PERIMETER PROTECTION SYSTEMS

NEW. Automatic barrier SH 50 / SH 100, ticketless parking

HÖRMANN

4

Good reasons to opt for Hörmann perimeter protection systems.

12

Application areas

24

Versions.
Accessories.
Technology.

Brand quality
made in Germany

The family-owned company Hörmann offers all important construction components for building and renovating projects from a single source. We manufacture in highly specialised factories using state-of-the-art production technologies. Our employees work intensively on new products, continual further developments and improvements to details. The results are patents and unique products on the market.

AN EYE ON THE FUTURE. Hörmann is setting a good example. That's why 100% of our electricity needs in Germany come from green electricity. Together with an intelligent and certified energy management system, CO_2-neutral mailing and the recycling of valuable materials, more than 40000 tons of CO_2 are saved each year. In addition, we offset over 100000 tonnes of CO_2 by promoting wind energy and reforestation projects in cooperation with ClimatePartner.

We use 100% green electricity from
naturstrom
ENERGY FOR THE FUTURE

GRÜNER STROM

The green electricity label of German environmental associations

Sustainable planning and competent advice

Experienced specialists within our customer-oriented sales organisation accompany you from the planning stage, through technical clarification up to the final building inspection. Complete working documentation, such as, e.g. technical manuals, are always accessible and up-to-date at www.hoermann.com.

A STRONG PARTNER FOR PERIMETER PROTECTION SYSTEMS. At Hörmann, innovation is produced in-house – highly qualified employees of the development departments are in charge of product optimisation and new developments. This results in market-ready, high-quality products that are very popular around the globe. All major system components are developed and manufactured by Hörmann, guaranteeing high compatibility, full functionality and optimal safety. Our wide range of bollards for different applications, road blockers, tyre killers and complete control concepts makes us a strong partner for security solutions.

ARCHITECTS' PROGRAM. Clearly structured navigation via drop-down menus and symbols, as well as a search function, provide faster access to texts for invitations to tenders and more than 9000 drawings (in DWG and PDF format) of over 800 Hörmann products in Germany (offer varies by country). In addition, BIM data can be provided for many products for the Building Information Modelling process, enabling efficient planning, drafting, construction and management of buildings. Photos and photo-realistic presentations provide additional information on many products.

Easy to fit
and service

The installation of all components and extensions into the barrier housing reduces the maintenance and service efforts. The complete systems are pre-assembled and configured for plug-and-play. In addition, the new generation of perimeter protection systems can also be integrated into digital service and remote maintenance concepts.

Round-the-clock service

FAST SERVICE. We recommend a semi-annual maintenance cycle for our perimeter protection systems. Hörmann offers consulting, maintenance and repairs in many countries. Our extensive service network means that we are always nearby and at your service around the clock. Our customers can rely on us.

10-year guaranteed availability

HÖRMANN SPARE PARTS. It goes without saying that spare parts for all our components are original Hörmann parts that come with a 10-year guaranteed availability.

SERVICE-FRIENDLY COMPONENTS. The control unit is well protected and integrated directly into the barrier housing. The modular structure allows the convenient fitting or replacement of the individual components. This way, potential malfunctions can be quickly and easily recognised and resolved. Additional extensions, such as the module for the ID card management system, are directly integrated into the barrier housing.

Customised
access authorisation

Hörmann perimeter protection systems set standards in terms of security and convenience. No matter what the protection area and requirement is: The product range allows for individually tailored solutions: All perimeter protection systems can be easily and safely operated with Hörmann BiSecur radio technology.

INDIVIDUAL CONTROL AND MANAGEMENT CONCEPTS. NEW.
The integration of barrier systems into existing facility management systems as well as fire alarm systems is possible without any problems. For this purpose, Hörmann offers a comprehensive ID card management system that provides individual entry and exit management. Access authorisation is made via identification media such as QR code cards, RFID stickers or number plate recognition. User groups with different authorisation levels and time zones can also be managed.
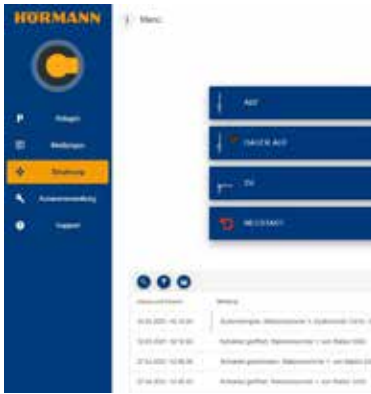
**CONTROL AND ADMINISTRATION VIA ONLINECONTROL.** With the connection via OnlineControl you can operate and manage barrier systems and the ID card management system on any end device around the world. They can be simply accessed via a smartphone, tablet or web browser. The clearly structured web interface allows the complete operation and status query of the barrier system as well as comprehensive administration. Malfunctions are displayed directly and forwarded as required, so they can be remotely remedied quickly and easily.
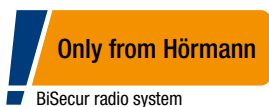
STATE-OF-THE-ART RADIO SYSTEM FOR DOOR CONTROL AND PERIMETER PROTECTION SYSTEMS. The bi-directional BiSecur radio system is based on future-oriented technology for convenient and secure operation. The extremely secure BiSecur encryption protocol makes sure that no one can copy your radio signal. It was tested and certified by security experts at Bochum university.
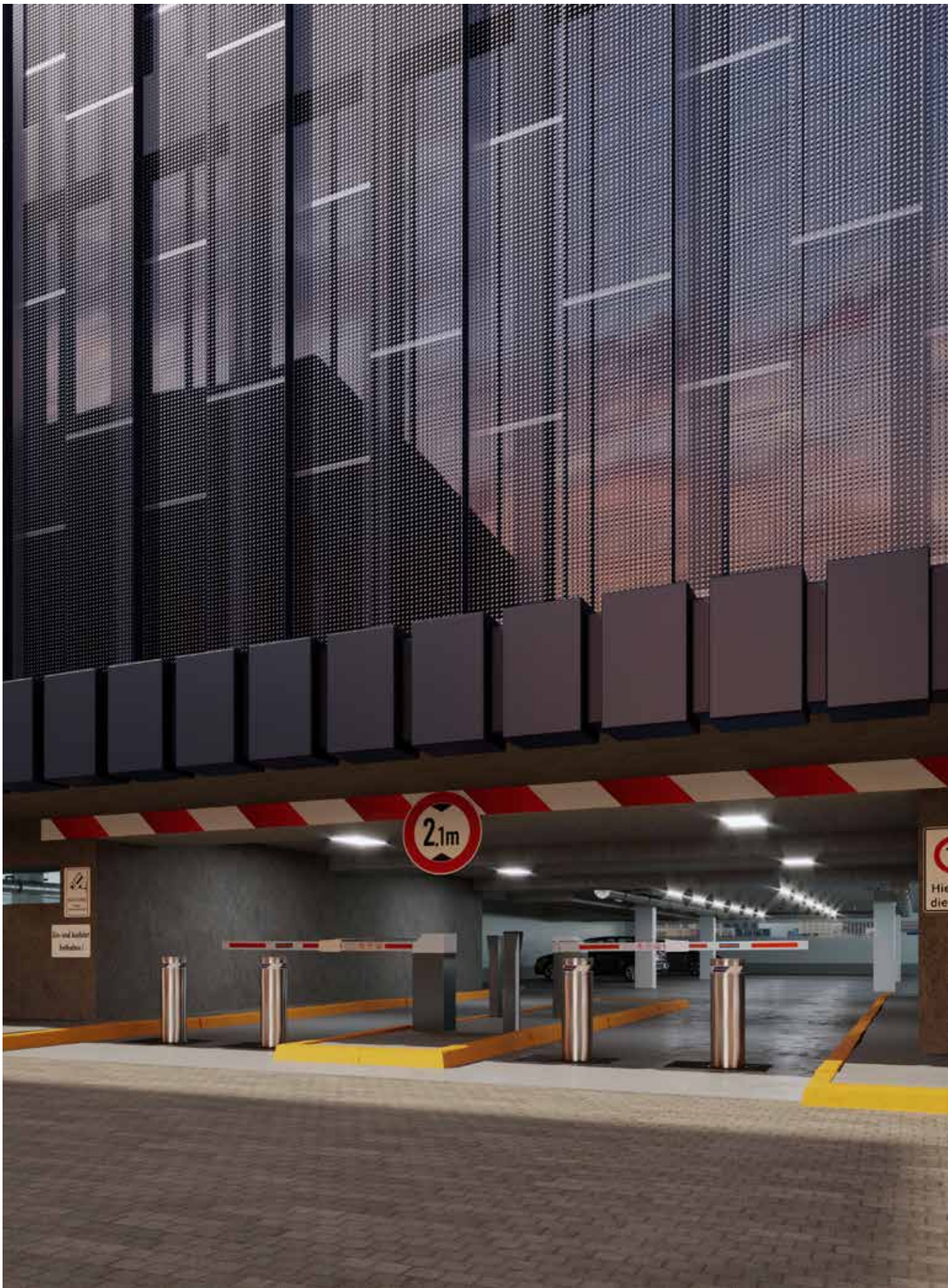
EMPLOYEE PARKING SPACES AND COMPANY PREMISES. The combination of parking and ID card management allows the flexible use of parking areas. Employees enter and exit with long-term parking tickets, e.g. RFID cards. Entry and exit of customers is handled with barcode tickets.

