





Rolling Shutters and Rolling Grilles

Sturdy and reliable for industrial, trade and commercial use







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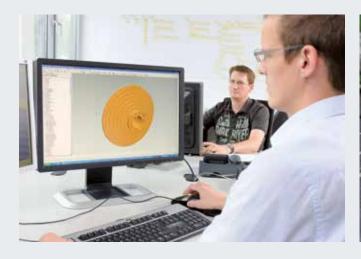
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Hörmann brand quality

Reliable and oriented towards the future



Kirow Ardelt GmbH, Leipzig



In-house product development

At Hörmann, innovation is produced in-house – highly qualified employees of the development department are in charge of product optimisation and new developments. This results in market-ready, high-quality products that are very popular around the globe.



Modern manufacturing

All the essential door components, such as profiles, side guides, support brackets and fittings are developed and produced by Hörmann - not bought in from here, there and everywhere.

This ensures greatest compatibility between the door, operator and control. The certified Management System guarantees the highest level of quality from development, through production to shipping.

This is Hörmann quality - Made in Germany.



As Europe's leading manufacturer of doors, hinged doors, frames and operators, we are committed to high product and service quality. This is how we set standards on an international scale.

Highly-specialised factories develop and manufacture construction components that are characterised by excellent quality, functional safety and a long service life.

Our presence in the global economy's key regions makes us a strong, future-oriented partner for industrial and public construction projects.



Energy savings compass your interactive planning aid on the Internet at www.hoermann.com



It goes without saying that spare parts for doors, operators and controls are original Hörmann parts that come with a guaranteed availability of 10 years.



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 technical manuals, is not only available in printed form, but is always accessible and up-to-date at www.hoermann.com

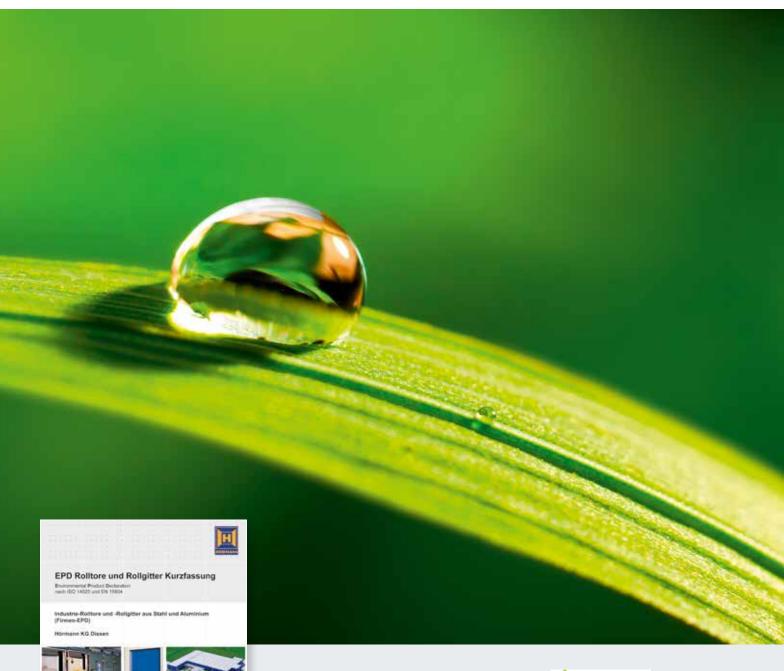


Fast service

Our extensive service network means that we are always nearby and at your service around the clock. This is a major advantage in terms of inspections, maintenance and repairs.

Sustainable production

For future-oriented construction





EPD rolling shutters / rolling grilles



Find out more about Hörmann's environmental activities in the "We think green" brochure.

Sustainable production: Rolling shutters and rolling grilles from Hörmann

Ecological quality

A comprehensive energy management system ensures environmentally friendly production, e.g. by using the heat from the production systems to warm the building.

Economical quality

A long service life and low maintenance costs thanks to the use of high-quality materials, such as colour coating with the surface protection system.

Functional quality

Energy-efficient curtains made of specially developed steel as well as thermally optimised side guides enable an optimum energy balance for buildings.

Process quality

A sustainable use of materials is possible thanks to efficient waste optimisation and the recycling of unmixed metal waste from the production process.

Sustainability verified and documented by the IFT in Rosenheim

Hörmann has received confirmation of the sustainability of all its rolling shutters and rolling grilles through an environmental product declaration (EPD) in accordance with ISO 14025 and EN 15804 from the Institut für Fenstertechnik (IFT – Institute of window technology) in Rosenheim. The inspection was based on the Product Category Rules (PCR) "Doors and Gates". Environmentally friendly production was confirmed by a life-cycle analysis in accordance with DIN ISO 14040 / 14044 for all rolling shutters and rolling grilles.

Sustainable construction with Hörmann competence

Hörmann has already been able to gain great expertise in sustainable construction through various projects. We also apply this know-how to support your projects.

References for sustainable construction with Hörmann



ThyssenKrupp, Essen



dm logistics centre, Weilerswist



Immogate logistics centre, Munich

Nordex-Forum, Hamburg
Unilever Hafen-City, Hamburg
Deutsche Börse, Eschborn
Opernturm, Frankfurt
Skyline-Tower, Munich
Prologis Pineham Sites, Sainsbury











Good reasons to try Hörmann

Innovations from the market leader



Safe and proven

Manual door opening and closing is facilitated significantly by the tension spring assembly. SB rolling shutters and rolling grilles up to 6000×4500 mm can be moved with little force. For rolling shutters / rolling grilles with an optional operator, the tension spring assembly reduces wear on the mechanical door elements and operator technology.

For further information, see pages 12 – 15.

Optimally matched to one another

Precise matching of the door, operator and control ensure the smooth operation of the rolling shutter/rolling grille. With a complete door solution from a single source, these components form the perfect team.

While Hörmann rolling shutters and rolling grilles stand for durability and functional safety, they are also trouble-free to maintain.



Only from Hörmann Only from Hörmann

Operational safety through power limit

ZAK system with active displacement

As standard with WA 300 R S4

In combination with a WA 300 R S4 operator, the SB and TGT rolling shutters / rolling grilles are characterised by a high level of safety when opening and closing. Thanks to the standard power limit in the "Open" and "Close" directions, most curtain variants and size ranges do not require the installation of a closing edge safety device to meet the requirements of DIN EN 12453.

For further information, please see page 48.

Minimum heat loss and gentle door travel

Hörmann classic rolling shutters with the optional ZAK system feature a tighter fit, thereby minimising heat loss. The ZAK system displaces the barrel on the support brackets and precisely guides the door curtain so that it always enters the side guides vertically. This protects the door and ensures less noise and abrasion. In addition, less fitting space is required in the lintel area.

Application areas

A matching door type for every purpose

Compact, spacesaving construction for shopping centres

SB rolling shutter / rolling grille
DD rolling grille

You can find additional door solutions for store entrances in the brochure "RollMatic Rolling Grille".



Optimised operator systems for logistics

SB rolling shutter / rolling grille



Easy operation for commercial buildings, warehouses and agriculture

SB rolling shutter / rolling grille



A secure door for underground garages and multistorey car parks

TGT rolling shutter / rolling grille
DD rolling shutter / rolling grille

You can find additional door solutions for underground and collective garages in the brochure "Door Systems for Collective Garages".



Large doors for industrial halls and disposal companies

DD rolling shutter / rolling grille



Ideal solutions for special requirements

Classic rolling shutter / rolling grille



SB rolling shutter / rolling grille

Simple manual operation for door openings up to 6000 × 4500 mm



Shopping centres

This door features space-saving design and high operational safety in all situations, e.g. with emergency opening from the outside, which is especially suited for small shop entrances.

The inexpensive solution as a manual rolling shutter with tension spring assembly





Agriculture

This robust, inexpensive solution with steel or aluminium profiles is available for door widths up to 5000 \mbox{mm}



Warehouses

Easy operation as a manual rolling shutter with tension spring assembly.

SB rolling shutter / rolling grille

Simple manual operation thanks to an innovative tension spring assembly



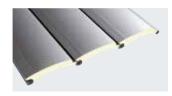
With tension spring assembly



Tension spring assembly

- The innovative tension spring assembly allows easy opening and closing without great exertion of force
- Ideally compensated curtain weight





Decotherm A, aluminium 5000 × 4500 mm Decotherm S, steel 5000 × 4500 mm



HR 120 A, aluminium 5000 × 4500 mm



HR 120 aero, aluminium 4000×4000 mm



HG-L, aluminium 6000 × 4500 mm



HG 75, aluminium 6000 × 3500 mm

All curtains are supplied as standard with wind locks or pull-out protection.



Chain hoist

- Easy opening and closing via the interior or exterior handle
- Particularly convenient with an optional chain hoist (recommended for doors higher than 3500 mm)



Faster fitting

- The entire door construction, including support brackets and side guides, is fitted as a frame unit to the building structure.
- Reduced fitting time
- Limited sideroom of only 165 mm facilitates fitting in narrow spaces
- Plastic runners and brush seals in the aluminium side guides ensure quiet door travel

SB rolling shutter / rolling grille

Maximum convenience with operator



Warehouses

Convenient operation with operator





Logistics

The ideal solution for low to medium operational frequencies.



