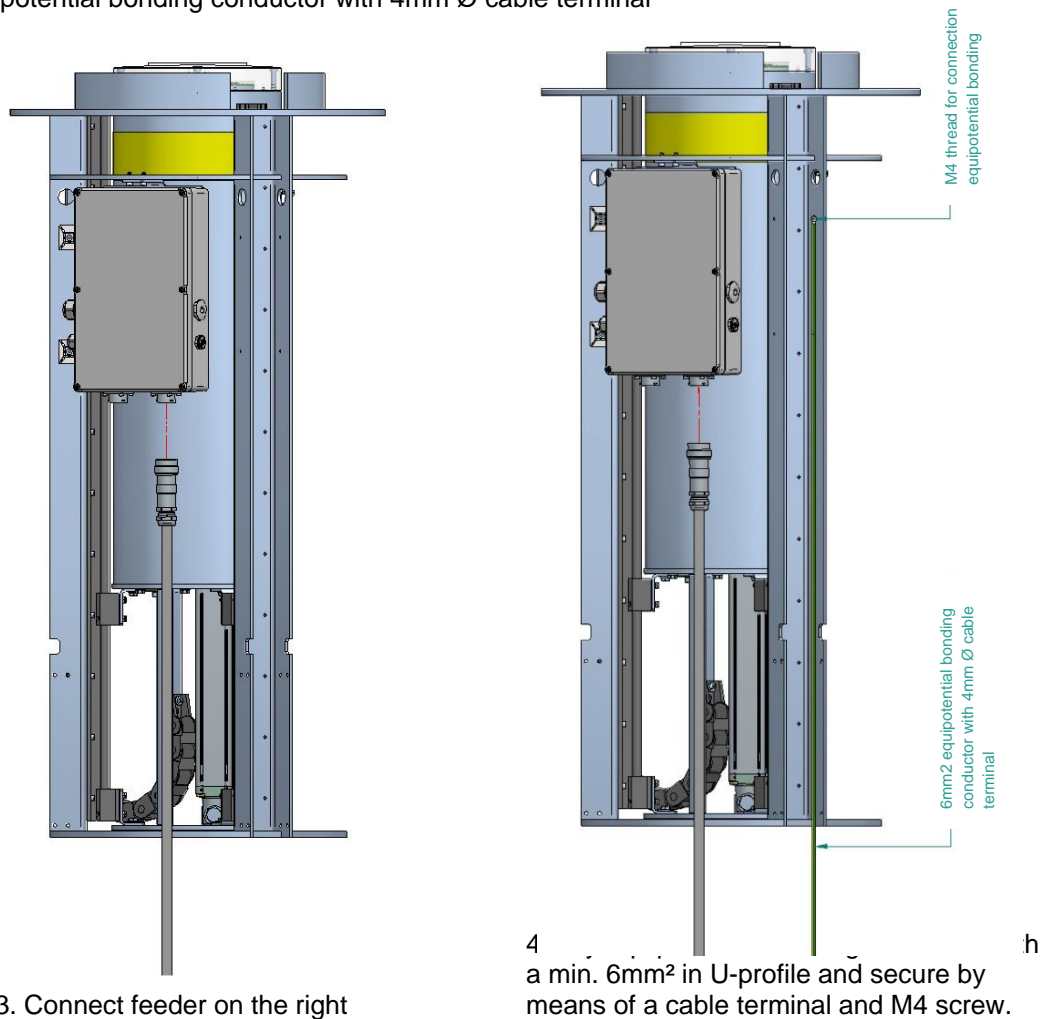


## 6 Mounting and installation, initial operation

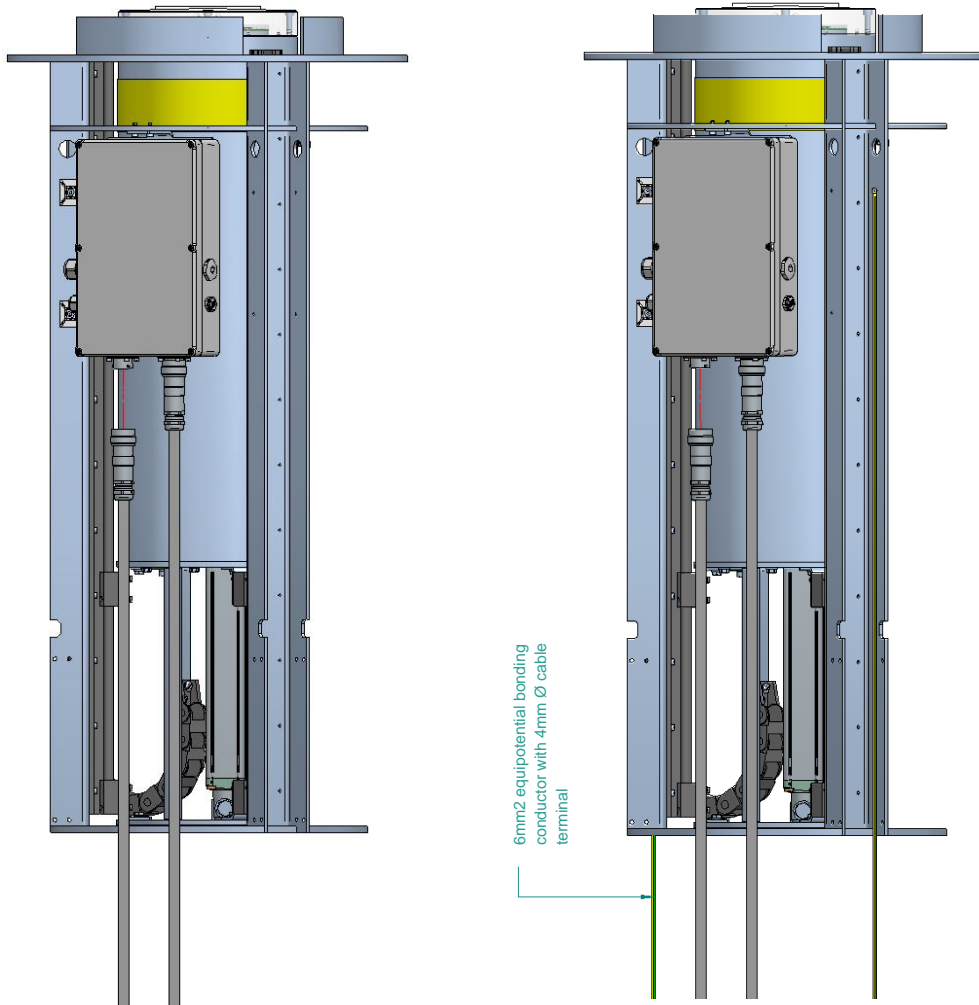
1. Pull in the 12-pole connection control line and 6mm<sup>2</sup> equipotential bonding conductor from the external control unit/power supply or control point.
2. Pull in optional connection line and 6mm<sup>2</sup> equipotential bonding conductor for other retractable bollards if required.
3. Attach plug and socket connector to retractable bollard 2 on the right-hand side of the connector housing.
4. Connect equipotential bonding conductor to retractable bollard 2 as shown in the figure.
5. Attach optional 12-pole connection line for other retractable bollard 2 on the left-hand side of the connector housing.
6. Connect optional equipotential bonding conductor for other retractable bollard 2 as shown in the figure.
7. Provide last retractable bollard 2 with terminating connector.
8. Lay cable and equipotential bonding conductor in U-profile and fix with cable ties.
9. Mount 3x M8 eye bolts at a suitable place for lifting device, e.g. block and tackle.
10. Lower retractable bollard 2 in concrete tube with lifting device, e.g. block and tackle.
11. Align retractable bollard 2 centrally while making allowance for the installation position of the radar modules.
12. Secure retractable bollard 2 with min. 6x or max. 9x hexagon bolts.
13. Assembly of cover with 4x countersunk screws.
14. Mount cover with 2x connection screws.