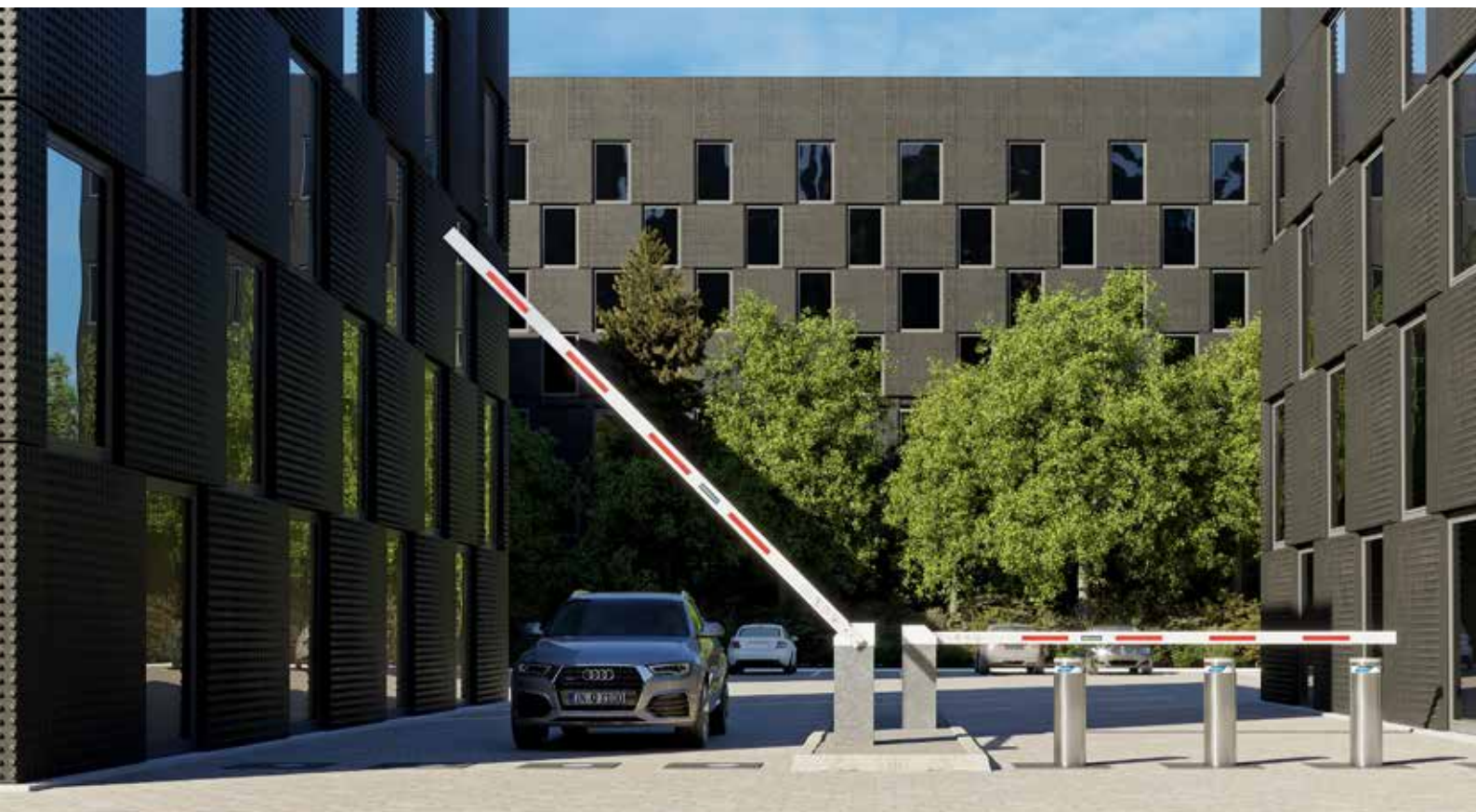→ For further information on the SH 300, see from page 28.

LEFT. SH 300 with flat boom

BOTTOM. SH 300 with flat boom and LED boom
lighting, barrier width approx. 3.75 m

HOTEL PARKING AREAS. An individual ID card management system allows hotel guests to use the underground garage or the hotel parking area for a defined period of time.

➔ For further information on the SH 300, see from page 28.

TOP. SH 300 with flat boom, barrier width
approx. 1.5 m, for entry and exit

BOTTOM. SH 300 with flat boom

TOP. SH 800 with octagonal boom
(preparation on both sides), suspended
grille and key switch

BOTTOM LEFT. SH 600 with round boom
(preparation on both sides)

BOTTOM RIGHT. SH 300 with flat boom,
barrier width approx. 2.75 m,

PARKING AREAS FOR RECREATIONAL AREAS AND CAMPING SITES. For long-term users, the authorisations for entry and exit are managed by timer-operated ID card management. At specific times, e.g. unattended times or outside the opening hours, the access can be blocked by the system.

