



# HSW ComfortDrive

Fully automatic  
operating system  
for glass panel  
partitions

## The HSW ComfortDrive fully automatic glass partition operator. Opening up new horizons.

### Quick and easy frontage, foyer and showroom adaptation

The HSW ComfortDrive is the fully automatic partition within the HSW portfolio – a model that offers outstanding convenience in flexible space utilisation. At the push of a button it enables showrooms and presentation areas, foyers, shops and self-service zones in banks to be adapted quickly and efficiently to daily changing requirements. With this system, multi-functional space management is a truly simple affair.

### Advanced technology – the ComfortDrive operating system.

With the HSW ComfortDrive, transparent partition elements can be moved to their individually preprogrammed positions under fully automatic control. The control interface takes the form of a user-friendly touch screen. A high level of safety is ensured by an integrated monitoring system that stops the partition motions the moment contact is made with an obstacle.

### Spatial management at the push of a button.

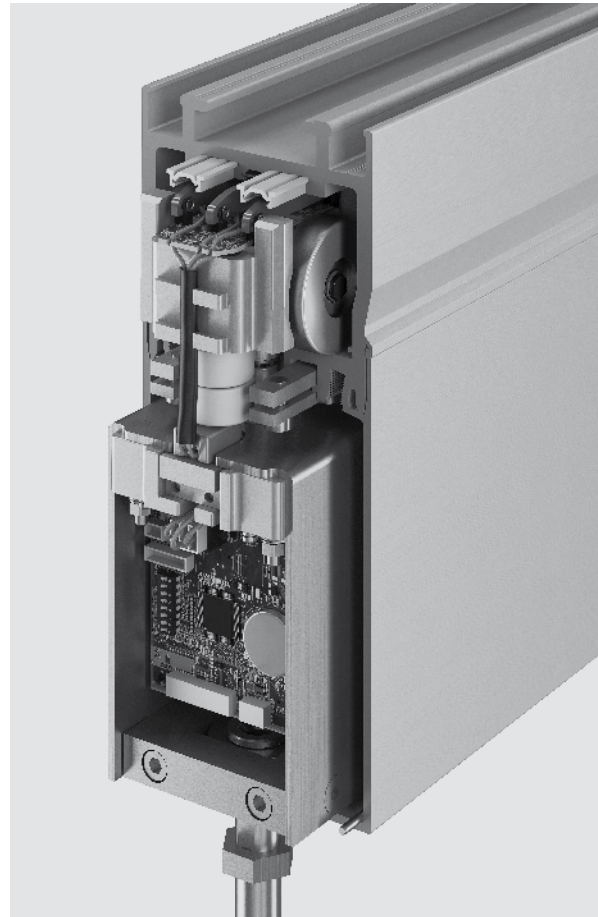
The HSW ComfortDrive can be controlled with just one finger operating a central touch screen. Aside from the standard functions “Open”, “Close” and “Stop”, a number of special positioning modes such as “One element open” (“Personnel opening” function), “Gapped configuration” or various free positioning patterns can be individually programmed and selected.



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## The benefits at a glance

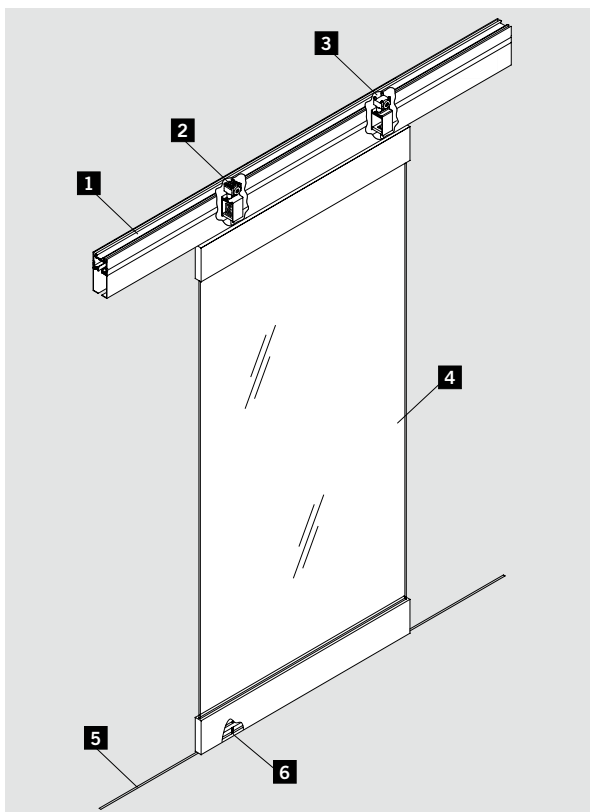
- Fully automatic actuation at the push of a button
- Exceptional convenience with dynamic opening and closing speeds of up to 250 mm/s
- Easy operation with self-explanatory touch screen
- Aesthetically elegant with slender track profile of just 98 mm in width
- Several element types and partition systems can be combined within one layout
- High level of safety ensured by an integrated monitoring system that stops and reverses the partition on contact with an obstacle – TÜV-GS safety-tested.
- Satisfies German statutory requirements governing powered windows, doors, shutters and gates: BGR 232, UVV (accident prevention) and VDE (electrical safety)
- Smart control system: elements communicate while on the move
- Individually programmable for custom configuration
- Parameterisable micro-processor control (bus system) for activation and monitoring of the operational sequence and functions
- Last element equipped with an electro-mechanical lock to prevent unauthorised operation
- In the event of a power failure, the partition can be manually operated
- Up to 30 elements per partition system, with up to 50 metres of track
- Element heights up to 4,000 mm
- Single element weights up to 250 kg
- High spatial configuration flexibility



Technical data	ComfortDrive
Track width	98 mm
Operator height	238 mm
Max. length with one control unit	50 m
Max. number of elements	30
Element width	600 – 1,500 mm
Max. element height	4,000 mm
Max. element weight	250 kg
Radius (directional changes)	150 mm
Track layouts	straight and segmented curved (min. radius 3 m)
Hold-open time, personnel access	variable
Travel speed	dynamic response up to 250 mm/s
Force limited to	150 N
Parameterisation	with laptop
Power consumption, stand-by mode	20 W
Max. power consumption (20 elements)	1,000 W
Electro-mechanical locking device	●
Manual unlocking	●
TÜV-GS safety-tested	●
Line fuse	16 A
Power supply	230 VAC
Power supply within operator	36 VDC
Class of protection	I