M4 thread for connection equipotential bonding

6mm<sup>2</sup> equipotential bonding conductor with 4mm Ø cable terminal

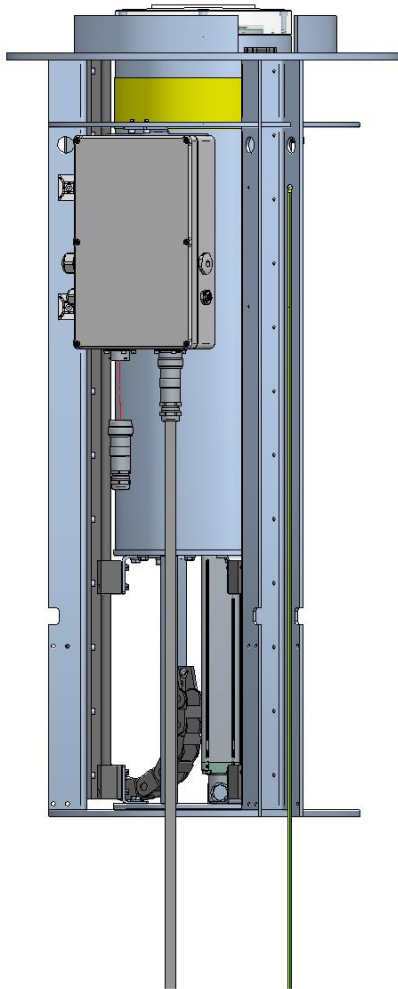


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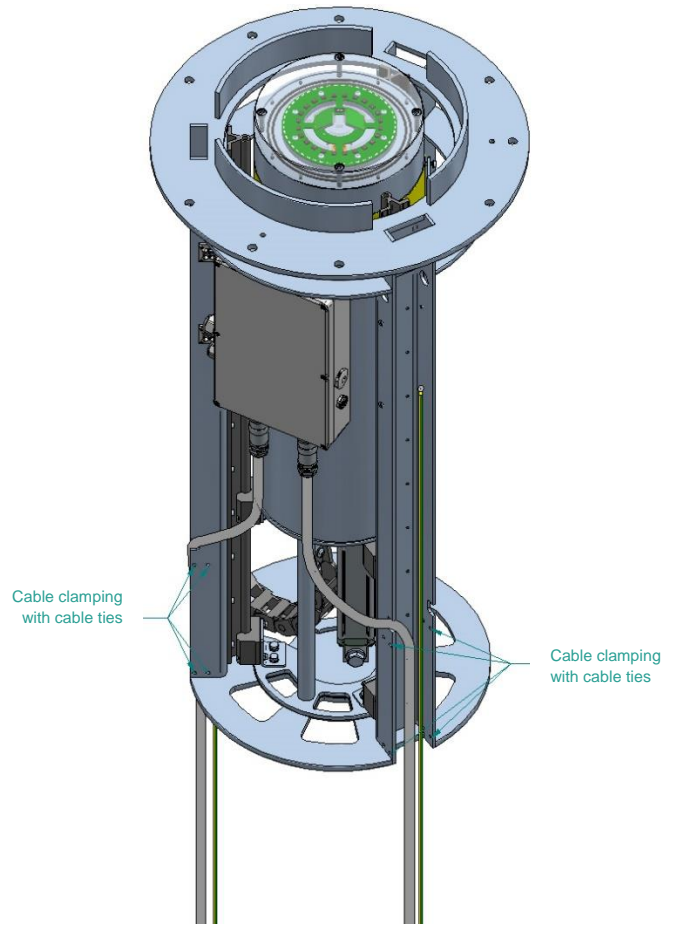


5. Connect optional connection line for other retractable bollards 2 on the left

6. Also lay optional equipotential bonding conductor for other retractable bollards 2 in U-profile and connect by means of a cable terminal and M4 screw.

