

CONVENIENCE AND SAFETY EVEN FOR HEAVY DOORS
GEZE POWERDRIVE – THE POWERHOUSE



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Autohaus Boden, Hasselt, Belgien

INTRODUCTIONS

GEZE Powerdrive – The Powerhouse

Convenience and safety even for heavy doors are the trademarks of the Powerdrive line.

Large entrances and opening widths together with high leaves make specific demands on door drive technology, and this is precisely where the strong points of the Powerdrive are.

The economical yet high-capacity Powerdrive can move „out of the ordinary“ door leaves up to 200 kg (up to 160 kg for escape route design) in weight. The sliding door systems are suitable for inside and outside doors, single- and double-leaf doors with thin-framed leaves, of ESG (single thickness safety glass) and ISO glass as well as doors with framed panels of metal, plastic or timber. The Powerdrive offers the appropriate drive for large-size openings, specific door leaf structures and difficult special fillings in standard and escape route designs. Optimal sliding characteristics and minor wear due to the coordinated profiles of roller and track and the self-cleaning roller carriage ensure high service life and reduced noise development.

The GEZE Powerdrive is optimally equipped for use in escape and rescue routes as well. Whether as FR variation with redundant 2-motor technology that will not let the user down even in case of emergencies, or as break-out solution: the Powerdrive always offers the highest degree of safety.

DIN 18650 – Standard fulfilled: A uniform standard was created with DIN 18650 to guarantee optimal safety to the operators and users of automatic doors. Naturally the GEZE Powerdrive sliding door systems were type-tested and certified in accordance with DIN 18650.

GEZE offers a fast, skilled and comprehensive service.

VARIATION VARIETY



DIN 18650



To meet the most diverse requirements, the Powerdrive is available in a multitude of variations:

- **GEZE Powerdrive PL** (standard version)
The high-capacity sliding door system for large and heavy doors
- **GEZE Powerdrive PL-FR**
For escape and rescue routes
- **GEZE Powerdrive PL FR-RWS** (approved by TÜV)
Constantly self-supervised system which immediately goes into a safe condition as soon as an error is registered somewhere
- **GEZE Powerdrive PL FR-LL**
Closing time (one way) in escape route locked single fault secure and constantly self-supervised system which immediately goes into a safe condition as soon as an error is registered somewhere
- **GEZE Powerdrive PL FR-DUO**
Two escape route directions
- **GEZE Powerdrive PL-HT**
Hermetic sliding door system for use in clean rooms



EXAMPLES OF USE

GEZE Powerdrive is the modern and “strong” automatic linear sliding door system for a wide range of applications for both interiors and façades:

- in administration buildings and public buildings
- in commercial buildings and car dealerships
- in airports and railway stations
- in nursing and healthcare areas, e. g. in hospitals and pharmacies
- in hotels and restaurants
- in banks and educational institutions, e. g. in schools and universities
- in industrial companies
- in draught lobbies

GEZE Powerdrive PL-HT is the complete automatic, tightly sealing linear sliding door system made of stainless steel for use in hermetically sealed areas, for example in operating theatres in hospitals.



The features of the GEZE Powerdrive at a glance



High leaf weights



High opening widths



Self-cleaning roller carriage



Simple to install and maintain



GEZEconnects – the wireless interface



Tested safety

TECHNICAL DATA

Powerdrive		PL	PL-FR	PL-HT
Number of door leaves 1 / 2 / 4		● / ● / ○		● / ○ / ○
Use in escape and rescue routes		○	●	○
Use in clean rooms		○	○	●
Dimensions (height x width)		150 resp. 200 x 185 mm		300 x 185 mm
Opening width	single-leaf	900 – 3000 mm	700 – 3000 mm	800 – 1800 mm
	double-leaf	900 – 3000 mm	800 – 3000 mm	○
Max. passage height		3000 mm	3000 mm	2800 mm
Hold-open time		0 - 60 s		
Weight per door leaf	single-leaf	max. 200 kg	max. 160 kg	max. 200 kg
	double-leaf	180 / 200 kg	160 kg	○
Max. opening speed		0,7 m/s depending on leaf weight		0,5 m/s
Max. closing speed		0,5 m/s		0,5 m/s
Mains connection		230 VAC +6% -10% at 50 Hz or 60 Hz		
Power consumption		max. 300 VA		
Enclosure rating		IP 20		
Approvals	DIN 18650	●	●	●
	BGR 232	●	●	●
	AutSchR	●	●	●

● = Standard

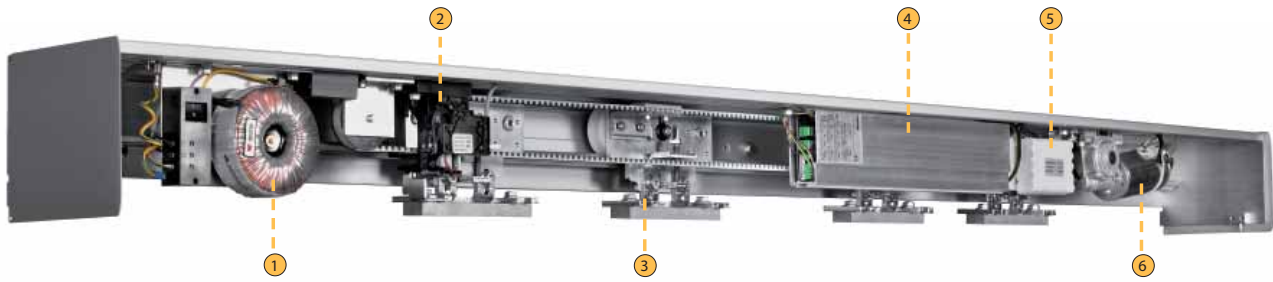
● = Optional

○ = Not possible with this variant

NOTES

- Increased opening and hold-open times if necessary with double-leaf systems and a maximum weight of 200 kg per door leaf
- The above-mentioned opening width and headroom are standard dimensions. Special dimensions on request.
- With a combination of maximum opening width and maximum headroom, the relevant max. leaf weight must be taken into consideration (standard ISO profile system = approx. 30 kg per m² leaf weight)
- A continuous floor guide is recommended for external systems with an opening width of greater than or equal to 2000 mm.

Overview of the GEZE Powerdrive module



COMPONENTS

Powerdrive	
① Transformer	Low noise development and powerful 200 W.
② Locking system	The bistable electromechanical locking system with mechanical emergency unlocking is continuously monitored by the control and is thus protected from misuse.
③ Roller carriage	Optimal sliding characteristics and minor wear due to the coordinated profiles of the roller and the track. Integrated brushes which permanently clean the rollers (self-cleaning roller carriage) ensure high service life and reduced noise development.
④ Control	The self-learning 16-bit microprocessor control adapts the operating parameters to the environmental conditions and uses CAN bus to communicate with other GEZE products. The Powerdrive system is always up-to-date because of the easy software update possibilities, and also it is well-equipped in control engineering even for future developments.
⑤ Battery	In case of emergencies, the light and compact NiMH battery enables the door to be temporarily opened or closed even without an external power supply.
⑥ Motor	Powerful motor with 400 Ncm and encapsulated gear, low-noise.

TECHNICAL FUNCTIONS

Powerdrive			PL	PL-FR
Moving leaf	ESG and ISO fine frame	up to 120 kg	●	●
	Non-supplied moving leaves	up to 200 kg	●	○
		up to 160 kg	●	●
GEZE specific functions for additional convenience	Automatic DUO (FR-DUO)		○	●
	Closing time LOCKED (FR-LL)		○	●
	Night RWS (FR-RWS)		○	●
Two-state toothed belt locking mechanism with manual unlocking facility			●	●
Emergency opening / emergency closing via integrated battery			● / ●	● / ○
Automatic reversing			●	●
Static force in accordance with BGR 232 and DIN 18650 ≤ 150 N			●	●
24 V DC output for external consumers			●	●
Readable fault memory			●	●
Main closing edge protection via connectable sensor systems			●	●
Secondary closing edge protection via connectable sensor systems			●	●
Draught lobby control			●	○
Door OPEN/CLOSE status signalling			●	●

- = Standard
- = Optional
- = Limited extent
- = Not possible with this variant

Program selector for selecting the operating status of automatic sliding doors

**Display programming switch**

Electronic user input using push buttons	Can be locked in emergency exits and escape routes
GEZE DPS	GEZE DPS-SCT

**Programming keypad**

Electronic user input using push buttons	Can be locked in emergency exits and escape routes
GEZE TPS	GEZE TPS-SCT

**Mechanical program selector**

Mechanical user input via rotary selector	Key-operated in emergency exits and escape routes
GEZE MPS	GEZE MPS-ST



The following modes can be set using the program selector:

Permanent hold-open mode

The door moves to the OPEN position and stays open. Motion detectors and opening sensors are deactivated.