PARKING AREAS FOR HOUSING COMPLEXES AND BLOCKS OF FLATS. For access to blocks of garages of housing complexes we recommend a long-term parking system with control elements, such as e.g. hand transmitters with which the garage doors can be operated at the same time.

TOP LEFT. SH 300 with flat boom, barrier width approx. 3.5 m,

TOP RIGHT. SH 600 with round boom (preparation on both sides), support post and two key switches, barrier width approx. 5 m

BOTTOM. SH 100 with oval boom, LED boom and cover lighting and photocell, barrier width approx. 2.75 m

TOP LEFT. SH 300 with flat boom, barrier width approx. 2.75 m,

TOP RIGHT. SH 300 with folding boom, barrier width approx. 2.75 m

BOTTOM. Automatic pay station HK-300

CAR PARKS IN SHOPPING CENTRES. A car park management system incorporating a remuneration system increases the attractiveness of shopping centres. We offer different solutions that allow the participating shops to reduce the parking fees for their customers and thus increase customer loyalty.

PUBLIC PARKING SPACES. A future-oriented park management system increases the profitability of inner-city parking areas. Individual payment systems from cash to credit cards offer customers convenient payment options and increase the usage rate of the parking areas.

Versions.
Accessories.
Technology.

Automatic barrier SH 50 / SH 100. NEW.

With oval boom

1 Oval boom
2 Oval boom

SH 50

SH 100
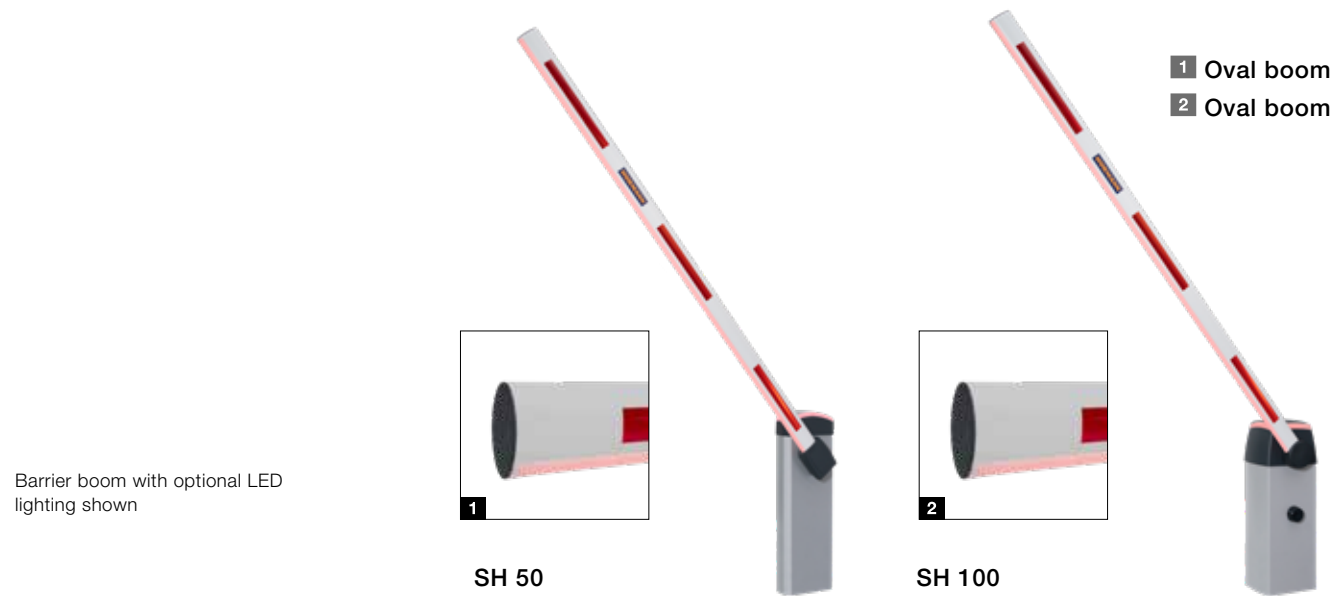
Product description

Barrier width max.	4710 mm	5750 mm
Opening / closing phase	3 – 6 s depending on boom length	3 – 6 s depending on boom length
Cycles per day	up to 500	up to 1,000
Overall cycles (service life)	up to 1 million	up to 2 million
Motor with control	24 V	24 V
Temperature range	−25 °C to +50 °C	−20 °C to +60 °C
Version	Right-hand/left-hand hinged	Right-hand/left-hand hinged
Dimensions barrier housing (width × height × depth)	220 × 1170 × 390 mm	320 × 1120 × 405 mm
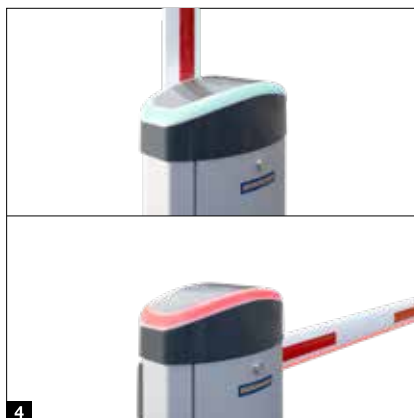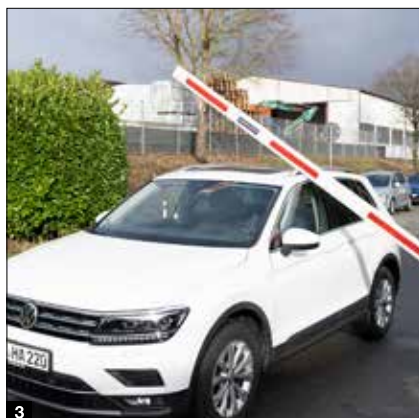
Standard equipment

Power limit [3]
The intelligent impact protection stops the barrier from closing in the presence of obstacles. This reliably protects persons and vehicles.

LED cover lighting [4]
The LED lighting integrated in the cover is used for visual signalling of the barrier status. (red: closed, green: open). With the SH 100, the LED cover lighting can be used independently of the LED boom lighting as an orange warning light.

Optional equipment

Emergency battery* [5]
The emergency battery enables temporary further operation to ensure operation in the event of a power failure.

Support post*** [6]
The floor-mounted support post made of powder-coated steel can be adjusted to match the height of the location.

Hörmann BiSecur radio** [7]
The modern BiSecur radio system ensures convenient and safe operation. All Hörmann BiSecur control elements can be used with the barriers (Fig. hand transmitter HS 4 BS).

LED lighting strips [8]
For better visibility at night and signalling of the opening status (red: closed, green: open), the barrier boom can be equipped with LED lighting strips.

➔ Further information on the respective standard equipment and optional equipment can be found on pages 32 – 35.

