AUTOMATIC BOLLARDS

urbanstar e-dynamix ATR-BM-275-H800

The new **urbanstar e-dynamix** automatic bollards with highly efficient brushless motor are used both for passages with increased passage frequency and for simple closures. These include traffic-calmed zones, pedestrian areas or bus lanes. Different control types in terminals, wall distributions or standing cabins allow simple, intelligent control. The new bollard series is convincing:

- very reliable in operation
- energy-efficient and durable operation
- intelligent regulation
- very low-maintenance drive
- appealing design
- very good visibility
- Vandalism safety

The quality
Non-corrosive materials prevent the formation of rust and guarantee a long service life and cost security.

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

The 100% electric drive
The new e-dynamix electric drive concept with wear-free brushless motor generates absolute top performance with a fraction of the energy of conventional bollards. Very quiet, powerful, fast and up to 5 million operating cycles - these are the advantages of the new drive. Fast lifting and even faster lowering (with soft-start and soft-stop in the end positions) guarantee precision of movement and maximum safety with very low maintenance costs. This is also ensured by the small number of mechanical parts and the special arrangement in the bollard cylinder: in the event of a collision, the motor remains undamaged.

The long service life
The bollard and the wear-free drive are designed for an extremely long service life. This is achieved by using high-quality materials and components. All parts are either made of stainless steel or non-corrosive materials.

Environmentally friendly and climate-friendly
e-dynamix works free of hydraulic or lubricating oils and does not require inefficient air aggregates such as compressors or the like. The optional heating system is also energy-saving: It works exactly where the heat is needed - with intelligent heating control and local temperature sensor.

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Bollard control

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

Self-monitoring

- detailed error analysis, shown on the control display
- automatic emergency lowering
- independent emergency lowering in case of a fault (programmable)
- visual indication in the event of a fault
- special flashing sequence of the head illumination for fault indication
- Adjustment of brightness / acoustic pre-warning
- automatic adjustment of the brightness of the head illumination and switching off the acoustic pre-warning (at night) by means of geo-coordinates
- Data acquisition and storage
- Simplified fault analysis or investigation of the evidence of incidents (accidents/collisions)

Remote monitoring and remote control (optional)

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

- Status display of the plant in real time
- Web-based control of the system
- Automatic fault messages by e-mail / SMS

Options

Adaptation to road gradient

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

Heating

In higher areas it is advisable to install a bollard heater. These are automatically controlled by temperature sensors.

Tailor-made bollards

We manufacture the bollard of your choice:

- Surface grinded stainless steel or painted in RAL-colour of your choice
- Laser engraving with logo or lettering
- different head illumination
- Warning markings

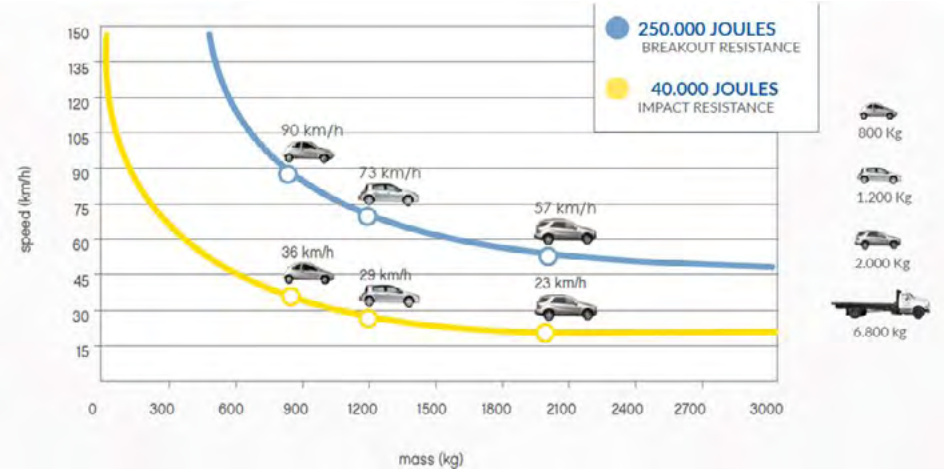
Special production of control terminals

We manufacture operating terminals and control elements in individual design.