Night mode

The motion detectors are set to inactive and the door closes.

Option: the door leaves are electrically locked to prevent them being forced open.

Shop closing time mode (one-way)

The door opens and only closes when a person goes out.

The outside motion detector is inactive, the inside detector is switched to active.

Automatic mode

The door opens as soon as the motion detector or sensor is triggered and closes again after a variable time. Safety sensors protect the door leaf travel path. If there is someone in the opening, the door will not close.

**Reduced opening width mode**

Activates or deactivates the settings made in Learn mode.

OFF mode (with TPS and MPS only)

The drive and sensors are switched off, but the door leaves can be moved manually.

**Key-operated pushbutton**

Program selector can be locked with a key-operated pushbutton (required on the FR variants)

Controls

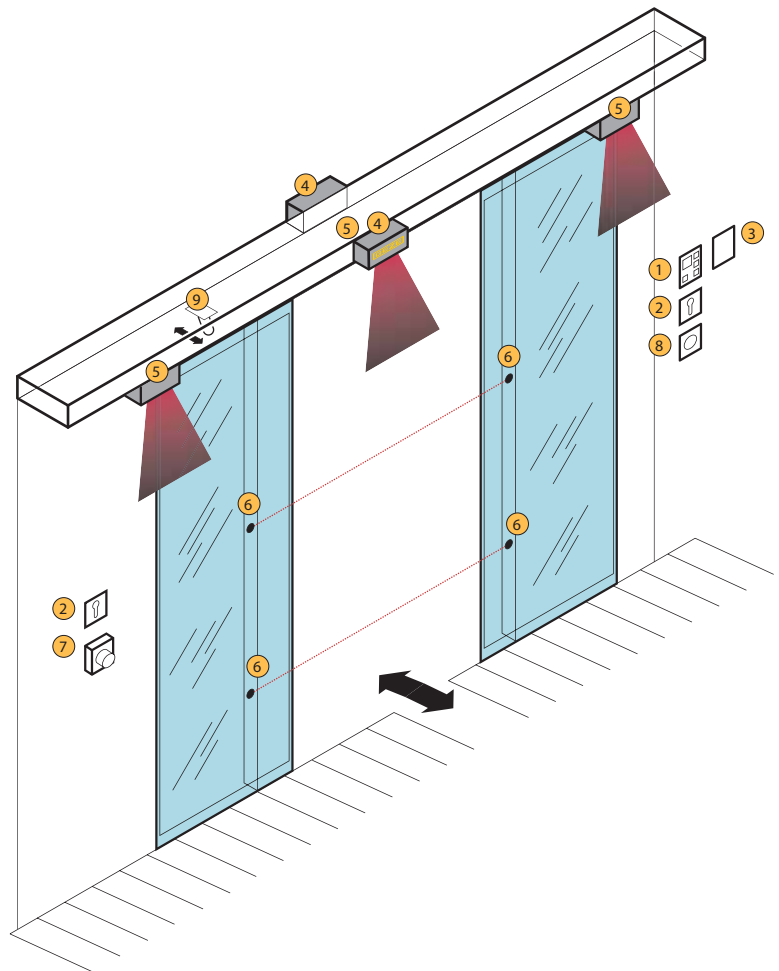
- ① Program selector
- ② Key-operated switch
- ③ Limited opening width button

Activation and safety

- ④ Motion detector
- ⑤ Infrared light curtain
- ⑥ Infrared light barrier (not permitted in DE according to DIN 18650)

Emergency controls

- ⑦ Emergency stop
- ⑧ Emergency up
- ⑨ Emergency unlocking



Actuators for linear sliding doors



Combination devices

Radar motion detector with light curtain for activation and protection

of automatic sliding doors	in emergency exits and escape routes
GEZE GC 362 R	GEZE GC 362 SF
GEZE Jupiter R	GEZE Jupiter SV



Radar motion detector

for activation

of automatic sliding doors	in emergency exits and escape routes
GEZE GC 302 R	GEZE GC 302 SV



Light curtains

for protecting the main and ancillary closing edges of automatic sliding doors

GEZE GC 333
GEZE Presence S

Mobile, effortless commissioning and monitoring

SERVICE TERMINAL ST 220



Mobile, easily portable and uncomplicated. Programming the GEZE Slimdrive SL NT automatic sliding door system is simple with the ST 220 service terminal. The service terminal and sliding door terminal communicate and exchange data via an integral RS485 interface.

- Small size makes it easily portable: 80 x 125 x 37 mm (width x height x depth)
- Large, illuminated display with clear text display
- Read-out function for maintenance and diagnostic information
- IP 40 enclosure
- Powered via the door system
- Compatible with all drive and software versions from DCU software version 3.0 onwards.
- Password-protected to protect operating parameters and maintenance data against unauthorised changes.

New and impressive: GEZE automatic door systems with Bluetooth technology

GEZEconnects

Wireless connection! Bluetooth is an international, standardised short-range radio link with a range of up to 10 metres. The GEZEconnects software allows you to control and monitor GEZE automatic door systems wirelessly via Bluetooth. Programming, commissioning, monitoring and data updates are all easily carried out from a laptop or PC.

GEZEconnects | SOFTWARE



TURBOTECHNIK



AUTOMATISCHE TÜRSYSTEME



RWA UND LÜFTUNGSTECHNIK



SICHERHEITSTECHNIK



GLASSYSTEME

GEZEconnects | SOFTWARE
zur kabellosen Verbindung von GEZE Automatischen Türsystemen und PCs über Bluetooth

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71229 Leonberg
Germany
Telefon: +49 (0)7152-203-0
Telefax: +49 (0)7152-203-310
www.geze.com

Systemvoraussetzungen:
PC mit Windows XP
Intel oder 100% kompatiblen
Prozessor
500 MB RAM
1,5 GHz
CD Laufwerk
Bluetooth Schnittstelle
150 MB freier Speicherplatz



GEZEconnects | SOFTWARE
zur kabellosen Verbindung von GEZE Automatischen Türsystemen und PCs über Bluetooth

GEZE
BEWEGUNG MIT SYSTEM

Other benefits of the forward-looking radio wireless technology

- Fast, efficient data transfer
- All default settings can be very simply adopted for other door systems.
- Time-saving updates possible for separate parameter settings.
- User-friendly documentation for commissioning, maintenance and diagnostic reports.
- All necessary statistics can be easily downloaded at any time.
- Password-protected to protect operating parameters and maintenance data against unauthorised changes.

Wireless control with system - reliable, convenient and secure at the touch of a button

GEZE RADIO PROGRAMME



Radio controlled operators for the various applications in our daily life make bring added convenience. Senior citizens, the disabled or physically weaker people can be afforded more quality of life, and they help make things easy for care staff. They are increasingly becoming standard fittings for barrier-free and age-suitable living.

With a new and innovative radio solution, GEZE has also adapted their range of control elements. The wireless control of doors and windows using the GEZE radio programme makes connection to a power supply superfluous. Thanks to the tiny dimensions of the radio modules, these can easily be integrated in a drive or an in-wall casing and can also be clipped directly into the elbow switch and mounted wirelessly on glass.