* Not available for SH 50
** As standard for barrier SH 100, optional for barrier SH 50, further information can be found on pages 44 – 47
*** Recommended from a barrier boom length of more than 4000 mm
Integration into pay station systems not possible with SH 50 and SH 100
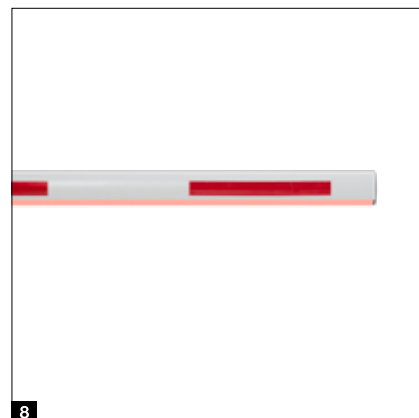
Automatic barrier SH 300

With flat boom, articulated arm or round boom

SH 300
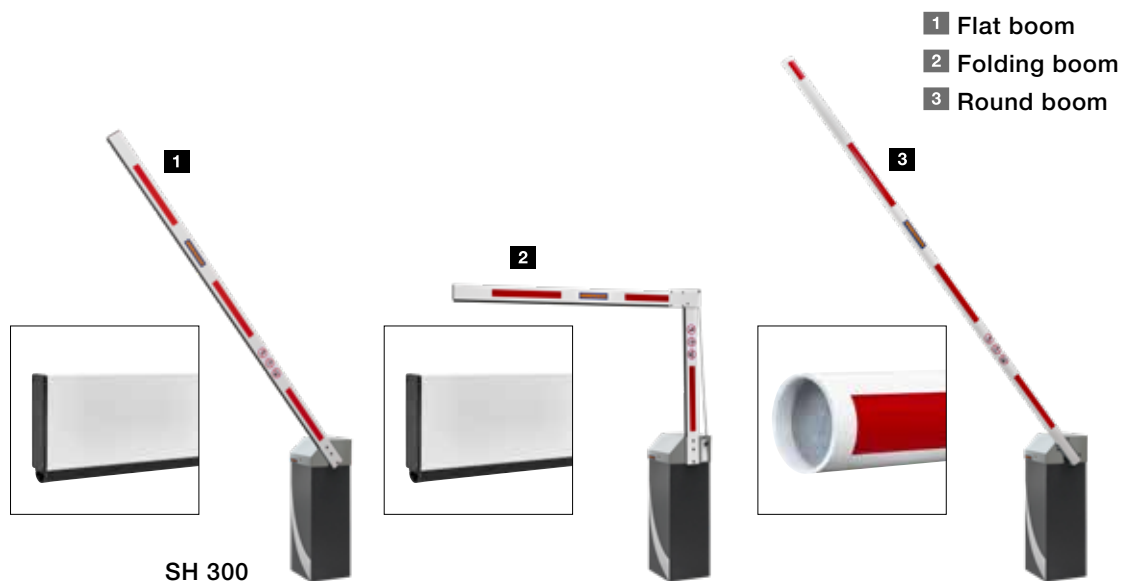
Product description

Barrier width max.	3750 mm
Opening / closing phase	2.4 s
Cycles per day	up to 5000
Overall cycles (service life)	up to 10 million
Motor with control	24 V
Temperature range	−25 °C to +65 °C
Version	Right-hand/left-hand hinged
Dimensions barrier housing (width × height × depth)	360 × 1130 × 360 mm

Standard equipment

Vandalism protection [4]
The planetary transmission prevents damage to the barriers in case of illegal barrier boom manipulation.

Power limit [5]
The intelligent impact protection stops the barrier from closing in the presence of obstacles. This reliably protects persons and vehicles.

Integrated control [6]
The control integrated in the barrier housing offers connections for induction loops as well as different ID card readers and control elements as standard. The control is prepared for OnlineControl as standard.

Optional equipment

LED lighting strips [7]
For better visibility at night and signalling of the opening status (red: closed, green: open), the barrier boom can be equipped with LED lighting strips.

→ Further information on the respective standard equipment and optional equipment can be found on pages 32 – 35.

Automatic barrier SH 600 / SH 800

With round boom or octagonal boom

1 Round boom
2 Octagonal boom

SH 600

SH 800
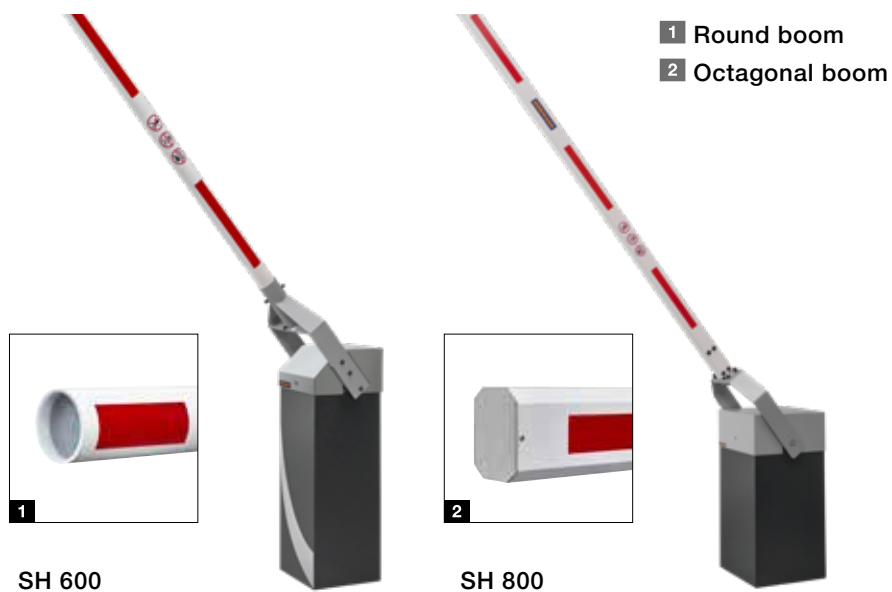
Product description

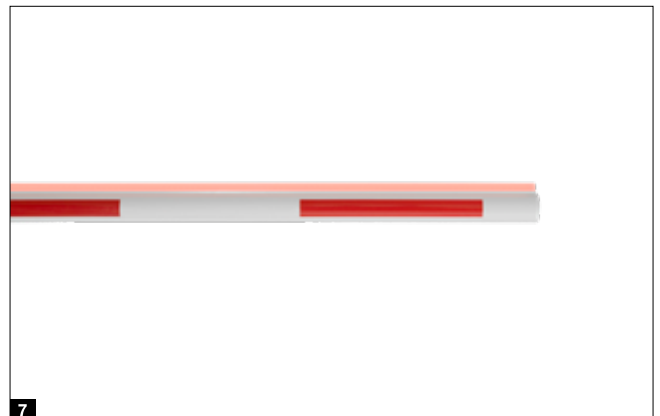|	SH 600	SH 800
Barrier width max.	6140 mm	10470 mm
Opening / closing phase	7.8 s	12.0 s
Cycles per day	up to 1600	up to 240
Overall cycles (service life)	up to 4 million	up to 600000
Motor with control	230 V	230 V
Temperature range	−25 °C to +65 °C	−25 °C to +65 °C
Version	Boom holder on both sides	Boom holder on both sides
Dimensions barrier housing (width × height × depth)	360 × 1130 × 360 mm	550 × 1160 × 550 mm

Standard equipment

Integrated control [3]
The control integrated in the barrier housing offers connections for induction loops as well as different ID card readers and control elements as standard.

