Rolling Shutters and Rolling Grilles
Matching side door NT 60
Hörmann Brand Quality
Reliable and oriented towards the future

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.

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

Sustainability documented and approved 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.

Sustainably produced rolling shutters and rolling grilles from Hörmann

**Ecological quality**
Environmentally-friendly production through a comprehensive energy management system

**Economical quality**
A long service life and low maintenance costs thanks to the use of high-quality materials

**Process quality**
Sustainable production processes through optimised material use

Sustainable construction with Hörmann’s expertise

Hörmann has been able to gain great expertise in sustainable construction through various projects. We also apply this know-how to support your projects. Another advantage: For every project order, the required data for LEED certification are automatically generated.
The Architects' Program
More than 9000 drawings for over 850 products

Planning with Hörmann products is now even easier thanks to a modern, user-friendly interface. Clearly structured navigation via drop-down menus and symbols, as well as a search function, give you faster access to tender specifications and drawings (in DWG and PDF format) of over 850 Hörmann products. Photo-realistic presentations provide additional information on many products.

The Architects' Program can be downloaded free-of-charge from the Hörmann Architects' Forum.

The energy savings compass
For sustainable planning

Hörmann's energy saving compass shows how external and internal doors are planned with energy-efficiency and sustainability in mind. An integrated calculated module estimates the amortisation period for door modernisation.

Plan with the energy savings compass at:
www.hormann.co.uk/energysavingscompass
Good Reasons to Try Hörmann
Innovations from the market leader

1. Innovative tension spring assembly
   Safe and proven
   Manual door opening and closing is facilitated significantly by the tension spring assembly. Rolling shutters/rolling grilles SB and TGT up to 6000 x 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.

2. High security without sensors on the door curtain
   Power limit as standard for WA 300 R S4 / WA 300 AR S4
   In combination with these operators, the rolling shutters / rolling grilles SB and TGT 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 and lintel trap guard to meet the requirements of DIN EN 12453. In addition, the door is very low maintenance, since there are no sensors with spiral cables susceptible to wear fitted to the door curtain.

   For further information, see pages 46 – 47.
Well thought-out design with guide channel and wind locks
The rolling shutter guide channel DD effectively reduces wear on the door curtain. If necessary, you can easily replace the funnel. In addition, our developments often fulfill several functions. For example, wind locks on the rolling shutter curtains protect your door from damage due to wind loads; at the same time they provide excellent burglar protection, since the profiles cannot be pushed out of the guide.

For further information, please see page 36.

Accessory package S6 with FU operator and control
Optimise your operations and minimise heat loss with the optional accessory package S6 incl. FU operator for the rolling shutter DD with Decotherm curtain. The door opens at up to 1.1 m/s – and thus almost as fast as a high-speed door. Further advantages: fitting dimensions as well as procurement and operating costs are significantly lower than for a high-speed door. Thanks to the soft start and soft stop function, the door runs particularly gently despite the speed – this takes stress off the door mechanism, thus extending the service life of the door. A light grille in the side guide ensures the necessary high security and is also reliably protected against wear and damage.

For further information, please see page 49.
Compact, space-saving 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 door systems for logistics
SB rolling shutter / rolling grille
DD rolling shutter
DD rolling shutter S6

Easy operation for commercial buildings, warehouses and agriculture
SB rolling shutter / rolling grille
(manually operated)
SB rolling shutter / rolling grille
(with operator)
A secure door for underground garages and multi-storey 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
DD rolling shutter / rolling grille
Classic rolling shutter / rolling grille
SB Rolling Shutter / Rolling Grille
Simple manual operation for door openings up to 6000 x 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 rolling shutter curtains is available for door widths up to 5000 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

SB rolling shutter for manual operation
Easy retrofitting with operator is possible

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

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)

Well thought-out door design
- Reduced fitting times, since the entire door construction, including support brackets and side guides, is fitted as a frame unit to the building structure
- 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

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

Decotherm S, steel
5000 x 4500 mm

HR 120 A, aluminium
5000 x 4500 mm

HR 120 aero, aluminium
4000 x 4000 mm

HG-L, aluminium
6000 x 4500 mm

HG 75, aluminium
6000 x 3500 mm

All curtains with wind locks or pull-out protection as standard!
For further information, please see page 36.

Overview of curtains
From page 32
SB Rolling Shutter / Rolling Grille
The convenient operator solutions with soft start and soft stop

Warehouses
Convenient operation with operator
**Logistics**
The ideal solution for low to medium operational frequencies.

