



VARIFLEX COMFORTDRIVE

Fully automatic operating system
for sound insulating partitions

VARIFLEX COMFORTDRIVE.

FULLY AUTOMATIC OPERATOR TECHNOLOGY FOR ADVANCED CONVENIENCE.

Quick and easy spatial adaptation in prestige and commercial environments.

The Variflex ComfortDrive is the fully automatic partition within the Variflex portfolio – a model that offers outstanding convenience in flexible space utilisation. At the push of a button it enables offices and conference rooms 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 principle.

With the Variflex ComfortDrive, sound-insulating partition elements – transparent or panelled – can be moved to their individually preprogrammed positions and their sealing strips extended or retracted under fully automatic control. The control interface takes the form of a user-friendly touch screen. 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 Variflex 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.

Outstanding flexibility.

Made up of individually operable elements, the Variflex ComfortDrive can be adapted to almost any layout and architectural concept. The elements are available in several standard designs and can be provided with virtually any surface finish required. The stacking tracks/ parking arrangements for accommodating the elements at the end or side of the track are arranged in keeping with the requirements of the application and designed so that the stacked elements take up as little room as possible.

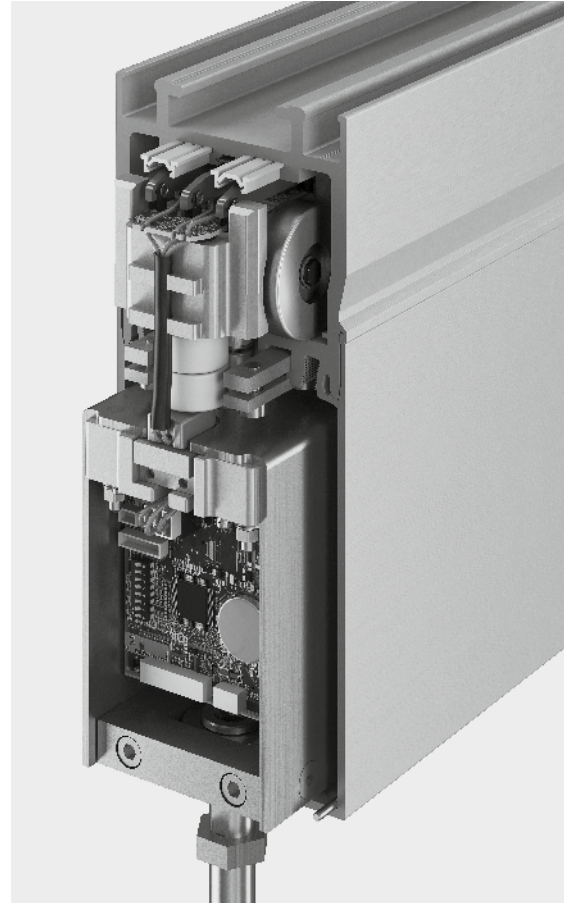
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THE BENEFITS AT A GLANCE

- 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
- Available in both panelled and transparent versions
- Several element types and partition systems can be combined within one layout
- Safety ensured by an integrated monitoring system that stops and reverses the partition on contact with an obstacle.
- 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
- Statutory microprocessor control (bus system) for activation and monitoring of the operational sequence and functions
- 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
- Single element weights up to 500 kg
- High spatial configuration flexibility
- Sound insulation with Variflex 100 elements up to $R_w = 57 \text{ dB}$ (lab value)



TECHNICAL DATA

General specifications

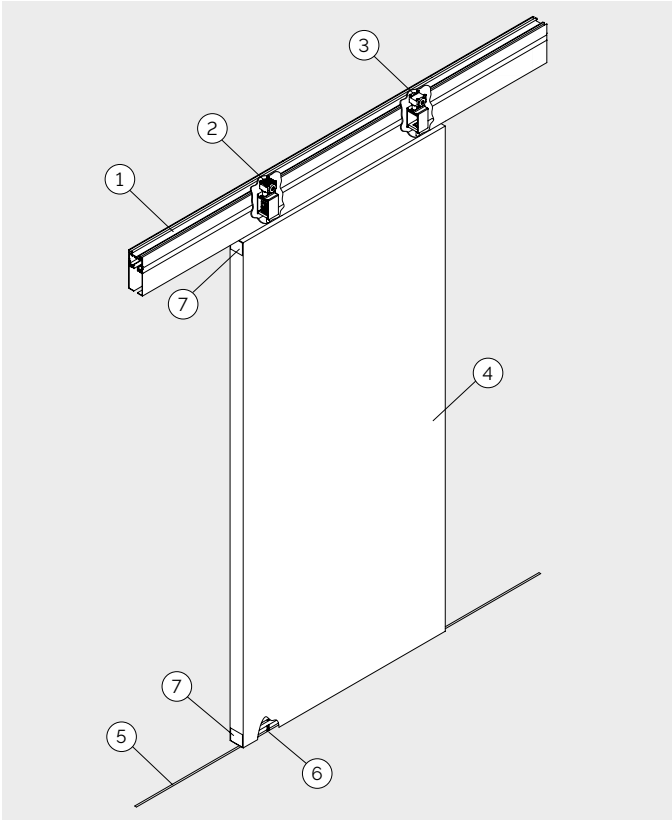
Track width	98 mm
With ceiling connection girder and quadruple-skin baffle	154 mm
Operator heigh	241 mm
Max. length with one control unit	50 m
Max. number of elements	30
Element width	850 – 1,250 mm
Max. element height (depending on the sound insulation/weight)	6,500 mm
Max. element weight	500 kg
Radius (directional changes)	150 mm
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	optional
Manual unlocking	●
TÜV 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	○
Electronically controlled extension and retraction of sealing strips	●
Emergency power module	○
Floating contact	●
Bus interface	●
Status feedback signalling	●
Sound insulation	
Sound insulation in Rw* Variflex 100	up to 57 dB
* per EN 120140, lab values	