Optional equipment

Stabiliser link* [4]
The aluminium support that is firmly attached to the barrier boom is equipped for quiet and gentle closing with spring damping and rubber end buffers.

Support post* [5]
The floor-mounted support post made of powder-coated steel can be adjusted to match the height of the location. Optionally, the post can be ordered with a magnet.

Suspended grille [6]

To secure the area underneath the barrier boom, it can be equipped with a 750 mm high red / white grille for creep zone protection.
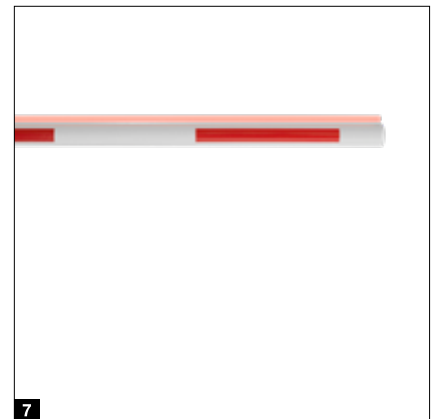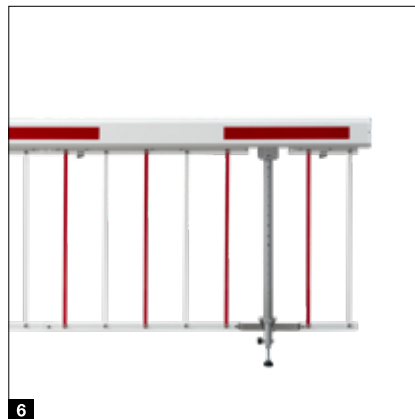
LED lighting strips [7]
For better visibility at night and signalling of the opening status (red: closed, green: open), the barrier boom can be equipped with LED lighting strips.

Recommended from a barrier boom length of more than 4000 mm

Standard equipment

For a long service life and easy service

1 Barrier boom

The durable aluminium profile is provided powder-coated in RAL 9010 Pure white with red reflection strips. In the barriers SH 300 with flat boom or folding boom, a rubber profile on the bottom side of the barrier boom protects vehicles and persons in case of impact.

2 Barrier boom

The barrier cover of the SH 50 is supplied in powder-coated steel in RAL 7016 Anthracite grey as standard. The cover of the SH 100 is made of plastic, also in RAL 7016 Anthracite grey. The barrier covers of the SH 300, SH 600 and SH 800 are supplied in powder-coated stainless steel in RAL 9006 White aluminium as standard. Optionally the cover of the SH 300, SH 600 and SH 800 is also available powder-coated in RAL to choose. The chamfered design prevents the risk of crushing.

3 barrier housing

The housing of the SH 50 and SH 100 is available in powder-coated steel in RAL 9006 White aluminium. The barrier housing of the SH 100 is optionally available in RAL to choose. The durable stainless steel housing of the SH 300, SH 600 and SH 800 is powder-coated in RAL 7016 Anthracite grey as standard. For individual designs, the housing is also optionally available in RAL to choose.

4 Integrated control and operator unit

The operator unit of the barriers SH 100 and SH 300 is integrated beneath the barrier cover. In the barriers SH 50, SH 600 and SH 800, it is found in the barrier housing. The integrated control of the SH 300, SH 600 and SH 800 can be easily retrofitted with additional extension modules, e.g. for the ID card management system. All components are easily accessible for simple fitting and maintenance.

Safety switch for service and maintenance

The safety switch prevents the movement of mechanical components when the housing is open.
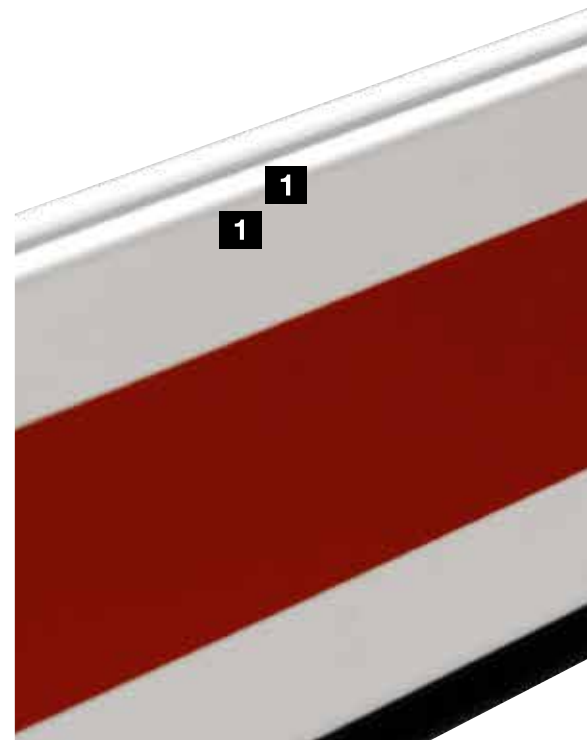
Optional equipment

The matching accessories for your requirements

[1] Pre-assembled induction loop

The pre-fabricated induction loop allows quick and simple fitting under pavement, screed, concrete or asphalt.

[2] Induction loop detector*

Without additional wiring, the detector can be easily attached to the circuit board and offers connections for up to two induction loops as well as four sensitivity levels and two frequency levels.

[3] Photocell

For the additional protection of the area underneath the barrier boom we recommend a photocell with a transmitter and opposite receiver.

[4] Infrared light button**

This combination of transmitter / receiver unit increases the safety in the area underneath the barrier boom and does not require a counter-post.

[5] Laser scanner*

For fitting in the protective housing Fitting on the left or right of the barrier. For presence / locking and safety function or for automatic opening of the barrier. Required with SH 600 / SH 800 to comply with standard EN 12453.
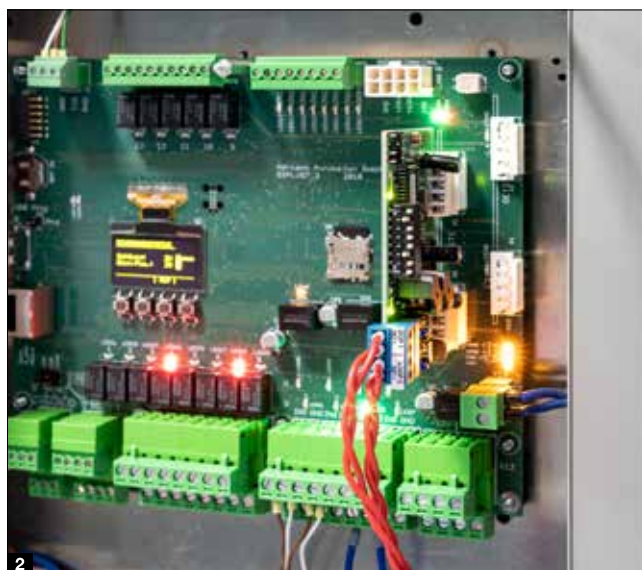
6 Fire brigade switch**

The switch allows for quick manual opening of the barrier by the fire brigade using a triangular key.