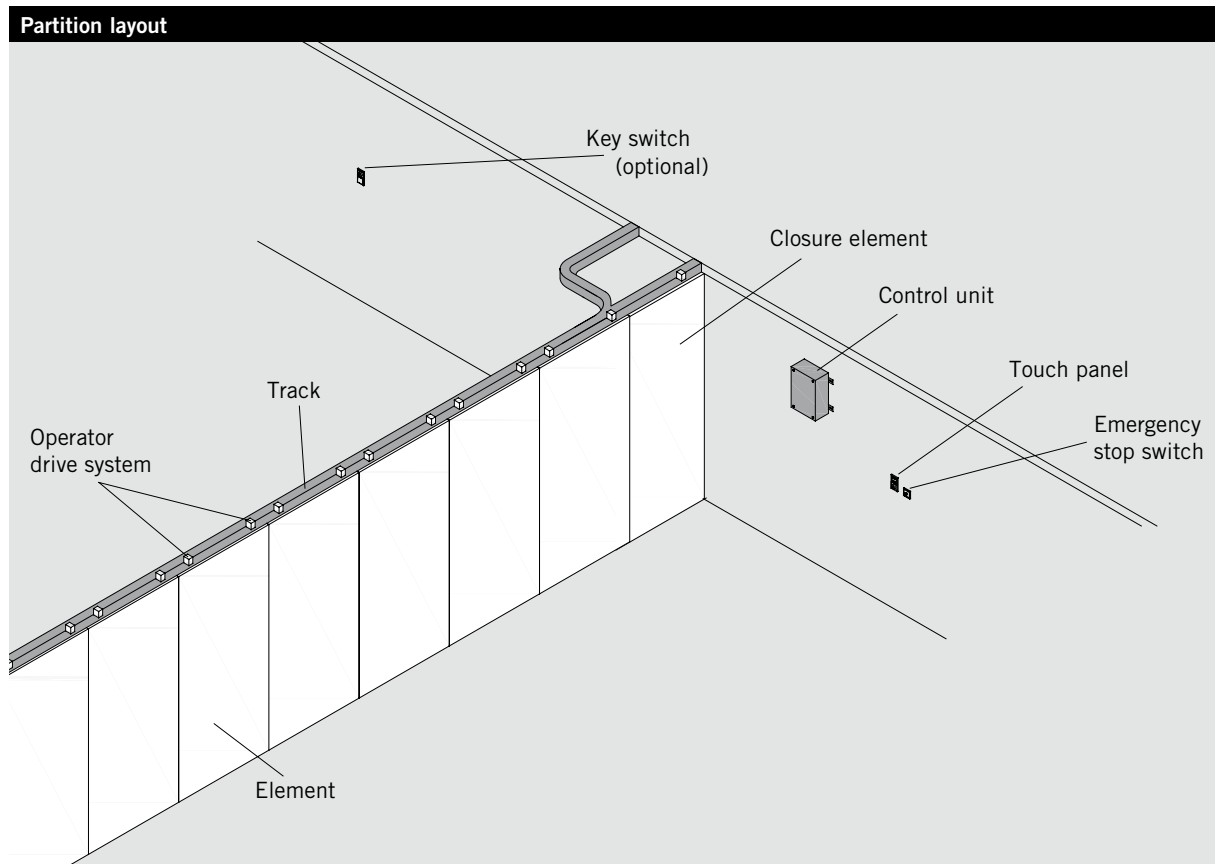
Control functions	
Touch panel functions	
Basic functions	
OPEN	●
CLOSE	●
STOP	●
Extended basic functions	
Partial opening / Partial closing	○
Personnel opening	○
Gapped configuration	○
Special modes	
Zonal opening	○
Free positioning	○
Key switch for personnel access	○
Emergency power module	○
Floating contact	●
Bus interface	●
Status feedback signalling	●

● Standard    ○ Option



### System structure

- 1** Ceiling-mounted load-bearing guide track with busbar system and cover
- 2** Driven carriers with element suspension mountings
- 3** Non-driven carriers with element suspension mountings
- 4** Glass partition elements
- 5** Floor-recessed guide track
- 6** Floor guide pin fitted to each partition element



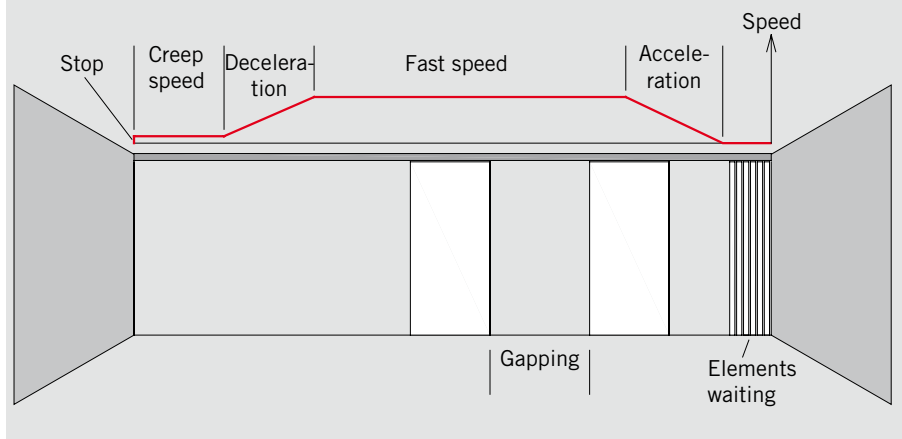
### Operating modes

In all operating modes, the partition elements are moved to their preprogrammed positions under fully automatic control. The operating behaviour is dynamically adapted according to where an element is currently located and where the preceding and following elements are positioned at any given moment in time. **The system operating behaviour can be adjusted by parameter reconfiguration.**

**Acceleration:** As soon as an element receives the command to go, it checks to ensure that the way ahead is free and then accelerates to the preprogrammed speed.

**Fast speed:** If the way ahead is unimpeded over a good distance, the element is accelerated to the highest speed of travel.

### Operating behaviour



**Creep speed:** The element switches to creep mode to travel the final few inches to its preprogrammed position.

**Deceleration:** As the element approaches its preprogrammed position, the speed is reduced to the required creep value.

**Stop:** The element stops once it has reached its preprogrammed position.

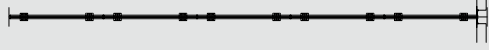
**Staggered travel mode:** The element follows the preceding element at a defined distance as they move into their respective positions.

**Waiting:** Although elements may have received the command to go, they remain in waiting mode until the way ahead is free.