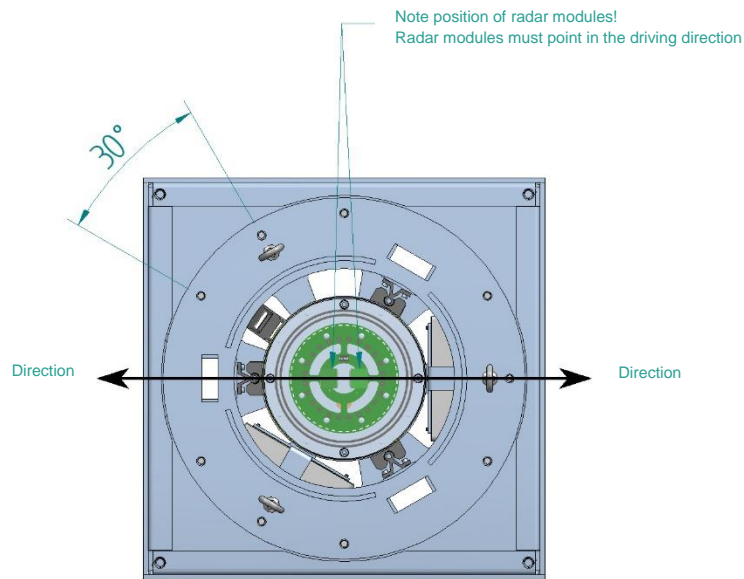


7. Mount terminating connector (without cable) on the last retractable bollard.

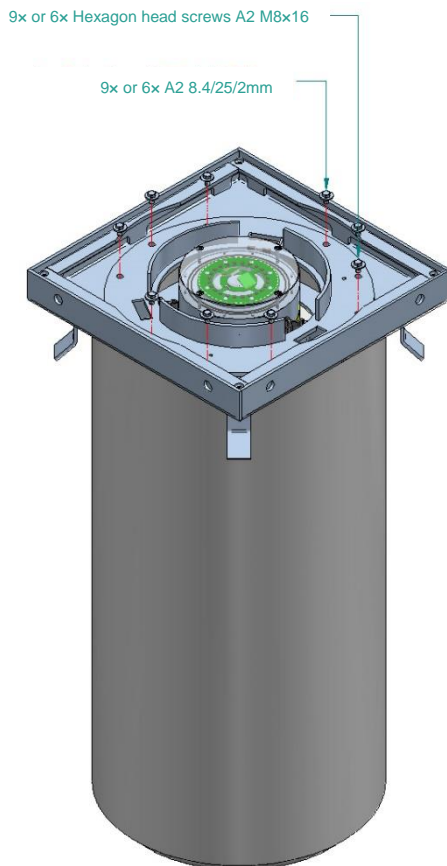


8. Insert cable in U-profile and secure with cable tie

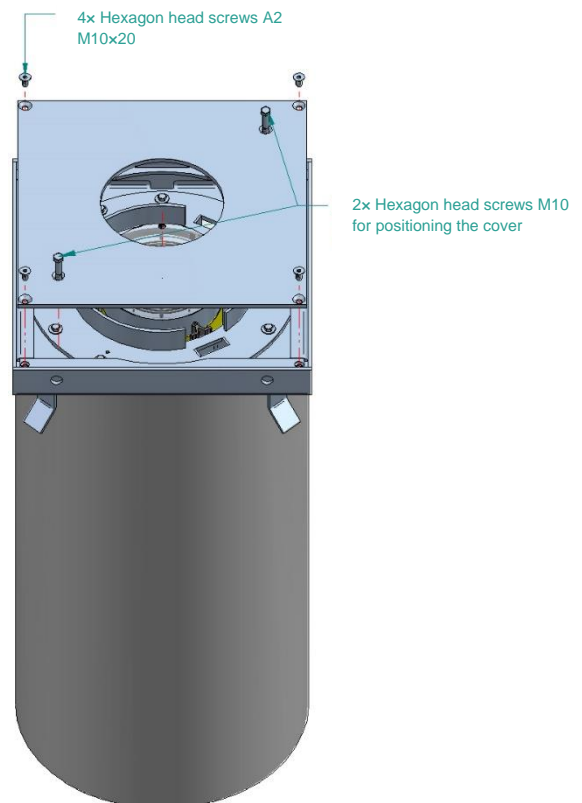




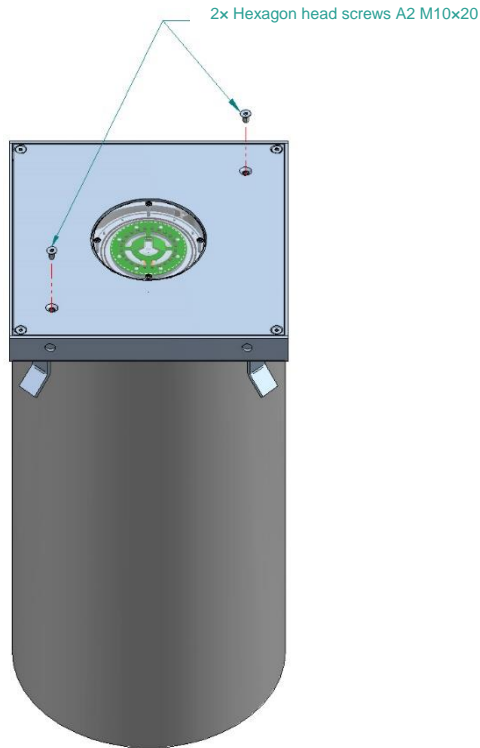
9. Align retractable bollard based on the driving direction and the position of the radar modules. The retractable bollard can be turned by 30°, in order to find the optimum position. The 3 eye bolts can be removed after alignment.



10. Screw retractable bollard to the frame



11. Screw cover on frame



12. Remove hexagon head screws and replace with 2x M10x20 countersunk screws.

## 7 Operation

### 7.1 Controls

Possible optional operation / function:

- Login and logout via detector loop
- Security via detector loop
- Manual operation with a key switch
- Fire alarm circuit (potential-free contact on external control unit)
- Badge reader circuit (potential-free contact on external control unit)
- Radio transmitter with manual sensor (potential-free contact on external control unit)
- Timer functions
- Login by SMS
- etc.

### 7.2 Displays

Possible optional displays on-site:

- Through travel authorisation (external red/green light signal)
- Acoustic signal
- Failure display (external display)

### 7.3 Operating modes

#### 7.3.1 Basic functions

An overriding control unit or appropriate switch / signal unit transmits pulses to the retractable bollard 2 control unit (potential-free contacts). These are implemented as an instruction to extend.

#### 7.3.2 Extension process

The LED operating light shows by flashing that a movement process has been triggered. This is monitored by radar sensors in the cover. If an obstacle is detected in the monitoring field, a reversing procedure will be triggered immediately. In addition, there is an active impact pressure monitoring system that will respond to potential mechanical blocking. The raising process can be overridden at any time using the "Down" command.

#### 7.3.3 Retraction process

This movement procedure is also displayed by flashing of the LED operating light. There is no radar monitoring. If retraction is prematurely blocked, an error message will be output on the control unit.

#### 7.3.4 Extended status

To ensure improved recognition, the LED operating display remains on permanently in this position red (360°).

#### 7.3.5 Retracted status

To ensure improved recognition, the LED operating display remains on permanently in this position green (360°).

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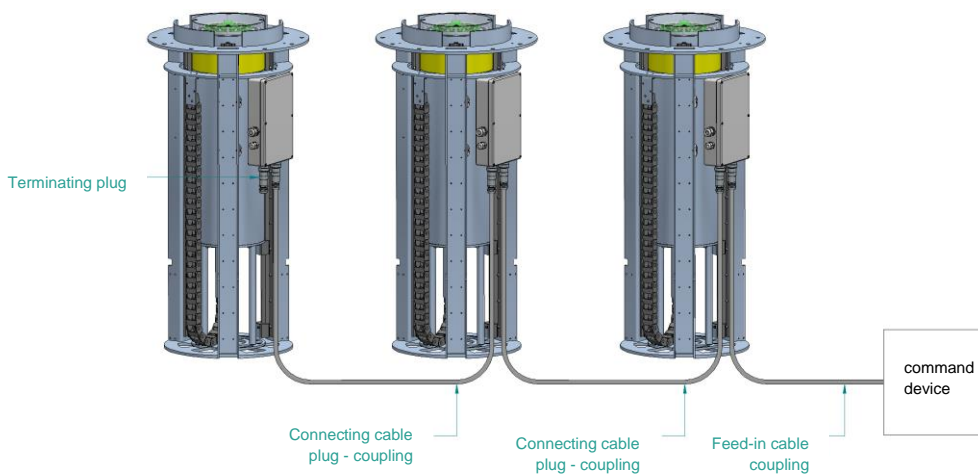
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### 7.4 Commissioning the control unit

