



# NEW: High-speed folding doors

For high wind loads, large door openings and low temperatures

**HÖRMANN**

# High-speed folding doors

Interior, exterior and deep-freeze doors





### **Safe door operation**

Flexible high-speed folding doors speed up workflows and reduce energy costs. They feature safe door operation and a long service life thanks to standard equipment with a safety light grille or photocell and a robust frame with flexible guide belts. In fact, they offer even more benefits: flexible high-speed folding doors are low-maintenance, easy to fit, cost-efficient and therefore economical for daily use.

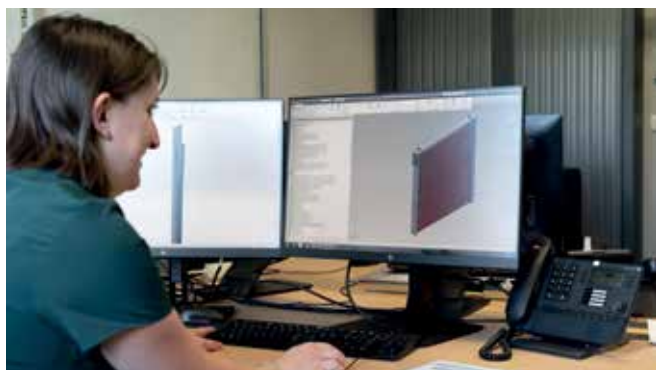
### **Robust solution**

The curtain is opened using a patented belt system with safety belts and folds in the lintel area. The galvanised steel wind reinforcement laths are arranged across the entire door height and withstand wind loads up to class 4 (optional).



# Hörmann brand quality

Future-oriented and reliable



## In-house product development

Highly-qualified technicians are constantly working on further developing and improving our products in order to meet the demands of the market. This results in economic designs of the highest standard.



## Precise production

Innovative production processes that have been matched perfectly with each other are a guarantee for steadily increasing product quality. An example: the modern hot air welding system that enables precise and automated welding of the door curtains.



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.



#### **Certified safety**

Hörmann high-speed folding doors are manufactured in line with stringent European standards and are, of course, certified.



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 support you from the planning stage, through technical clarification up to the final building inspection. Complete working documentation is not only available in printed form but is always accessible and up-to-date at [www.hoermann.com](http://www.hoermann.com)



### **Efficient service**

Our extensive service network means that we are never far away. This is a great advantage for testing, maintenance and repairs.

# Good reasons to try Hörmann

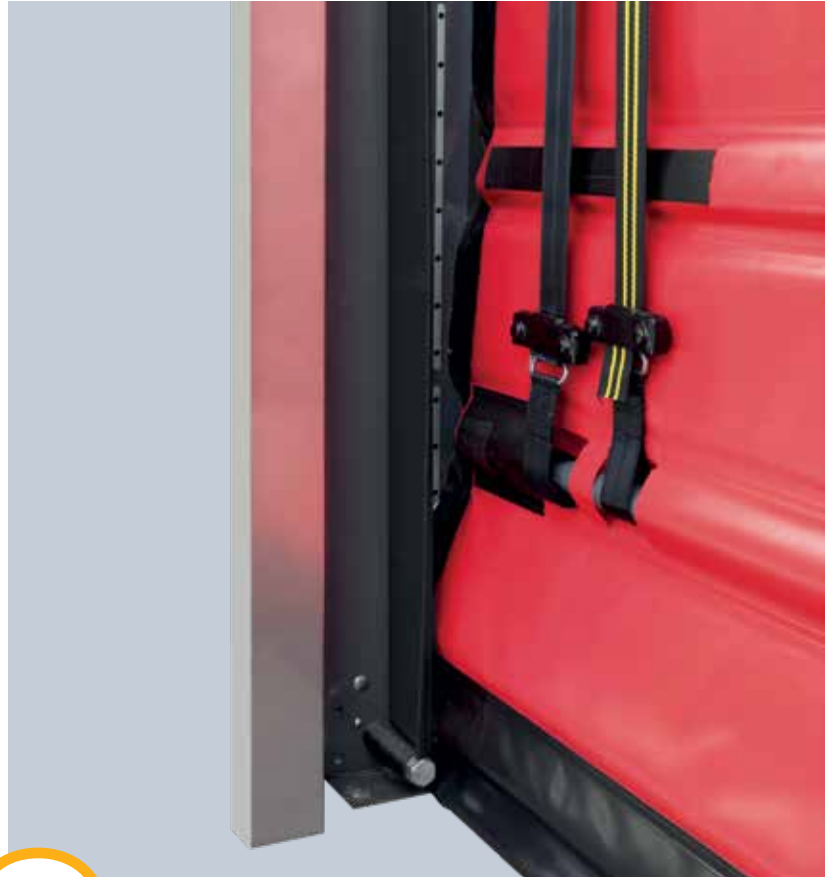
## Quality features of high-speed folding doors