AgricultureThis robust, inexpensive solution with steel or aluminium profiles is available for door widths up to 5000 mm.



Shop doors

The convenient solution with operator for secure night-time locking.

SB rolling shutter / rolling grille

Especially convenient with operator



Also available as an external rolling shutter!



With tension spring assembly







Operator variants

WA 250 R S4 The inexpensive operator with press-and-hold operation WA 300 R S4 The inexpensive statement was solved by the inexpensive statement of the inexpensi

The comfortable operator with impulse operation WA 300 AR S4 2
The space-saving operator

For further information about the operators,

Soft start and soft stop

see pages 48-49.

- As standard for all SB rolling shutters / rolling grilles with operators
- Ensures quiet door travel, reducing wear on the door and operator

Release directly on the operator as standard

- Integrated maintenance release directly on the operator 3
- The door can be switched to manual operation at any time
- The door remains fully functional, even in the event of a power failure

Easy fitting

- Operator fitting is very easy, since no components need to be fitted on the curtain.
- No additional side space requirement with the operators WA 250 R S4, WA 300 R S4
- Low amount of effort required for fitting, repair and other services
- Optional fitting gearbox facilitates fitting further as no forklift is required

Optional cover

- To prevent accidental reaching into the door barrel, doors under 2500 mm height require a shaft cover (cover in accordance with the requirements of EN 13241-1)
- Curtain cover PVSB protects the door barrel
- Operator cover VWA protects the operator
- Aluminium spring chamber cover AFA protects the spring systems
- Permanent protection from dirt and adverse effects of the weather

Curtain variants

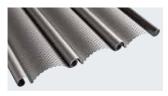
Size range (W × H, max.)



Decotherm A, aluminium 5000×4500 mm Decotherm S, steel 5000×4500 mm



HR 120 A, aluminium 5000 × 4500 mm



HR 120 aero, aluminium 4000×4000 mm



HG-L, aluminium



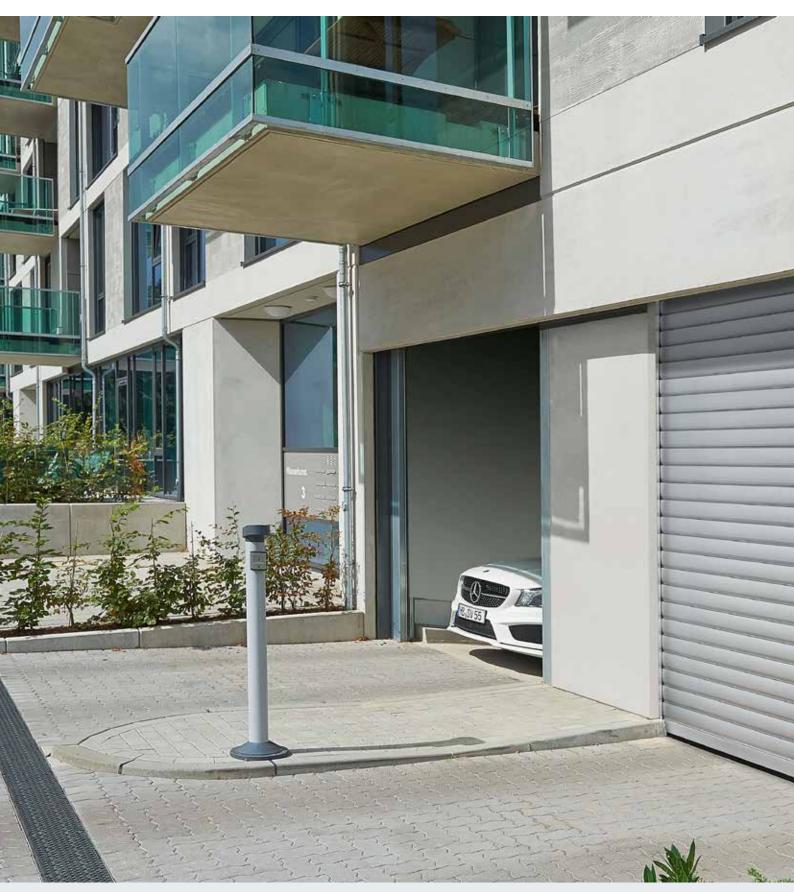
HG 75, aluminium 6000 × 3500 mm

All curtains are supplied as standard with wind locks or pull-out protection.

Overview of curtains From page 32 Operators and controls From page 46

TGT underground garage rolling shutter / rolling grille

The door solution for collective garages with up to 100 parking spaces



Residential and commercial building

A compact construction makes it ideal for fitting situations with limited space



Residential and commercial building

A standard power limit offers the highest level of safety when opening and closing.



Hotel garage

The underground garage rolling shutter/rolling grille is the ideal choice for up to 300 door cycles (open/close) per day.

TGT underground garage rolling shutter / rolling grille

A complete solution including WA 300 R S4 operator for up to 300 door cycles (open/close) per day



Application-optimised door technology

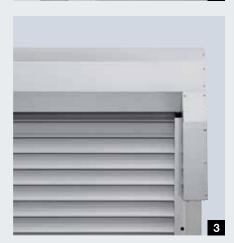
For a service life of over 200,000 door cycles (open / close)



With tension spring assembly



2





Tension spring assembly

- Supports the operator during the opening and closing of the door
- Gentle door travel
- Special dimensions of the spring and guide channels ensure an extended door service life of more than 200,000 door cycles
- The optional AFA aluminium spring chamber cover prevents accidental reaching into the tension springs
- Vision fields to monitor the status of the springs

Low required headroom

- Compact construction with low headroom requirement of 380 mm (Decotherm S / A) or 350 mm (HG-L)
- Secure rolling up of the rolling shutter or rolling grille curtain in the compact curtain cover PVTGT
- This largely prevents people from reaching in

Fast WA 300 R S4 operator

- An optimally adjusted ratio for the operator enables up to 20 % faster opening of the door in comparison with an SB rolling shutter / rolling grille
- Particularly low noise due to "soft start" and "soft stop"
- Galvanized sheet steel cover prevents accidental reaching in

Further information about the operator can be found on page 48.

Power limit as standard

- Power limit in "Open" and "Close" directions as standard
- Maximum safety during opening and closing
- No closing edge safety device or lintel trap guard required

Easy emergency release 4

- · Easy and quick manual door opening
- Use of entrances and exits ensured even during power failures

Curtain variants Size range (W × H, max.)



Decotherm A, aluminium 5000 × 2400 mm Decotherm S, steel 5000 × 2400 mm



HG-L, aluminium 5000 × 2400 mm

All curtains are supplied as standard with wind locks or pull-out protection.

Overview of curtains From page 32 Operators and controls From page 46



Note: Compliance with the acoustic rating requirements in accordance with DIN 4109 depends on the acoustic planning and design of the building structure.

DD rolling shutter / rolling grille

New innovative rolling shutter generation for door openings up to a width of 12000 mm



Large doors

The robust design allows for door openings up to a height of 9000 mm.







Warehouses

Low siderooms and lintel fitting coupled with the flexible operator fitting allow for installation even in tight spaces.



Night locking

The DD rolling grille is the ideal choice for secure night locking of large openings.

DD rolling shutter / rolling grille

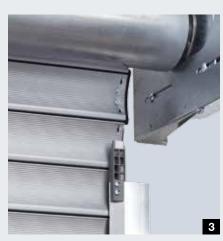
More flexibility and simple fitting with the direct drive operator



NEW from summer 2015 Especially quick and safe with the optional accessory package S6









Narrow aluminium side guide

- Only 80 mm side space requirement for all door sizes
- Fitted quickly and easily directly to the building structure without anchor technology
- 2-part design from 6000 mm door height for better handling during transport and fitting
- Harmonious unit of side guides and preassembled aluminium subframe profiles
- Easy fitting through an adapter groove in the profiles

Limited sideroom

- Bearing side max. 180 mm
- Operator side max. 280 mm

Guide channel that is gentle on the door

- Less wear on the door curtain due to newly developed metal holders with polyamide sliding surfaces
- Service-friendly, easy dismantling

Easy fitting

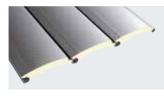
- The door components can easily be positioned on the building structure using the metre line and console template
- Ready-to-fit unit consisting of curtain, barrel and support bracket (standard)
- Side guide markings for quick adjustment of the door's end-of-travel positions
- Stackable packaging units to optimise transport and logistics

Curtain and operator cover

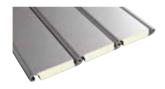
- The door barrel is protected from dirt and adverse effects of the weather by the PVDD curtain cover
- As trap guard for doors less than 2500 mm high
- Can be extended by the VDD operator cover (closed unit: support brackets, curtain and operator)
- Made of galvanized sheet steel for use as an external rolling shutter

Curtain variants Size range

Size range (W × H, max.)