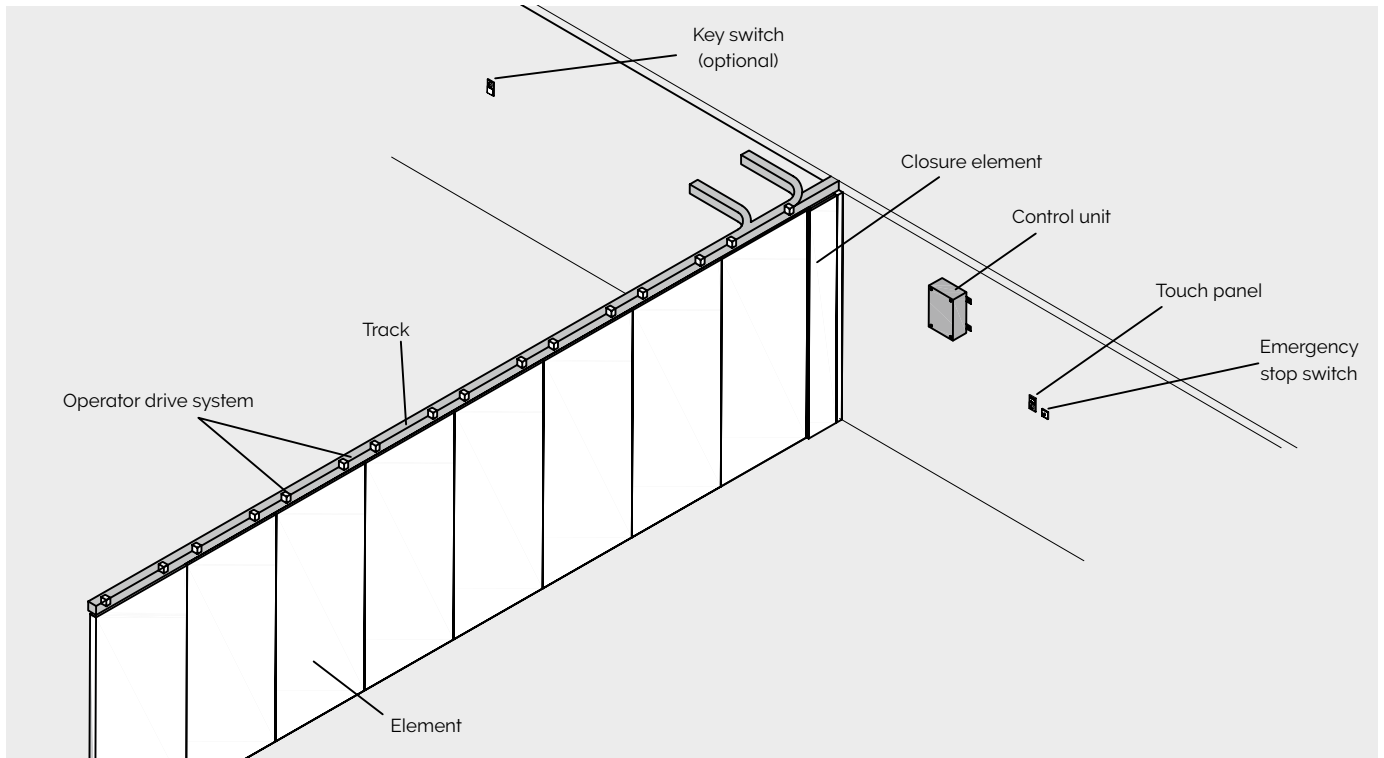
● standard ○ option

SYSTEM STRUCTURE



- 1. Ceiling-mounted loadbearing guide track with busbar system and cover
- 2. Driven carriers with element suspension mountings
- 3. Non-driven carriers with element suspension mountings
- 4. Partition elements of various designs and finishes
- 5. Floor-recessed guide track
- 6. Floor guide pin fitted to each partition element
- 7. Automatically controlled extending and retracting sealing strips

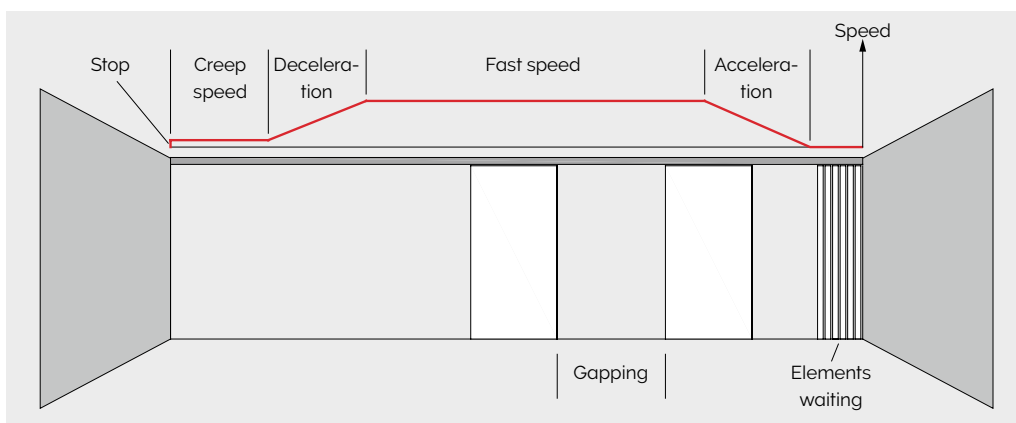
PARTITION LAYOUT



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.**

OPERATING BEHAVIOUR



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.

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.