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

**Shop doors**
The convenient rolling grille solution with operator up to 6000 mm door width for secure night time locking.
SB Rolling Shutter / Rolling Grille
High security due to power limit as standard

As standard for SB rolling shutter / rolling grille with operators WA 250 R S4 / WA 300 R S4

SB rolling shutter equipped with WA 250 R S4 / WA 300 R S4 operator and optional PVSB curtain cover
Operator variants
WA 250 R S4
The inexpensive operator with press-and-hold operation
WA 300 R S4
The comfortable operator with impulse operation
WA 300 AR S4
The side-flanged compact operator

Soft start and soft stop
• Ensures quiet door travel, reducing wear on the door and operator

Power limit in “Open” and “Close” directions as standard
• Easy to fit, since no closing edge safety device and lintel trap guard needs to be installed on the door
• Low maintenance, as there are no sensors with spiral cables susceptible to wear fitted to the door curtain
• Economical, due to short fitting times and low maintenance requirements

Release directly on the operator as standard
• Integrated maintenance release directly on the operator
• The door can be switched to manual operation at any time
• The door remains fully functional, even in the event of a power failure
• Can be optionally operated from the exterior of the building

Easy fitting
• No additional side space requirement with the operators WA 250 R S4, WA 300 R S4
• Optional fitting gearbox allows for fitting without a forklift in difficult fitting situations (see page 50)

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

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

Decotherm S, steel
5000 x 4500 mm

HR 120 A, aluminium
5000 x 4500 mm

HR 120 aero, aluminium
4000 x 4000 mm

HG-L, aluminium
6000 x 4500 mm

HG 75, aluminium
6000 x 3500 mm

All curtains with wind locks or pull-out protection as standard!
For further information, please see page 36.

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 wear-free security technology

Residential and commercial building
The compact construction is ideal for fitting situations with limited space.
**Residential and commercial building**
The standard power limit offers a high level of safety when opening and closing
without sensors on the door curtain which are prone to malfunctions.

**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
High security without sensors on the door curtain

As standard for TGT rolling shutter / rolling grille with operator WA 300 R S4

TGT underground garage rolling shutter with optional PVTGT curtain cover, VWA operator cover and AFA aluminium spring chamber cover
Application-optimised door technology
Constructed for over 200000 door cycles (open / close) and up to 300 door cycles (open / close) per day

Compact door construction
• Low required headroom of only 380 mm (Decotherm S) or 350 mm (HG-L) facilitates fitting in narrow spaces
• Reduced fitting times, since the entire door construction, including support brackets and side guides, is fitted as a frame unit to the building structure
• Secure rolling up of the rolling shutter or rolling grille curtain in the compact curtain cover PVTGT

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 and gentle due to “soft start” and “soft stop”
• Galvanized sheet steel cover PVTGT as protection

Power limit in “Open” and “Close” directions as standard
• Easy to fit, since no closing edge safety device and lintel trap guard needs to be installed on the door
• Low maintenance, as there are no sensors with spiral cables susceptible to wear fitted to the door curtain
• Economical, due to short fitting times and low maintenance requirements

Tension spring assembly
• Supports the operator during the opening and closing of the door
• Special dimensions of the springs and guide channels ensure long service intervals
• The optional AFA aluminium spring chamber cover prevents accidental reaching into the tension springs
• Vision fields to monitor the status of the springs

Easy emergency release
• Easy and quick manual door opening
• Use of entrances and exits ensured even during power failures
• Can be optionally operated from the exterior of the building

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

Logistics
High opening and closing speeds with the accessory package S6 optimise your operations and reduce heat loses.
DD Rolling Shutter / Rolling Grille
More flexibility and simple fitting with the direct drive operator

Optional for rolling shutter DD
Decotherm S with accessory package S6 including FU operator and control

DD rolling shutter with direct drive operator
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 pre-assembled aluminium subframe profiles
• Optionally with steel bracket fastening for insulated building openings or fitting by welding in steel construction

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
• 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 (required according to EN 13241-1)
• 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

Optional accessory package S6 for rolling shutter DD Decotherm
• Opening speed up to 1.1 m/sec
• FU operator with soft start and soft stop
• Safety light grille in the side guides
• L pads on the curtain interior for quiet door travel

For further information, please see page 53.
Classic Rolling Shutter / Rolling Grille
Individual solutions for opening widths up to 30 m

Large doors as coupled constructions (SSG)
Up to three rolling shutters or rolling grilles can be coupled in the opening up to 30 m wide and 6 m high using the SSG system. Once the doors have been opened, the mullions are unlocked manually and slid over to the side park positions.

Large doors for wide door openings and high wind loads
The Wind Protection System (WPS) increases the rigidity of the door against wind load. An aluminium telescopic support reliably braces the closed door. As a result, wind load classes 2 and higher can also be achieved for door widths above 10 m.
External rolling shutters
External rolling shutters are the perfect solution for hall openings that lack interior sideroom. If there is no overhead covering, we offer a special curtain cover in either galvanized sheet steel or stainless sheet steel.

Door opening with sloping ground
A chamfered bottom profile compensates for differences in height with sloping ground. Steps can also be bridged this way.
Classic Rolling Shutter / Rolling Grille
Sturdy and reliable

Classic rolling shutter with direct drive operator
Side guides
• 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
• For variable support
• Fitting and service-friendly screw connection
• With variable 30 mm increments and good sealing

Weld-on spacer brackets
• Especially suited for steel structures
• Can be directly welded onto the steel structure
• Ideally supplement the anchor technology in steel construction halls

Bend-resistant bottom profiles
• 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

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

Decotherm S, steel
10000 × 9000 mm

HR 116 A, aluminium
11750 × 8000 mm

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

HR 120 aero, aluminium
11750 × 8000 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
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 micro-profiled outer face.

HR 116 A, aluminium
The robust profile HR 116 A is ideal for industrial halls with large structural openings. With the special texture of the Stucco-textured surface minor damages are hardly visible.