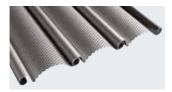
Decotherm A, aluminium 5000 × 4500 mm Decotherm S, steel 10000 × 9000 mm



HR 116 A, aluminium 11000 × 9000 mm



HR 120 A, aluminium 12000 × 8000 mm HR 120 S, steel 9000 × 8000 mm



HR 120 aero, aluminium 12000 × 8000 mm



HG-L, aluminium 9000 × 5500 mm



HG-V, aluminium (reinforced) 12000×8000 mm **HG-S, steel** 8750×8000 mm

The curtains Decotherm, HR 116, HR 120 and HG-L are supplied as standard with wind locks or pull-out protection.

Classic rolling shutter / rolling grille

Individual solutions for opening widths up to 30 m



Large doorsWith a coupled construction, opening widths of up to 30 m can be implemented.



Large doors

The optional WPS increases the resistance of doors to wind load.





Disposal firms

The robust design allows for door openings up to a height of 9000 mm.

Classic rolling shutter / rolling grille

Sturdy and dependable with optional ZAK system



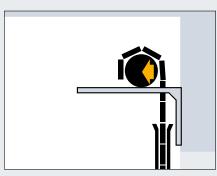


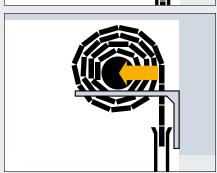
The ZAK system











Side guides 1

- Sturdy, made of 2 to 2.5-mm-thick galvanized steel
- Plastic runners with integrated brush seals ensure quiet door travel
- Wind locks with articulated design for higher wind loads

Advanced anchor technology 2

- For variable support
- Fitting and service-friendly screw connection
- With variable 30 mm increments and good sealing

Weld-on spacer brackets 3

- Especially suited for steel structures
- Directly welded to the steel construction
- Ideally supplement the anchor technology in steel construction halls

Bend-resistant bottom profiles 4

- Sturdy aluminium profile for curtain reinforcement
- Weather-resistant, flexible EPDM tubular seal
- Prevents the penetration of dirt and rain
- Compensates for minor unevenness in the floor

Optional ZAK system

(standard for classic rolling grilles with direct drive operator)

- One ZAK gearbox on each door side
- Precisely moves the barrel away from the lintel on opening
- Precisely moves the barrel towards the lintel on closing

Advantages:

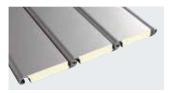
- The door curtain always enters the side guide vertically and without distortion.
- The door is optimally sealed at the lintel
- Operational noise and wear are significantly reduced

Curtain variants Size range

(W × H, max.)



Decotherm A, aluminium 4000 × 4000 mm Decotherm S, steel 10000 × 9000 mm



HR 116 A, aluminium 11750 × 9000 mm



HR 120 A, aluminium HR 120 S, steel 11750 × 8000 mm



HR 120 aero, aluminium $11750 \times 8000 \text{ mm}$



HG-V, aluminium (reinforced) 11750 × 8000 mm **HG-S, steel** 11750 × 8000 mm

Overview of curtains From page 32 Operators and controls From page 46

Rolling shutter laths Decotherm A / S, HR 116 A

Double-skinned and thermally insulated



Decotherm A, aluminium

The intelligent lightweight profile made of aluminium rolls up especially quietly and with minimum abrasion. Either with a bright-rolled surface or colour coating.

Decotherm S, steel

Galvanized special steel makes these profiles especially resistant to damage caused by transport, fitting and operation. Either with or without colour coating.

The facetted inner profile face matches the microprofiled outer face.



HR 116 A, aluminium

The robust profile HR 116 A is ideal for industrial halls with large structural openings. The Stucco-textured surface features a special texture that makes your door less sensitive to visual damage.

Matching inner and outer face, even with colour coating to choose.

Profile type	Decotherm A	Decotherm S	HR 116 A
Material	Aluminium	Steel	Aluminium
Surfaces without colour coating	Bright-rolled with transparent Galvanized without protective paint* protective paint		Stucco without protective paint
Surfaces with colour coating			Exterior and interior with identical colour coating to choose
Standard colours	RAL 9002 RAL 9006	RAL 9002 RAL 9006	RAL 9002 RAL 9006
Preferred colours**	_	•	•
Special colours	-	•	•
Profile height	109 mm	109 mm	119 mm
Curtain weight	Approx. 4.2 kg/m ²	Approx. 10.3 kg/m ²	Approx. 10.0 kg/m ²
Wind load class 2 up to a door width of	5000 mm 10000 mm		10000 mm
Heat transmission EN 12428 (single profiles)	4.6 W/(m²·K)	3.9 W/(m²·K)	5.3 W/(m²·K)
Door type	SB rolling shutter TGT rolling shutter DD rolling shutter Classic rolling shutter	SB rolling shutter TGT rolling shutter DD rolling shutter Classic rolling shutter	DD rolling shutter Classic rolling grille
Windows	•	•	•
Ventilation slots	-	-	•

^{*} Differences in appearance between two doors may occur for technical reasons

^{**} For preferred colours see page 37

^{***} Ventilation laths HR 120 aero

[•] Optionally available

Not available

Rolling shutter laths HR 120 A / S, HR 120 aero

Single-skinned



HR 120 A, aluminium

The HR 120 A profile is the ideal solution for unheated buildings. The bright-rolled version is the standard surface finish for this profile. The profile exterior of the aluminium coil-coated surface finish features high-quality colour coating.

HR 120 S, steelWith the HR 120 S profile made of heavy-duty steel with a galvanized finish, your door can withstand high loads.

Interior in Basalt grey, RAL 7012, if colour-coated.



HR 120 aero, aluminium

This finely perforated profile permits the entry of adequate light and air. Dust, paper and other contaminants remain outside. The bright-rolled surface finish is particularly well-suited for simple applications. The exterior of the coil-coated surface finish features a high-quality colour coating.

Interior in Basalt grey, RAL 7012, if colour-coated.

Profile type	HR 120 A	HR 120 S	HR 120 aero
Material	Aluminium	Steel	Aluminium
Surfaces without colour coating	Bright-rolled and without protective paint	Galvanized without protective paint	Bright-rolled and without protective paint
Surfaces with colour coating	Exterior: Colour coating to choose Interior: Basalt grey protective paint, RAL 701	2	Exterior: Colour coating to choose Interior: Basalt grey protective paint, RAL 7012
Standard colours	RAL 9002 RAL 9006	-	RAL 9002 RAL 9006
Preferred colours**	•	-	-
Special colours	•	_	-
Profile height	119 mm	119 mm	119 mm
Curtain weight	Approx. 6.0 kg/m ²	Approx. 15.0 kg/m²	Approx. 5.5 kg/m²
Wind load class 2 up to a door width of	7500 mm	10000 mm	4500 mm
Heat transmission EN 12428 (single profiles)	-	-	-
Door type	SB rolling shutter DD rolling shutter Classic rolling shutter	DD rolling shutter Classic rolling grille	SB rolling shutter DD rolling shutter Classic rolling shutter
Windows	•	•	-
Ventilation slots	***	-	-

Rolling grille curtains HG-V, HG-S, HG-L, HG 75



HG-V, aluminium (reinforced)The aluminium curtain, reinforced with V2 A stainless steel honeycomb connections, is ideal for wide openings such as underground garages or multi-storey car parks where high numbers of opening/closing cycles are the norm.



HG-S, steel

The robust and low-cost galvanized steel version is especially suitable for large widths and a high number of cycles.

Curtain type	HG-V	HG-S	HG-L	HG 75
Material	Aluminium	Steel	Aluminium	Aluminium
Surfaces without colour coating	Bright-rolled	Galvanized	Bright-rolled	
Surfaces with colour coating	-	Colour coating to choose	Colour coating to choose or anodised in a natural finish (E6 / EV 1)	RAL 9016, RAL 7035, RAL 9006, RAL 5011, RAL 8028, RAL 7016, RAL 9005
Weight of curtain	Approx. 7 kg/m²	Approx. 14 kg/m²	Approx. 6.5 kg/m ²	Approx. 6.7 kg/m ²
Door type	DD rolling grille Classic rolling grille	DD rolling grille Classic rolling grille	SB rolling grille TGT rolling grille DD rolling grille	SB rolling grille



HG-L, lightweight and compact aluminium

The elegant and space-saving aluminium version is particularly suitable for use in shopping arcades. Grille and honeycomb connections with aluminium crossbars provide additional reach-through protection.



HG 75, aluminium

The extruded aluminium profiles are available in a powder-coated surface finish. The 100 × 40 mm square holes can be provided in a straight or offset arrangement.



Compact fitting dimensions – optimal for store entrances

Thanks to its compact design with a required headroom or fitting depth of only 335 mm, the new RollMatic rolling grille is the ideal solution for small store entrances in the tightest of spaces. The required sideroom for the door is just 100 mm or 200 mm on the operator side. The RollMatic rolling grille is available in the curtain variants HG-L and HG 75.



More information can be found in the "RollMatic Rolling Grilles" brochure.

Coloured rolling shutters and rolling grilles

Create attractive accents



Matching door colours for facade

Coloured doors are increasingly used as design elements in modern industrial and commercial architecture. On account of their size alone, industrial rolling shutters and rolling grilles already play a key role in determining the visual appearance of the facade. This is why Hörmann offers you high-quality curtain coatings in more than 1000 RAL colours.