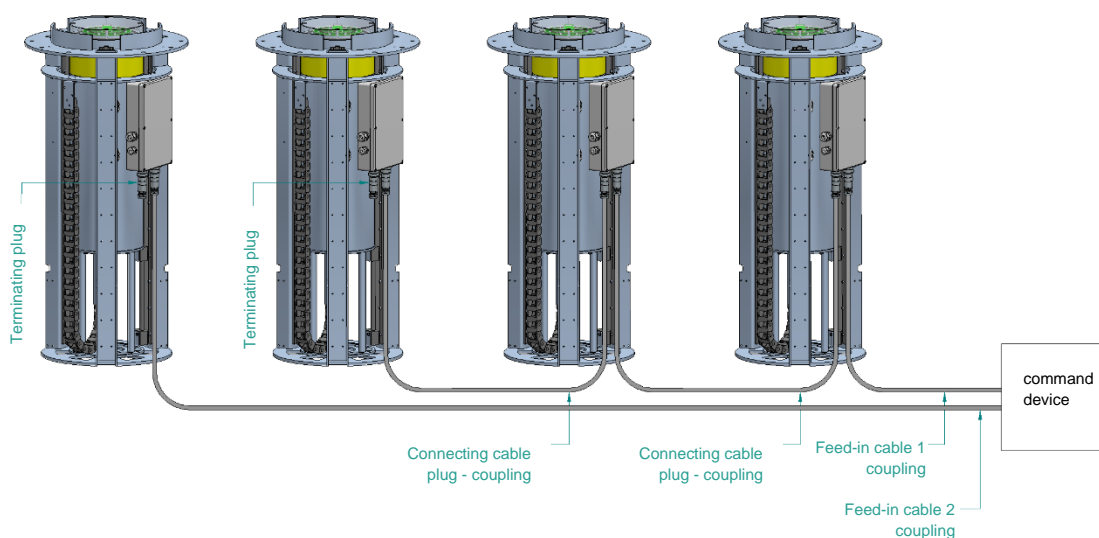
The retractable bollard 2 is initialised on initial connection of the power supply or in the event of a power failure. This can be seen on the LED operating light. All the colours are run through. From red, green, blue, white and red for a radar detection from one side and blue for a radar detection from the other side. Initialisation takes approx. 1 min. The retractable bollard is ready for operation after initialisation.

### 7.5 Control of several bollards

A max. of 3 retractable bollards can be connected together by branching. The retractable bollards are connected together by means of cables and connectors for this purpose. The terminating connector must be inserted in the last retractable bollard without fail. The terminating connector is used for terminating the position limit switches.



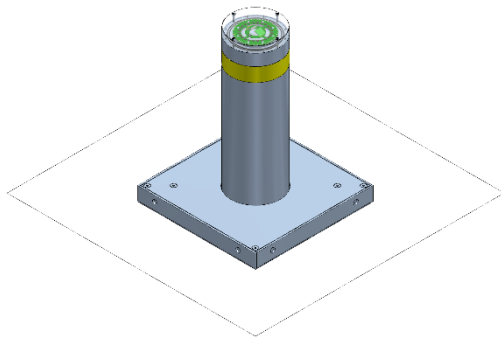
If more than 3 retractable bollards are used in association, a second or larger connection pipe must be laid between the control unit and the 4th retractable bollard (space for 2x cables incl. connector/coupling). The terminating connector must also be inserted in the last retractable bollard without fail in this case.



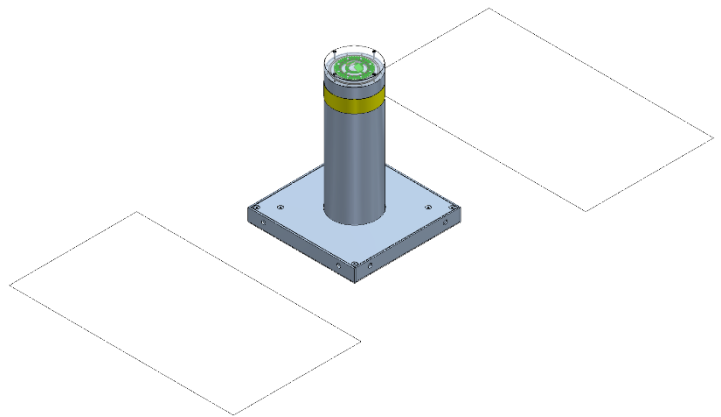
### 7.6 Detector loops

See the details in the manufacturer's instructions for the magnetic recording device with regard to operation of the retractable bollards 2 bollard or bollards using detector loops.

Example of retractable bollards 2 with a surrounding detector loop (perimeter protection)



Example of retractable bollards 2 with two detector loops (bi-directional registration of vehicle crossings)



## 8 Control unit

### 8.1 Electric power supply

The retractable bollard 2 is operated via the feeder cable with 230VAC. This supplies the power supply in the retractable bollard 2 with the supply voltage. The drive and the control unit require a voltage of 24VDC provided by the power supply.

The 230VAC supply voltage is connected as follows:

Conductor no.:	Description:
No. 1	Neutral conductor
No. 2	Outer conductor/line conductor
PE	PE conductor

### 8.2 Lift/ Extension – Reduce/ Retraction

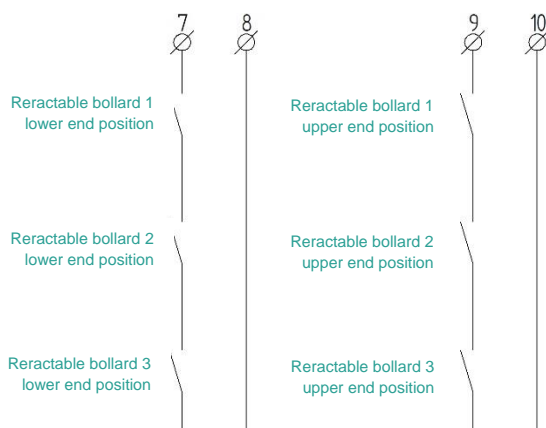
The retractable bollards 2 requires an external signal for an extension process. This command must execute the extension command over the complete travelling range until the top end position is reached. The retractable bollard moves to the lower end position as soon as the extension command is ended. An additional signal is therefore not required for a retraction process. An extension command can be executed with a voltage of 12-230VAC or DC.

Conductor no.:	Description:
No. 3	Extension command 12-230VAC/DC (24VDC/1mA) (230VAC/0.6mA)
No. 4	GND/Neutral conductor

### 8.3 Upper/Lower position limit switch

The retractable bollards 2 has 2 potential-free contacts for the upper and lower end position. If several retractable bollards are connected, the potential-free contacts are connected in series. This means that a valid end position signal is not output until all the retractable bollards 2 are in the same position and end position.

Conductor no.:	Description:
No. 7	Lower position limit switch (potential-free) max. 16A/230VAC
No. 8	Lower position limit switch (potential-free) max. 16A/230VAC
No. 9	Upper position limit switch (potential-free) max. 16A/230VAC
No. 10	Upper position limit switch (potential-free) max. 16A/230VAC



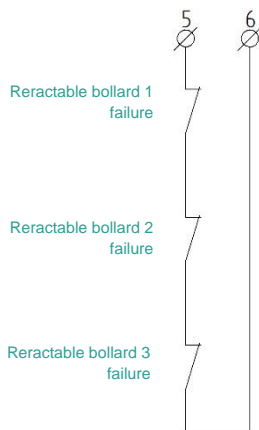
### 8.4 Fault

The retractable bollards 2 has a potential-free contact for faults. If several retractable bollards are connected, the potential-free fault contacts are connected in series. If a fault is detected in a retractable bollard, the circuit is interrupted, whereupon e.g. a message or warning can be output.