## Track configurations

### Example applications

Straight track



Track configuration with 90° angle



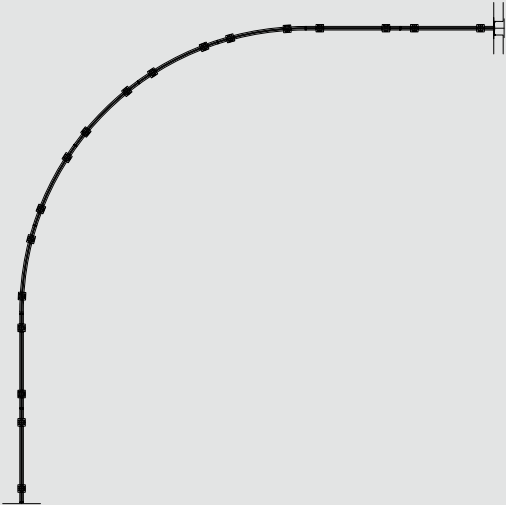
Track configuration with obtuse angle (e.g. 135°)



Segmented track configurations

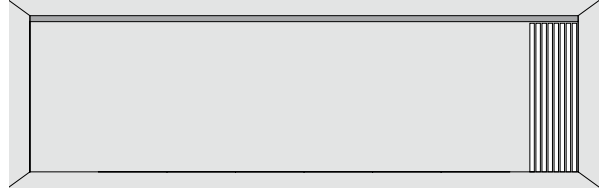


Curved and partially curved track configurations  
(min. radius 3 metres)



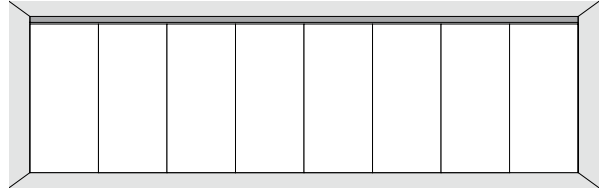
## Basic functions

### OPEN



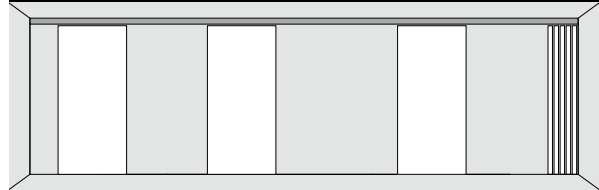
All elements move under fully automatic control to the OPEN position.

### CLOSE



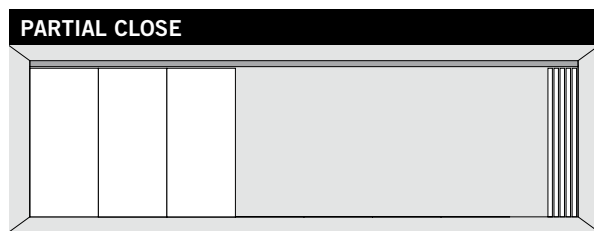
All elements move under fully automatic control to the CLOSED position.

### STOP

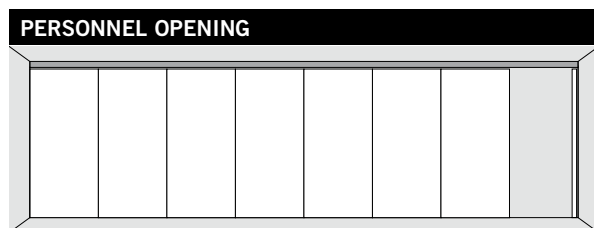


Immediate interruption of all travel functions.

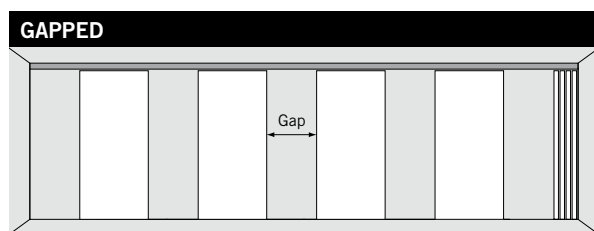
## Extended basic functions (optional)



Partial opening or closing of partition. The number of elements affected can be preset by parameter configuration.

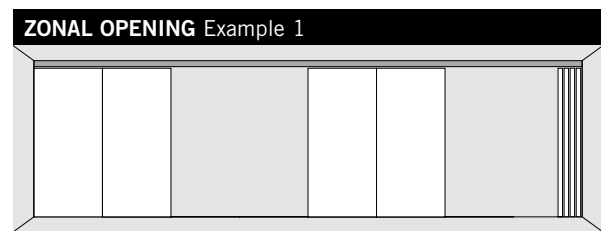


Partial open mode (personnel access). The number of elements that open or close can be preset by parameter configuration.

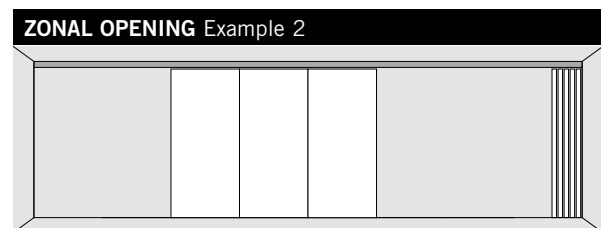


Positioning of the elements at a preprogrammed distance apart. The number of elements and the gapping distance can be preset by parameter configuration.

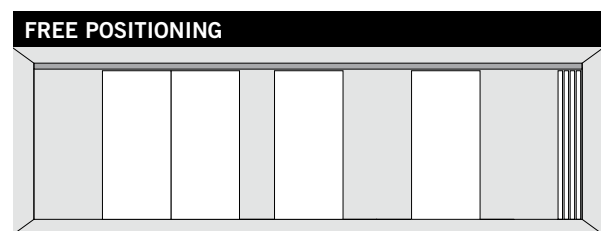
## Special operating modes (optional)



Certain areas of the partition can be opened. The position and number of elements can be preset by parameter configuration.



Certain areas of the partition can be opened. The position and number of elements can be preset by parameter configuration.