High-grade colour coating

Coil-coated rolling shutter laths provide long-term protection against adverse weather effects for surface finishes. Additional protective paint with polyamide particles reduces abrasion and noise.

All curtain and door types feature a bright-rolled bottom profile.

Special colours according to RAL



The colours shown are subject to the limitations of the printing process and cannot be regarded as binding.

All colours based on RAL.

Slight colour variations are permissible.

Standard colours

Grey white	RAL 9002
White aluminium	RAL 9006

Preferred colours

Grey aluminium	RAL 9007
Terra brown	RAL 8028
Anthracite grey	RAL 7016
Leaf green	RAL 6002
Gentian blue	RAL 5010
Flame red	RAL 3000

Impossible to force open!
Increase the break-in resistance of your property





External view



Interior view





The break-in-resistant locks secure the bottom profile to the side guides.

Lockable bottom profile with profile cylinder for all door types

Actuation either from the interior and exterior or only from the interior.

Shootbolt for SB rolling shutter / rolling grille

The shootbolts are fitted on the interior on the right and left end of the bottom profile (not suitable for external rolling shutters).

Shootbolt for DD and classic rolling shutter / rolling grille

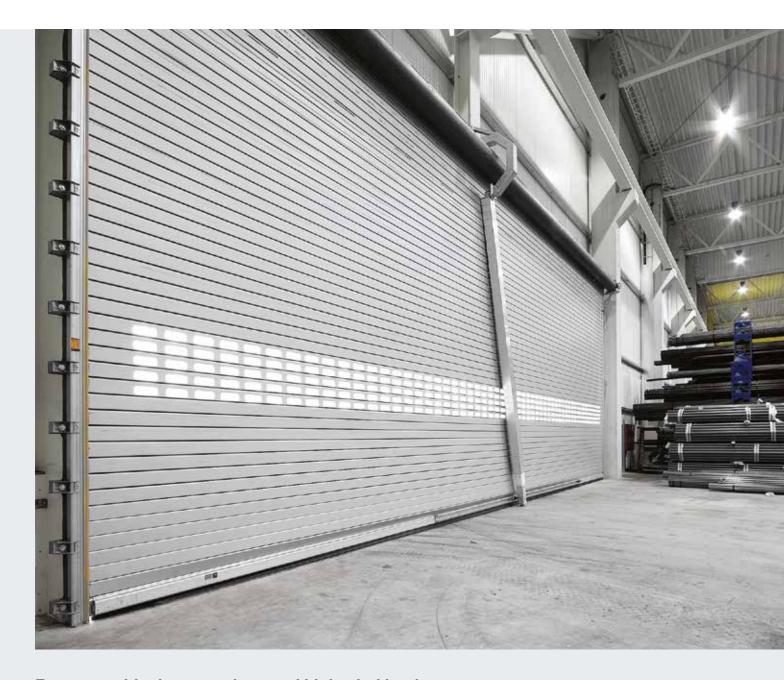
The shootbolt can be fitted to the right or left of the side guide. The lock is secured with a padlock (not suitable for external rolling shutters).

Electromagnetic locking for classic rolling shutters/rolling grilles

The automatic locking in the "Close" position can also be connected to a central control system.

Ideal solutions for large door openings

Classic rolling shutter/rolling grille



For extra wide door openings and high wind loads

Wind Protection System (WPS)

The WPS increases the rigidity of the door against wind load. An aluminium telescopic support reliably braces the closed door. On opening, it swings behind the lintel and bolts into the hall floor when the door is closed. As a result, wind load classes 2 and higher can also be achieved for door widths above 10 m.









Multiple doors with oversize opening widths up to 30 \mbox{m}

Coupled constructions (SSG)

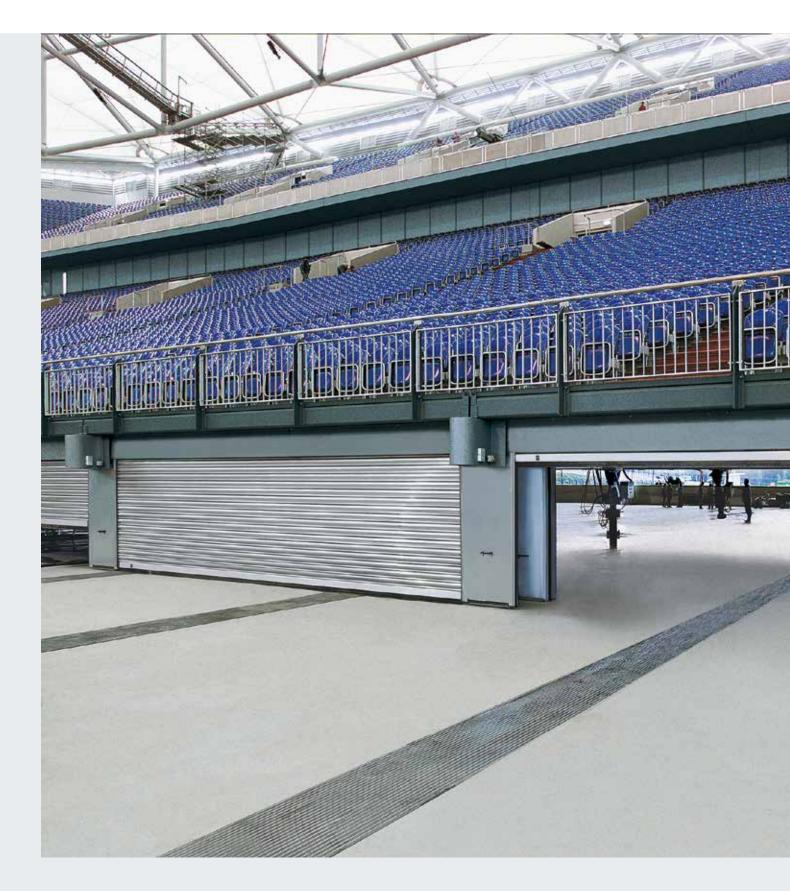
Up to three rolling shutters or rolling grilles can be coupled in the opening using the SSG system. Once the doors have been opened, the mullions are unlocked manually and slid over to the side park positions.

As a result, openings of up to 30 m width and 6 m height are possible.

The exterior is attractively divided into segments with an identical size. Each door can also be operated individually if only a part of the opening is needed. SSG systems can be combined with all profile and grille curtains from the classic range.

Ideal solutions for special requirements

Classic rolling shutter / rolling grille



Special solution for the FC Schalke 04 football arena

Eleven aluminium rolling shutters combined with rolling grilles span a nearly 80 metre wide opening which is used to transport the complete turf out of the arena.





Hörmann's rolling shutters and operators are available in an ATEX-certified version and thus can also be used in explosive areas.



For sloping ground

Chamfered bottom profile

Hörmann rolling shutters and rolling grilles can even be fitted on sloping ground. A chamfered bottom profile easily compensates for differences in height; steps can also be bridged this way.



For flexible passage of pedestrians

Pass door assembly with side door

A fixed pass door assembly with side door provides a convenient passage for pedestrians without needing to open the rolling shutter.

A swing-aside pass door assembly with side door (not shown) has an additional advantage: if necessary, the maximum clear hall opening can be utilised.



With a lack of interior sideroom

External rolling shutters

External rolling shutters are the perfect solution for hall openings that lack interior sideroom. They also provide advantages in explosion-proof areas. The door operator and control can be placed outside of the area with the greatest explosion risk, thus minimising the need for explosion protection measures.

If there is no overhead covering, Hörmann offers a special barrel casing in either galvanized sheet steel or stainless sheet steel. An addition to the certified trap guard is also available.

The safety of Hörmann rolling shutters and rolling grilles is certified

Safety features according to European standard 13241-1

Hörmann products are tested and certified for:

- Anti-fall safeguard
- Trap protection
- Trap guard

Hörmann rolling shutters and rolling grilles work safely during all opening and closing phases – whether manually-operated or power-driven. In doors with an impulse control, the specified dynamic closing forces are reliably maintained through monitoring systems with an integrated self-test function.

At Hörmann, the door and operator are perfectly matched to each other, tested by independent organisations for your safety and in compliance with the relevant standards.

It pays to compare!

Rolling grilles in public, easily accessible areas

Special safety equipment is required in areas frequented by children, who may hang on the rolling grille.

Lintel trap guards always need to be fitted on DD and classic rolling grilles with impulse controls.

With rolling grille SB and TGT with operator WA 300 R S4, the safety requirements according to DIN 13241-1 are fulfilled by the standard power limit in the "Open" direction.

In order to comply with the special requirements for public areas, we also recommend using an additional lintel trap guard with the WA 300 R S4.

Anti-fall safeguard



Integral catch safety device in direct drive operators

This catch safety device offers especially good absorption, a large amount of power reserve and reliably prevents the door curtain from falling.

Separate catch safety device for chain drive and tubular operators
Just like the integral version, this version is a high-performance device that responds as soon as the speed limit is fractionally exceeded.

With the SB and TGT rolling shutters, the doubly secured tension spring assembly prevents the door from falling.