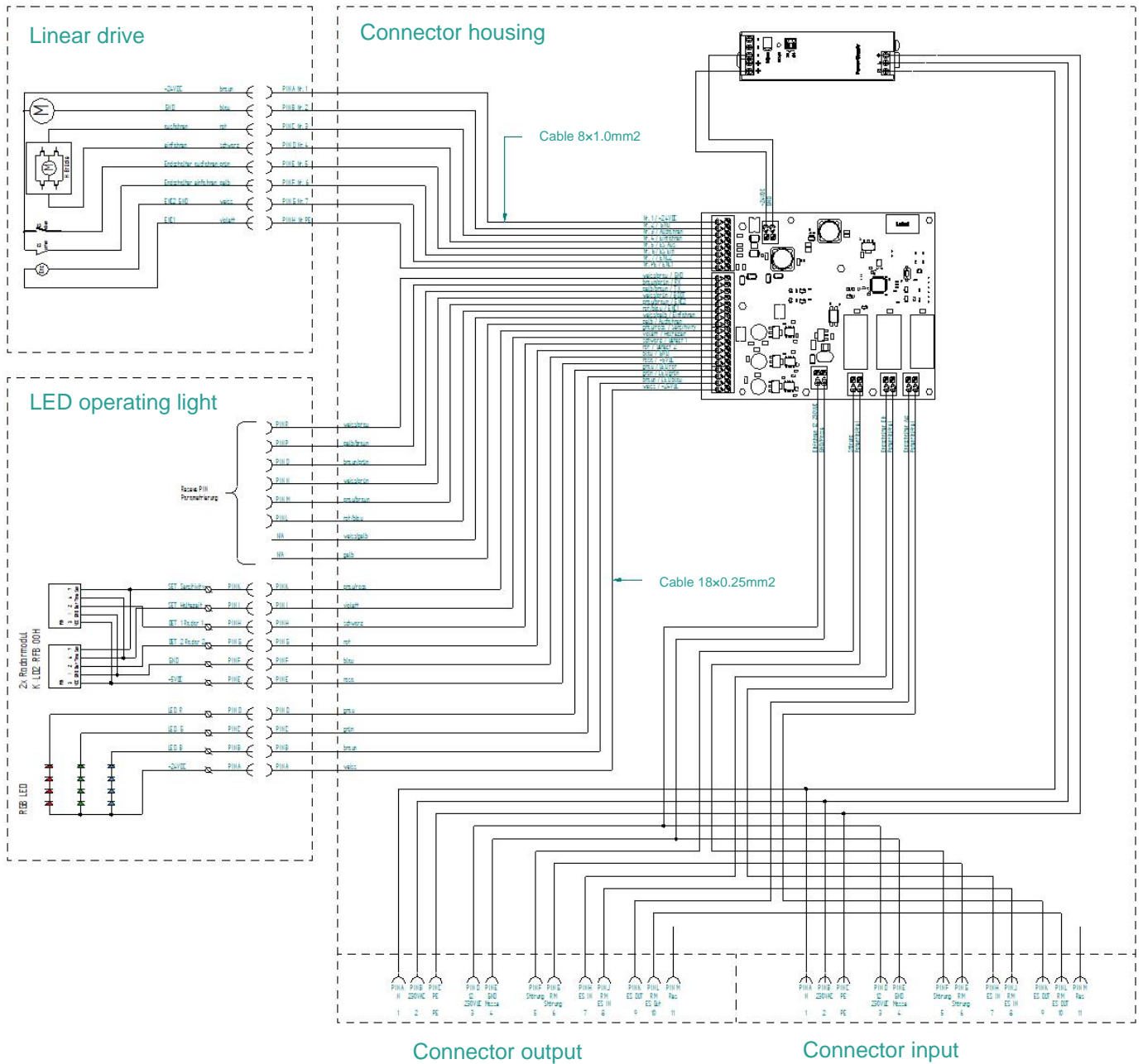
Possible causes for the fault:

- Retractable bollards 2 does not reach the upper or lower end position within the set time.
- There is a problem with the retractable bollard LED operating light and/or the radar modules.

<b>Conductor no.:</b>	<b>Description:</b>
No. 5	Fault (potential-free) max. 16A/230VAC
No. 6	Fault (potential-free) max. 16A/230VAC



## 9 Circuit diagram





## 10 Maintenance

### 10.1 Inspection and servicing plan

**Tasks to be performed:**

Cleaning of drainage  
 Check retractable bollard 2  
 Check control unit

**Time frame / cycle:**

As required  
 As required/min. every 2 months  
 As required

### 10.2 Description of inspection and servicing tasks

The drive unit must be checked and cleaned at appropriate intervals, and greased if necessary.

The cover locking unit must also be cleared of dirt at appropriate intervals to ensure that it can be opened reliably.

The electrical control unit and the partitions must be serviced in accordance with the provisions, standards and regulations in force in the country.

### 10.3 Introduction

The following steps and hints must be followed without fail to ensure correct installation. Only in this way can it be guaranteed that the product functions to the complete satisfaction of the customer.

### 10.4 Auxiliary tools

Hand brush or wire brush depending on dirt accumulation and deposits



Cleaning cloth

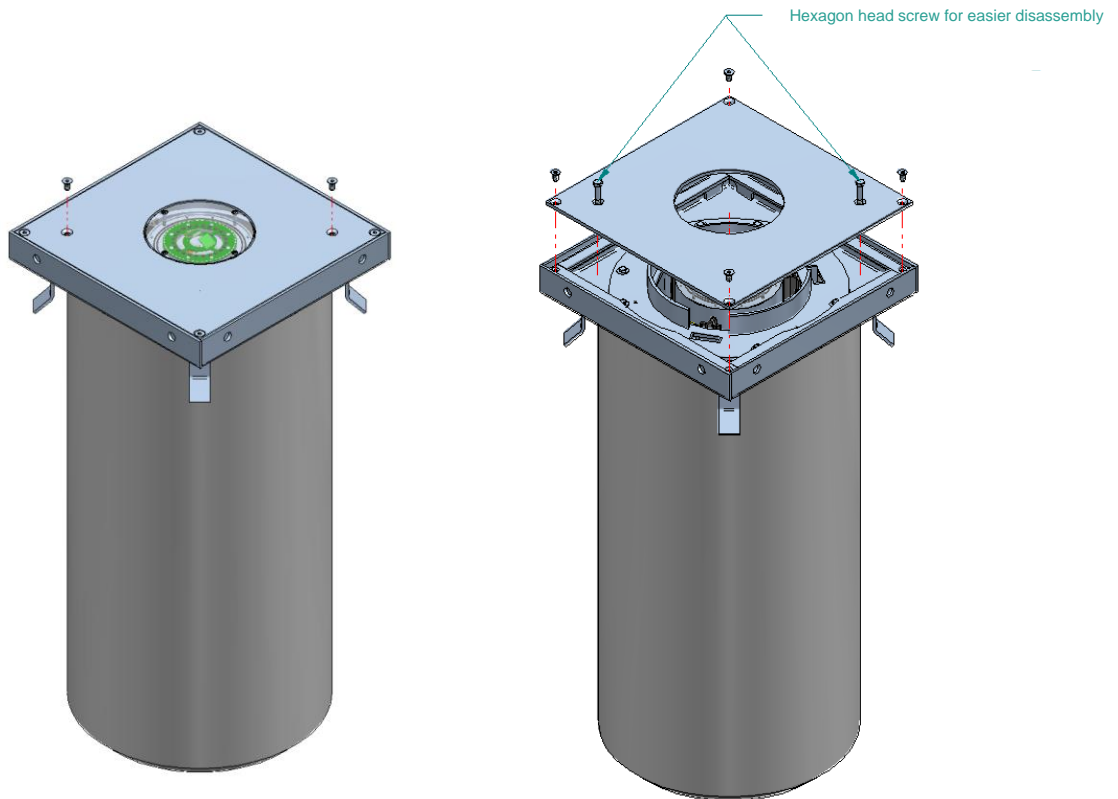


Lubricating oil “HIGH-TEF OIL” (Item no. 248190)