# 1

### Standard safety light grille or photocell

The safety light grille integrated into the side elements in the F 6010 / F 6010 Iso monitors the closing zone of the curtain up to a height of 2500 mm. The door types F 14005 and F 4010 Cold are equipped with a photocell (not shown) for monitoring the closing zone. This **safety equipment meets the requirements of DIN EN 13241-1.**



# 2

### Standard anti-fall safeguard

The high-speed folding doors are opened and closed via 2 pull belts. **In addition, 2 further safety belts** secure the door curtain in the event of damage, e.g. tearing of the pull belts. **This patented belt system effectively prevents the door from crashing.**



# 3

## Flexible guide belts

The robust frame with innovative flexible guide belts prevents damage and resulting downtimes of the door system. In the event of a crash, the floor rail of the curtain is forced out of the guide belts. The curtain can then be reinserted and the door can be operated again. Another advantage of the flexible guide belts is **minimal noise during movement of the curtain and the wind reinforcement laths caused by the wind.**



# 4

## Individual colour schemes

To achieve a **harmonious door appearance**, all Hörmann high-speed folding doors are available with **coated side elements and covers as standard**. Choose from 5 standard colours at no extra charge or optionally from 6 special colours.

Different colours can be combined for curtains, side elements and covers to create **individual colour schemes**. Alternatively, you can have your company logo or lettering (max. 800 x 800 mm) printed on the curtain.



# High-speed folding door

Interior, exterior and deep-freeze doors



## Door type F 6010 / F 6010 Iso

The fast external door with opening speeds up to 1.0 m/s and openings up to 6 × 6 m

## Door type F 14005

The high-speed folding door with opening speeds up to 0.50 m/s for openings up to 14 m wide and 10 m high







**Door type F 4010 Cold**

The insulated deep-freeze door for temperatures up to  $-30\text{ }^{\circ}\text{C}$  with opening speeds up to  $1.0\text{ m/s}$  and openings up to  $4 \times 4.5\text{ m}$



# High-speed folding doors

## Interior, exterior and deep-freeze doors

### Door type F 6010 / F 6010 Iso For fast door opening up to wind class 4

The opening speed of up to 1.0 m/s accelerates work processes for external door openings and reduces the thermal losses and draughts at the door. The stable steel wind reinforcement laths are arranged at 600 mm intervals across the entire height of the door and enable reliable operation up to wind class 3 (optionally up to wind class 4).

In addition, the flexible UPVC guide belts minimise the noise of the curtain caused by wind. **For improved thermal insulation, we recommend the F 6010 Iso** with an insulated curtain.



**F 6010 / F 14005**  
1 × UPVC curtain with standard steel wind reinforcement laths



**F 6010 Iso**  
Improved thermal insulation due to the insulated curtain

### Door type F 14005 For large exterior door openings up to 14 m wide and 10 m high

The high-speed folding door F 14005 reduces energy loss and draughts at large external door openings of up to 14 m wide and 10 m high. The robust steel wind reinforcement laths guarantee that the doors reliably withstand wind loads of up to class 3 as standard. The door type F 14005 is optionally available with special wind reinforcement laths up to wind class 4.



**F 6010 / F 14005**  
Flexible guide belts prevent downtime after a crash



**F 6010 / F 14005**  
Optional window elements for improved visibility

### Door type F 4010 Cold For cold store areas with temperatures up to -30 °C

The flexible high-speed folding door F 4010 Cold is the optimal solution for all interior areas in cold store logistics. The triple-insulated curtain reliably reduces cooling losses in cold store areas and the opening speed of 1 m/s ensures the rapid flow of traffic for maintaining the cold chain. The standard heated frames mean that the F 4010 Cold can also be used in cold store areas with temperatures up to -30 °C.