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

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### Profile type

<table>
<thead>
<tr>
<th>Profile type</th>
<th>Decotherm S</th>
<th>HR 116 A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>Steel</td>
<td>Aluminium</td>
</tr>
<tr>
<td>Surfaces without colour coating</td>
<td>Galvanized without protective paint*</td>
<td>Stucco without protective paint</td>
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<tr>
<td>Surfaces with colour coating</td>
<td>Exterior and interior with identical colour coating to choose</td>
<td>Exterior and interior with identical colour coating to choose</td>
</tr>
<tr>
<td>Standard colours</td>
<td>RAL 9002, RAL 9006</td>
<td>RAL 9002, RAL 9006</td>
</tr>
<tr>
<td>Preferred colours**</td>
<td>•</td>
<td>•</td>
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<tr>
<td>Special colours</td>
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<td>•</td>
</tr>
<tr>
<td>Profile height</td>
<td>109 mm</td>
<td>119 mm</td>
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<tr>
<td>Curtain weight</td>
<td>Approx. 10.3 kg/m²</td>
<td>Approx. 10.0 kg/m²</td>
</tr>
<tr>
<td>Wind load class 2</td>
<td>10000 mm</td>
<td>12000 mm</td>
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<tr>
<td>up to a door width of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat transmission EN 12428 (single profiles)</td>
<td>3.9 W/(m²·K)</td>
<td>5.3 W/(m²·K)</td>
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<tr>
<td>Door type</td>
<td>SB Rolling Shutter, TGT rolling shutter, DD rolling shutter, Classic rolling shutter</td>
<td>DD rolling shutter, Classic rolling grille</td>
</tr>
<tr>
<td>Windows</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Ventilation slots</td>
<td>–</td>
<td>•</td>
</tr>
</tbody>
</table>

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

** For preferred colours see page 41

*** Ventilation laths HR 120 aero

- Optionally available
  - Not available

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All SB, TGT, DD rolling shutter curtains are supplied as standard with wind locks or pull-out protection. For further information, please see page 36.
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, steel
With the HR 120 S profile made of heavy-duty steel with a galvanized finish, your door can withstand higher loads.

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 without requirements to appearance. The exterior of the coil-coated surface finish features a high-quality colour coating.

### Rolling Shutter Laths
HR 120 A / S, HR 120 aero
Single-skinned

<table>
<thead>
<tr>
<th>Profile type</th>
<th>HR 120 A</th>
<th>HR 120 S</th>
<th>HR 120 aero</th>
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<tbody>
<tr>
<td><strong>Material</strong></td>
<td>Aluminium</td>
<td>Steel</td>
<td>Aluminium</td>
</tr>
<tr>
<td><strong>Surfaces without colour coating</strong></td>
<td>Bright-rolled and without protective paint</td>
<td>Galvanized without protective paint</td>
<td>Bright-rolled and without protective paint</td>
</tr>
<tr>
<td><strong>Surfaces with colour coating</strong></td>
<td>Exterior: Colour coating to choose Interior: Basalt grey protective paint, RAL 7012</td>
<td>–</td>
<td>Exterior: Colour coating to choose Interior: Basalt grey protective paint, RAL 7012</td>
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<tr>
<td><strong>Standard colours</strong></td>
<td>RAL 9002 RAL 9006</td>
<td>–</td>
<td>RAL 9002 RAL 9006</td>
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<tr>
<td><strong>Preferred colours</strong></td>
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<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Special colours</strong></td>
<td>•</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Profile height</strong></td>
<td>119 mm</td>
<td>119 mm</td>
<td>119 mm</td>
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<tr>
<td><strong>Curtain weight</strong></td>
<td>Approx. 6.0 kg/m²</td>
<td>Approx. 15.0 kg/m²</td>
<td>Approx. 5.5 kg/m²</td>
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<tr>
<td><strong>Wind load class 2 up to a door width of</strong></td>
<td>7500 mm</td>
<td>10000 mm</td>
<td>5500 mm</td>
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<tr>
<td><strong>Heat transmission EN 12428 (single profiles)</strong></td>
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<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Door type</strong></td>
<td>SB Rolling Shutter DD rolling shutter Classic rolling shutter</td>
<td>DD rolling shutter Classic rolling grille</td>
<td>SB Rolling Shutter DD rolling shutter Classic rolling shutter</td>
</tr>
<tr>
<td><strong>Windows</strong></td>
<td>•</td>
<td>•</td>
<td>–</td>
</tr>
<tr>
<td><strong>Ventilation slots</strong></td>
<td>***</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
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.

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

The curtains for SB, TGT, DD rolling grilles are supplied as standard with wind locks or pull-out protection. For further information, please see page 36.
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 x 40 mm square holes can be provided in a straight or offset arrangement.

Compact fitting dimensions and RC 2 security – optimal for store entrances
Thanks to its compact design, the new RollMatic rolling grille is the ideal solution for small store entrances in the tightest of spaces. The RollMatic rolling grille is available in the curtain variants HG-L and HG 75. The combination with the AD 100 sliding door combines the requirements of a convenient automated daytime entrance and escape route as well as secure night time locking. This combination meets the RC 2 requirement (tested and approved) when the door and grille are closed.