Examples of types of application

- Retro-fitting without needing to lay cables and using existing switches/buttons
- Mounting without connection to power, for example, on glass
- Individual or group control of doors and windows
- Combined control of doors and windows using a remote



Hygienically one step ahead - GEZE proximity switch AIR 12 Cleanscan

AIR 12 CLEANSKAN



Opening doors with a wave: The AIR 12 Cleanscan can be used to control interior doors with no requirement for haptic perception cleanly and conveniently. Thus, active infrared sensors ensure, for example, the bacteria-free access to the bathrooms as well as for germ-free conditions in hotel kitchens, swimming baths and doctor's surgeries.

The pulse generator is installed at hand height and is able to precisely recognise people and objects, regardless of the direction in which they are moving, both very close i.e. at a distance of just five centimetres or even as far as 0.6 metres. The differing detection distances can be adapted optimally to the actual ambient circumstances and the requirements of the user groups. The no-contact sensor system offer the highest possible level of operating convenience, simply moving towards the door is sufficient to activate the automated opening function. It also brings about the benefit of absolute hygiene.

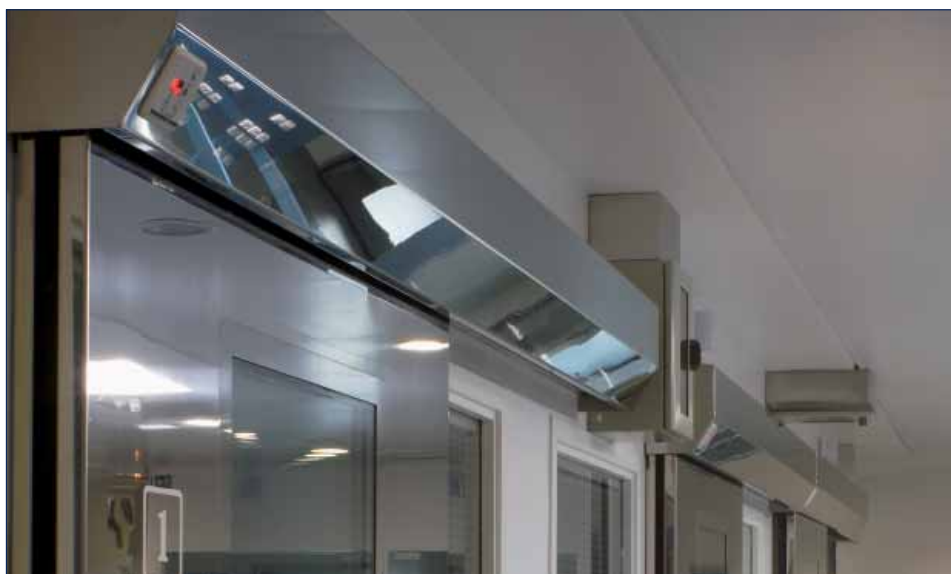
- No-contact proximity switch
- Variable adjustment of the sensor range in two stages
- Precise detection of people and objects - regardless of the direction in which they are moving
- Can be used universally for either surface or flush mounting

SPECIAL VARIATIONS**GEZE Powerdrive PL-HT – The hermetic sliding door system**

GEZE Powerdrive PL-HT is a tightly closing linear sliding door system which is specifically designed for use in clean room areas, in hospitals and clinics – particularly in the operating theatres and laboratories – as well as for production rooms with special hygiene requirements, such as the food, chemical and pharmaceutical of semi-conductors.

The hermetic sliding door Powerdrive PL-HT is based on the proven principle of self-lowering door leaves which, together with an all round rubber seal, create a hermetically sealed transition between two rooms with differing pressure conditions.

The Powerdrive PL-HT sliding door system has hygienic stainless steel surfaces and an almost invisible floor guidance which both are easy to be cleaned. The closed door leaf is sealed to all sides, without the seal permanently affect other components. Thus the special door is designed for high levels of use as well as for long life. The self-learning digital DCU-control assume optimal convenience thanks to automatic learning of door behaviour to the access frequencies.



The hermetic sliding door is available as a pre-assembled complete system, consisting of:

- the powerful drive with sealing mechanism and special functions, such as for example push&go and hospital control
- the detachable and easy to install stainless steel cover with integrated mud flap on the inside of the drive
- the stainless steel door leaf with rigid foam core and wear-resistant surrounding seal – pre-assembled for easy, quick and safe installation on site
- the stainless steel door frame for quick installation and invisible fastening

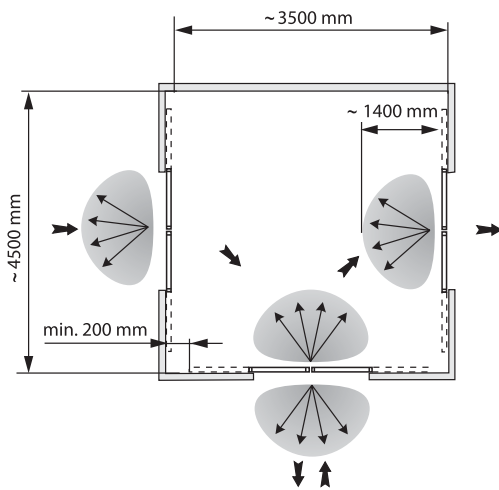
GEZE offers custom-made solutions for highest safety in particularly sensitive areas.

DRAUGHT LOBBIES

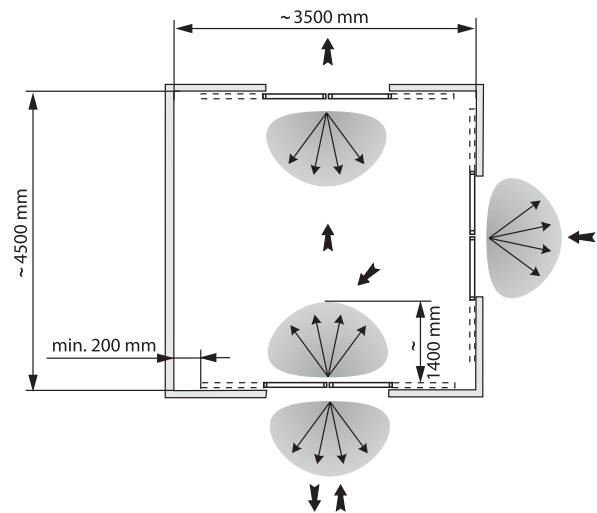
Draught lobbies are used to avoid draughts and cut down the amount of heat exchange. Preferably, only one of the doors should be open.
 Direction-detecting radar movement sensors only activate the door if persons are moving towards the door. The door can therefore be closed behind the person sooner.