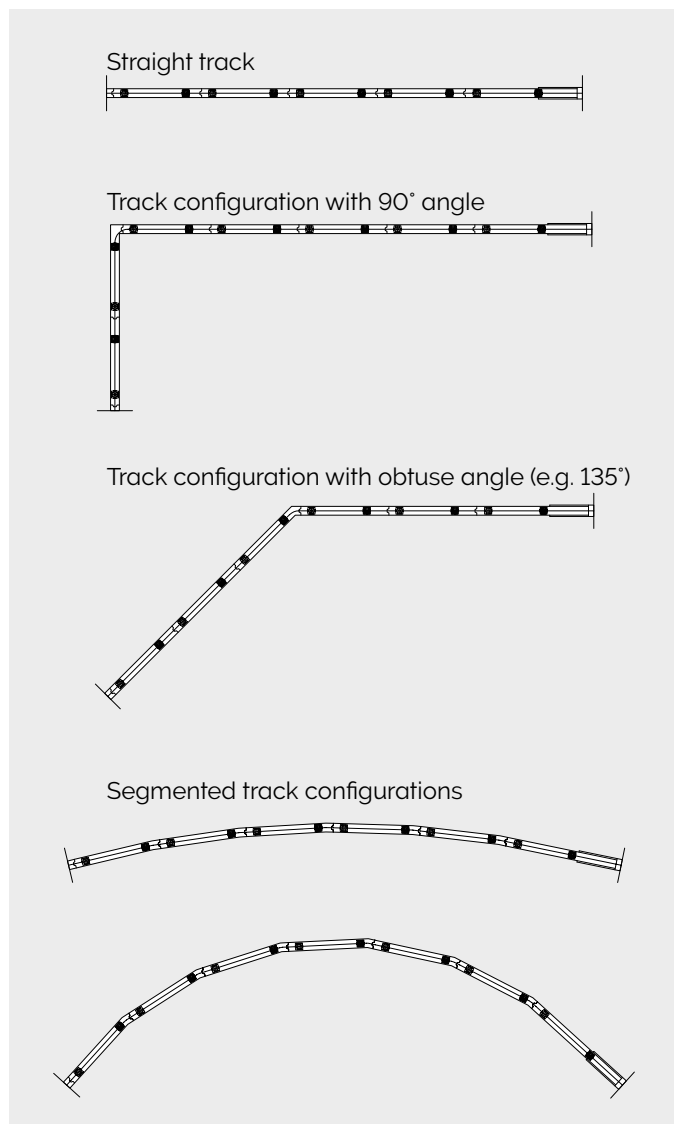
Stop: The element stops once it has reached its preprogrammed position. The top and bottom sealing strips are extended.

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

Waiting: Elements receiving the command to go remain in the waiting mode until the way ahead is free.

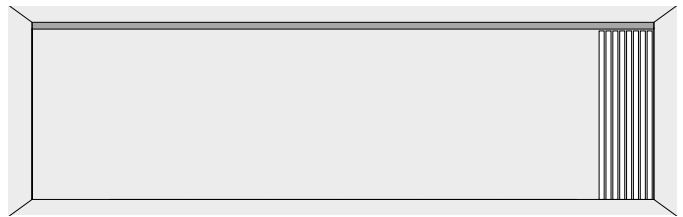
TRACK CONFIGURATIONS

Example applications



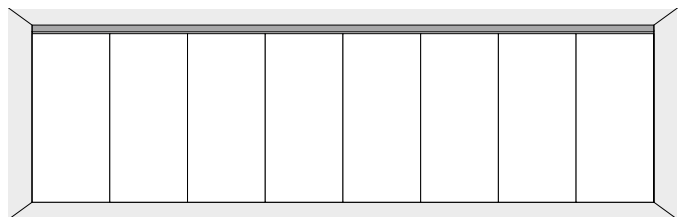
BASIC FUNCTIONS

OPEN



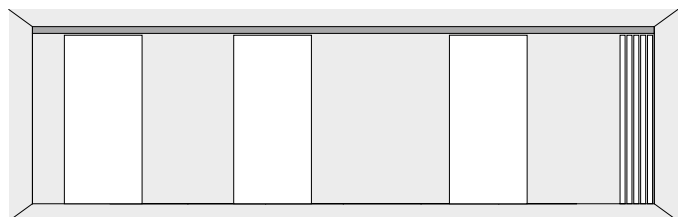
Automatic retraction of sealing strips. All elements move under fully automatic control to the OPEN position.

CLOSE



All elements move under fully automatic control to the CLOSED position. Automatic extension of sealing strips.

STOP



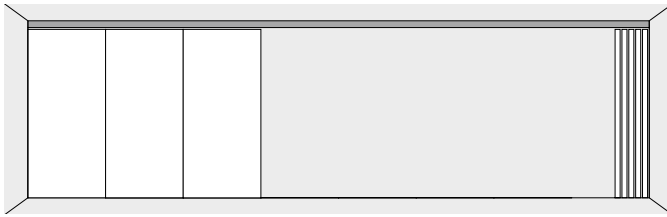
Immediate interruption of all travel functions.



EXTENDED BASIC FUNCTIONS

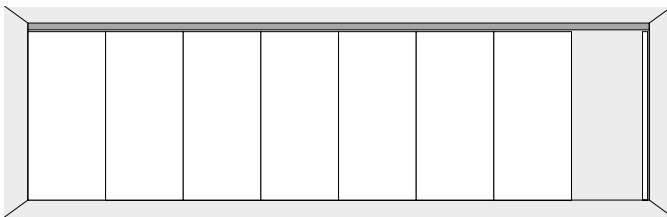
(optional)

PARTIAL CLOSE



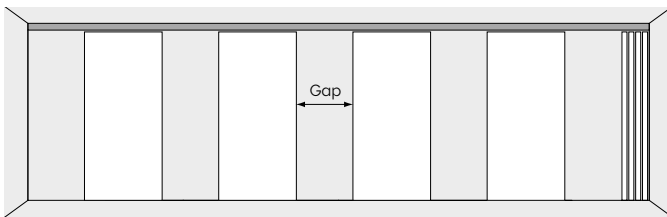
Partial opening or closing of partition. The number of elements affected can be preset by parameter configuration.