More information can be found in the brochures “Rolling Grille RollMatic” and “Automatic Door Systems”.
**Wind Lock and Break-In-Resistance**

*For a sturdy and safe operation*

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## Pull-out protection and wind lock

All rolling shutter and rolling grille curtains for door types SB, TGT and DD are supplied as standard with wind lock or pull-out protection. These prevent the curtain from being pushed out of the side guides. That is effective break-in-resistance! Furthermore, the potential wind loads that can affect the door are increased by this construction.

### Engaging solutions

- **DD rolling shutter Decotherm S profile with steel wind lock** (standard)
  - (from 5000 mm door width or height or optionally higher wind load requirements)
- **DD rolling shutter Decotherm S profile with plastic wind lock** (standard)
- **DD rolling shutter HR 116 A profile with steel wind lock**
- **DD rolling grille curtain HG-L, HG-V, HG-S with pull-out protection (shown HG-L)**
- **SB / TGT rolling shutter Decotherm S profile with plastic wind lock**
Break-In-Resistant Locks

Locks the bottom profile with 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.

**External view**

**Viewed from inside**

**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 can be 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.
**Side door NT 60**

- For all rolling shutter and rolling grille curtains
- 60 mm aluminium frame construction
- As standard with all-round seals made of long-lasting, weather-resistant EPDM
- Two-part hinges, three-way adjustable
- Curtains fixed by glazing beads
- Also available with a fascia panel

**Fittings**

- Mortice lock with profile cylinder
- Offset lever handle set with oval rose escutcheon, made of black plastic
- On request also available as lever / knob handle sets
- Optionally available in natural finish cast aluminium, polished stainless steel or brushed stainless steel

**Optional equipment**

- Stainless steel push bar 38-2, brushed, 1000 mm high, outside, additionally with stainless steel lever handle set, inside
- Overhead door closer with hold-open device
- Push bar for escape door, inside (panic lock required)
- Multiple-point locking
- Window section with synthetic double pane
Steel side doors with thermal break

MZ Thermo65 multi-purpose door

- 65-mm-thick door leaf with thermal break and PU rigid foam infill
- Aluminium block frame with thermal break and threshold with thermal break
- High thermal insulation with a U-value = 0.82 W/(m²·K)
- Optionally available in a WK 2 KSI Thermo version with 42-mm-thick door leaf

Additional information can be found in the Function doors for construction projects 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.
The Safety of Hörmann Rolling Shutters and Rolling Grilles Is Certified

Safety features according to the 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.

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.

Curtain cover
The optional curtain cover for door types SB, TGT and DD prevents operators from reaching into the hazard area of the door curtain in accordance with the EN 13241-1 requirements.

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 the European standard 13241-1 Hörmann products are tested and certified for:

- Thermal insulation
- Acoustic insulation
- Sealing
- Wind load

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 double-skinned door profiles compared with other rolling shutters.

Acoustic insulation
The door’s curtain and sealing technology reduce noise from both outside and inside.

Sealing

Double-skinned DD and classic rolling shutters have all-round sealing. This is ensured by a frost-proof flexible lip seal along the bottom edge, a brush seal at the lintel optimally adapted to the door size, as well as a fine bristle seal in the side guides.

Stability

Robust wink locks and deflection-resistant bottom profiles enable your door to withstand high wind loads.

DD rolling shutter Decotherm S profile with steel wind lock
Better with a system

This means 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
Operators WA 250 R S4 / WA 300 R S4
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 when button is pressed (press-and-hold operation)
• Low power consumption in standby of approx. 1 watt (if no other electrical accessories are connected)
• Soft start and soft stop for gentle door 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
• Automatic opening and closing after pressing the button (impulse operation)
• Low power consumption in standby of approx. 1 watt (if no other electrical accessories are connected)
• Soft start and soft stop for gentle door operation
• 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)

Power limit in “Open” and “Close” directions as standard

• Easy to fit, since no closing edge safety device and lintel trap guard needs to be installed on the door
• Low maintenance, as there are no sensors with spiral cables susceptible to wear fitted to the door curtain
• Economical, due to short fitting times and low maintenance requirements

Impulse operation without closing edge safety device

- Size range for Decotherm S rolling shutters, HG-L rolling grilles and TGT rolling shutters / rolling grilles
- Size range for the TGT HG-L rolling grille

<table>
<thead>
<tr>
<th>Door height</th>
<th>1000</th>
<th>2000</th>
<th>3500</th>
<th>4500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door width</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Easy fitting without forklift with the optional gearbox fitting (for rolling shutters with Decotherm S curtain and rolling grilles with HG-L curtain)
Operator WA 300 AR S4
For SB rolling shutters / rolling grilles

WA 300 AR S4 The compact 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
- 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
- Suitable for indoor and outdoor use, optimally suited for shop and underground garage doors

Power limit in “Open” and “Close” directions as standard

- Impulse operation without closing edge safety device (see page 46 below)
- **Easy to fit**, since no closing edge safety device and lintel trap guard needs to be installed on the door
- **Low maintenance**, as there are no sensors with spiral cables susceptible to wear fitted to the door curtain
- **Economical**, due to short fitting times and low maintenance requirements

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
Accessory Package S6 with 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 1-phase FU operator with soft start and soft stop for gentle door travel
- Up to 30 door cycles per hour or 300 per day possible
- The door construction is designed for at least 200,000 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
- 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 8500 mm
Direct Drive, Chain Drive and Tubular Operators
For classic rolling shutter / rolling grille

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

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

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 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.