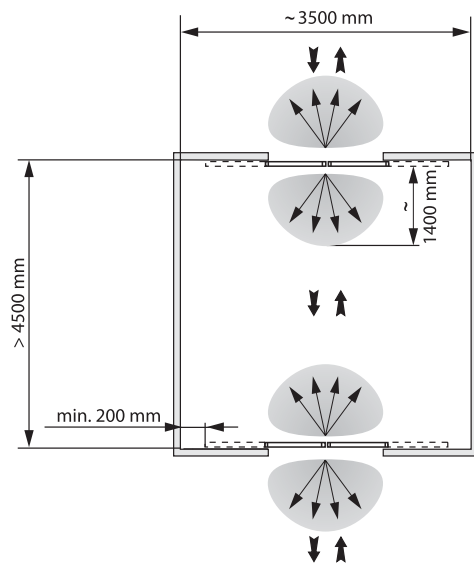
Combination example 1



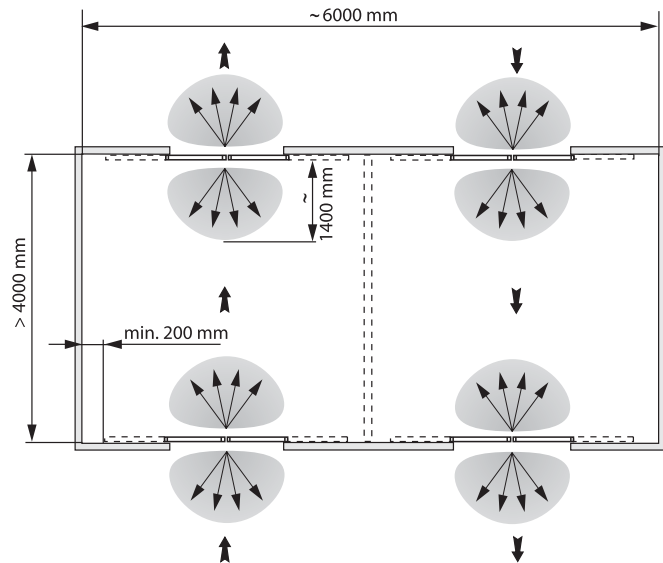
Combination example 2



Combination example 3



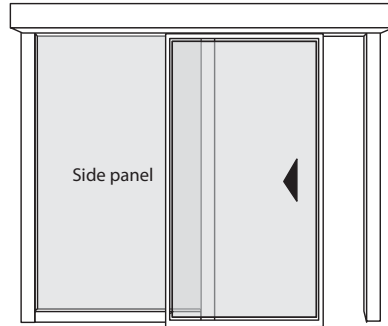
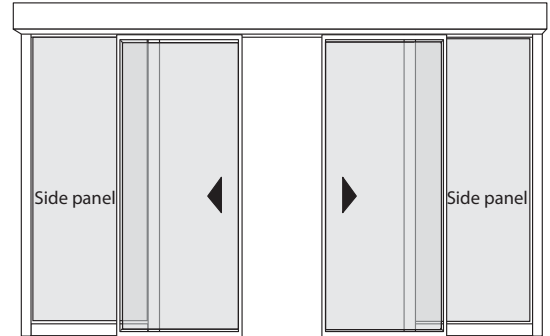
Combination example 4



MOUNTING EXAMPLES

As a standard version the linear sliding door system is suitable for single-leaf or double-leaf doors, left-hand as well as right-hand closing, with or without side panel. The systems can be used in both interior and exterior areas. **Especially for heavy doors.**

View from inside:

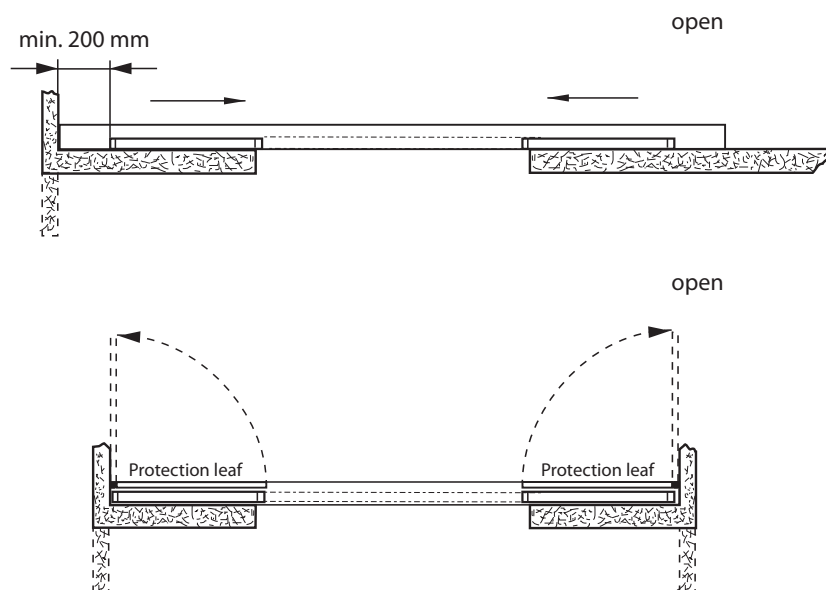
Single-leaf, right-hand closing**Double-leaf, with side panel****INSTALLATION VARIATIONS**

If the building is also going to be used by groups of people who require additional protection in accordance with building law (persons who are particularly at risk), more protection equipment than is specified in the following may be required.

It will only be possible to provide an exact description of the protection by carrying out a safety analysis in accordance with the machinery directive and DIN 18650.

Fitted to wall/lintel without side panel, double-leaf

- without protection leaf
- with protection leaf, for restricted installation space

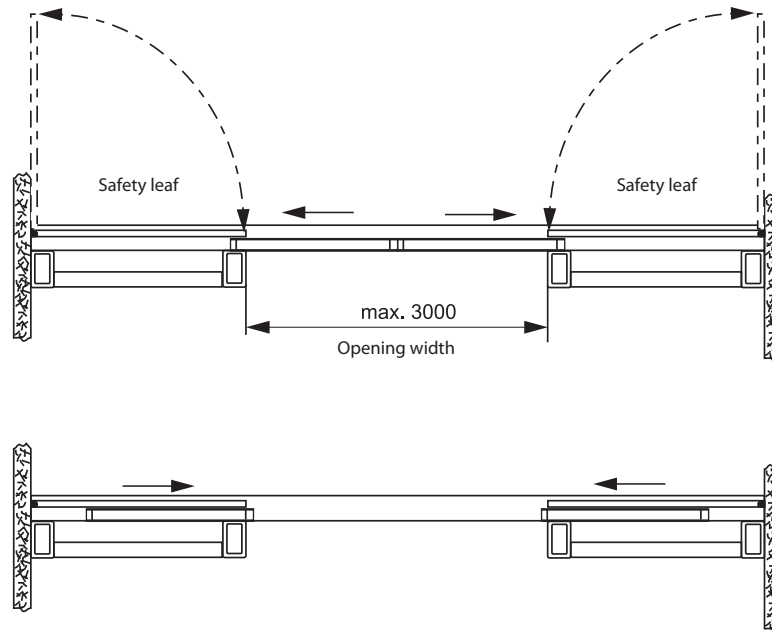


Protection leaves and safety leaves are used if separative safety equipment is required in accordance with DIN 18650.