PERSONNEL OPENING



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

GAPPED

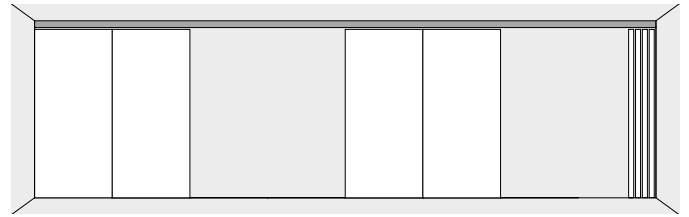


Positioning of the elements at a preprogrammed distance apart. The number of elements and the gapping distance can be preset by parameter configuration.

SPECIAL OPERATING MODES

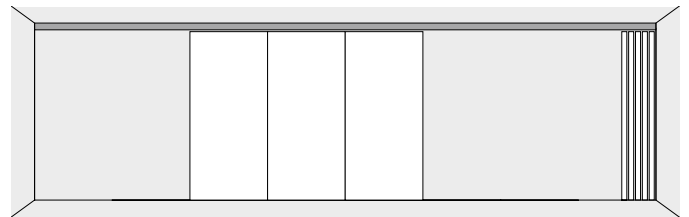
(optional)

ZONAL OPENINGG Example 1



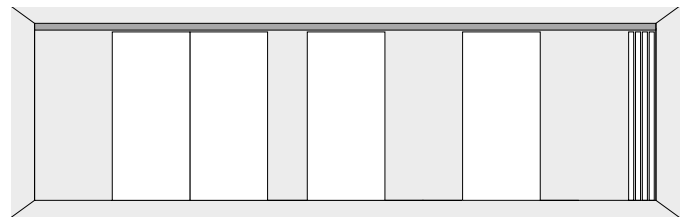
Certain areas of the partition can be opened. The position and number of elements can be preset by parameter configuration.

ZONAL OPENING Example 2

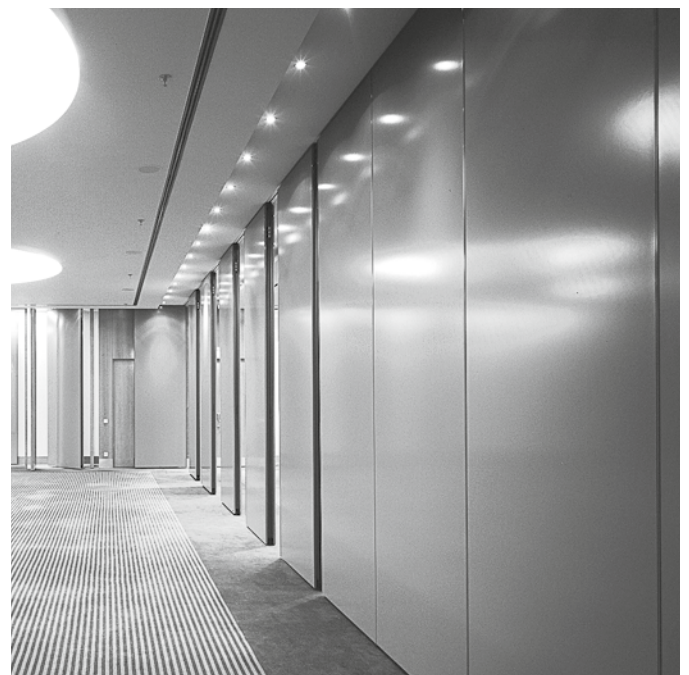


Certain areas of the partition can be opened. The position and number of elements can be preset by parameter configuration.

FREE POSITIONING

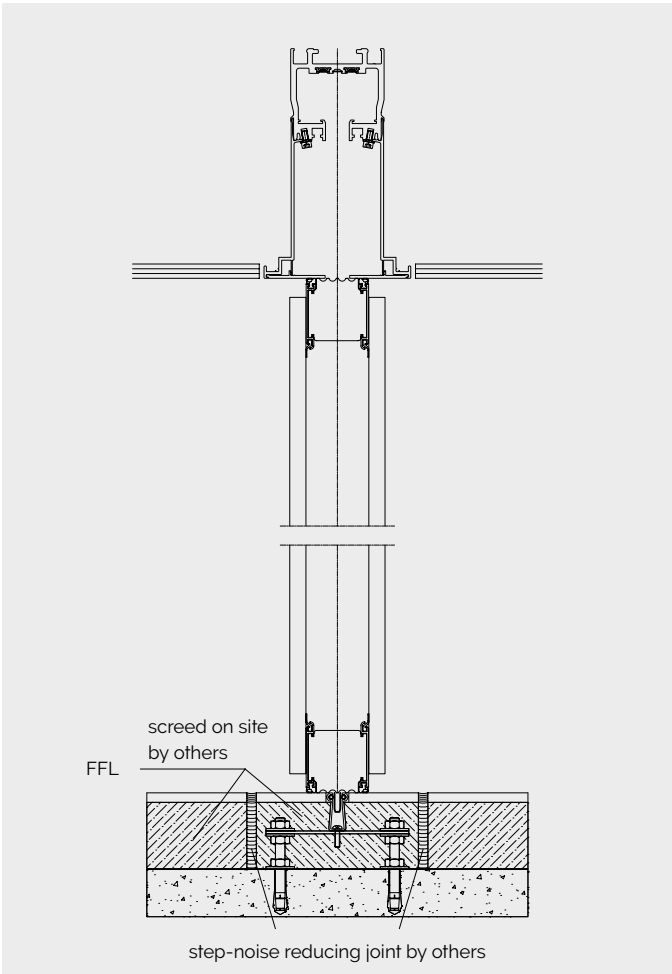


This mode offers the possibility of placing the elements at any track location.