#### Notice:

Useful optional extras provided on site, such as underfloor heating, air curtain systems or dehumidifiers, ensure the reliable function of the high-speed folding doors.



**F 4010 Cold**  
3 × insulated curtain for reducing cooling losses



**F 4010 Cold**  
Heated frames for use in cold store areas

## Equipment features

Door type	F 6010 / F 6010 Iso	F 14005	F 4010 Cold
Suitable application	Interior / exterior	Interior / exterior	Cold store area
Size range			
Width (mm)	Up to 6000	6000 to 14000	Up to 4000
Height (mm)	Up to 6000	4000 to 10000	Up to 4500
	AK E Optional: AK 500 FUE-1	AK E 700 M **	AK E
Speed with control	*		
Max. opening (m/s)	1,0	0,5	1,0
Closing approx. (m/s)	1,0	0,5	1,0
Security			
Light grille	●	–	–
Photocell	–	●	●
Closing edge safety device	○	–	–
Resistance to wind load (EN 12424)			
Up to wind class 2	–	●**	–
Up to wind class 3	●	●**	–
Up to wind class 4	○	○**	–
Curtain	UPVC, steel wind reinforcement laths	UPVC, steel wind reinforcement laths	3 × UPVC, fibreglass composite material
Temperature range ***	+5 °C to +40 °C	+5 °C to +40 °C	-30 °C to +5 °C
Fabric thickness (mm)	1,0	1,0	1,0
Vision field	○	○	–
Curtain colours			
Standard colours	●	●	●
Special colours	○	○	○
Side element colours			
Galvanized	●	–	●
Standard colours, coated	●	●	●
Special colours, coated	○	○	○
Stainless steel	○	–	○

● = Standard ○ = Optional

\* Max. 60 cycles per hour

\*\* Dependent on door size

\*\*\* Deviating temperatures on request

All colours based on RAL

## Standard colours



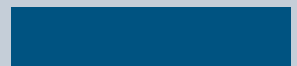
RAL 1018 Zinc yellow



RAL 2004 Pure orange



RAL 3002 Carmine red

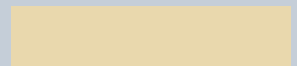


RAL 5010 Gentian blue

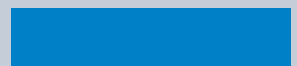


RAL 7038 Agate grey

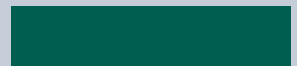
## Special colours



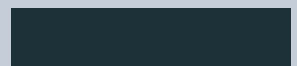
RAL 1015 Light ivory



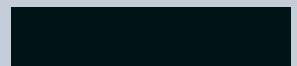
RAL 5015 Sky blue



RAL 6026 Opal green



RAL 7016 Anthracite grey



RAL 9005 Jet black



RAL 9010 Pure white



# Controls

For high-speed folding doors F 6010 / F 6010 Iso and F 4010 Cold



## AK E

Reversing contactor control in plastic housing, three-phase, 400 V

### Operation

Open / Stop / Close membrane push button

### Function

Automatic timer, adjustable hold-open phase, safety line curtain, photocell, closing edge safety device, stop / re-open

### Extension options

Main switch, emergency-off button, traffic light, flashing warning light, locking, intermediate stop, extension circuit board, stainless steel cabinet IP 65

### Wiring

Connecting lead 3 ~ 400 V, N, PE, fuse 10 A, slow-acting, plug-in connection between door operator and control cabinet as cable set, 6.5 m, CEE plug, 5-pin with 1 m cable for on-site CEE socket, 16 A

### Housing dimensions

180 × 320 × 100 mm



## AK 500 FUE-1

FU control in plastic housing, IP 54, three-phase, 400 V

### Operation

Open / Stop / Close membrane push button, emergency-off button, 4 × 7-segment display for information on door functions, lockable main switch

### Function

Automatic timer, adjustable hold-open phase, safety line curtain, closing edge safety device, stop / re-open

### Extension options

Traffic light, flashing warning light, locking, intermediate stop, extension PCB  
Stainless steel cabinet IP 65

### Wiring

Connecting lead 3 ~ 400 V, N, PE, fuse 16 A, slow-acting, plug-in connection between door operator and control cabinet, connecting lead cross-section 5 × 2.5 mm<sup>2</sup> (depending on national standards), colour-coded plug-in control wiring