Trap protection and trap guard



Trap protection

Black plastic strips on the edges of the side guide protect against cuts.



Trap guard TES (optional)

A cover made of a special rigid fabric prevents operators from reaching into the hazard area where the door rolls up.



Safety equipment

Closing edge safety device, lintel trap guard and through-traffic photocell are self-testing before and during every shutter cycle. If a malfunction is detected in just one of the units, the shutter's control system automatically switches to press-and-hold operation.



Safety requirements
Please note the mandatory annual inspection
for all power-driven doors.

Well thought-out designs with convincing performance properties

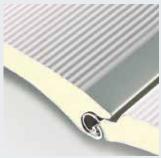
Performance characteristics according to European standard 13241-1

Hörmann products are tested and certified for:

- Thermal insulation
- Acoustic insulation
- Sealing
- Wind load

Thanks to innovations and continuous further developments, rolling shutter construction at Hörmann has been ahead of its time for years. Performance criteria in accordance with European standards document these developments with convincing results.

Thermal insulation and acoustic insulation









Thermal insulation

Minimal thermal bridges and use of fine-pored PU rigid foam infill ensure good thermal insulation in all doubleskinned door profiles compared with other rolling shutters.

Acoustic insulation

Curtain and sealing technology used around the entire shutter reduce noise from both outside and inside.

Sealing

Decotherm



Lintel seal





Double-skinned DD and classic rolling shutters provide an all-around tight fit. This is ensured by a frost-proof flexible lip seal along the bottom edge, a flocked special material at the lintel, as well as a fine bristle seal in the side guides.



Bristle seal

Stability



Wind Protection System (WPS)



Robust wind lock end pieces and deflection-resistant bottom profiles enable your door to withstand high wind loads. The optional WPS provides excellent wind load protection.

Compatible system solutions

For high functional door safety





Better with a system

The components have been optimally adjusted to work together, ensuring the door's functional safety.

The uniform operating concept and the 7-segment displays facilitate daily use. Fitting is also simplified thanks to uniform housing and cable sets. This way, all Hörmann products work together optimally and efficiently:

- Industrial doors
- Loading technology
- Operators
- Controls
- Accessories

WA 250 R S4 / WA 300 R S4 operators

For SB rolling shutters / rolling grilles
For TGT underground garage rolling shutter / rolling grille

WA 250 R S4 with press-and-hold operation

- Inexpensive operator for SB rolling shutters / rolling grilles
- Ideally suited for doors with low operating frequency
- Integrated operator control with push button DTH R
- Opening and closing in press-and-hold operation
- Limit switch reporting or start warning with traffic lights can be optionally connected via additional prints.

WA 300 R S4 with impulse operation and standard power limit

- "Comfort" operator for SB rolling shutters / rolling grilles and TGT underground garage rolling shutters / rolling grilles
- Opening and closing through impulse operation
- Power limit in Open and Close directions as standard
- Automatic timer
- Integrated operator control with push button DTH R
- Functional extension with external control 360: second opening height, traffic control (in combination with activating kit for warning light and photocell)
- No fitting of a closing edge safety device (see fig. "Impulse operation without closing edge safety device")
- Low amount of effort required for fitting, repair and other services





Impulse operation without closing edge safety device Size range for SB Decotherm A/S rolling shutters, HG-L rolling grilles and all TGT rolling shutters/rolling grilles



All dimensions in mm

Easy fitting without forklift with the optional gearbox fitting (for rolling shutters with Decotherm curtains)

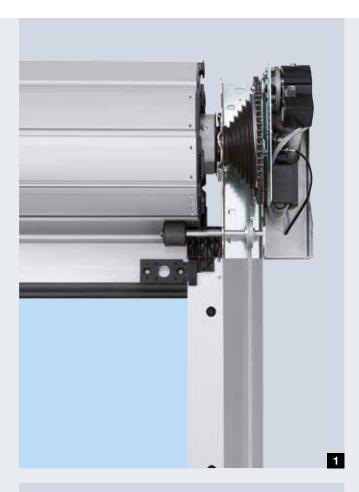


Operator WA 300 AR S4

For SB rolling shutters / rolling grilles









WA 300 AR S4 The space-saving operator

- Compact operator solution for SB rolling shutters / rolling grilles
- Small operator unit next to the barrel, no visible components underneath the door barrel
- Only 100 mm additional sideroom is required on the operator side
- Quiet and gentle door travel with soft start and soft stop
- Power limit in Open and Close directions as standard
- No fitting of a closing edge safety device (see fig. "Impulse operation without closing edge safety device" on page 48)
- · Control unit 300 can be installed separately
- Quick and convenient setting of the travel limits and control parameters from the floor
- Can be upgraded with external control 360
- Easy switching to manual door operation (for use inside and outside buildings) with the standard "secured release"
- Available with and without curtain cover 2
- Suitable for indoor and outdoor use, optimally suited for shop and underground garage doors



External control unit 300

Direct drive operator

For DD rolling shutters / rolling grilles

Direct drive operator

- Powerful direct drive operator with absolute encoder (AWG)
- Integrated position-independent catch safety device
- Variable operator fitting
 - 1 Towards bottom
 - 2 Horizontal
 - 3 Towards top
- With the horizontal or upward alignment, no operator technology is visible underneath the barrel
- Free choice of fitting position during fitting thanks to a new support bracket technology







FU operator

For DD rolling shutters









Optional accessory package S6 Fast and reliable with soft start and soft stop

- For rolling shutter DD with Decotherm S curtain and colour coating
- Powerful FU operator with soft start and soft stop for gentle door travel
- Up to 30 door cycles per hour or 300 per day are possible
- The door construction is designed for at least 200000 door cycles
- Opening speed up to 1.1 m/sec
- Light grilles in the side guides safeguard the door area even with high closing speeds 2
- No-wear monitoring of the door operation as no sensors are required on the curtain
- L-Pads on the inside of the curtain to minimise noise and wear
- Space-saving design with only 100 mm of additional required headroom (compared to a standard version DD rolling shutter with the same size)
- Optimises the flow of traffic and reduces energy loss
- Max. width 5000 mm, max. height 9000 mm

Direct drive, chain drive and tubular operators

For classic rolling shutters / grilles

Direct drive operators

- Ideal for small to medium-sized rolling shutters and rolling grilles
- With integral catch safety device

ZAK system

- Standard in classic rolling grilles
- · Optional in classic rolling shutters
- · Reduced running noise and door wear
- Minimised space requirement
- · Lintel area is optimally sealed



Chain drive operators

- · Powerful operator for large rolling shutters
- With plug-in connections for mains cables and connection cables
- With a separate catch safety device as standard
- Can be combined with the ZAK XL system for large doors

ZAK-XL system

- Reduced running noise and door wear
- Minimised space requirement
- · Lintel area is optimally sealed



Tubular operators

- For small doors with especially limited fitting space at the sides and few door cycles per day
- With a separate catch safety device as standard



Hörmann is your partner for special solutions

Special control construction





Hörmann offers you a complete and individual control concept from a single source. From the integration of the Hörmann special control into your control concept to a complete central control for all functions as well as PC-based visualisation of all door and loading components.



Individual in-house project development



Modular solutions, compatible with the Hörmann operator technology



More information can be found in the Special control systems brochure.



Controlled processes through visualisation on a control panel or web application

Controls

Compatible system solutions

	Internal control WA 250 R S4	Internal control WA 300 R S4	External control 300	External control 360	Impulse control 445 R	Comfort control 460 R	Comfort control B 455 R
Operators							
WA 250 R S4 for SB rolling shutter / rolling grille	•	-		-			
WA 300 R S4 for SB / TGT rolling shutter / rolling grille	_	•		0			
WA 300 AR S4 for SB rolling shutter / rolling grille			•	0			
Direct drive operator for DD rolling shutter / rolling grille					0	0	
Direct drive, chain drive and tubular operator for classic rolling shutter/rolling grille					0	0	0
Functions / features							
Control and operator can be mounted separately	-	-	•	•	•	•	•
Adjustments made conveniently directly on the control			•	•	•	•	•
Soft start and soft stop for quiet door travel	•	•	•	•			
Power limit in "Open"/"Close" directions 4)	_	•	•	•			
Second opening height with additional button on the housing cover	-	○ ²⁾	O 2)	•		•	
Status and error display via LED	•	•	•				
Menu reading from outside with a double 7-segment display (maintenance, cycle and operating hours counters as well as error analysis)	-	-		•	•	•	•
Collective malfunction signalling with on-site individual display (acoustic, visual, or e.g. via mobile phone)	-	-		0	0	0	0
Extension possible with external radio receiver	_	•	•	•	•	•	•
Automatic timer 1)	-	•	•	•		•	•
Traffic control ¹⁾	_	_		0		0	
Integrated connecting terminals for additional command units	-	•	•	•	•	•	•
Function lock via miniature lock	0	0	•	● 5)	● 5)	● 5)	● 5)
With SKS closing edge safety device: see fig. "Impulse operation without closing edge safety device"	-	•	•	•	•	•	•
Without SKS closing edge safety device: "Open"/"Close" in press-and-hold operation	•	•	•	•			•
Standard accessory DTH R push button	•	•					
Power supply	230 V	230 V	230 V	230 V	400/230 V	400/230 V	230 V
Main switch integrated into control housing	-	○ 3)	0	0	0	0	0
Protection category IP 65 (jet-water protected) for controls and door leaf components	•	•	•	•	•	•	•

as standard

- with corresponding equipment possibly with additional control
- Not available
- 1) Only in combination with an activating kit for warning light and photocell or light grille
- 2) Possible in combination with UAP1-300 and DTH I or DTH IM
- $^{\scriptscriptstyle (3)}$ In combination with push button control 300 U
- 4) In the "Close" direction, the power limit is only possible in the indicated curtain variants and size ranges (see "Impulse operation without closing edge safety device", see page 48)
- 5) Convertible to profile half cylinder



Optional: Profile half cylinder For all external controls



Optional push button control 300 U Push button control 300 U (figure above) forms a compact unit with dock leveller controls 420 S and 420 T. Combined with controls 420 S and 420 I. Combined with a dock leveller control including energy-saver function, this reduces energy consumption. Push button control 300 U is also optionally available with integrated main switch (not shown).