Modular solutions, compatible with the Hörmann operator technology

Controlled processes through visualisation on a control panel or web application

Individual in-house project development
## Controls

**Compatible system solutions**

<table>
<thead>
<tr>
<th>OPERATORS</th>
<th>Internal control WA 250 R S4</th>
<th>Internal control WA 300 R S4</th>
<th>External control 300</th>
<th>External control 360</th>
<th>Impulse control 445 R</th>
<th>Comfort control 460 R</th>
</tr>
</thead>
<tbody>
<tr>
<td>WA 250 R S4 for SB rolling shutter / rolling grille</td>
<td>●</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>WA 300 R S4 for SB / TGT rolling shutter / rolling grille</td>
<td>–</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>WA 300 AR S4 for SB rolling shutter / rolling grille</td>
<td>–</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Direct drive operator for DD rolling shutter / rolling grille</td>
<td>–</td>
<td>–</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Accessory package S6 for rolling shutter DD</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Direct drive, chain drive and tubular operator for classic rolling shutter / rolling grille</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

### 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: ○ ○ ○ ○ ○ ○
- Second opening height with additional button on the housing cover: – ○ ○ ○ ○ ○ ○
- 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): – – – ○ ○ ○ ○
- Extension possible with external radio receiver: – ● ● ● ● ● ●
- Automatic timer: ● ● ● ● ● ●
- Traffic control**: ● ○ ○ ○ ○ ○
- Integrated connecting terminals for additional command units: – ● ● ● ● ● ●
- Function lock via miniature lock: ○ ○ ● ● ● ● ●
- 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: ● ● ● ● ● ●

### Accessories

- Main switch integrated into control housing: – ○ ○ ○ ○ ○
- 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
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 46)
5) Convertible to profile half cylinder

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52
## Internal control

- **WA 250 R S4** for SB rolling shutter / rolling grille
- **WA 300 R S4** for SB / TGT rolling shutter / rolling grille
- **WA 300 AR S4** for SB rolling shutter / rolling grille
- **Direct drive operator** for DD rolling shutter / rolling grille
- **Accessory package S6** for rolling shutter DD, Direct drive, chain drive and tubular operator

### 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**
- **Second opening height with additional button on the housing cover**
- **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)**
- **Extension possible with external radio receiver**
- **Automatic timer**
- **Traffic control**
- **Integrated connecting terminals for additional command units**
- **Function lock via miniature lock**

### Notes:

- **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

### Power supply

- **230 V**

### Accessories:

- **Profile half cylinder** for all external controls
- **Push button control 300 U** (figure above) forms a compact unit with dock leveller controls 420 S and 420 T. 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).

### Optional:

- **Main switch** for all external controls
- **Key switch post STI 1** for installing a maximum of 2 controls with additional housing. Colour: White aluminium RAL 9006 Dimensions: 200 x 60 mm, height 1660 mm

### On request with integrated option relay:

- “Open” limit switch reporting for dock leveller release
- No magnetic switch required on the door
- Minimum cabling required
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 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
Black textured with chrome caps

1-button hand transmitter
HS 1 BS
Black textured 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

4-button hand transmitter
HSE 4 BS
Black textured surface with chrome or plastic caps

1-button hand transmitter
HSE 1 BS
Black textured 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.
<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
</table>
| **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 |
| **Radio code switch**         | FCT 3 BS  
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 |
| **2-channel relay receiver**  | HER 2 BS  
With 2 volt-free relay outputs with status query and external antenna |
| **2-channel relay receiver**  | HER 24 BS  
With 2 volt-free relay outputs for choosing the direction, a 2-pin input for volt-free Open and Close limit switch reporting (for querying the door position) |
| **4-channel relay receiver**  | HER 4 BS  
With 4 volt-free relay outputs with status query |
| **3-channel receiver**        | HERI 3 BS  
For controlling 3 functions |
| **Bi-directional receiver**   | ESEI BS  
For querying door position |
### Accessories