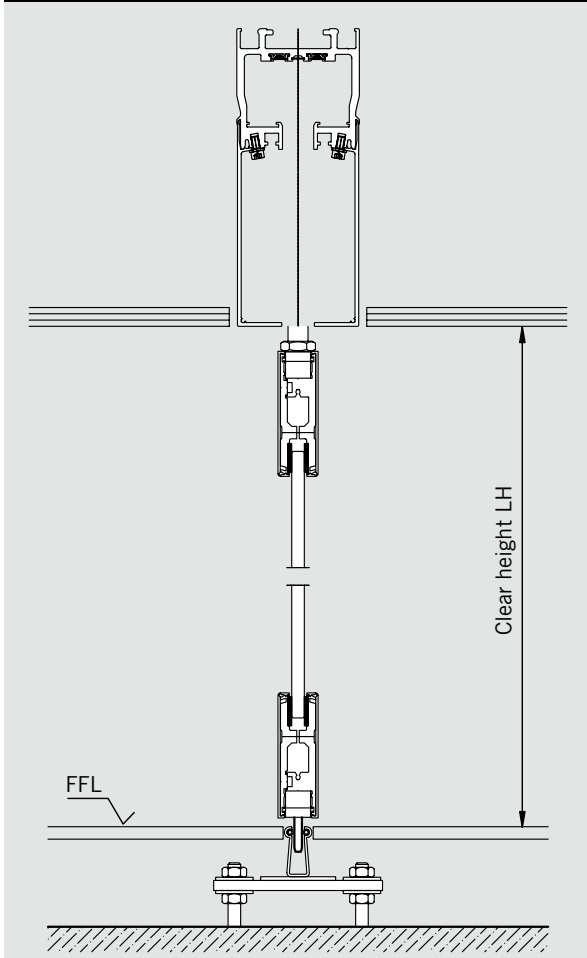


This mode offers the possibility of placing the elements at any track location.

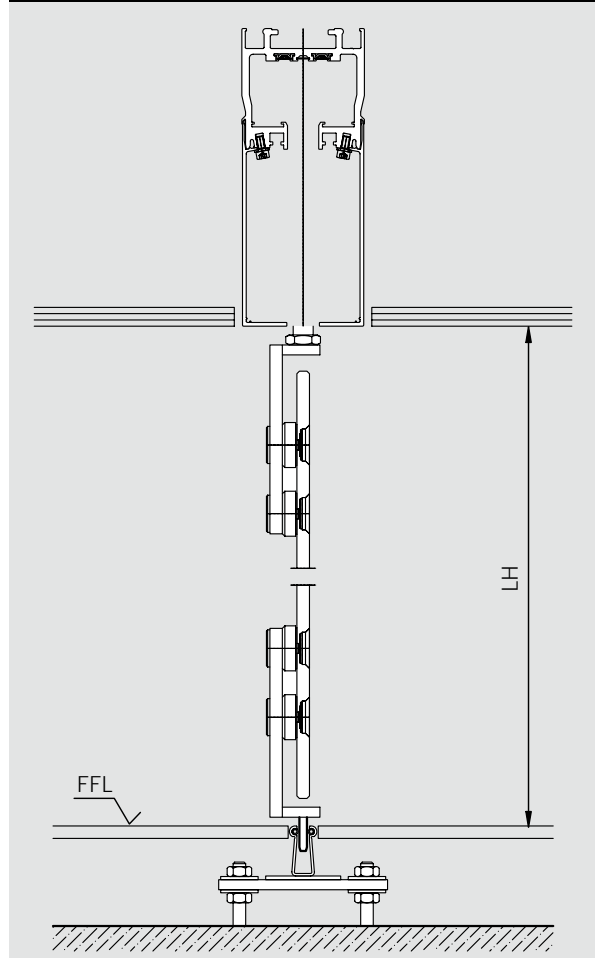


## Vertical sections

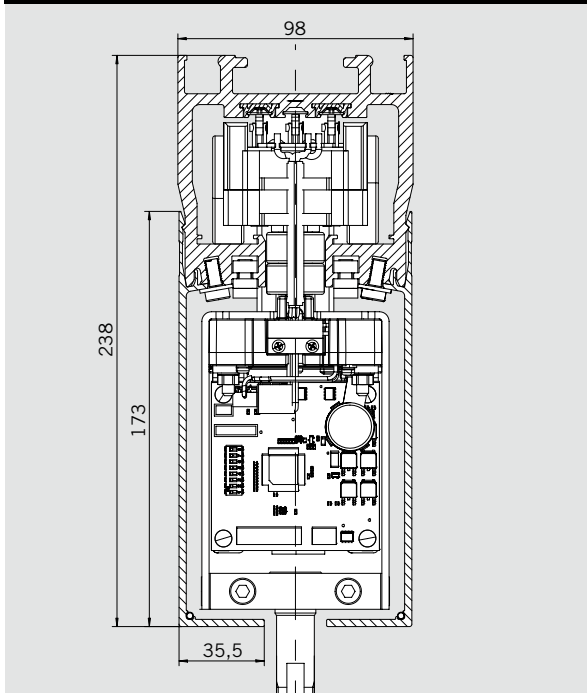
Vertical section with an HSW-G element



Vertical section with an HSW-MANET element



Vertical section through track

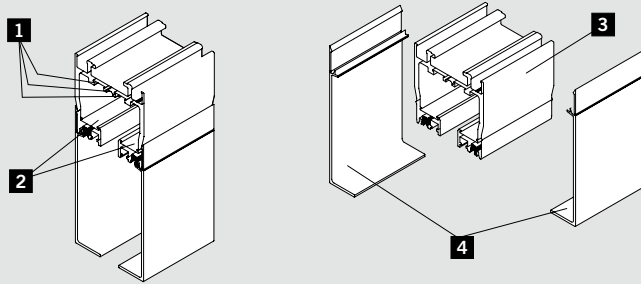


Drawing shows track and carrier trolley



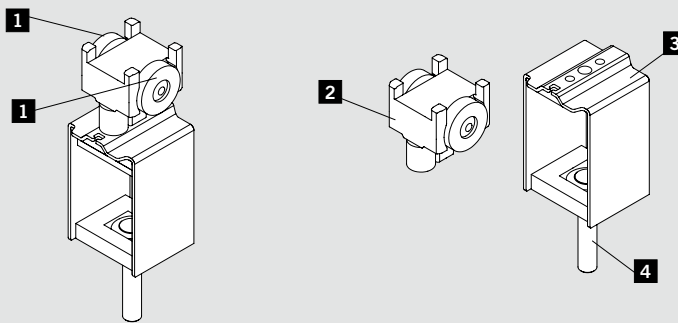
## Track design details

### Track rail



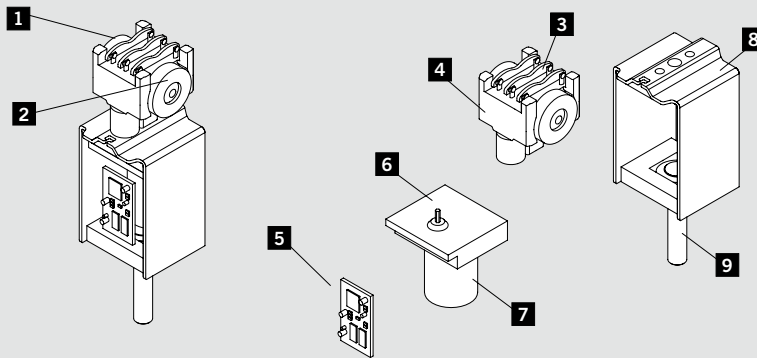
- 1** Busbars (contact rails)
- 2** Running surfaces
- 3** Track profile
- 4** Track covers