- With integrated option relay on request:
 Open limit switch reporting for dock leveller release
 No magnet switch required on the door
 Minimal wiring required



Optional: Main switch For all external controls



Optional: Key switch post STI 1

For installing a maximum of 2 controls with additional housing.
Colour: White aluminium, RAL 9006

Dimensions: 200 × 60 mm,

Height: 1660 mm

Radio controls, receivers



Hörmann BiSecur (BS)

The modern radio system for industrial door operators

The bi-directional BiSecur radio system is based on future-oriented technology for the convenient and secure operation of industrial doors. 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 in online banking
- Interference-resistant radio signal with a stable range
- Convenient inquiry of the door position*
- Backwards compatible, i.e. radio receivers with the radio frequency 868 MHz (2005 to June 2012) can also be operated with BiSecur control elements















5-button hand transmitter HS 5 BS

With additional button for querying the door position*, black or white textured surface, with chrome caps

5-button hand transmitter HS 5 BS

With additional button for querying the door position*, black textured surface, with chrome caps

4-button hand transmitter HS 4 BS

High-gloss black, with chrome caps

1-button hand transmitter HS 1 BS

High-gloss black, with chrome caps



4-button security hand transmitter HSS 4 BS

Additional function: copy protection for hand transmitter coding, with chrome caps





2-button hand transmitter HSE 2 BS

High-gloss black or white, with chrome caps



M

2-button hand transmitter HSE 2 BS

Black textured surface with chrome or plastic caps





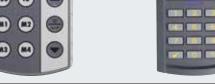
1-button hand transmitter HSE 1 BS

High-gloss black, with chrome caps

WA 300 S4 optionally with bi-directional receiver ESEi BS, all other operators optionally with bi-directional receiver HET-2 24 BS and feedback on the end-of-travel positions.











♦BiSecur

Industrial hand transmitter HSI BS

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



With illuminated buttons 3 function codes

Radio code switch FCT 10 BS

With illuminated buttons and protective cover, 10 function codes

Radio finger-scan FFL 12 BS

2 function codes and up to 12 fingerprints



1-channel relay receiver HER 1 BS

With volt-free relay output with status query **// NEW**



2-channel relay receiver

With 2 volt-free relay outputs with status query and external antenna **II NEW**



2-channel relay receiver HET-E2 24 BS

With 2 volt-free relay outputs for choosing the direction, a 2-pin input for volt-free Open / Close limit switch reporting (for querying the door position)



♦BiSecur

4-channel relay receiver HER 4 BS

With 4 volt-free relay outputs with status query **// NEW**



3-channel receiver HEI 3 BS

For controlling 3 functions



Bi-directional receiver ESEi BS

For querying door position

♦ BiSecur

Push buttons



Push button DTH R

For separate control of the door in the "Open" / "Close" positions, with separate stop button. Dimensions: 90 × 160 × 55 mm (W × H × D) Protection category: IP 65

For controls 360, 435 R, 445 R, 460 R, B 455 R and integrated controls WA 250 R S4, WA 300 R S4



Push button DTH RM

For separate control of the door in the "Open" / "Close" positions, with separate stop button, with miniature lock (operator is deactivated). It is not possible to move the operator (2 keys included in the scope of delivery). Dimensions:

 $90 \times 160 \times 55$ mm (W × H × D) Protection category: IP 65

For controls 360, 435 R, 445 R, 460 R, B 455 R and integrated controls WA 250 R S4, WA 300 R S4



Push button DTH I

To move the door into the "Open" / "Close" positions, with separate stop button. 1/2-open button to open the door up to the programmed intermediate travel limit. Dimensions: 90 × 160 × 55 mm (W × H × D) Protection category: IP 65

For controls 360, 460 R and integrated controls WA 250 R S4, WA 300 R S4



Push button DTH IM

To move the door into the "Open" / "Close" positions, with separate stop button. 1/2-open button to open the door up to the programmed intermediate travel limit, with miniature lock (operator is deactivated). It is not possible to move the operator (2 keys included in the scope of delivery). Dimensions: $90 \times 160 \times 55 \text{ mm (W} \times \text{H} \times \text{D)}$

Protection category: IP 65

For controls 360, 460 R and integrated controls WA 250 R S4, WA 300 R S4



Push button DT 02

To move the door into the "Open" / "Close" positions, with separate stop button. Dimensions: 65 × 112 × 68 mm (W × H × D) Protection category: IP 65

For controls 435 R (only with SKS), 445 R, 460 R and B 455 R



Push button DT 04

To separately move the door into the "Open" / "Close" positions, with separate stop button. 1/2-open button to open the door up to the programmed intermediate travel limit. Dimensions: 69 x 185 x 91 mm (W x H x D) Protection category: IP 65

For controls



Push button DTN A 30

For separate control of the door in the "Open" / "Close" positions, with separate stop button (stays depressed after actuation in order to prevent unauthorised operation. Unlocking with key), 2 keys included in the scope of delivery, Dimensions: 66 × 145 × 85 mm (W × H × D)

Protection category: IP 65

For controls 435 R, 445 R, 460 R and B 455 R

Push buttons, key switches, key switch posts



Push button DTP 02

To move the door into the "Open" / "Close" positions, with separate stop button and control voltage indicator, lockable with profile half cylinder (available as accessory). Dimensions: 86 × 260 × 85 mm (W × H × D) Protection category: IP 44

For controls 435 R, 445 R, 460 R and B 455 R



Push button DTP 03

For separate control of the door in the "Open" / "Close" positions, with separate stop button and control voltage indicator, lockable with profile half cylinder (available as accessory). Dimensions: 68 × 290 × 74 mm (W × H × D) Protection category: IP 44

For controls 435 R, 445 R, 460 R and B 455 R



Emergency-off button DTN 10

To quickly immobilise the door, push-to-lock button (mushroom button), surface-mounted. Dimensions: 93 × 93 × 95 mm (W × H × D) Protection category: IP 65

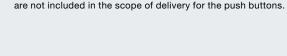
For controls: 360, 435 R, 445 R, 460 R, B 455 R and integrated controls WA 250 R S4, WA 300 R S4



Emergency-off button DTNG 10

To quickly immobilise the door, push-to-lock mushroom button, Surface-mounted Dimensions: 93 × 93 × 95 mm (W × H × D) Protection category: IP 65

For controls 360, 435 R, 445 R, 460 R, B 455 R and integrated controls WA 250 R S4, WA 300 R S4



The lockable function serves to isolate the control voltage and immobilises the command units. Profile half cylinders



Key switch ESA 30 Surface-mounted version

With 3 keys Impulse or "Open / Close" function selectable. Dimensions: $73 \times 73 \times 50$ mm (W × H × D) Protection category: IP 54



Key switch ESU 30 Recessed version

With 3 keys

Impulse or "Open / Close" function selectable. Dimensions of switch box: 60 mm (d), 58 mm (D) Dimensions of cover: 90 × 100 mm (W × H), Wall recess: 65 mm (d), 60 mm (D) Protection category: IP 54



Key switch STAP Surface-mounted version

With 3 keys Impulse or "Open / Close" function selectable. Dimensions: $80 \times 110 \times 68 \text{ mm}$ (W × H × D) Protection category: IP 54



Key switch STUP Recessed version

With 3 keys Impulse or "Open / Close" function selectable. Dimensions of switch box: 60 mm (d), 58 mm (D) Dimensions of cover: 80 × 110 mm (W × H) Wall recess: 65 mm (d), 60 mm (D) Protection category: IP 54



With adapter for installing command units (e.g. transponder key switch, code switch, finger-scan or key switch). The command units must be ordered separately. The post is anodised aluminium (natural finish). Top and bottom end of post in Slate grey, RAL 7015.

Dimensions: 300 mm (d), 1250 mm (H) Protection category: IP 44

Version with fitted key switch STUP (available as accessory)



Code switches









Code switch CTR 1b, CTR 3b

The code switches CTR 1b and CTR 3b offer a high level of security against unauthorised opening. You simply enter your own personal code – a key is no longer needed.