INSTALLATION VARIATIONS

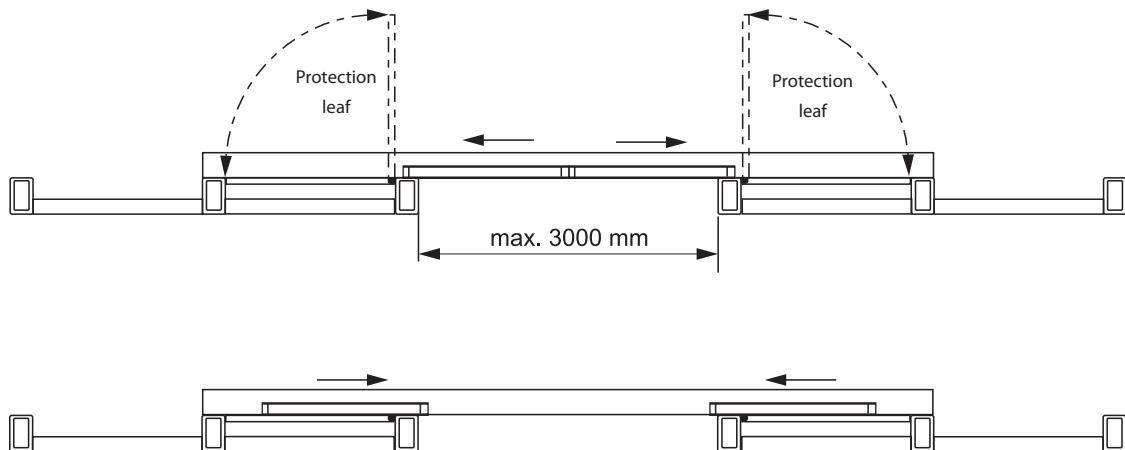
Fitted to façade structure, double-leaf

- with safety leaf



Fitted to façade structure, double-leaf

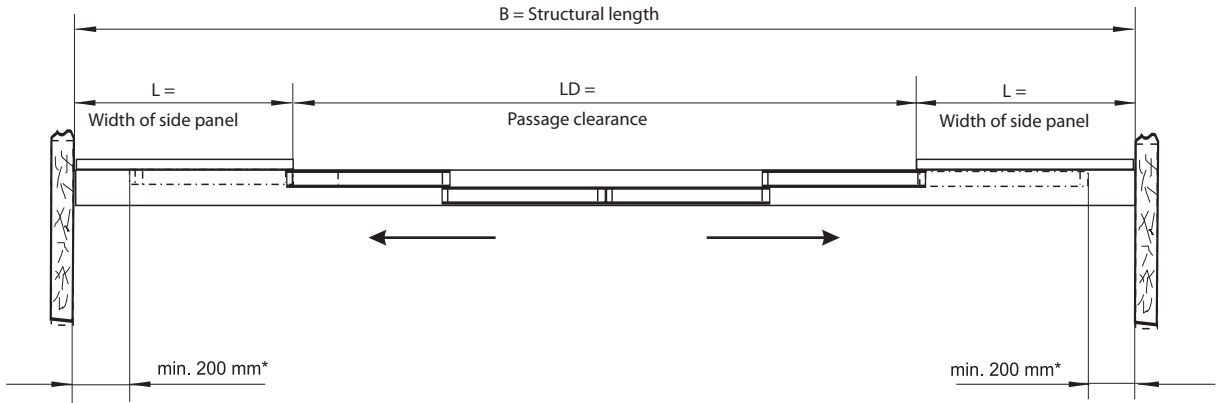
- with protection leaf



Protection leaves and safety leaves are used if separative safety equipment is required in accordance with DIN 18650.

INSTALLATION VARIATIONS Unsupported installation with and without fanlight

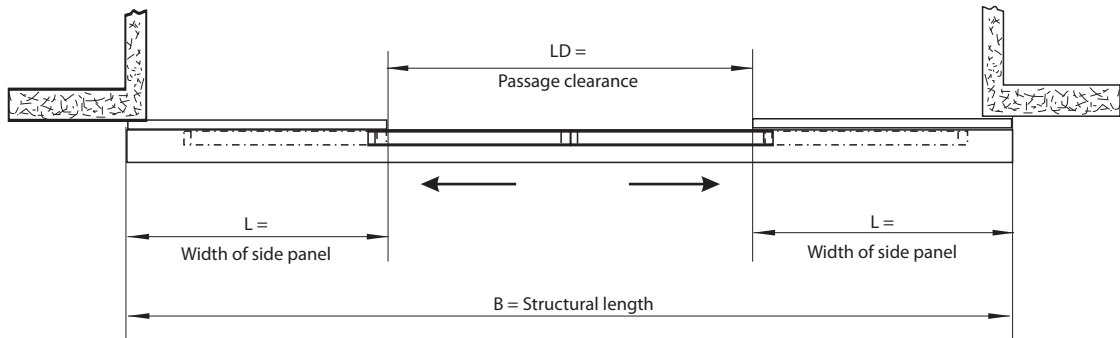
- Double-leaf, width of side panel $L = (B-LD) / 2$
- With mounting on outside façade: LD = max. 2000 mm, B = max. 4500 mm
Height with fanlight = max. 3000 mm



* an alternative safeguarding is possible

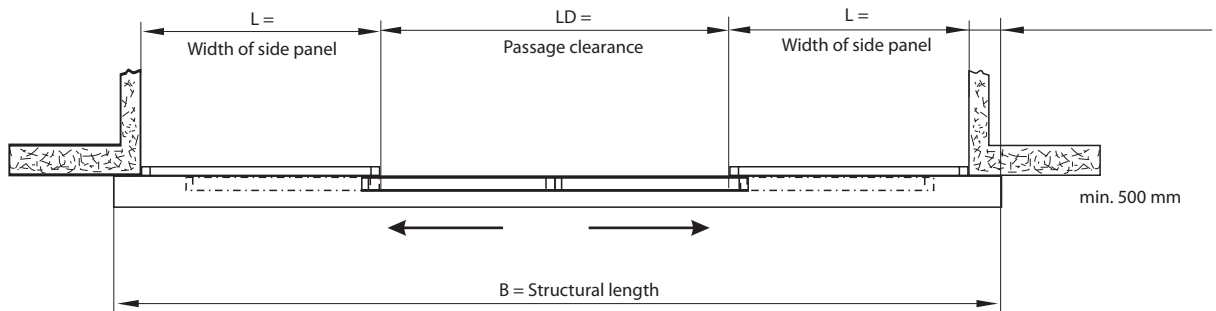
Fitted to wall/lintel, double-leaf

- Wall mounting, double-leaf, surface-mounted



Fitted to wall/lintel with side panels

- Wall mounting, double-leaf, flush-mounted

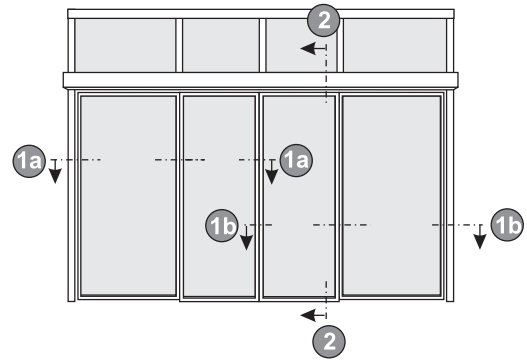


HORIZONTAL AND VERTICAL SECTIONS

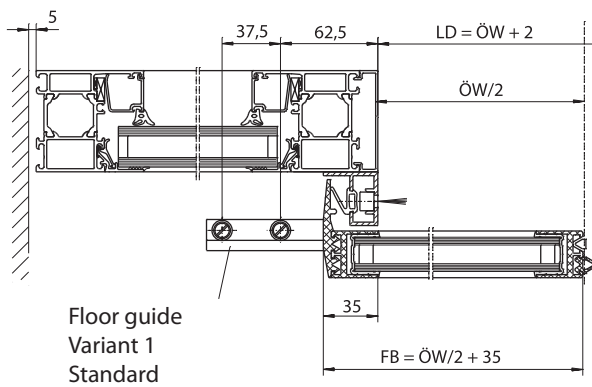
ISO profile system fitted to façade elements

List of abbreviations

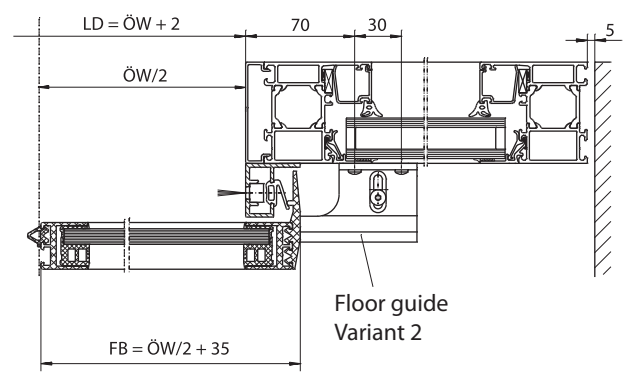
DH	Passage height
ÖW	Opening width
B	Structural length of the entire system (mm)
FB	Leaf width
LD	Passage clearance



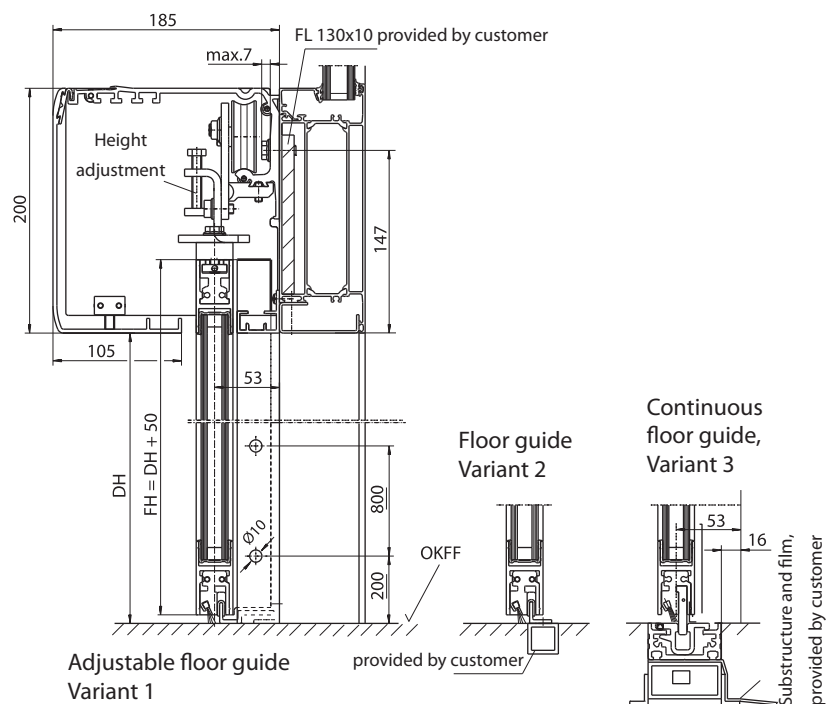
1a ISO profile system with 22 mm glass



1b ISO profile system with 10 mm ESG glass (leaf)