#### Push buttons

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Dimensions</th>
<th>Protection category</th>
<th>Controls Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Push button DTH-R</td>
<td>For separate control of the door in the “Open” / “Close” positions, with separate stop button.</td>
<td>$90 \times 160 \times 55$ (W x H x D)</td>
<td>IP 65</td>
<td>360, 445 R, 460 R, B 455 R and integrated controls WA 250 R S4, WA 300 R S4</td>
</tr>
<tr>
<td>Push button DTH-RM</td>
<td>For separate control of the door in the “Open” / “Close” positions, with separate stop button, with miniature lock (operator is deactivated). Operator movement is no longer possible.), 2 keys included in the scope of delivery.</td>
<td>$90 \times 160 \times 55$ (W x H x D)</td>
<td>IP 65</td>
<td>360, 445 R, 460 R, B 455 R and integrated controls WA 250 R S4, WA 300 R S4</td>
</tr>
<tr>
<td>Push button DTH-I</td>
<td>For control of the door in the “Open / Close” positions, with separate stop button, 1/2-open button to open the door up to the programmed intermediate travel limit.</td>
<td>$90 \times 160 \times 55$ (W x H x D)</td>
<td>IP 65</td>
<td>360, 460 R and integrated controls WA 300 R S4</td>
</tr>
<tr>
<td>Push button DTH-IM</td>
<td>For control of the door in 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. Operator movement is no longer possible.), 2 keys included in the scope of delivery.</td>
<td>$90 \times 160 \times 55$ (W x H x D)</td>
<td>IP 65</td>
<td>360, 460 R and integrated controls WA 300 R S4</td>
</tr>
<tr>
<td>Push button DT 02</td>
<td>For control of the door in the “Open / Close” positions, with separate stop button.</td>
<td>$75 \times 145 \times 70$ (W x H x D)</td>
<td>IP 65</td>
<td>360, 445 R, 460 R and B 455 R</td>
</tr>
<tr>
<td>Push button DT 03</td>
<td>For separate control of both operational directions, with separate stop button.</td>
<td>$75 \times 180 \times 70$ (W x H x D)</td>
<td>IP 65</td>
<td>360, 445 R, 460 R and B 455 R</td>
</tr>
<tr>
<td>Push button DT 04</td>
<td>For separate control of the door in the “Open / Close” positions, with separate stop button, 1/2-open button to open the door up to the programmed intermediate travel limit.</td>
<td>$75 \times 225 \times 70$ (W x H x D)</td>
<td>IP 65</td>
<td>360, 460 R and B 455 R</td>
</tr>
<tr>
<td>Push button DTN A 30</td>
<td>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.</td>
<td>$75 \times 180 \times 105$ (W x H x D)</td>
<td>IP 65</td>
<td>360, 445 R, 460 R and B 455 R</td>
</tr>
</tbody>
</table>
Accessories
Push buttons, key switches, key switch posts

<table>
<thead>
<tr>
<th>Push button DTP 02</th>
<th>Push button DTP 03</th>
<th>Emergency-off button DTN 10</th>
<th>Emergency-off button DTNG 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>For 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).</td>
<td>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).</td>
<td>To quickly immobilise the door, push-to-lock button (mushroom button), surface-mounted.</td>
<td>To quickly immobilise the door, push-to-lock mushroom button, Surface-mounted</td>
</tr>
<tr>
<td>Dimensions: 77 × 235 × 70 mm (W × H ×D)</td>
<td>Dimensions: 77 × 270 × 70 mm (W × H ×D), Protection category: IP 44</td>
<td>Dimensions: 93 × 93 × 95 mm (W × H ×D), Protection category: IP 65</td>
<td>Dimensions: 93 × 93 × 95 mm (W × H ×D), Protection category: IP 65</td>
</tr>
<tr>
<td>For controls 360, 445 R, 460 R, B 455 R and integrated control WA 300 R S4</td>
<td>For controls 360, 445 R, 460 R, B 455 R and integrated controls WA 250 R S4, WA 300 R S4</td>
<td>For controls 360, 445 R, 460 R, B 455 R and integrated controls WA 250 R S4, WA 300 R S4</td>
<td>For controls 360, 445 R, 460 R, B 455 R and integrated controls WA 250 R S4, WA 300 R S4</td>
</tr>
</tbody>
</table>

The lockable function serves to isolate the control voltage and immobilises the command units. Profile half cylinders are not included in the scope of delivery for the push buttons.
**Accessories**

**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 × 110 × 17 mm (W × H × D),
Decoder housing:
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 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 × 75 × 13 mm (W × H × D),
Decoder housing:
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 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 × 110 × 39 mm (W × H × D)
Decoder housing:
70 × 275 × 50 mm (W × H × 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). Alternatively, transponder cards can also be used.

Dimensions:
60 × 110 × 17 mm (W × H × D),
Decoder housing:
140 × 130 × 50 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
Accessories
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: 45 × 86 × 39 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: weather protective cover (not shown), 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:
45 × 85 × 31 mm (W × H × D)
Protection category: IP 65
Optional: weather protective cover (not shown)

Pull switch ZT 2 with cord
Impulse generation to open or close the door
Dimensions:
60 × 90 × 55 mm (W × H × 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 HLG-V as advance protection
The light grille additionally monitors the main closing edge of the door at a height of 2500 mm.
Fitting is possible both on the outside on the facade and in the reveal as well as to the guide rail.
Optionally, the HLG-V can also be integrated into the key switch post set STL made of weather-resistant anodised aluminium.
Max. range: max. 10 m,
protection category: IP 65,
operating temperature: −20 °C to +60 °C,
resolution: < 50 mm (under 500 mm);
< 200 mm (over 500 mm),
increased security with cross-beam sensor technology,
easy alignment possible,
connection cables included in the scope of delivery

Fitting in the reveal
Fitting to the guide rail
Fitting with key switch post set STL

59
## Accessories

### Activating kit for warning lights, LED warning lights

#### Multi-function circuit board to be fitted in existing housing or optionally in separate extension housing (shown)
- 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 × 164 × 130 mm (W × H × 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 × 164 × 130 mm (W × H × D)
Protection category: IP 65

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### 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

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### Loop cable for induction loop
- Roll of 50 m,
- Cable designation: SIAF,
- Cross section: 1.5 mm²,
- Colour: brown
Warning lights with bright, long-lasting LEDs