7 Key switch**

The key switch allows for convenient opening of the barrier via the building technology (e.g. an on-site or separate closing system).

8 LED lighting strips

For better visibility at night and signalling of the opening status (red: closed, green: open), the barrier boom can be equipped with LED lighting strips.

9 LED warning lights

Prior to every opening and closing, the warning light signals the imminent barrier boom movement.

10 Crash protection

For fitting in front of barriers, entry / exit stations or automatic pay stations. Available in three diameters, five different designs and the painted steel or stainless steel versions. Details see the "Crash protection and impact absorber profile" brochure.

* Not available for SH 50 / SH 100
** * Not available for SH 50
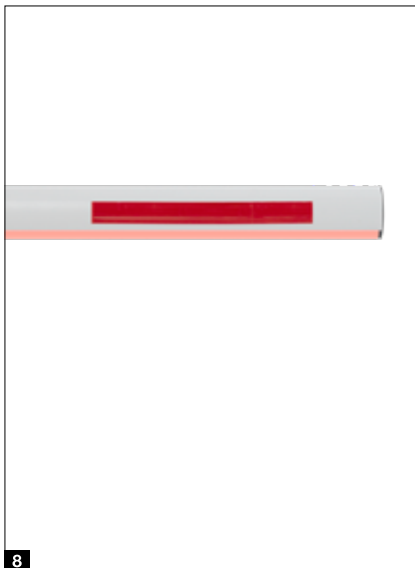
Control Housing

The optimal solution for any requirement

● Standard equipment
Optional equipment

Shown with optional ID card readers

	KGM	KGG	KGU	Car / lorry
Dimensions / technical data				
Dimensions (W × H × D):	180 × 1100 × 160 mm	300 × 1100 × 260 mm	425 × 1205 × 410 mm	395 × 2060 × 380 mm
max. cut-out dimension (W × H)	90 × 400 mm	205 × 400 mm	300 × 530 mm	(2 x) 300 × 415 mm
max. number of command units	1	2	3	(2 ×) 3
Preparation for intercom	○	○	●	●

Standard equipment

1 Housing

As standard, the housing made of stainless steel is delivered powder-coated in RAL 7016 Anthracite grey. It is also optionally available in RAL to choose.

2 Front panel

As standard, the stainless steel panel is available powder-coated in RAL 9006 White aluminium. Optionally, all colours are also available in RAL to choose.

3 Intercom

The mesh grille for the intercom is already integrated in the front panels of the KGU and car / lorry control housing. This way, the intercom unit can be conveniently fitted or retrofitted. In the KGM and KGG control housings, intercoms can be optionally integrated.

4 ID card reader

The housing provides sufficient space for system-specific or on-site reader and additional components.

Entry and Exit Station with Automated Pay Station

Equipment variations according to customer requirements

Entry station
• For short- and long-term parking
• Output unit for coded barcode tickets
• Barcode reader

Exit station
• For short- and long-term parking
• Collection unit for coded barcode tickets
• Barcode reader

Automatic pay station
• for short-term parking
• Barcode reading unit for billing the parking fees via a barcode ticket
• Coin and banknote processing
• Issue of receipts

● Standard equipment
Optional equipment

	Entry station	Exit situation	Automatic pay station
Dimensions / technical data			
Dimensions (W × H × D):	425 × 1205 × 410 mm	425 × 1205 × 410 mm	650 × 1120 × 300 mm
5.7" TFT colour display	●	●	●
Control buttons	1	–	3
Animated ticket request	●	–	–
Animated ticket collection	–	●	●
Integrated barrier control	●	●	–
Integrated heating	●	●	●
Intercom	○	○	○

Entry and exit stations equipment

High-contrast colour display [1]
The 5.7" TFT colour screen displays informational texts to facilitate operation.

Animated ticket request button [2]
The ticket request button at the entry station begins flashing in green when a vehicle is detected driving through the induction loop.

Animated ticket collection [3]
A flashing arrow at the entry station prompts the customer to insert the parking permit. The ticket collection function can also be used for long-term parking tickets.

Optional QR / RFID transponder reader [4]
For long-term parking with QR or RFID cards, the entry and exit stations can be equipped with a corresponding barcode reading unit.

Automatic pay station equipment

High-contrast colour display [5]
The high-contrast 5.7" TFT colour display is operated via three buttons on the side.

Easy-to-understand operator guidance [6]
Easily recognisable pictograms, e.g. for coins and banknotes, facilitate the use.

Animated ticket collection [7]
A flashing arrow prompts the customer to insert the parking ticket.

Ticketless parking. NEW.

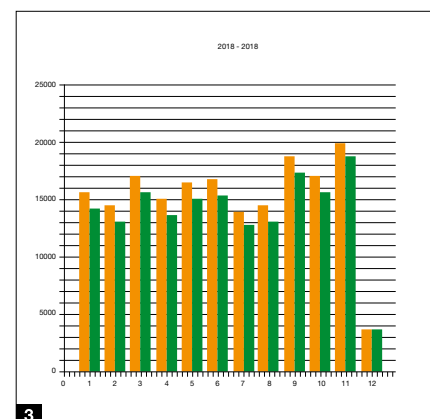Convenient parking systems with vehicle number plate recognition

Number plate recognition for pay station systems

The digital parking ticket with vehicle number plate recognition enables fast and non-contact parking management at entry and exit stations. The vehicle number plate is recognized by the camera during entering. After paying the parking charge at the automatic pay station, the parking customer proceeds to the exit and leaves the parking area via the automatically opening barrier thanks to vehicle number plate recognition. Once the parking process is complete, the encrypted number plate is deleted from the database in compliance with the GDPR.

Advantages

- Vehicle number plate used as parking ticket
- Short-term users only need a parking ticket if the number plate is not recognised (e.g. in case of heavy soiling).
- Secure data recording through encrypted transmission
- Cost reduction and environmentally conscious processing by eliminating parking tickets
- Fast processing of short-term and long-term users at entry and exit stations

- Reduced maintenance and follow-up costs
- Convenient parking processing for your customers
- Payment at the automatic pay station by entering the vehicle number plate via touch display
- Customer loyalty thanks to bonus tickets
- Convenient and simple management and evaluation via WebControl
- Retrofitting of existing Hörmann parking systems possible

1

2

3

Parking systems with vehicle number plate recognition

Payment systems and automatic pay station equipment

Paying parking charges at the automatic pay station
The vehicle number plate can be entered conveniently and easily at the automatic pay station via the 12.1" TFT colour touch display. Clear and self-explanatory menu navigation makes it easier for the parking customer to complete the payment process.