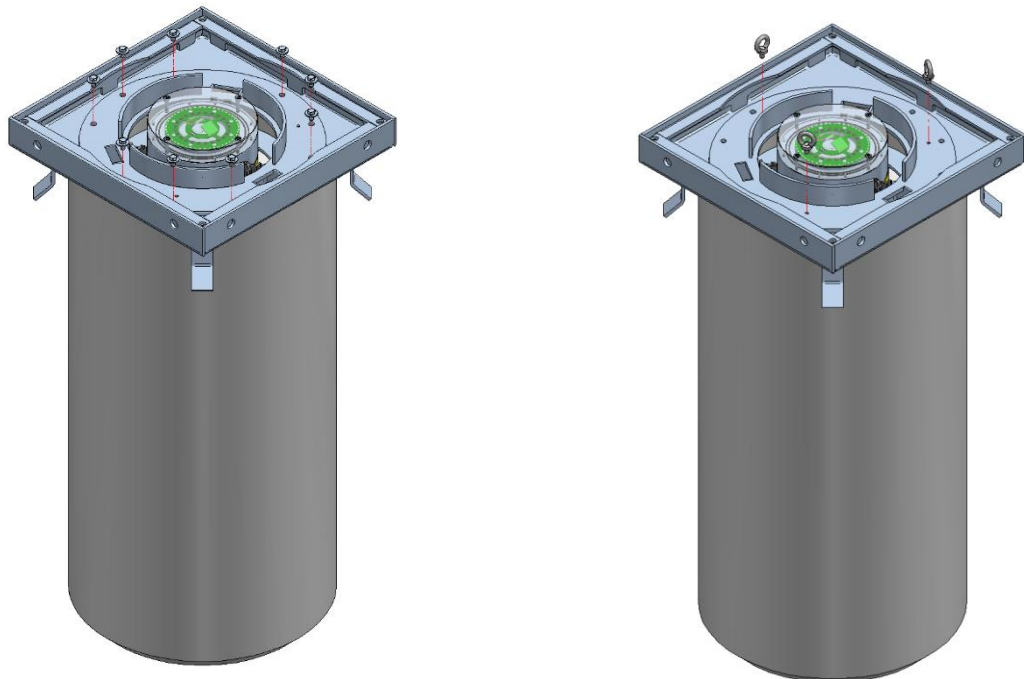


## 10.5 Maintenance steps

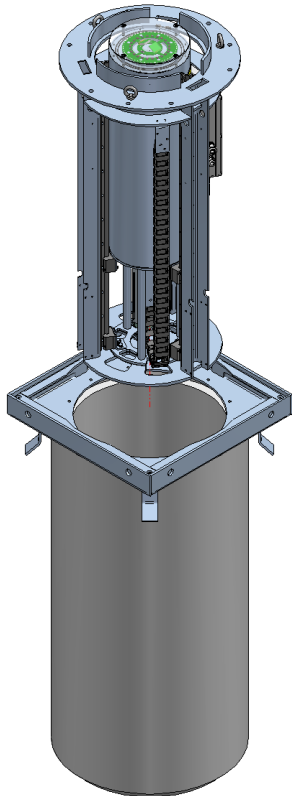
- 1) Retract the retractable bollard 2 and remove the stainless steel cover by undoing the 6 screws. Then mount 2 M10 hexagon head screws, in order to lift the cover more easily.



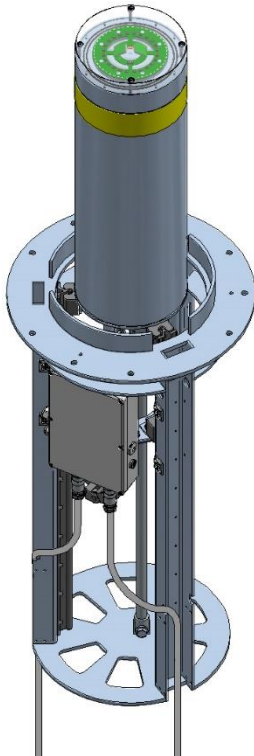
- 2) Undo the 6 or 9 screws and attach the 3 eye bolts



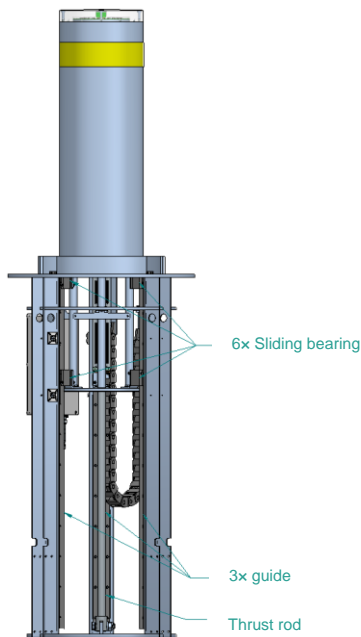
- 3) Carefully remove the bollard from the concrete tube by means of a block and tackle or similar and place it on the ground. Please ensure that the cables are not damaged!



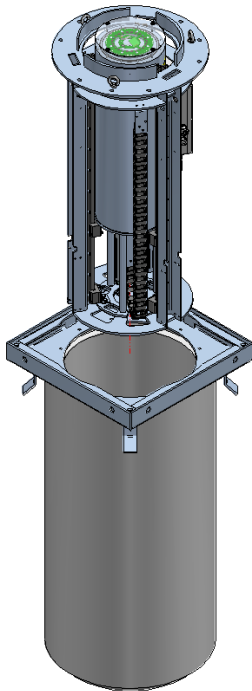
- 4) Extend the retractable bollard to facilitate cleaning



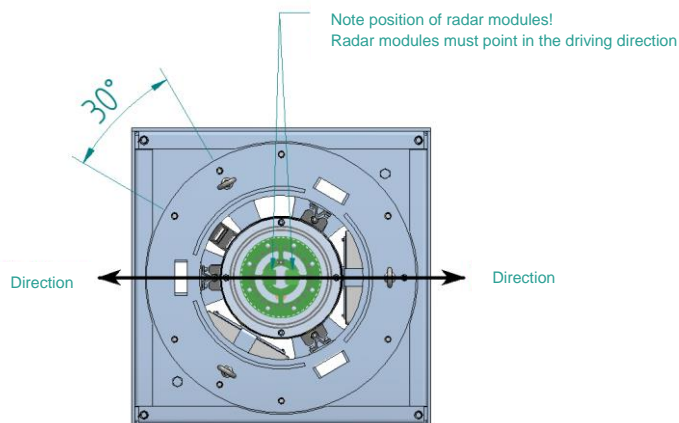
- 5) Clean the retractable bollard with a brush and cleaning cloth, in order to remove dust, dirt and soiling, etc. Also clean the shaft frame and the mounting flange. There must be free of dirt for the reassembly, otherwise the level of the retractable bollard and the floor covering is no longer correct. Also remove any foreign bodies and dirt accumulation which could adversely affect operation from the shaft.
  
