



World first: square bollard

We present for the first time an automatically retractable bollard in square design and with longitudinal illumination. Equipped with all high-quality components of the urbanstar bollard series.

urbanstar Traffic bollard

This automatic bollard with efficient and operationally reliable hydraulic drive is used both for passages with increased traffic frequency and for simple barriers. These include traffic-calmed zones, pedestrian areas or bus lanes. Different types of control on control pillars, or installed on walls or booths allow simple, intelligent control.

The new bollard series will impress you with its:

- High degree of operational reliability
- Intelligent control
- Low-maintenance drive
- Attractive design
- Very good visibility
- Safety from vandalism

Quality & long life of service

Both the bollard and the mechanism are designed for an extremely long service life. This is achieved by the use of a small number of mechanical parts as well as of high-quality materials and components. Non-corrosive materials prevent rust formation and guarantee long service life and cost security.

The design

The timeless, slim and square design, reduced to a minimum, fits architecturally very well into all urban areas. The innovative LED full illumination of the bollard head and cylinder ensures perfect visibility day and night. Thanks to their identical design, fixed, manually and automatically retractable bollards of the **urbanstar Q series** can be seamlessly combined with each other.

The reliable drive

The integrated, closed hydraulic drive is designed for 2,000 movement cycles per day and is operated with bio-oil. All hydraulic connections are made of stainless steel, the single-acting hydraulic lifting cylinder is specially coated with an anti-corrosive material.

Bollard control

A new smart bollard control system enables the system to continuously monitor itself with a wide variety of sensors. The new control system offers:

Self-monitoring

- Detailed fault analysis, displayed on the control display
- Automatic emergency retraction
- Independent emergency retraction in the event of faults (programmable)
- Visual display in case of malfunction
- Special flashing sequence of the head lighting for fault indication
- Adjustment of brightness / acoustic warning
- Automatic adjustment of the brightness of the head lighting and switching off of the acoustic warning (at night) by means of geo-coordinates

- Data acquisition and storage
- Simplified fault analysis or investigation of evidence in the event of incidents (accidents/collisions)

Remote monitoring and control (optional)

Optionally, we offer remote monitoring and control via a cloud platform (web-based)

Advantages

- Status display of the system in real time
- Web-based control of the system
- Automatic error messages via email / SMS

Options

Adaptation to road gradient

The bollard inserts (shafts) can be adapted to the road gradient – a great advantage in construction and operation: unhindered road cleaning and snow removal, no tripping/ danger for pedestrians or cyclists.

Heating

For better operational safety in winter, it is advisable to install a bollard heater. This works exactly where the heat is needed – with intelligent heating control and a local temperature sensor.

Custom Bollards

We manufacture the bollard of your choice:

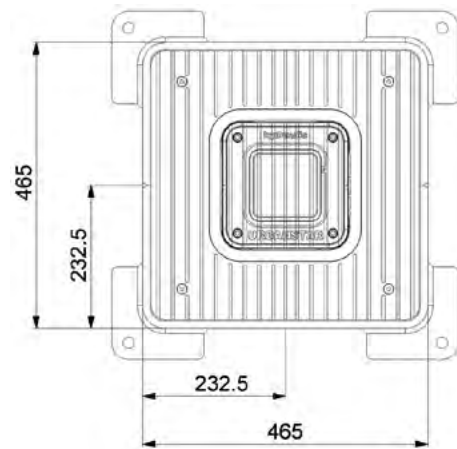
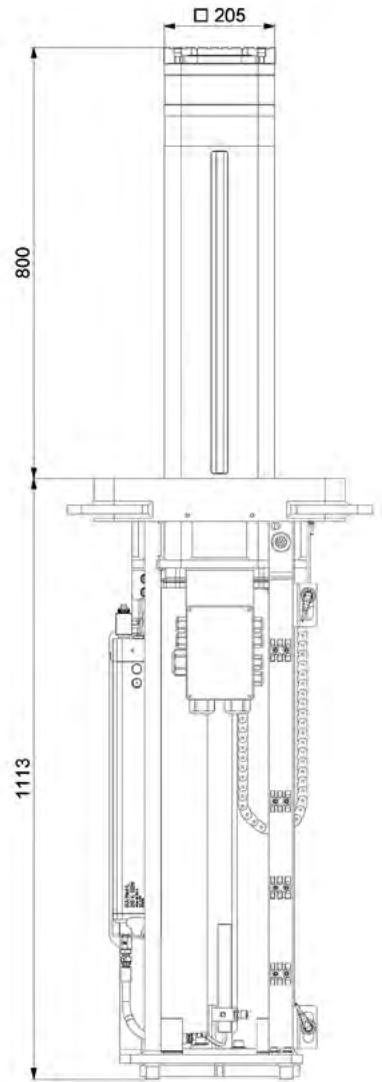
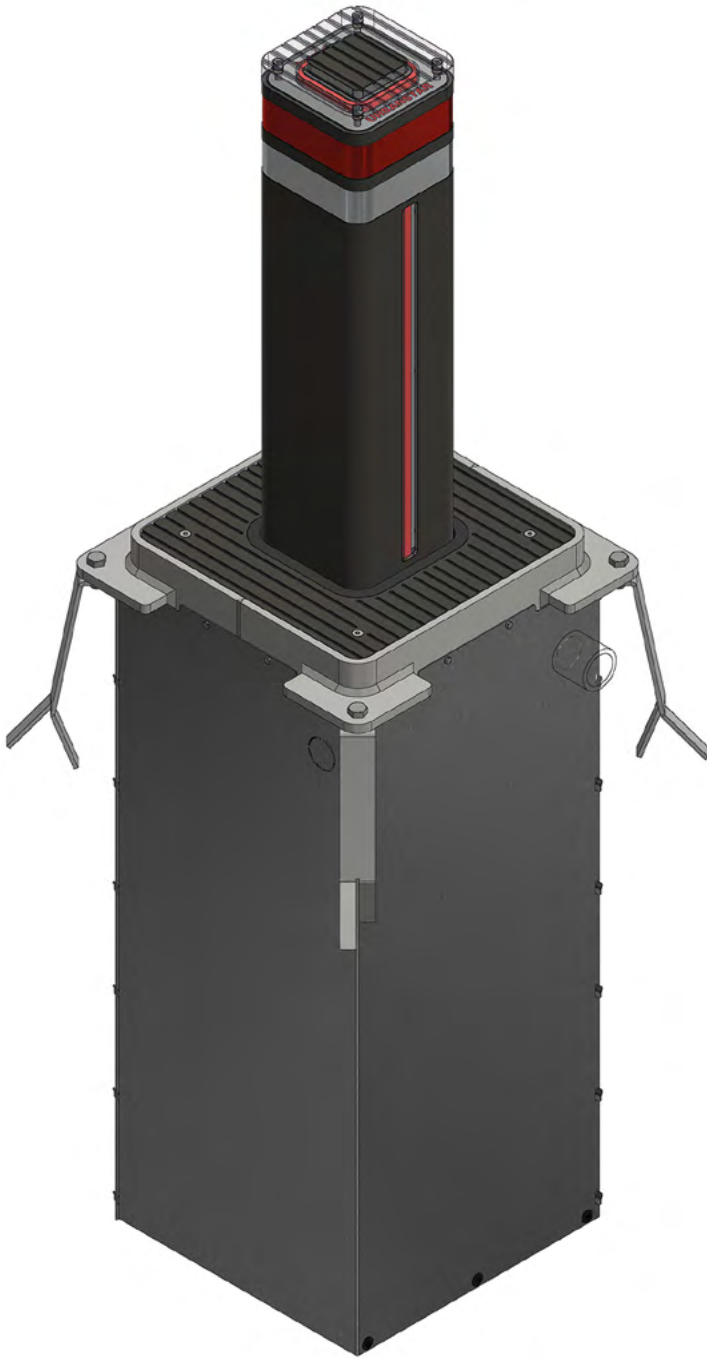
- Surface in different RAL colors
- Different head lighting
- Warning markings