With the CTR 3b comfort version, you can open a second door and also switch on the outside lights or change the direction of the door.

Dimensions:

 $80\times110\times17$ mm (W × H × D), Decoder housing: $140\times130\times50$ 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 AC

CTV 1 / CTV 3 code switch

The code switches are especially robust and protected against vandalism. To operate, you enter your own personal code – no key is needed. With the CTV 3 comfort version, you can open a second door and also switch on the outside lights or change the direction of the door.

Dimensions:

 $75\times75\times13$ mm (W × H × D), Decoder housing: $140\times130\times50$ 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 AC





Finger-scan FL 12, FL 100

A fingerprint is enough to securely and conveniently open your rolling shutter / rolling grille. The finger-scan is available in two versions, as an FL 12 or FL 100 to store 12 or 100 fingerprints, respectively.

Dimensions: $80 \times 110 \times 39 \text{ mm } (W \times H \times D)$ Decoder housing: $70 \times 275 \times 50 \text{ mm } (W \times H \times D)$ Reader protection category: IP 65 Decoder housing protection category: IP 56 Switching capacity: 2.0 A/30 V DC

Transponder key switch TTR 100, TTR 1000

The convenient solution when several persons require access to the building. You simply hold the transponder key with your personal security code approx. 2 cm in front of the reader (non-contact system). A major benefit in the dark. Two transponder keys are included. Suitable for max. 100 transponder keys (TTR 100) or 1000 transponder keys (TTR 1000).

Dimensions:

 $80\times110\times17$ mm (W × H × D), Decoder housing: $140\times130\times50$ mm (W × H × D) Transponder pad protection category: IP 65 Decoder housing protection category: IP 54 Switching capacity: 2.5 A/30 V DC 500 W / 250 V AC

Photocells, light grilles, key switch posts









Reflection photocell RL 50 / RL 300

Photocell with transmitter / receiver unit and reflector. The photocell is tested by the control prior to each closing cycle. Connected via a system cable (RL 50, length 2 m) or a 2-wire cable (RL 300, length 10 m). Dimensions: $68 \times 97 \times 33$ mm (W × H × D), protection category: IP 65

Reflector range up to 8 m (standard): 30 × 60 mm (W × H), reflector range up to 12 m (not shown): 80 mm diameter (optional with anti-fog coating)

One-way photocell EL 51

Photocell with separate transmitter and receiver.
The photocell is tested by the

control prior to each closing cycle.
Connected via a system cable.
Max. range 8.0 m
Dimensions with fitting bracket:
60 × 165 × 43 mm (W × H × D)
Protection category: IP 65

Pull switch ZT 2 with cord

Impulse generation to open or close the door. Dimensions: $60 \times 90 \times 55 \text{ mm (W} \times \text{H} \times \text{D)}$ Pull cord length: 3.2 m Protection category: IP 65

KA 1 cantilever arm (not shown) Extension 1680 – 3080 mm. Can be used with ZT 2

Light grille ELG 1 / ELG 2

The light grille monitors the entire closing zone of the door up to a height of 2500 mm. If vehicles with trailers are standing in the door area, they are reliably detected, helping to avoid damage to the vehicle and door. Simple fitting to the door frame and trouble-free aligning of sensors make the light grille especially economical to use. In addition, the ELG 1 light grille can be easily integrated in the STL post set.

Voltage supply: 24 V DC
Power consumption: 100 mA each
Max. range: 12.0 m
Protection category: IP 65
Sun suppression: 150,000 lux
Operating temperature:
-25 °C to +55 °C
Resolution: 60 mm crossed
Light source: LED infrared
Transmitter lead length: 10 m
Receiver lead length: 5 m
Height: ELG 1 = 1380 mm,
ELG 2 = 2460 mm

Post set STL

The key switch post set consists of weather-resistant anodised aluminium and is prepared for installation of an ELG 1 light grille. The covers and foot cladding are made of Slate grey plastic, RAL 7015.



Activating kit for warning lights, LED warning lights



Multi-function circuit board for fitting in an existing housing or optionally in a separate extension housing (fig.) Limit switch reporting, momentary impulse, collective malfunction signalling.

Extension unit for controls 445 R, 460 R, B 455 R

Dimensions of additional housing: 202 × 164 × 130 mm (W × H × D) Protection category: IP 65 A circuit board can be optionally mounted in the control.



Digital weekly timer in a separate additional housing

The timer can switch command units on and off via a volt-free contact. Extension unit for controls 460 R, B 455 R 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: $202 \times 164 \times 130$ mm (W \times H \times D) Protection category: IP 65



Summer / winter activating kit in an additional housing

Function for full opening of door and individually programmable intermediate travel limit.

Extension unit for controls 460 R, B 455 R

Dimensions of additional housing: $202 \times 164 \times 130$ mm (W \times H \times D) Protection category: IP 65



DI 1 induction loop in a 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,

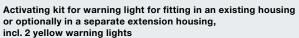
Colour: brown

Warning lights with bright, long-lasting LEDs









Extension unit for control 445 R, 460 R, B 455 R. The activating kit for warning lights serves as a visual indicator while the door is moving (weekly timer, optional for 460 R, B 455 R). Applications:

Start warning (for 445 R, 460 R, B 455 R), automatic timer (460 R, B 455 R). After the set hold-open phase has elapsed (0 – 480 s), the warning lights flash during the set pre-warning phase (0 – 70 s).

Traffic light dimensions: $180\times250\times290~\text{mm}~(W\times H\times D)$ Dimensions of additional housing: $202\times164\times130~\text{mm}~(W\times H\times D)$ Contact load: 250~V~AC: 2.5~A/500~W Protection category: IP 65 Traffic light material: High-quality aluminium housing, powder-coated





Traffic control in a separate additional housing or for fitting in an existing housing, incl. 2 red/green warning lights

Extension unit for control 460 R and B 455 R. The activating kit for warning lights serves as a visual indicator for regulating the entrance and exit (optional weekly timer).

Duration of the green phase: Adjustable from 0 – 480 s Duration of the clearance phase: Adjustable from 0 – 70 s

Traffic light dimensions: $180 \times 410 \times 290 \text{ mm (W} \times \text{H} \times \text{D})$ Dimensions of additional housing: $202 \times 164 \times 130 \text{ mm (W} \times \text{H} \times \text{D})$ Contact load: 250 V AC: 2.5 A/500 W Protection category: IP 65 Traffic light material: High-quality aluminium housing, powder-coated



UAP 1-300 for WA 300 R S4

For impulse selection, partial opening function, limit switch reporting and activating kit for warning light with 2 m system cable
Protection category: IP 65
Max. switching capacity:
30 V DC / 2.5 A (resistive load)
250 V AC/500 W (resistive load)
Dimensions:
110 × 45 × 40 mm (W × H × D)



HOR 1-300 for WA 300 R S4

To control limit switch reporting or warning lights with 2 m connecting lead Protection category: IP 44 Max. switching capacity: 30 V DC / 2.5 A (resistive load) 250 V AC/500 W (resistive load) Dimensions: 110 × 45 × 40 mm (W × H × D)



Radar movement detector RBM 2

For "Open door" impulse with directional recognition, max. fitting height: 6 m Dimensions: 155 × 132 × 58 mm (W × H × D) Contact load: 24 AC/DC, 1 A at resistive load Protection category: IP 65

Remote control for radar movement detector Optional

Overview of rolling shutters and rolling grilles

Construction and quality features

● = Standard ○ = Optional

			SB rollin	g shutter		SB rolli	ng grille	
		Deco	therm	HR 120		HG-L	HG 75	
		Α	s	Α	aero			
Wind load EN 12424	Class 2 up to door width in mm	5000	5000	5000	4000	-	-	
	Higher wind loads on request	-	-	-	-	-	-	
	Wind lock	•	•	•	•	-	-	
Water tightness EN 12425		0	0	0	0	0	0	
Thermal insulation	Appendix B EN 12428 Individual shutter section (U = W/(m ² ·K))	4.6	3.9	-	-	-	-	
	Shutter 4×4 m, fitted (U = W/(m ² ·K))	4.9	4.1	-	-	-	-	
Door sizes	Max. width (LZ) mm	5000	5000	5000	4000	6000	6000	
	Max. height (RM) mm	4500	4500	4500	4000	4500	3500	
Space requirements	See the technical manual	,			•			•
Curtain material	Single-skinned aluminium	-	-	•	•	•	•	
	Double-skinned aluminium	•	-	-	-	-	-	
	Single-skinned steel	-	-	-	-	-	-	
	Double-skinned steel	-	•	-	-	-	-	
Curtain surface	Bright-rolled aluminium	•	-	•	•	-	-	
	Mill-finished aluminium	-	-	-	-	•	-	
	Stucco-textured aluminium	-	-	-	-	-	-	
	Aluminium coated in RAL 9002	0	-	0	0	0	-	
	Aluminium coated in RAL 9006	0	-	0	0	0	0	
	Aluminium coated in RAL to choose	_	-	0	_	0	0*	
	Anodised aluminium E6 / EV 1	_	_	_	_	0	_	
		_	•	_	_	_	_	-
	Galvanized steel coated in RAL 9002	_	0	_	_	_	_	
	Galvanized steel coated in RAL 9006	_	0	_	_	_	_	-
	Galvanized steel coated in RAL to choose	_	0	_	_	_	_	
Own weight of curtain	Approx. kg/m²	4.2	10.3	6.0	5.5	6.5	6.7	
Side door	Matching the door	0	0	0	0	_	_	
Glazing	Standard arrangement	_	0	0	_	_	_	
	Logistics arrangement	0	0	0	_	_	_	-
Seals	All-round on 4 sides	0	0	0	_	_	_	
Burglar resistance	Pull-out protection	_	_	_	_	•	•	
	Internal locking	0	0	0	0	0	0	
	External / internal locking	0	0	0	0	0	0	
Anti-lift kit		-	-	-	-	•	•	
Safety equipment	Finger trap protection	•	•	•	•	_	_	
	Side trap guard	0	0	0	0	0	0	
	Safety catch	•	•	•	•	•	•	
Fastening options	Concrete	•	•	•	•	•	•	
5 · 1 · · · · · · · · · · · · · · · · ·	Steel	•	•	•	•	•	•	
	Brickwork	•	•	•	•	•	•	