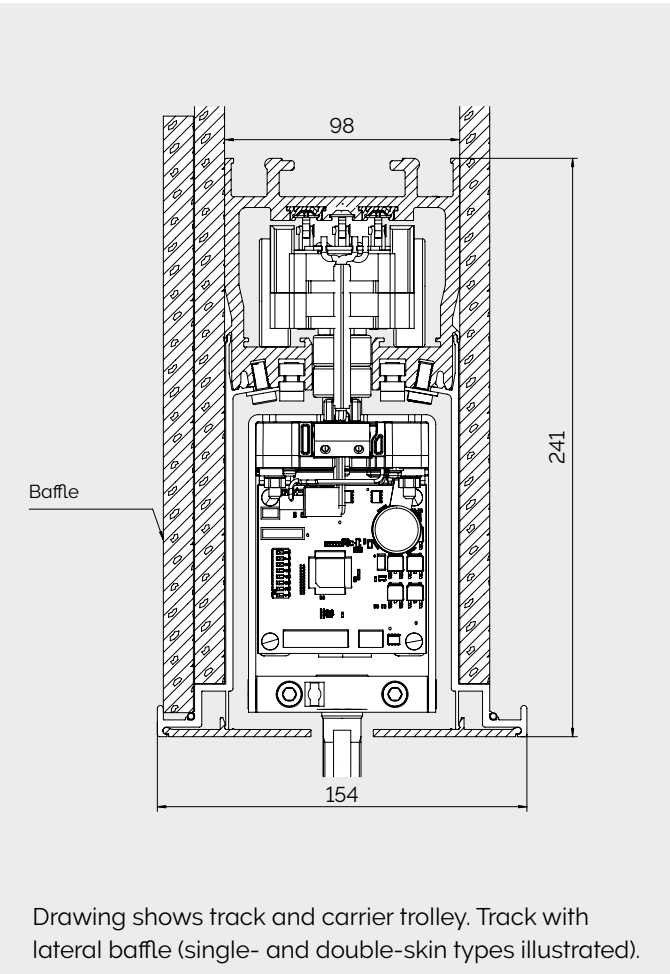


VERTICAL SECTIONS

Vertical section
with a Variflex element

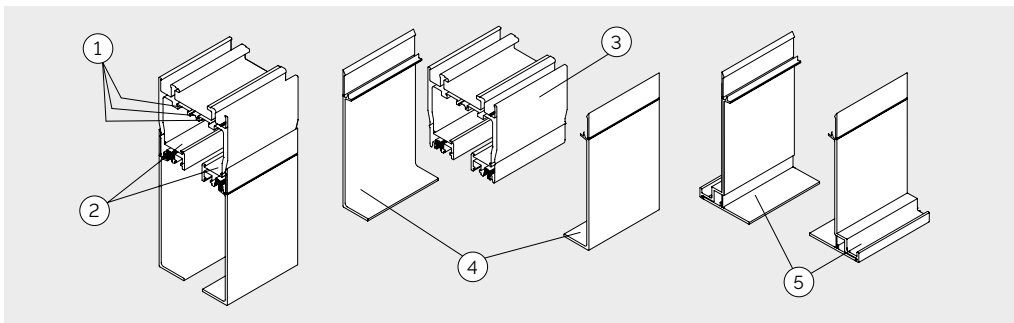


Vertical section
through track with cover and baffle



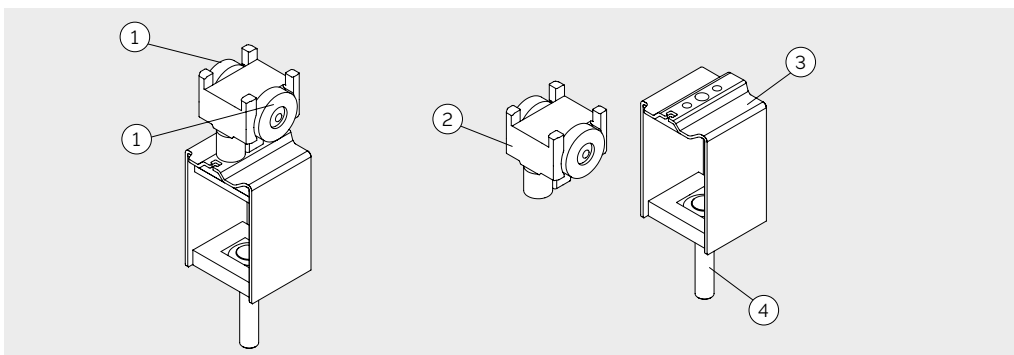
TRACK DESIGN DETAILS

Track rail



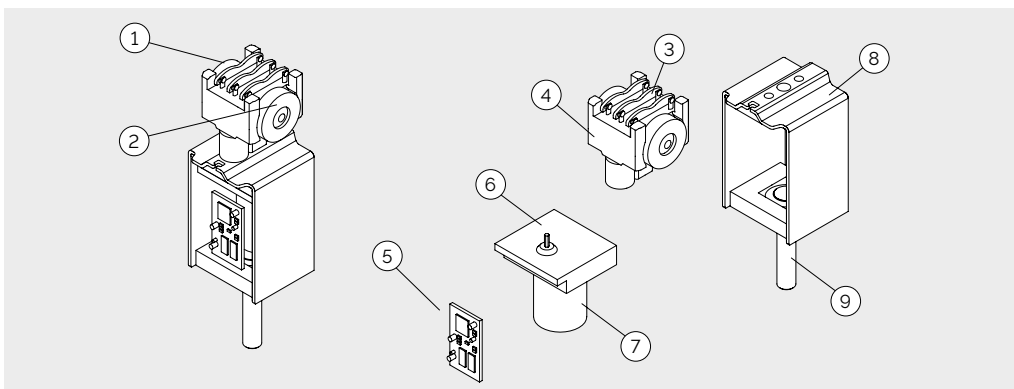
1. Busbars (contact rails)
2. Running surfaces
3. Track profile
4. Track covers
5. Track covers for lateral baffle in sound-insulating partitions