- 6) Clean the guide, the sliding bearings and the thrust rod with a cloth. Lubricate the guide and the thrust rod of the drive with lubricating oil, Item no. 248190.



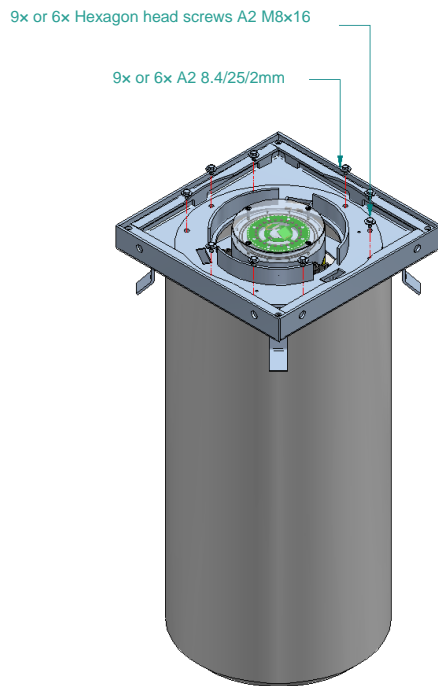
- 7) Move the retractable bollard in and out, so that the grease is distributed over the guide rod and the spindle. The retractable bollard can now be lowered into the concrete tube.



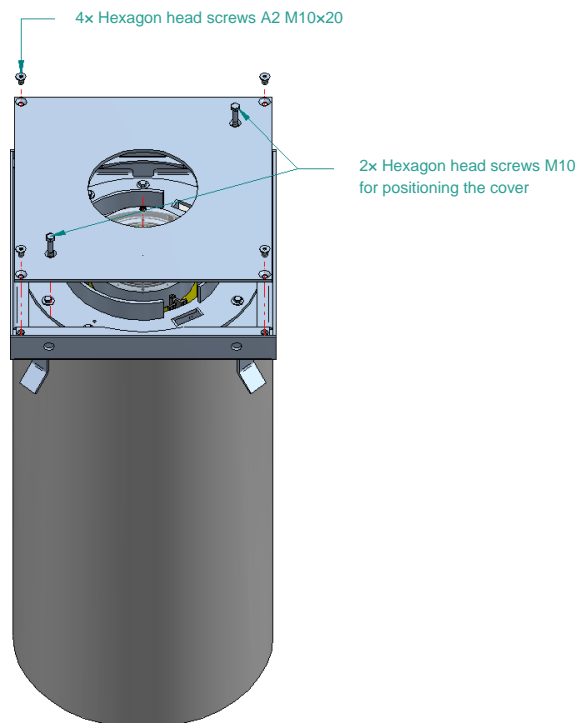
- 8) Align the retractable bollard in the driving direction as per the radar modules. Check the connection cable before you insert it in the concrete tube. It may not be damaged or pinched.



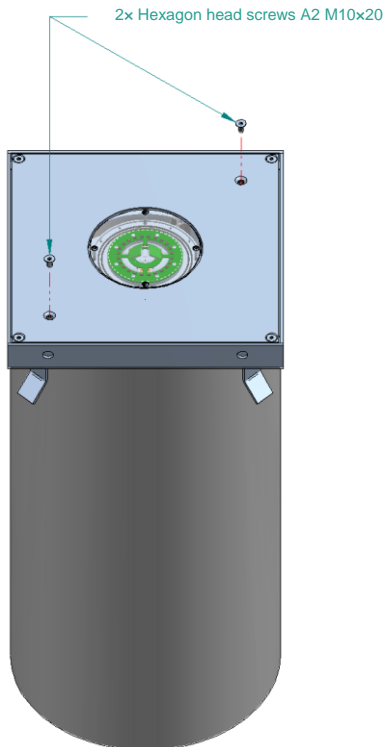
- 9) The retractable bollard must be aligned in the middle of the concrete tube. Retighten the 6 or 9 screws with the key.



- 10) Mount the cover with the countersunk screws



- 11) Remove the M10 auxiliary hexagon head screws for positioning the cover and replace with M10x20 countersunk screws.



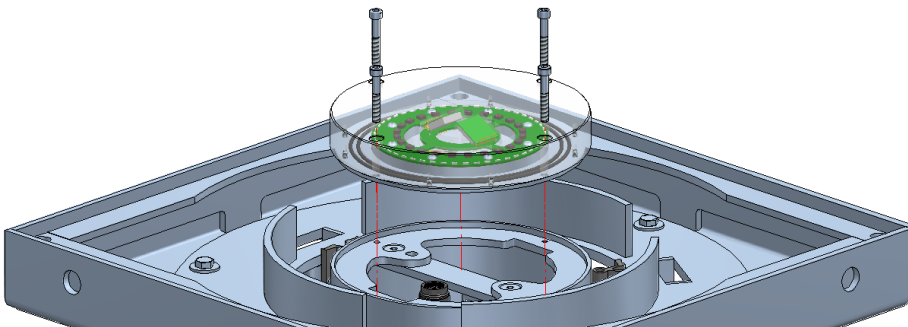
## 10.6 Replacing retractable bollards 2 LED operating light incl. radar sensor

1. Undo the cover screws and disassemble the cover
2. Undo 4x M6x40mm hexagon socket screws of the LED operating light
3. Disassemble the LED operating light
4. Disconnect the connector on the rear

Assembly is carried out in the reverse order

### **i** Hint

When replacing the retractable bollards 2 LED operating light, including the radar sensor, ensure that the permitted starting torque of 4Nm is not exceeded, so as to prevent damage that could result in malfunctions.