The product benefits at a glance

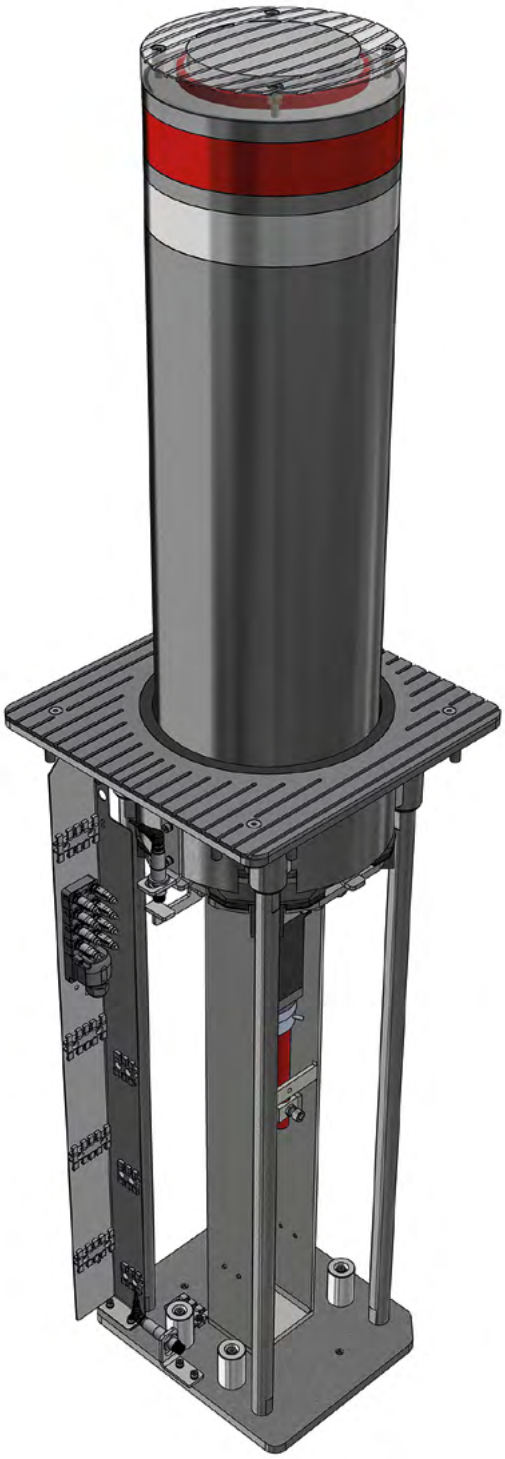
- 100% wear-free electric drive
- strong 360° LED bollard head illumination
- acoustic advance warning for pedestrians, wheelchair and bicycle users (can be switched off at any time)
- visually impaired labelling with reflector foils
- floor-level bollard head and shaft end
- cylinder made of ground stainless steel
- Substructure of the bollard anti-corrosion coated
- very quiet drive for intensive use: up to 3000 movements per day guaranteed. No knocks in the end positions
- adjustable lifting force limitation (3 to 35 kg)
- optimized lifting and lowering speeds
- automatic lowering in case of malfunction/power failure
- integrated, thermostatically controlled heating

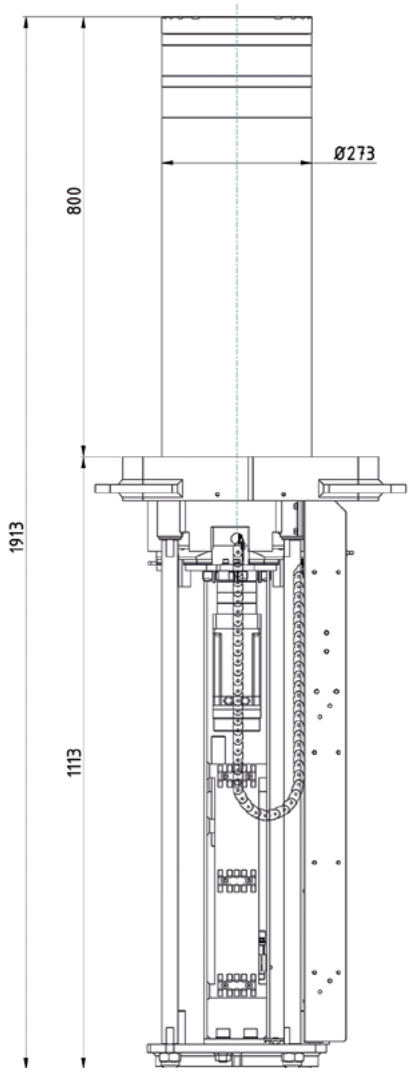
Impact resistance



Technical specifications

Type	Automatically retractable bollard with integrated brushless DC electric motor and wear-free Drive concept „e-dynamix“. Connection of the bollard via normal control line to the external Control distribution.
Subconstruction	Compact bollard frame made of hot-dip galvanised steel
Blocking element	Cylindrical bollard with a diameter of 275 mm and a height from the ground of 800 mm
Cylinder material	Stainless steel, ground; optionally other designs or RAL colours
Corrosion protection	All components made of stainless steel or rustproof materials
Lost shuttering	The bollard shaft is made of zinc plate; for the installation of the bollards in building envelopes the following options are available. Dimensions: 441 x 441 x 1160 mm (body 465 x 465 mm)
Drive	100% electric drive with powerful 48 V Brushless motor
Drive power	500 W; 8-12 A (rated power / rated current)
Operating voltage motor	48 VDC
Bollard head	Made of cured polycarbonate and aluminium block
Bollard head illumination	360° and upward shining LED illumination in red (continuous light or flashing); other colours optionally possible
Run-in time (reduction)	2.5 - 3.5 seconds
Extension time (lifting)	3.5 seconds
Bollard control	Supply voltage 230V +6/-10% 50Hz; maximum cable length: 80 meters
Protection class bollard side	IP 67
Load class	D400; 25 t wheel load
Frequency of use / duty cycle	intensive use (3‘000 movements/day); designed for continuous operation
Reflector adhesive tapes	Standard width 55mm, white or red (optional two reflector strips for better contrast)
Operating temperature	-40 °C (with heating) to +70 °C
Heating for winter operation (optional)	40 - 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)	Buzzer built into the bollard for the advance warning of pedestrians
Emergency operation / emergency lowering	The bollard lowers automatically in case of power failure or in case of malfunction. Optionally this function can can be switched off so that the bollard remains in the raised position (battery supported)
Impact resistance	40'000 J (without deformation) / 250'000 J (breakout resistance)
Weight bollard system	137 kg
Weight shaft with frame	56 kg

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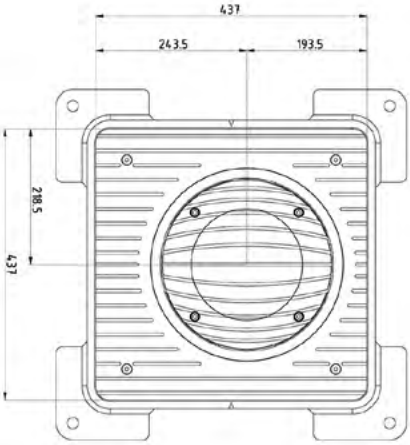
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