Activating kit for warning light for fitting in an existing housing or optionally in a separate extension housing, incl. 2 yellow warning lights

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 × 250 × 290 mm (W × H ×D)
Dimensions of additional housing:
202 × 164 × 130 mm (W × H ×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 × 410 × 290 mm (W × H ×D)
Dimensions of additional housing:
202 × 164 × 130 mm (W × H ×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
Optional: remote control for radar movement detector
## Overview of Rolling Shutters and Rolling Grilles

**Construction and quality features**

<table>
<thead>
<tr>
<th><strong>Wind load EN 12424</strong></th>
<th><strong>SB Rolling Shutter</strong></th>
<th><strong>SB rolling grille</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 2 up to door width in mm</td>
<td>Decotherm</td>
<td>HR 120</td>
</tr>
<tr>
<td>5000</td>
<td>5000</td>
<td>4000</td>
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<tr>
<td>Higher wind loads on request</td>
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<td>–</td>
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<tr>
<td>Wind lock</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

| **Water tightness EN 12425** | 0 | 0 | 0 | 0 | 0 |

| **Thermal insulation** | **Individual shutter section (U = W/m²K)** | 3.9 | – | – | – |
| **Shutter 4 x 4 m, fitted (U = W/(m²·K))** | 4.1 | – | – | – | – |

| **Door sizes** | Max. width (LZ) mm | 5000 | 5000 | 4000 | 6000 | 6000 |
| Max. height (RM) mm | 4500 | 4500 | 4000 | 4500 | 3500 |

| **Space requirements** | See the technical manual |

| **Curtain material** | Single-skinned steel | – | – | – | – |
| Double-skinned steel | ● | – | – | – | – |
| Single-skinned aluminium | – | ● | ● | ● | ● |
| Double-skinned aluminium | – | – | – | – | – |

| **Curtain surface** | Galvanized steel | – | – | – | – |
| Galvanized steel coated in RAL 9002 | – | – | – | – |
| Galvanized steel coated in RAL 9006 | – | – | – | – |
| Galvanized steel coated in RAL to choose | – | – | – | – |
| Bright-rolled aluminium | – | ● | ● | – | – |
| Mill-finished aluminium | – | – | – | ● | – |
| Stucco-textured aluminium | – | – | – | – | – |
| Aluminium coated in RAL 9002 | – | ○ | ○ | ○ | ○ |
| Aluminium coated in RAL 9006 | – | ○ | ○ | ○ | ○ |
| Aluminium coated in RAL to choose | – | ○ | – | ○ | ○ |
| Anodised aluminium E6 / EV 1 | – | – | – | ● | – |

| **Own weight of curtain** | Approx. kg/m² | 10,3 | 6,0 | 5,5 | 6,5 | 6,7 |

| **Side door** | Matching the door | ○ | ○ | ○ | – | – |

| **Glazing** | Standard arrangement | ○ | ○ | – | – | – |
| Logistics arrangement | ○ | ○ | – | – | – |

| **Seals** | All-round on 4 sides | ○ | ○ | – | – | – |

| **Break-in-resistance** | Pull-out protection | ● | ● | ● | ● | ● |
| Internal locking | ○ | ○ | – | – | – |
| External / internal locking | ○ | ○ | ○ | ○ | ○ |

| **Anti-lift kit** | – | – | – | ● | ● |

| **Safety equipment** | Finger trap protection | ● | ● | ● | – | – |
| Side trap guard | ○ | ○ | – | – | – |
| Safety catch | ● | ● | ● | ● | ● |

| **Fastening options** | Concrete | ● | ● | ● | ● |
| Steel | ● | ● | ● | ● | ● |
| Brickwork | ● | ● | ● | ● | ● |
| Timber | ● | ● | ● | ● | ● |

* RAL 9016, RAL 7035, RAL 9006, RAL 5011, RAL 8028, RAL 7016, RAL 9005
** Shutter 4 x 2.4 m, fitted
<table>
<thead>
<tr>
<th>TGT rolling shutter / rolling grille</th>
<th>DD rolling shutter</th>
<th>DD rolling grille</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decotherm HG-L</td>
<td>Decotherm HR 116</td>
<td>HR 120</td>
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<td>3,9</td>
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<td>3,9</td>
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<tr>
<td>4,2**</td>
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<td>5000</td>
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<td>10000</td>
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<tr>
<td>2400</td>
<td>2400</td>
<td>8000</td>
</tr>
</tbody>
</table>

| Door sizes |
| Max. width (LZ) mm | Max. height (RM) mm |
| 5000 | 4500 |
| 5000 | 4500 |
| 4000 | 4000 |
| 6000 | 6000 |
| 6000 | 6000 |
| 5000 | 2400 |
| 6000 | 2400 |
| 8000 | 8000 |
| 8000 | 8000 |
| 10000 | 8000 |
| 12000 | 8000 |
| 12000 | 8000 |
| 12000 | 5500 |
| 12000 | 8000 |
| 12000 | 8000 |
| 9000 | 8000 |
| 12000 | 8000 |

| Curtains material |
| Single-skinned steel | – – – – – |
| Double-skinned steel | ● – – – – |
| Single-skinned aluminium | – ● ● ● ● |
| Double-skinned aluminium | – – – ● – – – – – – |