Created	Modified	Object-ID
28.02.2020	19.09.2023	1599820
rasa	rasa	

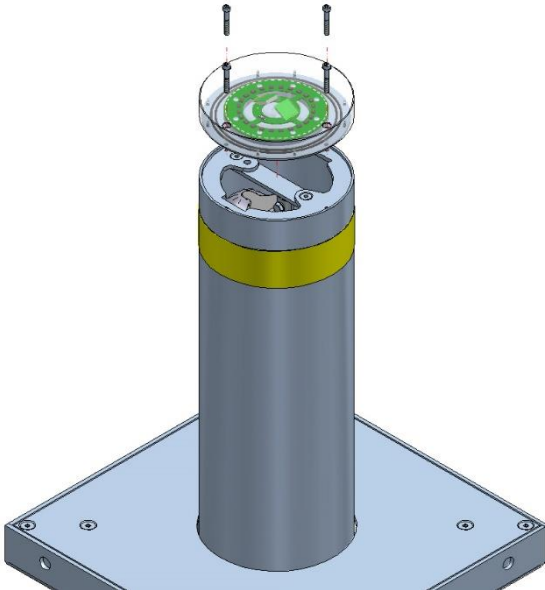
## 10.7 Manual emergency retraction

The retractable bollard 2 can be manually retracted in the event of a failure or a power failure.

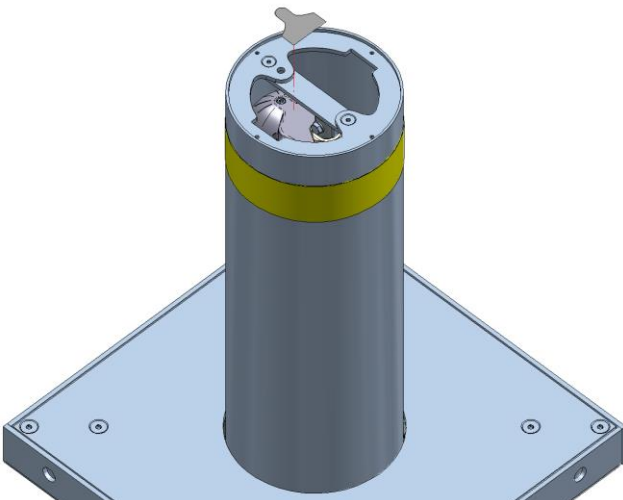
**⚠ Hazard**

The retractable bollard must be disconnected from the power supply without fail, so that a sudden extension or retraction process cannot occur when the power is restored.

1. The LED operating light can now be disassembled. Undo the 4 screws, remove the LED operating light and disconnect the plug and socket.

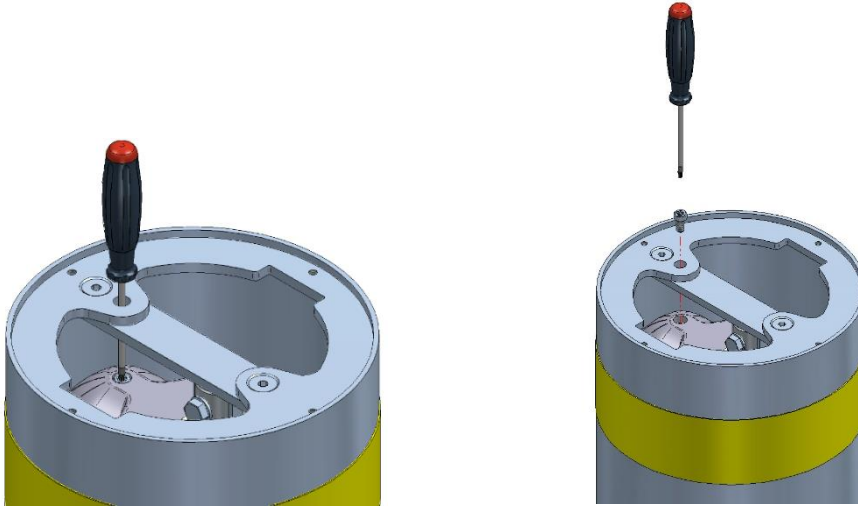


2. The drive is now accessible from above. The sticker is removed from the linear drive or folded back in the next step.





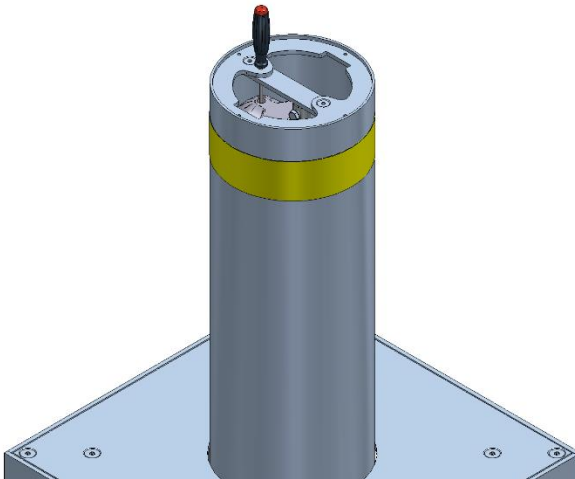
3. The screw for emergency retraction can be seen after removal of the sticker. The screw must be removed with a 5mm hexagon socket screwdriver. Keep the screw and the associated sealing ring in a safe place.



4. After removing the screw, the drive can be retracted by turning it clockwise with a 6mm inner hexagon screwdriver. The screwdriver would have to be moved anti-clockwise for extension.

**Hint**

The torque for emergency actuation is approx. 6-8Nm. The max. speed is 65 rpm. An increase in the speed is not permissible and could damage the drive. The use of a drill driver is therefore not permissible.



5. The components are assembled in the reverse order. The supply voltage can be switched on again after manual retraction of the retractable bollard 2.

## 11 Troubleshooting

### 11.1 Rectifying malfunctions

<b>Fault / error message</b>	<b>Possible cause(s)</b>	<b>Action</b>
Retractable bollard 2 does not extend (LED flashes slowly orange)	Radar has detected an object	Remove object from radar range
Retractable bollard 2 does not extend (LED flashes quickly red)	Failure in control unit	Carry out a "reset" of the control unit by disconnecting the voltage supply
Retractable bollard 2 does not retract (LED flashes quickly red)	Failure in control unit	Carry out a "reset" of the control unit by disconnecting the voltage supply
Retractable bollard 2 does not operate	Power supply interrupted.	Check the power supply
Retractable bollard 2 does not operate	Control wire to retractable bollard 2 faulty	Check control wire
Retractable bollard 2 does not operate	Control device or higher-level control unit defective.	Check the function of control devices or higher-level control unit

## 12 Service

### 12.1 Service addresses

GIFAS ELECTRIC GmbH Borsigstrasse 9  D-41469 Neuss	GIFAS-ELECTRIC S.r.l Via dei Filaracci 45 Piano del Quercione I-55054 Massarosa (LU)	GIFAS ELECTRIC GmbH Strass 2  A-5301 Eugendorf	GIFAS-ELECTRIC GmbH Dietrichstrasse 2 Postfach 275 CH-9424 Rheineck
☎ +49 2137 105-0 📠 +49 2137 105-230 🌐 www.gifas.de ✉ verkauf@gifas.de	☎ +39 58 497 82 11 📠 +39 58 493 99 24 🌐 www.gifas.it ✉ info@gifas.it	☎ +43 6225 7191-0 📠 +43 6225 7191-561 🌐 www.gifas.at ✉ verkauf@gifas.at	☎ +41 71 886 44 44 📠 +41 71 886 44 49 🌐 www.gifas.ch ✉ info@gifas.ch

### 12.2 Imprint

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CH-9424 Rheineck  
www.gifas.ch

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