### Non-driven carrier



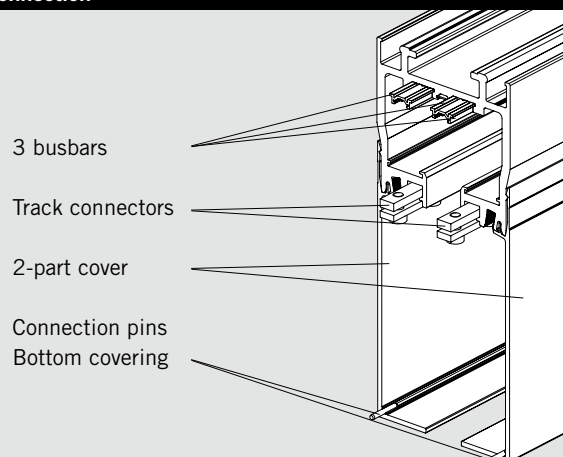
- 1** Non-driven roller
- 2** Roller head
- 3** Support frame
- 4** Carrier pin

### Driven carrier



- 1** Driven roller
- 2** Non-driven roller
- 3** Collector
- 4** Roller head
- 5** PCB
- 6** Drive gear
- 7** Motor
- 8** Support frame
- 9** Carrier pin

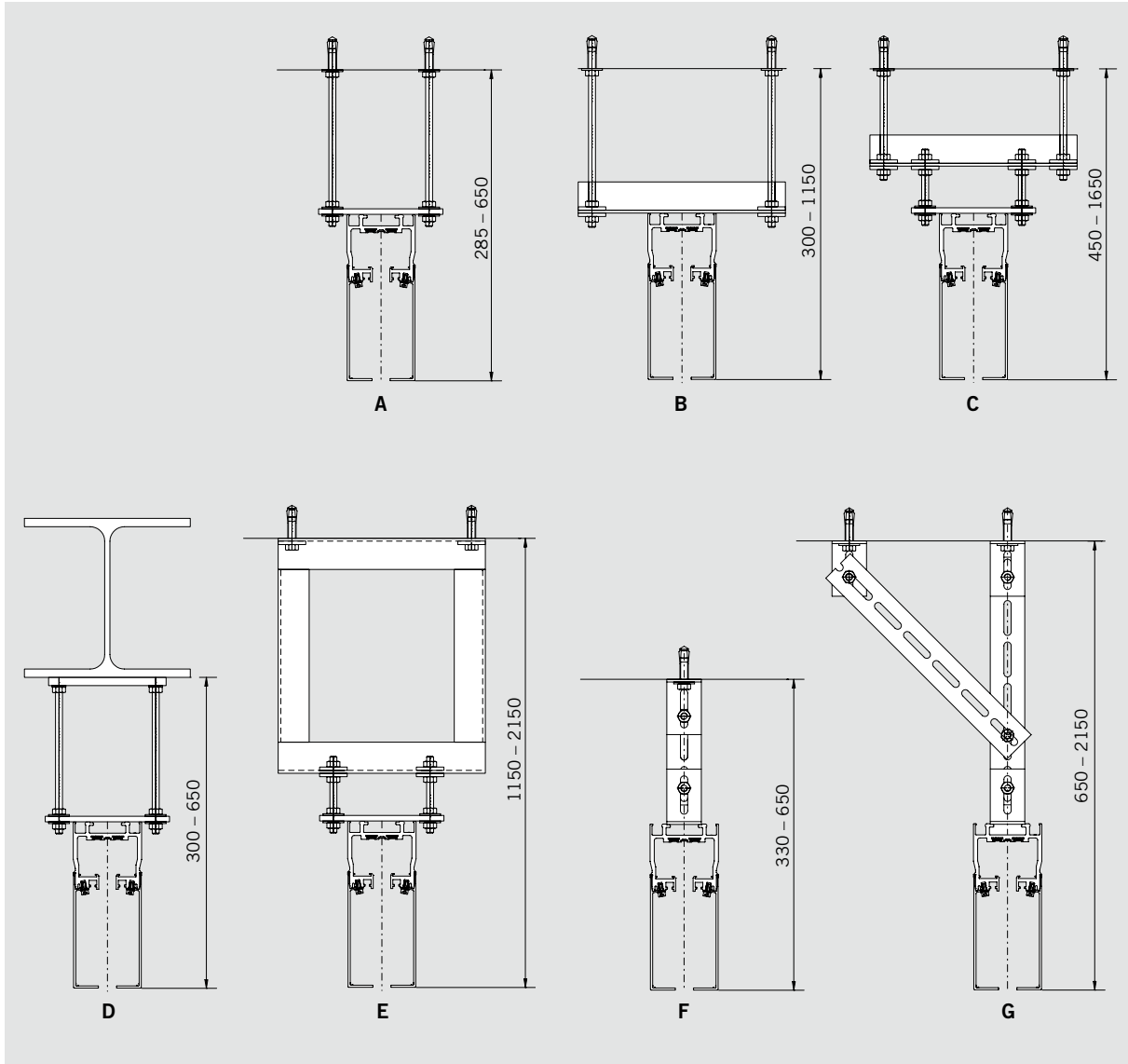
### Track interconnection



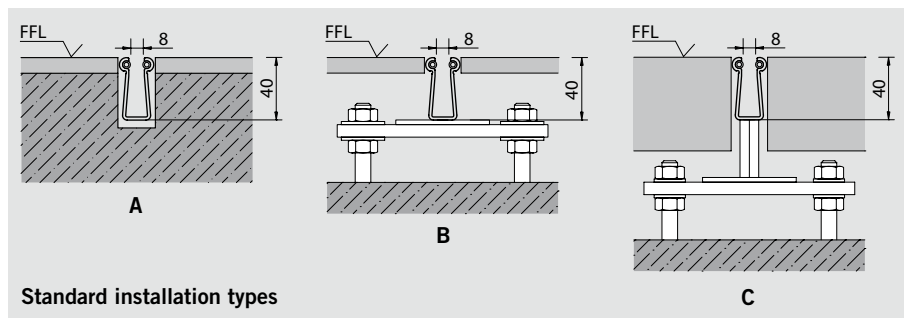
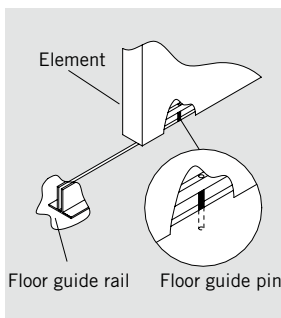
## Suspension systems

The track suspension system is selected on the basis of the specific application requirements.