Non-driven carrier



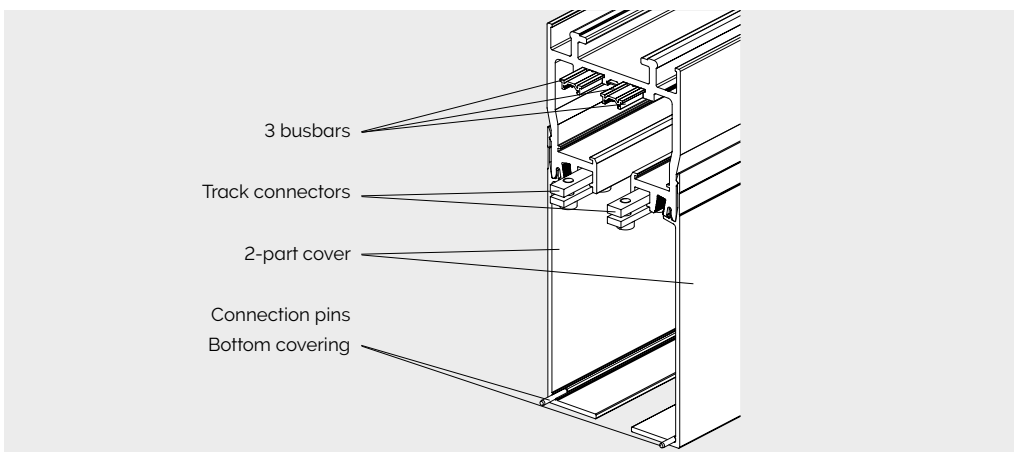
1. Non-driven roller
2. Roller head
3. Support frame
4. Carrier pin

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



ELEMENT TYPES

Fullwall element (VE)



Telescopic element overlapping (TE)



Manually or automatically operated wall abutment (AWA)



Corner element 90° (EE) and T-configurations



Angled element (WE)



Glass element (GE)



Passdoor within element (DT)



Pass door element with window

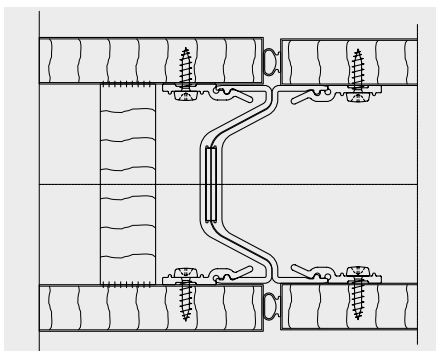


Glass pass door (GDT)

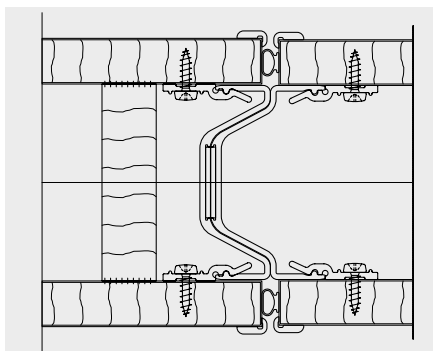


ELEMENT INTERCONNECTION

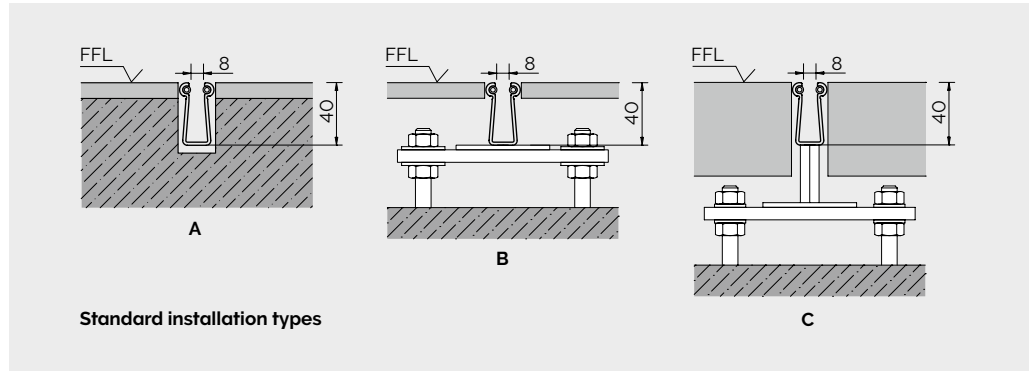
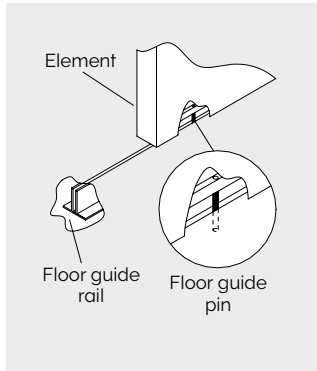
**Visible edge
(type K)**