Parking customer guidance at all stations
The entry and exit stations serve as information panels for your parking customers and as a fallback solution in case the licence plate cannot be recognized due to external influences such as dirt, snow or damage. Short-term users then receive a parking ticket while long-term users fall back on their parking ID, e.g. barcode or RFID cards. Access to the parking area is thus always ensured and ensures a controlled and customer-friendly process.

Payment systems

Coins and banknotes [1]
As standard, the automatic pay stations are supplied with a coin slot and banknote insertion, as well as intelligent cash processing.

Credit cards (optional) [2]
The barcode reading unit including display and PIN pad enables payment via credit or debit card.

Convenient evaluation for the operator [3]
Individual and customer-specific analyses can be created quickly for different report data (parking duration, parking fees, remuneration). The easy export of data facilitates the further processing of the data in external applications.

Automatic pay station equipment

Parking ticket hole puncher [4]
Perforation of the parking ticket can be used for a simple discount, complete reimbursement or tariff change.

Remuneration station "online" [5]
The remuneration station allows partial or full reimbursement or a tariff switch. A barcode parking ticket can be reimbursed once or several times at the station.

Remuneration printer "offline" [6]
With the printer, up to two barcodes for partial or full reimbursement or tariff change can be printed.
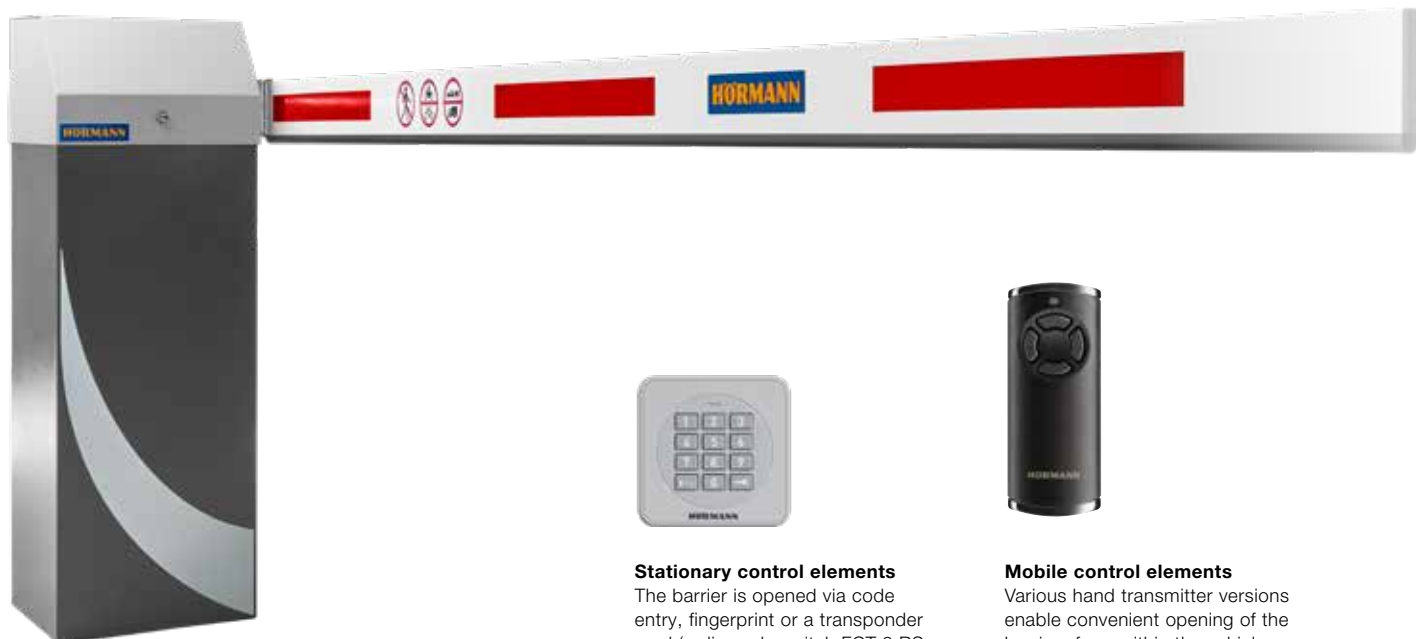
Bonus ticket [7]
A remuneration ticket is a coupon for the parking fee. It can involve a discount, full reimbursement or tariff switch.

Customised access authorisation

Solutions with control elements, system solutions with ID card management

Stationary control elements
The barrier is opened via code entry, fingerprint or a transponder card (radio code switch FCT 3 BS shown).

Mobile control elements
Various hand transmitter versions enable convenient opening of the barriers from within the vehicle (hand transmitter HS 4 BS shown).

ID card media

1 QR, barcode or RFID transponder card
The card is read contactlessly. On request, the cards can feature your individual design.

2 Smartphone
Simply open the barrier with the QR code on your smartphone, which you hold in front of the reader on the control device.

3 RFID far range reader
An RFID windscreen sticker is recognised by the barcode reading unit and allows entry or exit with the correct authorisation. This ID medium enables convenient and quick passage.

4 Vehicle number plate recognition
A camera scans the number plate of the vehicle and allows entry or exit with the correct authorisation. A separate ID medium is not required.

Customised access authorisation
Convenient solution with OnlineControl

ID card management*

The system developed by Hörmann in-house offers you a flexible entry and exit management system that is, of course, individually configured on-site or by the Hörmann partner according to customer requirements. Therefore, the ID card management defines

- which users or user groups
- using which ID media
- may pass which barriers
- at which times.

For this purpose, a mobile or stationary end device is connected to the IP address of the barrier via a web browser – either directly with the barrier or with LAN or WLAN access to the local network. Access is allowed via the ID media found on page 42.

OnlineControl*

With the connection to OnlineControl, several barrier systems around the world can be centrally controlled from a single location. In addition to the configuration and administration of the ID card management, this solution additionally offers the remote control of the barrier incl. the status query, without the need for staff on location to supervise the barrier. In addition, the system monitors the functioning of the barrier and automatically generates malfunction notifications. These can be forwarded to the service technician. Your advantages? The remote malfunction analysis minimises repair times on location and prevents repeated deployment as our service technicians will already bring all required spare parts along with them.