| Curtain surface |
| Galvanized steel | ● – – – – |
| Galvanized steel coated in RAL 9002 | ○ – – – – |
| Galvanized steel coated in RAL 9006 | ○ – – – – |
| Galvanized steel coated in RAL to choose | ○ – – – ○ |
| Bright-rolled aluminium | – ● ● – – |
| Mill-finished aluminium | – – – ● – |
| Stucco-textured aluminium | – – – – – |
| Aluminium coated in RAL 9002 | – ○ ○ ○ – |
| Aluminium coated in RAL 9006 | – ○ ○ ○ ○ |
| Aluminium coated in RAL to choose | – ○ – ○ ○ * |
| Anodised aluminium E6 / EV 1 | – ○ – ○ – |

| Own weight of curtain |
| Approx. kg/m² | 10,3 | 6,0 | 5,5 | 6,5 | 6,7 |
| 10,3 | 6,5 | 10,0 | 6,0 | 15,0 | 5,5 |
| 6,5 | 7,5 | 15 |

| Side door |
| Matching the door | ○ ○ ○ – – |
| Glazing |
| Standard arrangement | ○ ○ – – – |
| Logistics arrangement | ○ ○ – – – |
| Seals |
| All-round on 4 sides | ○ ○ – – – |
| Break-in-resistance |
| Pull-out protection | ● ● ● ● ● |
| Internal locking | ○ ○ ○ ○ ○ |
| External / internal locking | ○ ○ ○ ○ ○ |
| Anti-lift kit | – – – ● ● |

| Safety equipment |
| Finger trap protection | ● ● ● – – |
| Side trap guard | ○ ○ ○ ○ ○ |
| Safety catch | ● ● ● ● ● |

| Fastening options |
| Concrete | ● ● ● ● ● |
| Steel | ● ● ● ● ● |
| Brickwork | ● ● ● ● ● |
| Timber | ● ● ● ● ● |

* RAL 9016, RAL 7035, RAL 9006, RAL 5011, RAL 8028, RAL 7016, RAL 9005

** Shutter 4 x 2.4 m, fitted
# Overview of Rolling Shutters and Rolling Grilles

**Construction and quality features**

- **●** = Standard
- **○** = Optional

<table>
<thead>
<tr>
<th>Wind load EN 12424</th>
<th>Decotherm</th>
<th>Classic rolling shutter</th>
<th>HR 116</th>
<th>HR 120</th>
<th>S</th>
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<th>A</th>
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</thead>
<tbody>
<tr>
<td>Class 2 up to door width in mm</td>
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<td>10000</td>
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<td>10000</td>
<td>4500</td>
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<td>Higher wind loads on request</td>
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<td>Wind lock</td>
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<td>Water tightness EN 12425</td>
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<tr>
<td>Thermal insulation</td>
<td>Appendix B EN 12428</td>
<td>3.9</td>
<td>5.3</td>
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<tr>
<td>Individual shutter section (U = W/m²K)</td>
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<tr>
<td>Shutter 4 x 4 m, fitted (U = W/(m²·K))</td>
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<td>5.4</td>
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<td>Door sizes</td>
<td>Max. width (LZ) mm</td>
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<td>Max. height (RM) mm</td>
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<tr>
<td>Space requirements</td>
<td>See the technical manual</td>
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<td>Curtains</td>
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<tr>
<td>Curtain material</td>
<td>Single-skinned steel</td>
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<td>Double-skinned steel</td>
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<td>Double-skinned aluminium</td>
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<td>Curtain surface</td>
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<td></td>
<td>Galvanized steel coated in RAL 9002</td>
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<td></td>
<td>Galvanized steel coated in RAL 9006</td>
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<td>Galvanized steel coated in RAL to choose</td>
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<td>Bright-rolled aluminium</td>
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<td>Mill-finished aluminium</td>
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<td>Stucco-textured aluminium</td>
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<td>Aluminium coated in RAL 9006</td>
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<td>Aluminium coated in RAL to choose</td>
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<tr>
<td>Own weight of curtain</td>
<td>Approx. kg/m²</td>
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<td>10.0</td>
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<td>Side door</td>
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<td>Standard arrangement</td>
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<td>Logistics arrangement</td>
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<tr>
<td>Seals</td>
<td>All-round on 4 sides</td>
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<tr>
<td>Break-in-resistance</td>
<td>Pull-out protection</td>
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<td></td>
<td>Internal locking</td>
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<td>External / internal locking</td>
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<td>Anti-lift kit</td>
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<td>Safety equipment</td>
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<tr>
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* RAL 9016, RAL 7035, RAL 9006, RAL 5011, RAL 8028, RAL 7016, RAL 9005
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Everything from a single source for your construction project
Quick service with testing, maintenance and repairs
Our extensive service network means that we are always nearby and at your service around the clock.

1. Sectional doors
2. Rolling shutters and rolling grilles
3. High-speed doors
4. Loading technology
5. Steel and stainless steel sliding doors
6. Steel and aluminium multi-function doors
7. Steel and stainless steel doors
8. Steel frames with high-quality timber function doors from Schörghuber
9. Fully glazed tubular frame parts
10. Automatic sliding doors
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