**Edge protection profiles
(type U)**



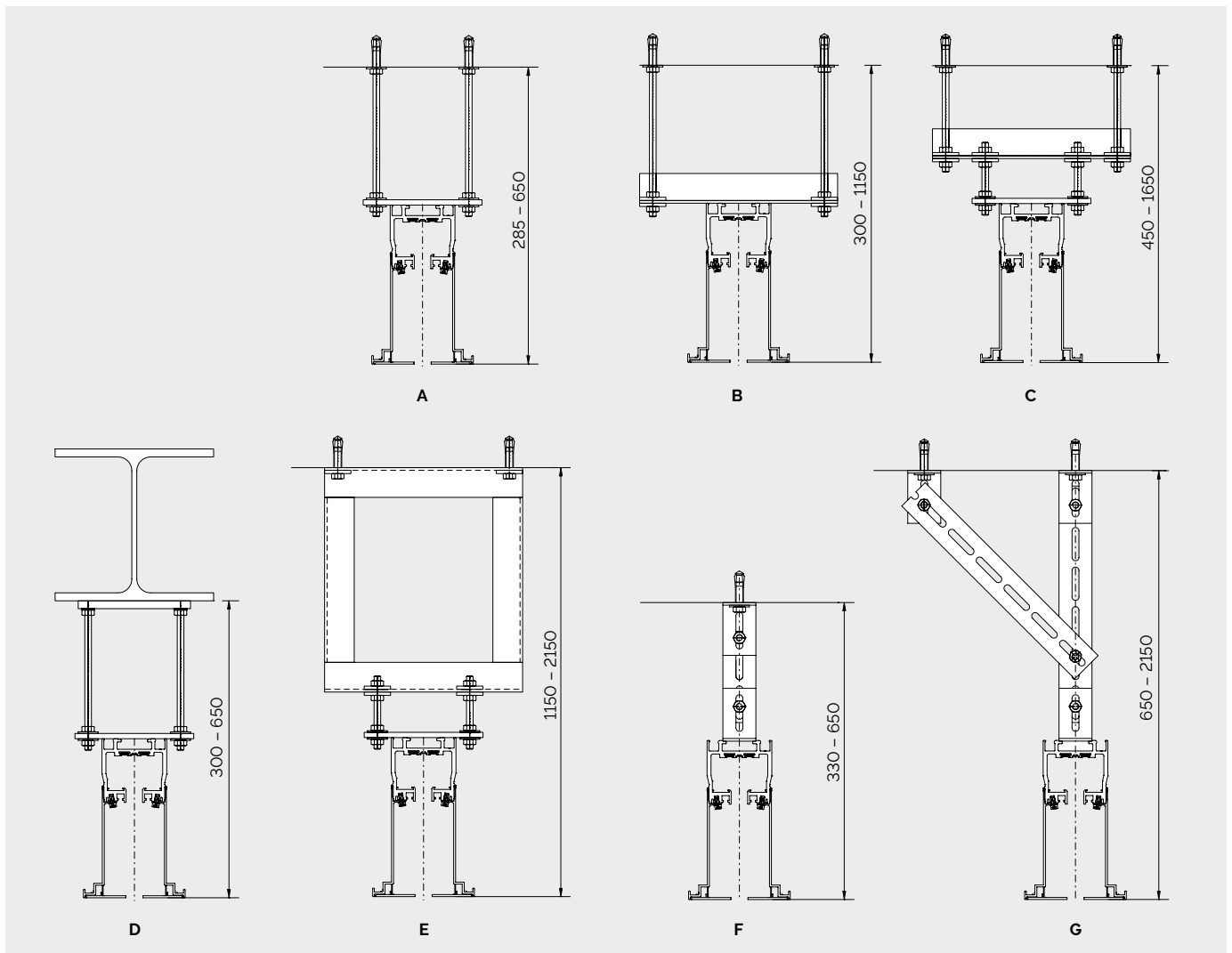
FLOOR GUIDES



SUSPENSION SYSTEMS

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

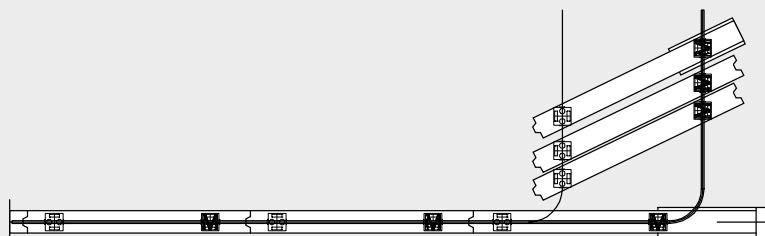
The following examples show the most common suspension systems used for the partition track type in question.



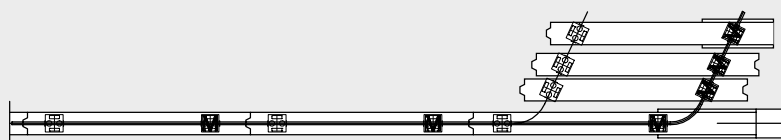
STACKING TRACK OPTIONS

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.