Custom-made control pillars

We manufacture control pillars and control elements in individual designs.

The benefits at a glance

- strong 360° LED bollard head illumination
- illumination of bollard cylinder in the direction of travel
- acoustic warning for pedestrians, wheelchairs and cyclists (can be switched off at any time)
- visually impaired labeling with reflector foils
- ground-level bollard head and shaft end
- polished stainless steel bollard cylinder
- steel bollard cylinder, painted in RAL
- substructure anti-corrosion coated mechanism
- suitable for very intensive use: guaranteed up to 2,000 work cycles per day.
- adjustable lifting force limitation (6 to 35 kg)
- automatic retraction in case of malfunction/power failure
- integrated, thermostatically controlled heating



Technical specifications

Construction type	Automatically retractable bollard with integrated hydraulic drive. Connection via normal control line to external control distribution.
Substructure	Compact bollard frame made of hot-dip galvanized steel
Blocking element	Cylindrical, square bollard; □205 mm and a height from the bottom of 800 mm
Cylinder material	Steel, hot-dip galvanized; optional other versions or RAL colours
Corrosion protection	All components made of hot-dip galvanized steel or stainless materials
Lost formwork	Bollard shaft is made of zinc sheet; stainless steel shafts are optionally available for installing the bollards in building envelopes. Dimensions: 441 x 441 x 1160 mm (body 465 x 465 mm)
Mechanism	Hydraulic drive with bio-oil, installed in the bollard
Motor power	500W; 8-12A (Rated Power / Rated Current)
Operating voltage of mechanism	230 VAC / 24 VDC
Bollard head	Made of hardened polycarbonate and aluminium block
Bollard head illumination / Cylinder illumination	360° and upward shining LED lighting in red (continuous light or flashing); other colors optional; cylinder illumination in direction of travel
Lowering time	3.5 seconds
Lifting time	5.5 seconds
Bollard control	Supply voltage 230V +6/-10% 50/60Hz; maximum cable length: 80 meters
Degree of protection on the part of the bollard	IP 67
Load class	D400; 25 t wheel load
Frequency of use / duty cycle	Intensive use (2,000 movements/day); designed for continuous operation
Reflector tapes	Standard width 55mm, white or red; equipped with two reflector bands for better contrast
Operating temperature	-40 °C (with heating) to +70 °C
Heater for winter operation (optional)	80 W with thermostat control (built into the bollard)
Force limitation during lifting	freely adjustable for the first 15 cm; standard setting: 30 kg
Acoustic warning (optional)	Built-in buzzer in the bollard for warning pedestrians
Emergency operation / lowering	The bollard automatically lowers in the event of a power failure or malfunction. Optionally, this function can be switched off so that the bollard remains in the raised position (battery supported).
Impact strength	40,000 J (without deformation) / 250,000 J (breakout resistance)
Weight of bollard system	135 kg
Weight of shaft with frame	56 kg