2 Vertical section ISO glass

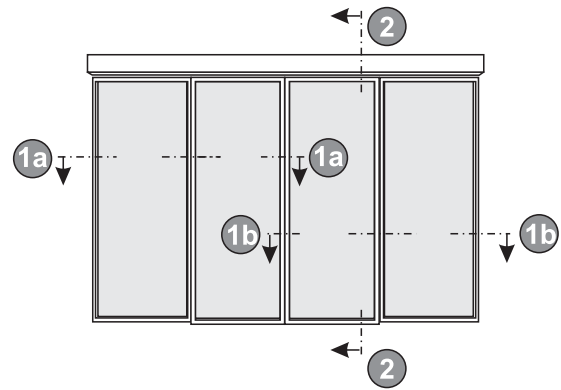


HORIZONTAL AND VERTICAL SECTIONS

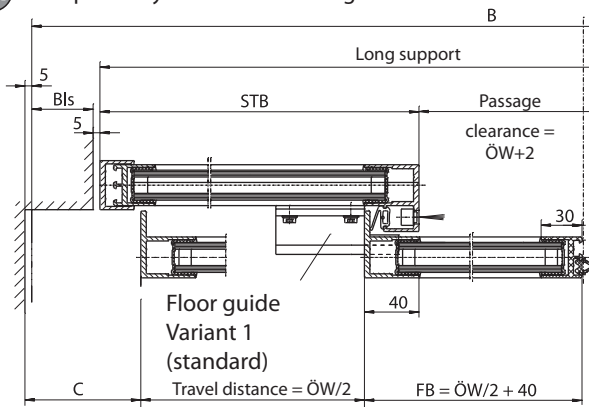
ISO profile system, wall-mounted (= lintel installation) with side panels

List of abbreviations

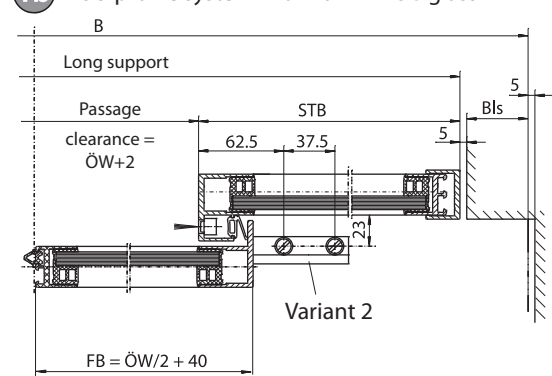
DH	Passage height
ÖW	Opening width
B	Structural length of the entire system (mm)
FB	Leaf width
STB	Width of side panel
C	Safety distance



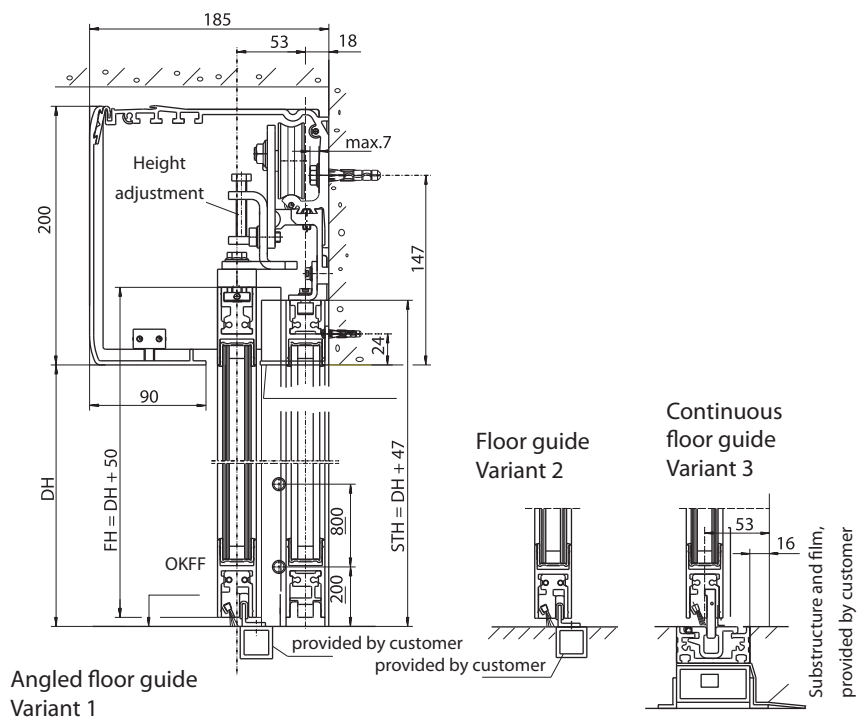
1a ISO profile system with 22 mm glass



1b ISO profile system with 10 mm ESG glass



2 Vertical section ISO glass

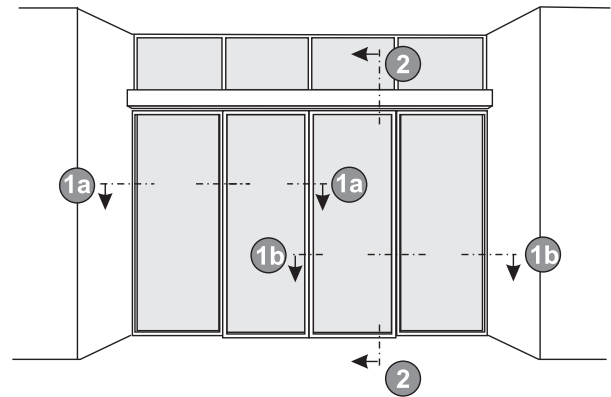


HORIZONTAL AND VERTICAL SECTIONS

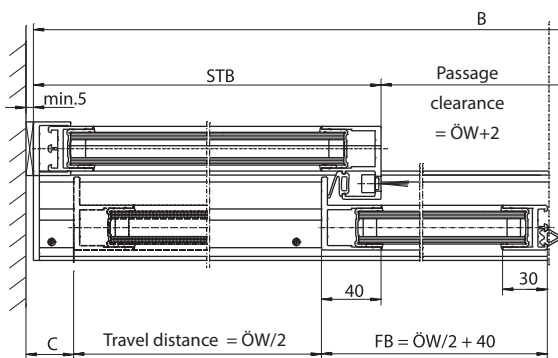
ISO profile system, unsupported between walls

List of abbreviations

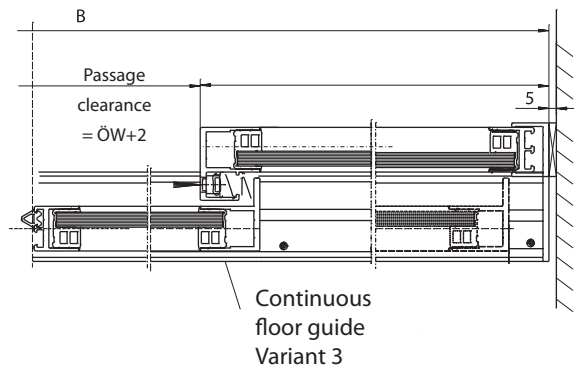
DH	Passage height
ÖW	Opening width
B	Structural length of the entire system (mm)
FB	Leaf width
STB	Width of side panel
C	Safety distance