The following examples show the most common suspension systems used for the partition track type in question.



## Floor guides

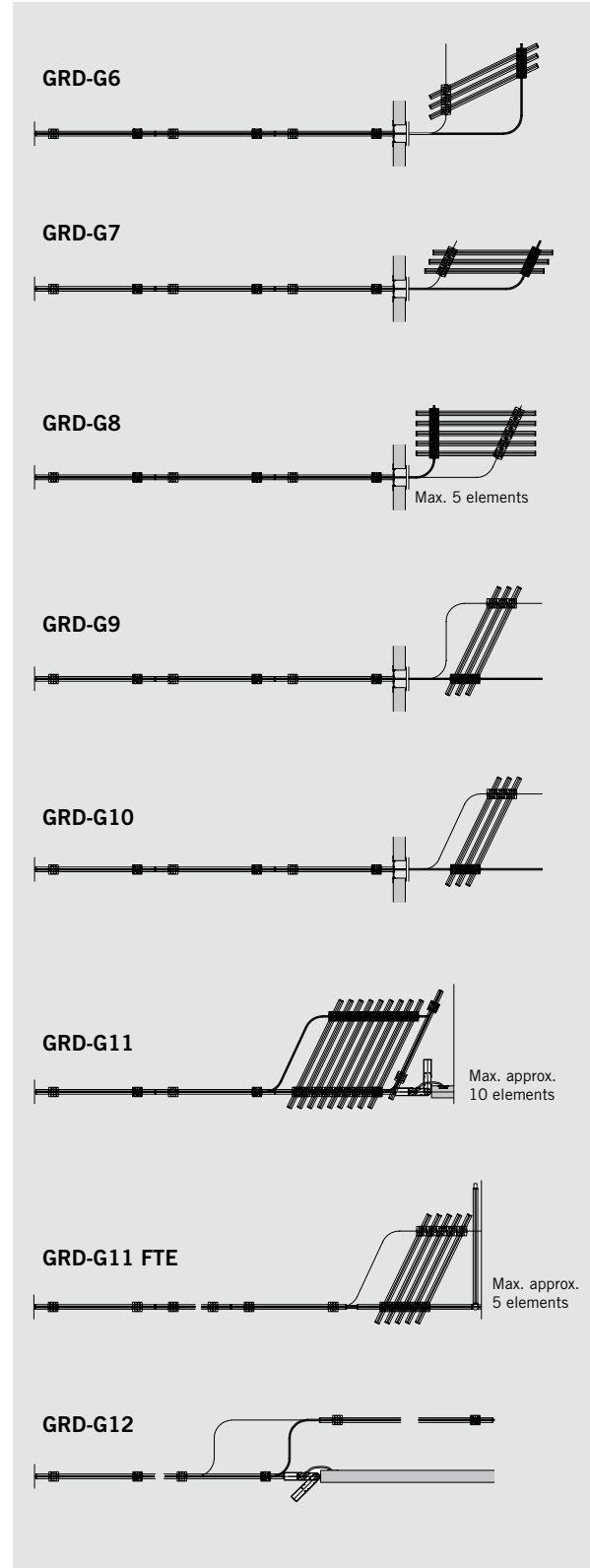
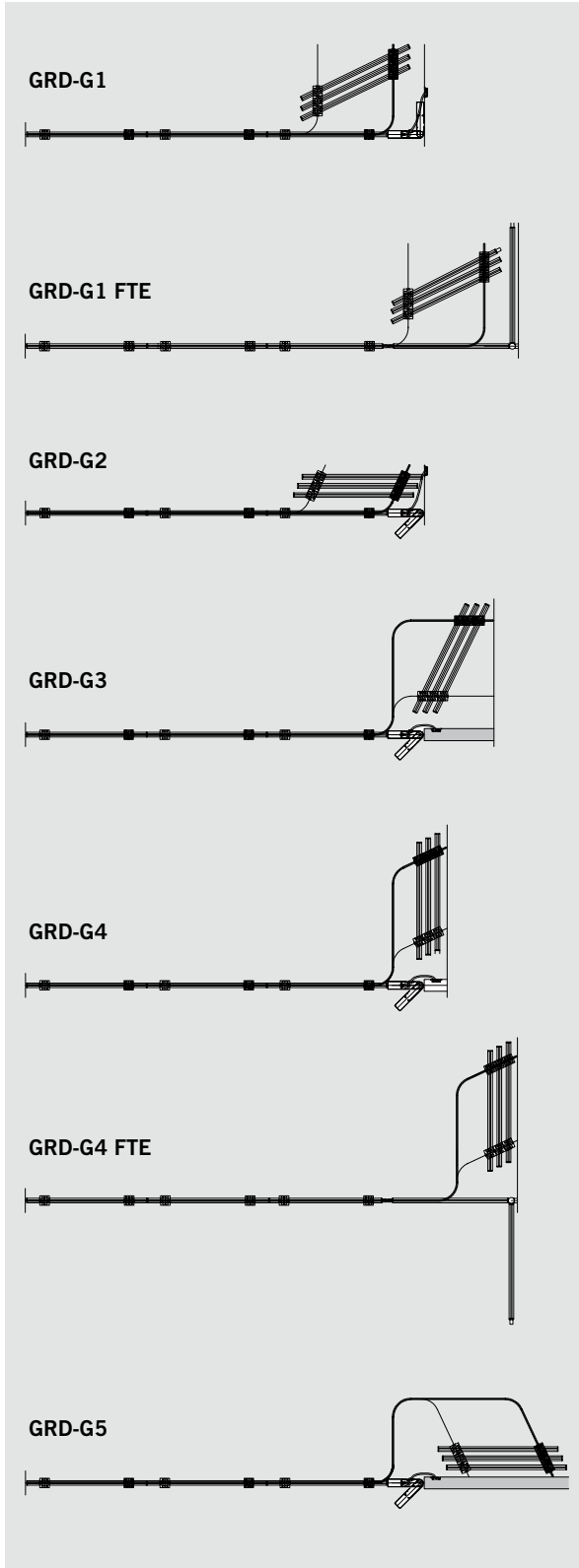


## Stacking track options

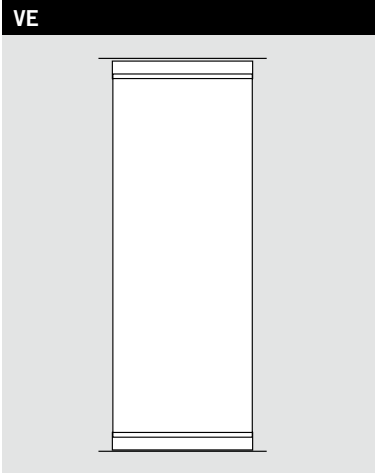
The stacking tracks serve to store the elements in a compact stack and can – depending on the room size and shape – be located within a very small area for maximum spatial efficiency.