### Housing dimensions

230 × 460 × 200 mm



## Extension PCB for AK 500 FUE-1

### Expansion card with 6 relays

Lock controller

6 additional switch outputs  
(1 × 4, 2 × 1 volt-free) 6 additional digital inputs

### Expansion card with 1 relay

Lock controller 1 additional switch output



## Induction loop detector

1- or 2-channel plug-in print suitable for 2 separate induction loops, supplied without loop cable

# Accessories

For high-speed folding doors F 6010 / F 6010 Iso and F 4010 Cold



**4-button hand transmitter  
HS 4 BS**  
Black textured surface  
with chrome caps



**Industrial hand transmitter  
HSI 6 BS**  
To control up to 6 doors,  
with extra-large buttons for  
easier operation with work gloves,  
impact-resistant housing,  
IP 65



**Radar movement detector MWD**  
Fast and targeted automatic  
door opening, directional  
recognition, max. fitting height  
7 m, fitting in cold store possible  
to max. - 22 °C,  
IP 65



**Pull switch with plastic pull cord**  
Horizontal or vertical fitting  
possible, aluminium die-cast  
housing, IP 65, cord length 4 m



**Push button**  
2 x "Open / Close",  
plastic housing,  
IP 65



**Push button**  
3 x "Open / Emergency-off / Close",  
plastic housing,  
IP 65



**Mushroom button**  
With large operating surface,  
plastic housing,  
IP 65



**Radar button HTR 1-24**  
Sensor for non-contact opening,  
plastic housing,  
IP 41



**Warning light Ø 150 mm**  
Red, plastic housing  
with mounting strap,  
IP 65



**Warning light Ø 150 mm**  
Red, green, plastic housing  
with fitting support, IP 65



**Rotating warning light**  
Red or yellow, plastic housing,  
IP 54



**Flashing warning light**  
Orange, plastic housing,  
IP 65

# Controls and accessories

## For high-speed folding doors F 14005



### AK E 700 M

Reversing contactor control in plastic housing, three-phase, 400 V or 230 V

#### Operation

Open / Stop / Close membrane push button, main switch, emergency-off button

#### Function

Automatic timer, adjustable hold-open phase, safety line curtain, stop / re-open

#### Extension options

Traffic light, flashing warning light, locking,

#### Wiring

Connecting lead 3 ~ 400 V, PE, fuse 10 A, slow-acting, or connecting lead 3 ~ 230 V, PE, fuse 25 A, slow-acting

#### Housing dimensions

400 × 500 × 200 mm



### 4-button hand transmitter

Black



### Pull switch with cord

Horizontal or vertical fitting possible, aluminium die-cast housing, IP 65, cord length 4 m



### Radio receiver

For control via hand transmitter



### Push button

3 × "Open / Emergency-off / Close", plastic housing, IP 65



### Push button

2 × "Open / Close", plastic housing, IP 65



### Mushroom button

With large operating surface, plastic housing, IP 65



### Induction loop

Detector with normally open contact and changeover contact, can be set to pulse or permanent contact, direction recognition, 50 m loop cable