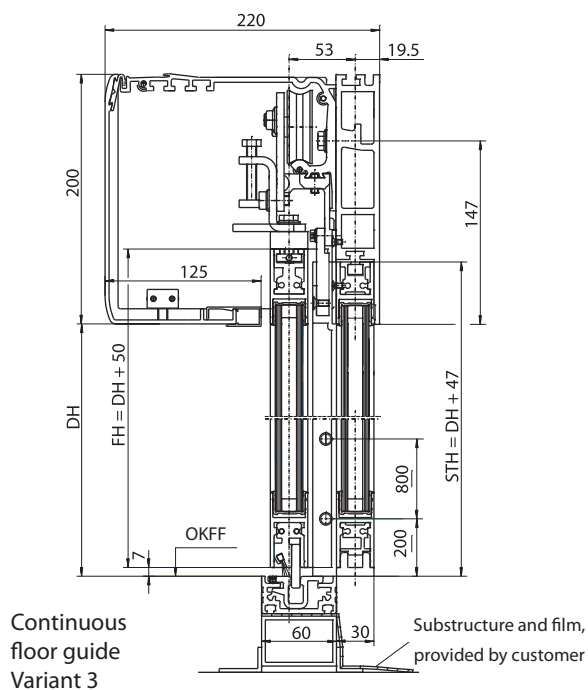
1a ISO profile system with 22 mm glass



1b ISO profile system with 10 mm glass



2 Vertical section ISO glass



Continuous floor guide Variant 3

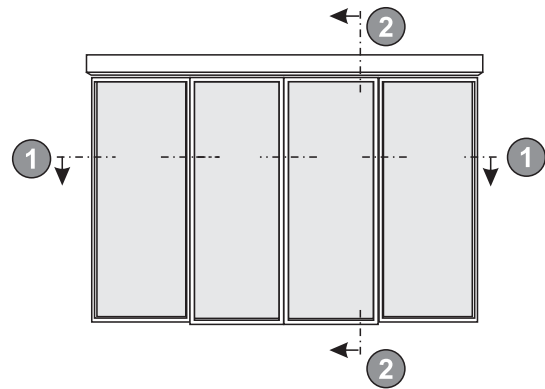
Substructure and film, provided by customer

HORIZONTAL AND VERTICAL SECTIONS

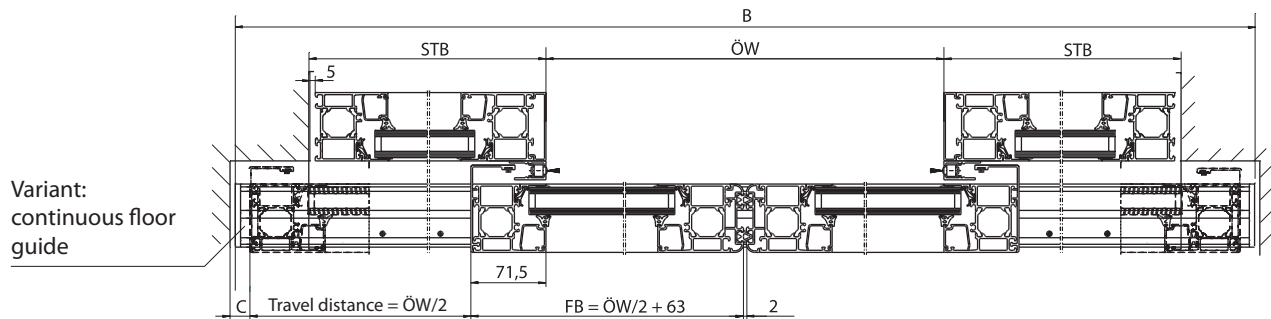
Framed leaves fitted to profile system A

List of abbreviations

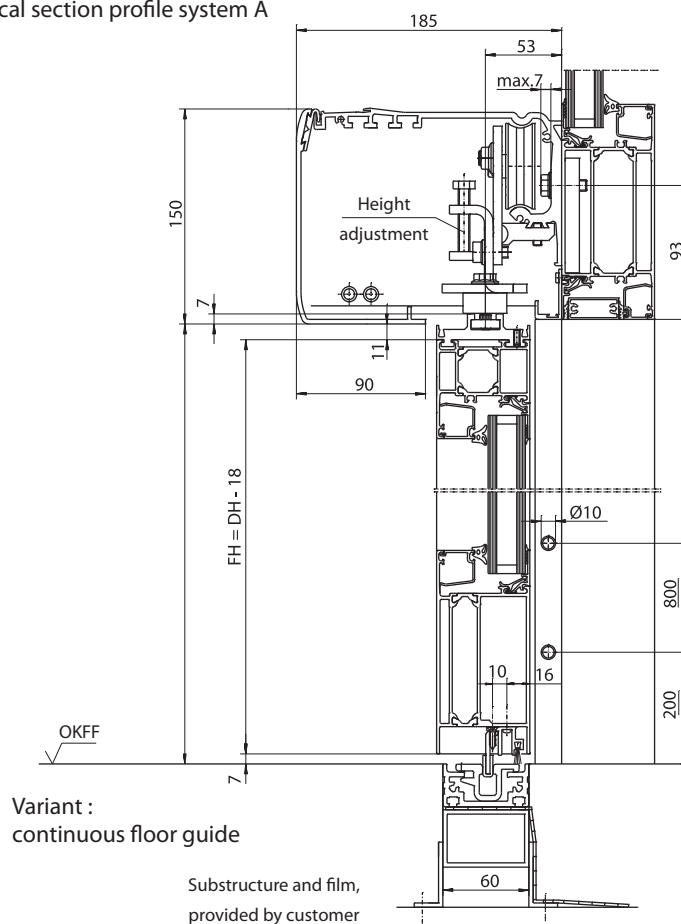
DH	Passage height
ÖW	Opening width
B	Structural length of the entire system (mm)
FB	Leaf width
STB	Width of side panel
C	Safety distance



1 Framed leaves fitted to profile system



2 Vertical section profile system A



Variant :
continuous floor guide

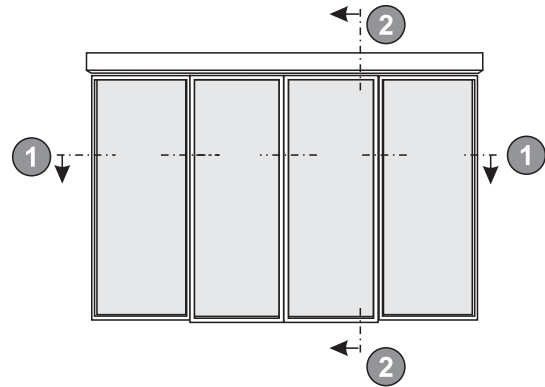
Substructure and film,
provided by customer

HORIZONTAL AND VERTICAL SECTIONS

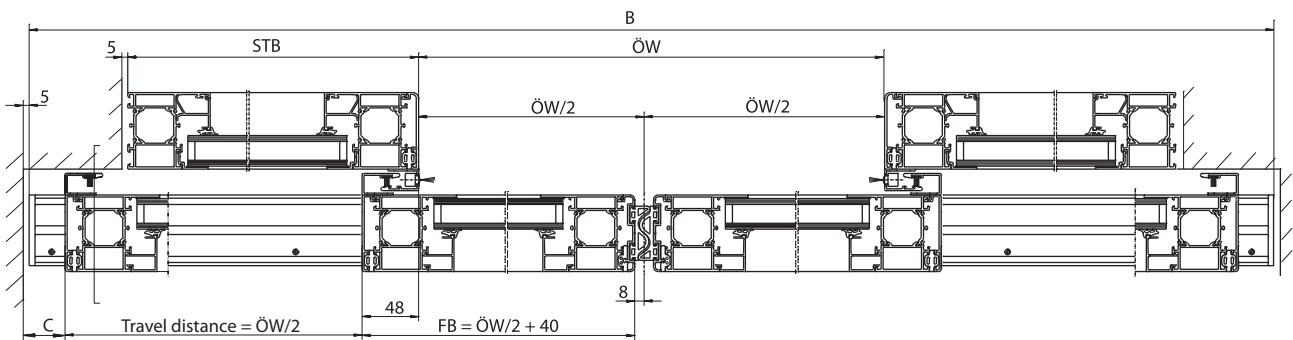
Framed leaves fitted to profile system B