* Not available for SH 50 and SH 100

All functions at a glance

	Standard barrier control	Optional ID card management	Optional OnlineControl
Action			
Barrier operation Open/Permanently Open/Closed	●		●
Barrier configuration	●		●
Malfunction recognition	●	●	●
Approve/block ID cards		●	●
Issuing individual access authorisation		●	●
Management of up to 2000 ID cards		●	○
Mobility storage of up to 1000 movements		●	
Authorisations of up to 16 parking and time zones		●	
Anti-passback management		●	
Expandable to up to 16 barriers		●	
Remote control and remote maintenance of the barrier			●
Automatic malfunction notification via e-mail			●
Management of several barrier systems			●

● = Standard equipment   ○ = Optional equipment

Accessories

Radio control, receiver

HS 5 BS
Four button functions
plus query button,
High-gloss surface
Black or white

HS 5 BS
Four button functions
plus query button,
Textured surface
matt black

HS 4 BS
Four button functions,
Textured surface
matt black

HS 1 BS
One button function,
Textured surface
matt black

HSE 1 BS
One button function,
including eyelet for key ring,
textured surface
matt black

HSE 4 BS
Four button functions, incl. eyelet
for key ring, textured surface matt
black with chrome or plastic caps

HSE 2 BS
Two-button hand transmitter,
High-gloss black or white, with
chrome caps

HSS 4 BS
Four-button security hand
transmitter,
Additional function: copy
protection for hand transmitter
coding, with chrome caps

⇔ **BiSecur**

❗ **Only from Hörmann**

Modern radio system
The bi-directional BiSecur radio system is based on future-oriented technology
for convenient and secure operation. The extremely secure BiSecur encryption
protocol makes sure that no one can copy your radio signal. It was tested and
certified by security experts at Bochum university.

Your advantages
- 128-bit encryption with the same high security level as online banking
- Interference-resistant radio signal with a stable range
- Compatible with Hörmann door control and perimeter protection systems
- Backwards compatible, i.e. radio receivers with the frequency 868 MHz
  (2005 to June 2012) can also be operated with BiSecur control elements

↹ **BiSecur**

**Industrial hand transmitter
HSI BS**
To control up to 1000 receivers,
with a display and extra-large
quick selection buttons for easier
operation with work gloves,
transferring of hand transmitter
coding to other devices possible

**Industrial hand transmitter
HSI 6 BS, HSI 15 BS**
To control up to six or 15 receivers,
with extra-large buttons for easier
operation with work gloves,
impact-resistant housing
Protection category: IP 65

**Radio code switch
FCT 3 BS**
Three functions, with illuminated
buttons, recessed or surface-
mounted fitting possible, plastic
housing in Light grey RAL 7040
(also available with ten functions
and hinged cover, painted in White
aluminium RAL 9006)

**Radio code switch
FCT 10 BS**
Ten functions, with illuminated
buttons and hinged cover,
recessed or surface-mounted
fitting possible, plastic housing
in White aluminium RAL 9006

**Radio finger-scan
FFL 25 BS**
Two functions and up to 25
fingerprints, with hinged cover,
recessed and surface-mounted
fitting possible, plastic housing
painted in White aluminium
RAL 9006

**2-channel relay receiver
HET-E2 MCX BS**
With 2 volt-free relay outputs for
choosing the direction, one 2-pin
input for volt-free Open/Close limit
switch reporting, external antenna

Hörmann homee Brain
Basic cube with BiSecur radio
system for operating Hörmann
garage door and entrance gate
operators, entrance door locks,
electric devices and perimeter
protection systems via the
Hörmann homee app

Accessories

Code switches, finger-scans, transponder key switches

**Code switches
CTR 1b-1, CTR 3b-1**
For one (CTR 1b-1) or three
(CTR 3b-1) functions, with
illuminated buttons

Dimensions:
80 × 80 × 15 mm (W × H ×D)

**Code switches
CTV 3-1**
For three functions, with
particularly robust metal keypad

Dimensions:
80 × 80 × 15 mm (W × H ×D)

**Code switches
CTP 3**
For three functions, with
illuminated lettering and touch-
sensitive surface

Dimensions:
80 × 80 × 15 mm (W × H ×D)

Decoder housing
For code switch CTR 1b-1,
CTR 3b-1, CTV 3-1, CTP 3

Dimensions:
140 × 130 × 50 mm (W × H × D),
Keypad protection category: IP 65
Decoder housing protection
category: IP 54

switching capacity: 2.5 A / 30 V DC
500 W / 250 V A

**Finger-scan
FL 150**
For two functions, up to 150
fingerprints can be saved

Dimensions:
80 × 80 × 13 mm (W × H × D),
decoder housing:
70 × 275 × 50 mm (W × H × D),
switching capacity: 2.0 A / 30 V DC

**Transponder key switch
TTR 1000-1**
For one function via transponder key
or transponder card, up to 1000 keys
or cards can be saved

Dimensions:
80 × 80 × 15 mm (W × H × D),
decoder housing:
140 × 130 × 50 mm (W × H × D),
switching capacity: 2.5 A / 30 V DC
500 W / 250 V AC

Induction loop detector DI 1 in separate additional housing

Suitable for one induction loop. The detector has a normally open contact and a change-over contact. DI 2 induction loop (not shown) in a separate additional housing. Suitable for two separate induction loops. The detector has two volt-free normally open contacts. Can be set for impulse or permanent contact, directional recognition possible.

Dimensions of additional housing:
202 × 164 × 130 mm (W × H × D),
switching capacity:
DI 1: low voltage 2 A, 125 V A / 60 W,
DI 2: 250 V AC, 4 A, 1000 VA (resistive load AC),
supplied without loop cable

Loop cable for induction loop
50 m roll, cable designation: SIAF,
cross-section: 1.5 mm², colour: brown

Digital weekly timer in a separate additional housing

The timer can switch command units on and off via a volt-free contact. Switching capacity: 230 V AC, 2.5 A / 500 W,
can be switched over to summer / winter time, manual switching: automatic operation, switching preselection "permanently ON / OFF"

Dimensions of additional housing:
202 × 164 × 130 mm (W × H × D),
protection category: IP 65

Digital yearly timer in additional housing

The timer can switch command units on and off via a volt-free contact. Switching capacity: 230 V AC, 2.5 A / 500 W,
can be switched over to summer / winter time, manual switching: automatic operation, switching preselection "permanently ON / OFF"

Dimensions of additional housing:
202 × 164 × 130 mm (W × H × D),
protection category: IP 65

Key switch
ESU 30

With three keys, recessed version, impulse or "Open / Close" function can be selected

Dimensions of the switch box:
60 mm (d), 58 mm (D),
Dimensions of the panel:
90 × 100 mm (W × H),

Brickwork recess:
65 mm (d), 60 mm (D);

Protection category: IP 54
Surface-mounted version ESA 30

Dimensions:
73 × 73 × 50 mm (W × H ×D)

Key switch
STUP / STAP 50

With three keys

Dimensions:
80 × 80 mm (W × H),
Protection category: IP 54

Warning lights
Red / green

As a visual indicator of authorized or blocked passage, not in combination with stainless steel key switch posts

Dimensions: 170 × 467 × 200 mm (W × H × D),
contact load: 250 V AC: 2.5 A / 500 W,
protection category: IP 65

Everything from a single source
for construction and industry

Our large product range offers the right solution for any requirement. All products are are optimally adjusted to work together, ensuring high functional safety. This makes us a strong, future-oriented partner for industrial and public construction projects.

INDUSTRIAL DOORS. LOADING TECHNOLOGY. SLIDING DOORS. CONSTRUCTION PROJECT DOORS. PERIMETER PROTECTION SYSTEMS

HÖRMANN