The low weight of the elements and the advantages that this brings in terms of the structural building requirements that need to be fulfilled are particularly beneficial in the stacking areas.

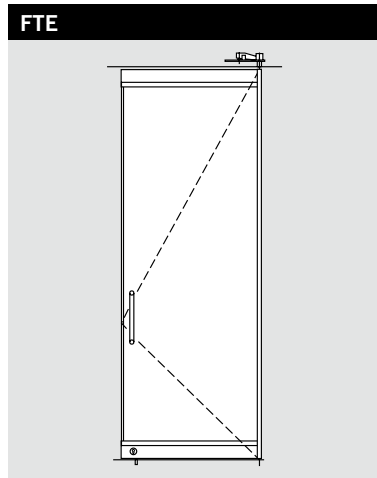
The following shows our standard stacking track arrangements. Custom solutions to meet specific requirements can also be provided on request.



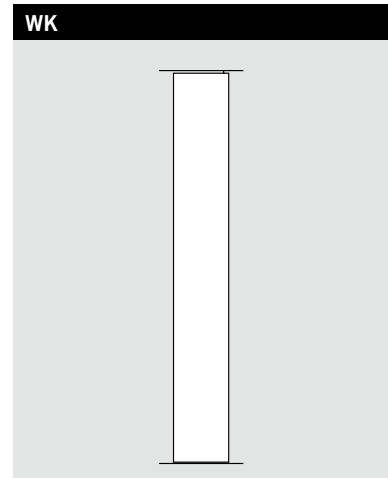
## HSW-G



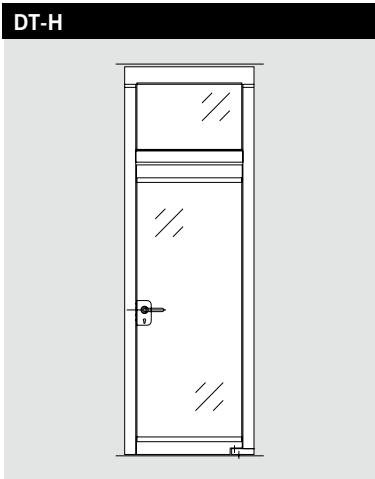
Fullwall element



Corner element

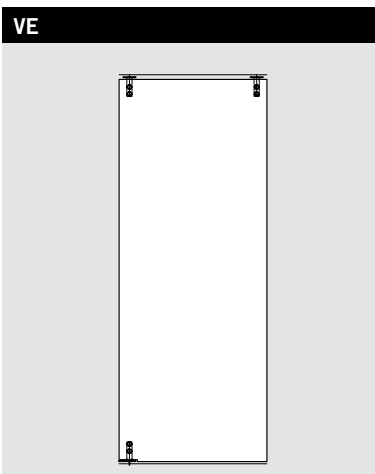


Closure flap, electrically operated

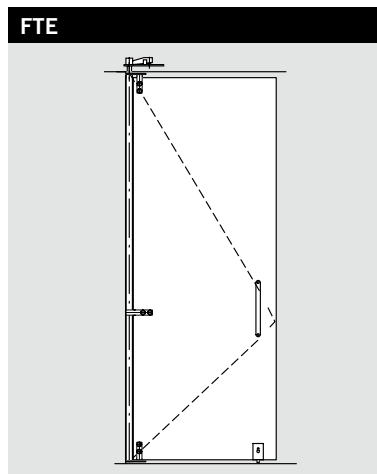


Passdoor, H-frame  
(only available with HSW-G profiles)