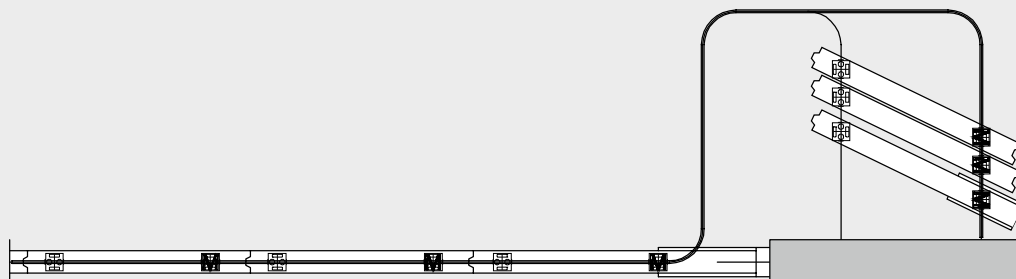
GRD-S1



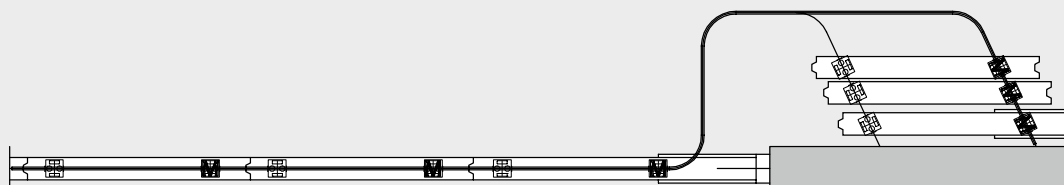
GRD-S2



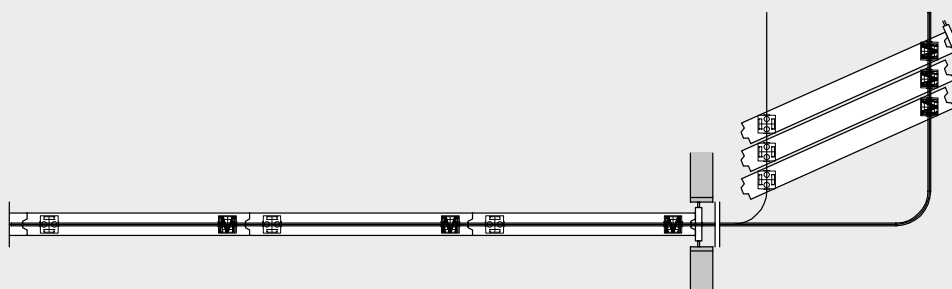
GRD-S5



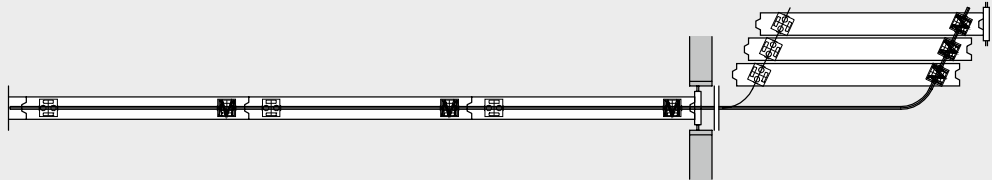
GRD-S6



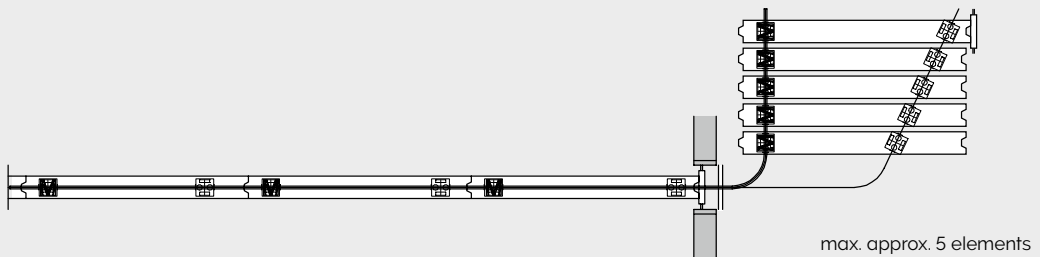
GRD-S7



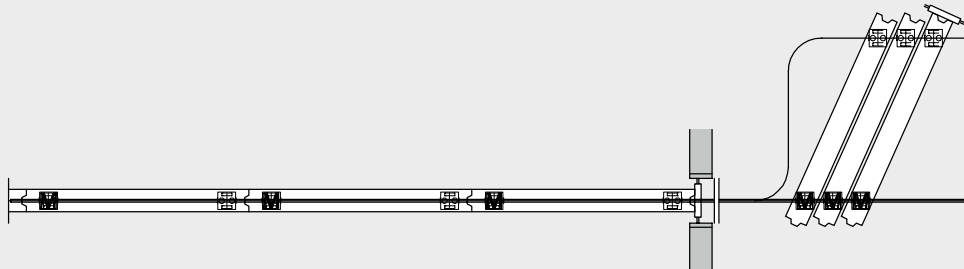
GRD-S8



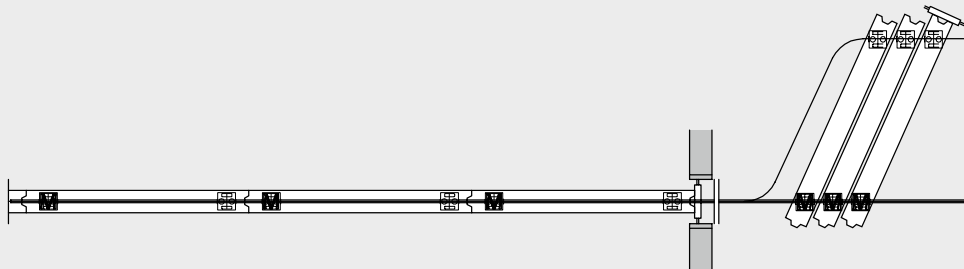
GRD-S9



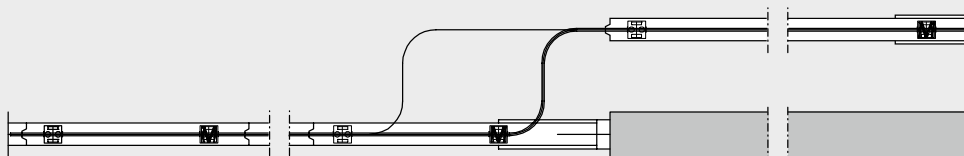
GRD-S10



GRD-S11



GRD-S13

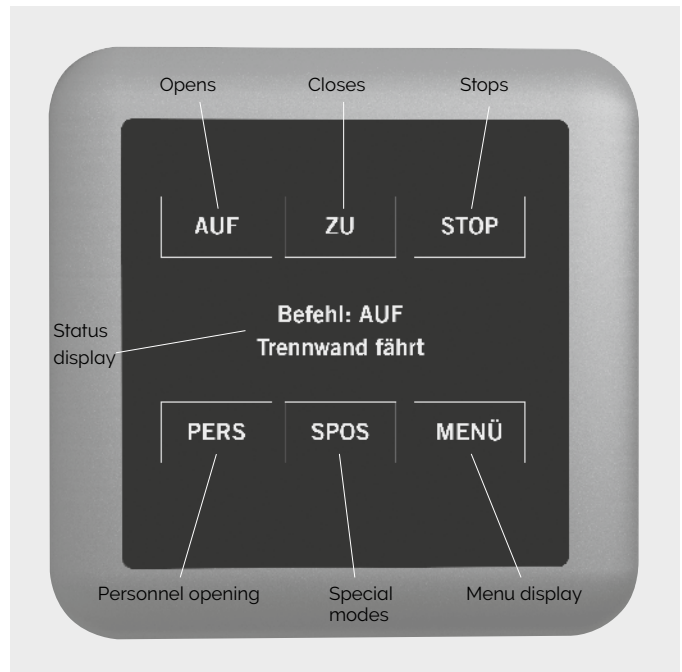


AUXILIARY EQUIPMENT

Touch panel with display for control and programming functions

All the functions of the Varitrans 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.

Premium display: Touch display





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