^{*} RAL 9016, RAL 7035, RAL 9006, RAL 5011, RAL 8028, RAL 7016, RAL 9005

^{**} Shutter 4 × 2.4 m, fitted

TGT rolling shutter / rolling grille					DD rolling grille						
Deco	therm	HG-L	Deco	therm	HR 116		HR 120		HG-L	HG-V	HG-S
Α	s		Α	s	Α	Α	s	aero			
5000	5000	-	5000	10000	10000	7500	10000	4500	-	-	-
-	-	-	-	0	0	0	0	-	-	-	-
•	•	•	•	•	•	•	•	•	-	-	-
0	0	0	0	0	0	0	0	0	0	0	0
4.6	3.9	-	4.6	3.9	5.3	-	-	-	-	-	-
5.0**	4.2**	-	4.9	4.1	5.3	-	-	-	-	-	-
5000	5000	5000	5000	10000	11000	12000	8750	12000	9000	8750	12000
2400	2400	2400	4500	9000	9000	8000	8000	8000	5500	8000	8000
-	-	•	-	-	-	•	-	•	•	•	_
•	-	-	•	-	•	-	-	-	-	-	_
-	-	-	-	-	-	_	•	-	-	-	•
-	•	-	-	•	-	-	-	-	-	-	-
•	-	-	•	-	-	•	-	•	-	•	-
-	-	•	_	-	-	_	-	-	•	-	-
-	-	-	-	-	•	-	-	-	-	-	-
0	-	0	0	-	0	0	-	0	-	-	-
0	-	0	0	-	0	0	-	0	-	-	-
-	-	0	_	-	0	0	-	-	0	-	_
-	-	0	_	-	-	_	-	-	0	-	_
-	•	-	_	•	-	_	•	-	-	-	•
-	0	-	-	0	-	-	-	-	-	-	_
-	0	-	-	0	-	_	-	-	-	-	-
-	0	-	_	0	-	_	-	-	-	-	0
4.2	10.3	6.5	4.2	10.3	10.0	6.0	15.0	5.5	6.5	7.5	15
0	0	-	0	0	0	0	0	0	-	0	0
-	0	-	-	0	0	0	0	-	-	-	-
0	0	-	0	0	0	0	0	-	-	-	_
0	0	-	•	•	•	•	•	-	-	-	-
-	-	•	-	-	-	_	-	-	•	-	-
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
-	-	•	-	-	-	_	-	-	•	•	•
•	•	-	•	•	•	•	•	•	-	-	-
0	0	0	0	0	0	0	0	0	0	0	0
•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•
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Overview of rolling shutters and rolling grilles

Construction and quality features

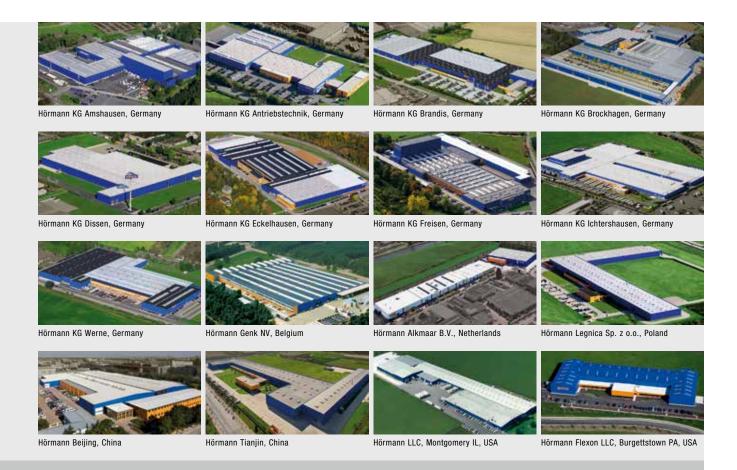
● = Standard ○ = Optional

		Classic rolling shutter						
		Decotherm		HR 116		HR 120		
		Α	s	Α	Α	s	aero	
Wind load EN 12424	Class 2 up to door width in mm	4000	10000	10000	7500	10000	4500	
	Higher wind loads on request	0	0	0	0	0	0	
	Wind lock	0	0	0	0	0	0	
Water tightness EN 12425		0	0	0	0	0	0	
Thermal insulation	Appendix B EN 12428 Individual shutter section (U = W/(m²·K))	4.6	3.9	5.3	-	-	-	
	Shutter 4 × 4 m, fitted (U = W/(m²·K))	5.0	4.2	5.4	-	-	-	
Door sizes	Max. width (LZ) mm	4000	10000	11750	11750	11750	11750	
	Max. height (RM) mm	4000	9000	9000	8000	8000	8000	-
Space requirements	See the technical manual	I.		_L	J.		J.	J.
Curtain material	Single-skinned aluminium	-	_	_	•	-	•	
	Double-skinned aluminium	•	-	•	_	-	_	-
	Single-skinned steel	_	-	_	_	•	-	-
	Double-skinned steel	_	•	_	_	-	_	-
Curtain surface	Bright-rolled aluminium	•	_	_	•	_	•	
	Mill-finished aluminium	_	_	_	_	_	_	-
	Stucco-textured aluminium	_	_	•	_	_	_	-
	Aluminium coated in RAL 9002	0	_	0	0	_	0	-
	Aluminium coated in RAL 9006	0	_	0	0	-	0	1
	Aluminium coated in RAL to choose	_	-	0	0	_	_	-
	Anodised aluminium E6 / EV 1	_	-	_	_	_	_	-
		_	•	_	_	•	_	-
	Galvanized steel coated in RAL 9002	_	0	_	_	_	_	-
	Galvanized steel coated in RAL 9006	_	0	_	_	-	_	-
	Galvanized steel coated in RAL to choose	_	0	_	_	_	_	_
Own weight of curtain	Approx. kg/m²	4.2	10.3	10.0	6.0	15.0	5.5	
Side door	Matching the door	0	0	0	0	0	0	
Glazing	Standard arrangement	-	0	0	0	0	-	
	Logistics arrangement	0	0	0	0	0	_	
Seals	All-round on 4 sides	•	•	•	•	•	_	
Burglar resistance	Pull-out protection	-	_	_	_	_	_	
	Internal locking	0	0	0	0	0	0	-
	External / internal locking	0	0	0	0	0	0	-
Anti-lift kit		-	_	_	_	_	-	
Safety equipment	Finger trap protection	•	•	•	•	•	•	
	Side trap guard	0	0	0	0	0	0	-
	Safety catch	•	•	•	•	•	•	
Fastening options	Concrete	•	•	•	•	•	•	
•	Steel	•	•	•	•	•	•	-
	Brickwork	•	•	•	•	•	•	-
	Timber	•	•	•	•	•	•	

^{*} RAL 9016, RAL 7035, RAL 9006, RAL 5011, RAL 8028, RAL 7016, RAL 9005

Classic rolling grille							
HG-A	HG-V	HG-S					
-	-	-					
-	-	-					
-	-	-					
0	0	0					
-	-	-					
-	-	-					
8000	11750	11750					
8000	8000	8000					
1	1	T					
•	•	-					
-	-	-					
-	-	•					
-	-	-					
•	•	-					
-	-	-					
-	-	-					
-	-	_					
-	-	-					
0	_	-					
0	_	-					
-	_	•					
-	-	0					
-	-	0					
-	-	0					
7.0	7.5	15					
0	0	0					
_	_	_					
-	-	-					
-	-	_					
0	0	0					
•	•	•					
-	- 0	-					
•	•	•					
•	•						
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•	•	•					
•		•					

Hörmann: Quality without Compromise



Hörmann is the only manufacturer worldwide that offers you a complete range of all major building products from one source. We manufacture in highly-specialised factories using the latest production technologies. The close-meshed network of sales and service companies throughout Europe, and activities in the USA and China, make Hörmann your strong partner for first-class building products, offering "Quality without Compromise".

GARAGE DOORS
OPERATORS
INDUSTRIAL DOORS
LOADING EQUIPMENT
HINGED DOORS
DOOR FRAMES