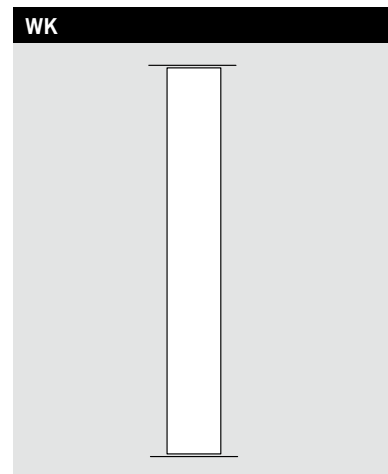
## HSW-MANET



Fullwall element

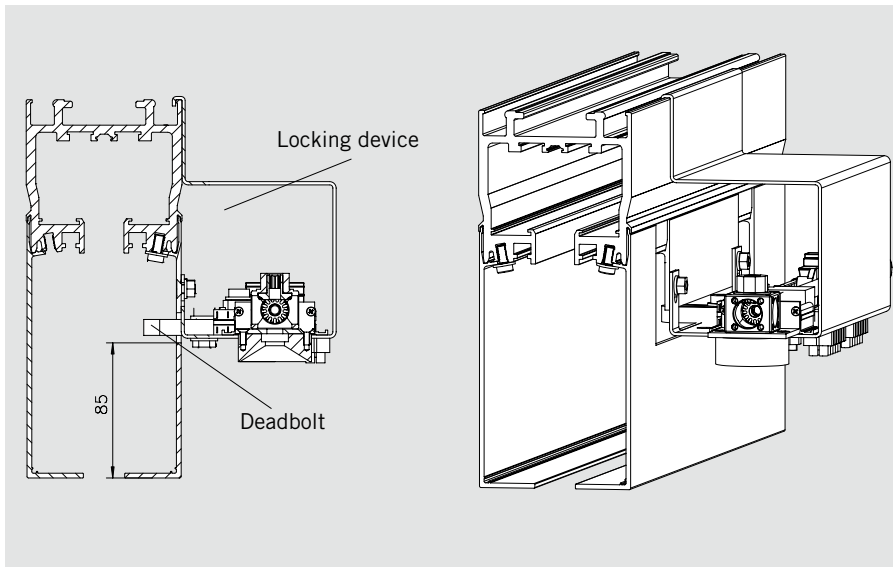


Fixed full-height passdoor, electrically operated



Closure flap, electrically operated

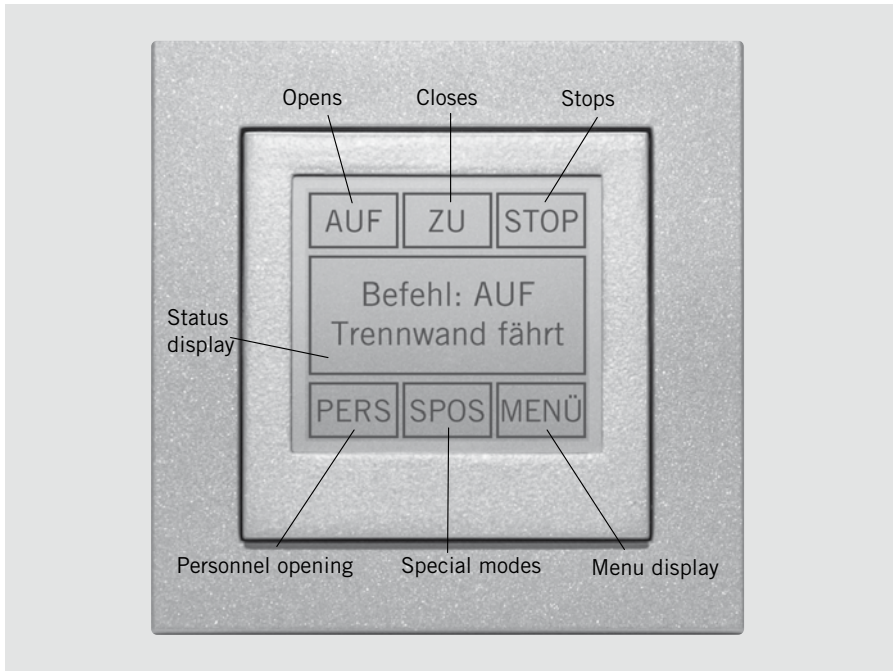
## Locking device



The locking device takes the form of an electro-mechanically operated deadbolt designed to engage and secure the elements. It is fitted to the track rail and is mainly used to lock the closed partition. It is usually located at the closure element of a glass panel partition. The locking device is equipped with two sensors that detect and signal the ENGAGED and DISENGAGED end positions of the deadbolt. There are two further sensors to signal whether the locking device is locked. One of these two sensors has a floating contact and can be connected to an alarm system.

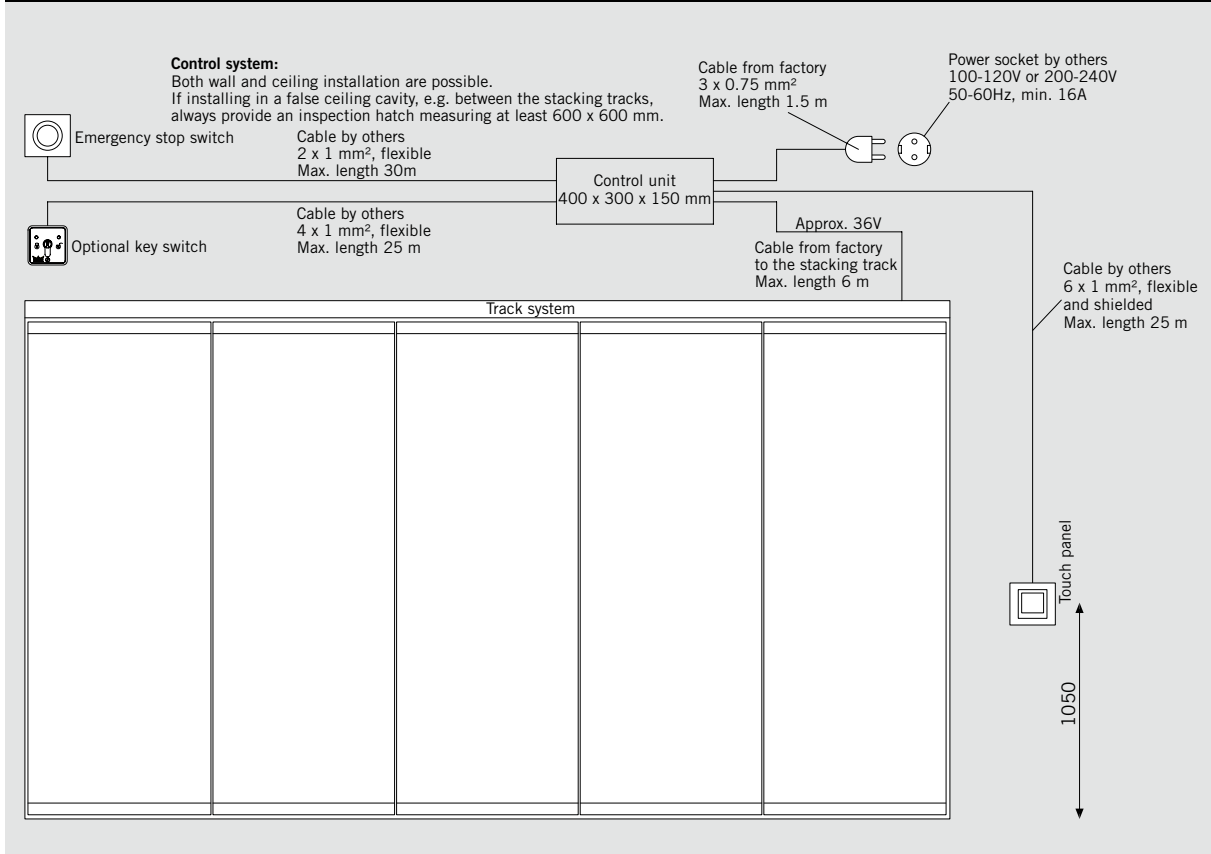


Touch panel with display for control and programming functions



All the functions of the HSW ComfortDrive can be controlled with just one finger operating the buttons of the central touch screen. Aside from the standard functions “Open”, “Close” and “Stop”, a number of special positioning modes such as “Personnel opening”, “Gapped configuration” or various free positioning patterns can be individually programmed and selected. A bus link with the building control system can also be provided.

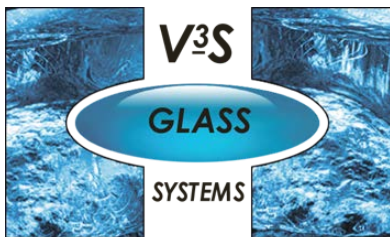
Cabling/wiring diagram



## ComfortDrive for sound-insulating partitions

Fully automatic partition system with MOVEO elements. For more information, please see the brochure: "MOVEO ComfortDrive – Fully automatic operating system for sound-insulating partitions". If you don't have the brochure, we will be glad to send you one.





[www.v3s-glass-systems.be](http://www.v3s-glass-systems.be)



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