### Radar sensor

Fast and targeted automatic door opening, directional recognition, IP 65



### Rotating warning light

Red or yellow, plastic housing, IP 54

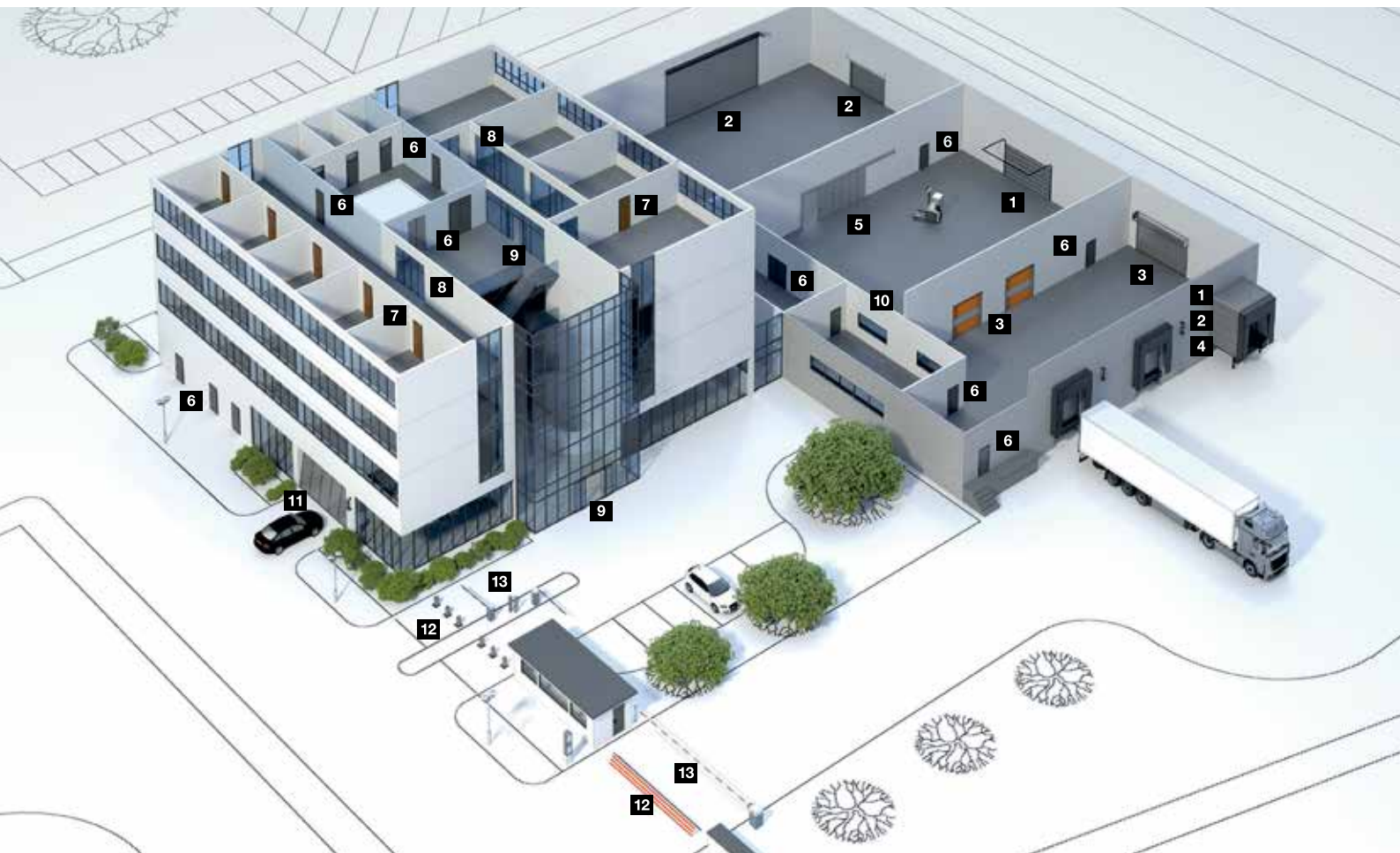


# Hörmann Product Range

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



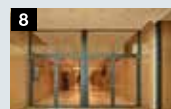
**5** Steel and stainless steel sliding doors



**6** Steel and stainless steel construction project doors



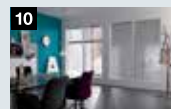
**7** Steel frames with high-quality timber function doors from Schörghuber



**8** Tubular frame construction project doors



**9** Automatic sliding doors



**10** Visibility window



**11** Collective garage doors



**12** Bollards and road blockers



**13** Barrier and pay station systems

# Hörmann: Quality without Compromise



Hörmann KG Amshausen, Germany



Hörmann KG Antriebstechnik, Germany



Hörmann KG Brandis, Germany



Hörmann KG Brockhagen, Germany



Hörmann KG Dissen, Germany



Hörmann KG Eckelhausen, Germany



Hörmann KG Freisen, Germany



Hörmann KG Ichtershausen, Germany



Hörmann KG Werne, Germany



Hörmann Alkmaar B.V., Netherlands



Hörmann Legnica Sp. z o.o., Poland



Hörmann Beijing, China



Hörmann Tianjin, China



Hörmann LLC, Montgomery IL, USA



Hörmann Flexon LLC, Burgettstown PA, USA



Shakti Hörmann Pvt. Ltd., India

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 Asia, 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**