List of abbreviations

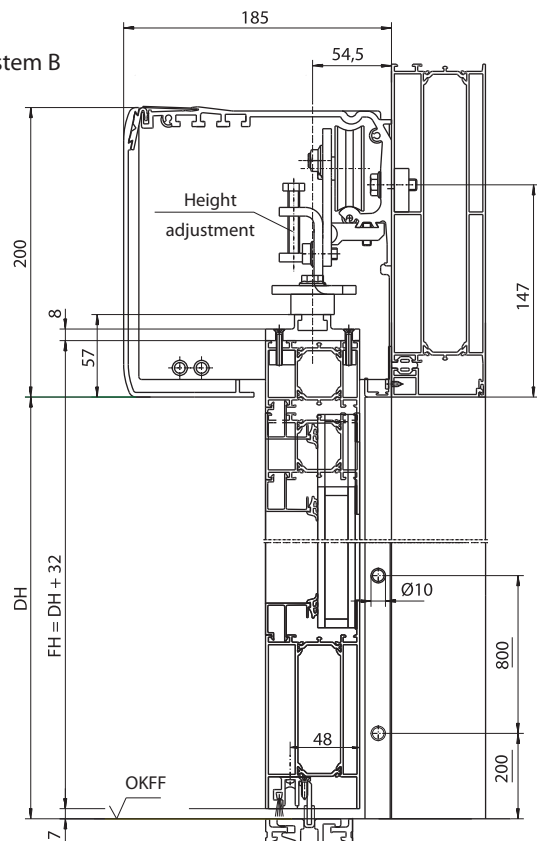
DH	Passage height
ÖW	Opening width
B	Structural length of the entire system (mm)
FB	Leaf width
C	Safety distance



1 Framed leaves fitted to profile system

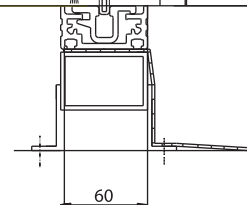


2 Vertical section profile system B



Variant :
continuous floor guide

Substructure and film,
provided by customer



CALCULATIONS

Structural length of the entire system *)

Powerdrive	PL	PL-FR **)
Single-leaf version	ÖW 700 - 3000 mm $B = 2 \times \text{ÖW} + 65 \text{ mm}$	ÖW 700 - 3000 mm $B = 2 \times \text{ÖW} + 65 \text{ mm}$
Double-leaf version	ÖW 800 - 3000 mm $B = 2 \times \text{ÖW} + 100 \text{ mm}$	ÖW 800 - 3000 mm $B = 2 \times \text{ÖW} + 100 \text{ mm}$

*) Minimum installation length with ISO glass profile system

**) Request drawing 70506-0-001 for variations FR-RWS/-LL.

NOTES

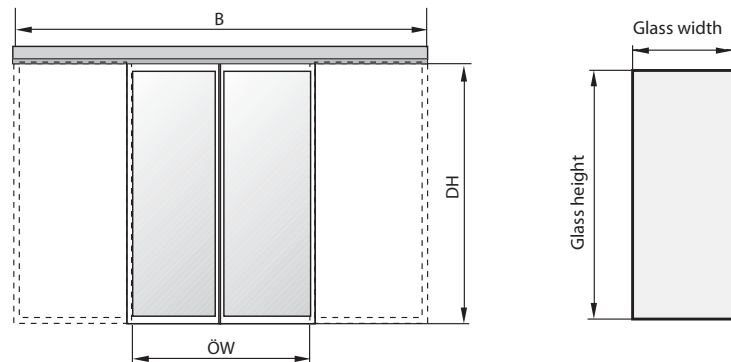
- Escape route sliding doors < 1000 mm are only permitted in exceptional cases.
- The minimum opening widths are oriented to building law requirements.

Glass size calculation

Powerdrive		PL	PL-FR
Leaf width	single-leaf	$FB = \text{ÖW} + 40$	$FB = \text{ÖW} + 32$
	double-leaf	$FB = \text{ÖW}/2 + 40$	$FB = \text{ÖW}/2 + 32$
Leaf height	with cover 150 mm	$FH = DH$	$FH = DH$
	with cover 200 mm	$FH = DH + 50$	$FH = DH + 50$
Glass dimensions	glass width	$FB - 40$	$FB - 26$
	glass height	$FH - 90$	$FH - 85$
	glass thickness	22 mm	10 mm, 12 mm

List of abbreviations

ÖW	Opening width
B	Structural length of the entire system (mm)
DH	Passage height
FH	Leaf height
FB	Leaf width





Zertifikat P-2926/07

(Nur gültig mit umseitigen Bedingungen)

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Baumusterprüfzeichen

Geltungsdauer
31.12.2012



Erzeugnis: Automatische Linearschiebetür
Typ: Powerdrive

- Prüfgrundlagen :**
- DIN 18650-1/2: 2005-12
Schlösser und Baubeschläge - Automatische Türsysteme
 - BGR 232: 2003
Kraftbetätigte Fenster, Türen und Tore,
 - DIN EN 60 335-1: 2007-02
Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke
Teil 1: Allgemeine Anforderungen
 - DIN EN 60 950-1: 2006-11
Sicherheit von Einrichtungen der Informationstechnik

sowie in vorgenannten Prüfgrundlagen aufgeführte mitgeltende Normen, Vorschriften und Richtlinien.

Prüfergebnis :

Die in den Prüfgrundlagen gestellten Anforderungen werden im Ergebnis der Baumusterprüfung und bei Einhaltung der Bedingungen der Baumusterprüfbescheinigung P-2926/07 von dem ganzen Erzeugnis erfüllt.

Die Genehmigung, das oben abgebildete Prüfzeichen gemäß den umseitig abgedruckten Bedingungen zu verwenden, wird hiermit erteilt.

Amstadt, 02.11.2007

TÜV Thüringen Anlagentechnik GmbH & Co. KG
Prüfstelle für Gerätesicherheit


Dipl.-Ing. Sorge
Leiter der Prüfstelle





Zertifikat P-2927/07
(Nur gültig mit umseitigen Bedingungen)

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Baumusterprüfzeichen

Geltungsdauer
31.12.2012



Erzeugnis: Automatische Linearschiebetür zum Einsatz in Rettungswegen
Typ: Powerdrive-FR

- Prüfgrundlagen :
- Richtlinie über automatische Schiebetüren in Rettungswegen (AutSchR) (Mitteilung des DIBt Heft Dez/1998)
 - DIN 18650-1/2: 2005-12
Schlösser und Baubeschläge - Automatische Türsysteme
 - BGR 232: 2003
Kraftbetätigte Fenster, Türen und Tore.
 - DIN EN 60 335-1: 2007-02
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Teil 1: Allgemeine Anforderungen
 - DIN EN 60 950-1: 2006-11
Sicherheit von Einrichtungen der Informationstechnik

sowie in vorgenannten Prüfgrundlagen aufgeführte mitgeltende Normen, Vorschriften und Richtlinien.

Prüfergebnis :

Die Prüfstelle für Bauprodukte des TÜV Thüringen e.V., als vom Deutschen Institut für Bautechnik Berlin unter THU 08 benannte PÜZ-Stelle mit den angeschlossenen Prüflaboratorien bestätigt:

➤ **Das Baumuster entspricht den Vorschriften nach Bauregelliste A Teil 1 Nr. 6.18 für geregelte Bauprodukte** ◀

Die in den Prüfgrundlagen gestellten Anforderungen werden im Ergebnis der Baumusterprüfung und bei Einhaltung der Bedingungen der Baumusterprüfbescheinigung P-2927/07 von dem ganzen Erzeugnis erfüllt.
Die Genehmigung, das oben abgebildete Prüfzeichen gemäß den umseitig abgedruckten Bedingungen zu verwenden, wird hiermit erteilt.

Zella-Mehlis, 02.11.2007

Technischer Überwachungsverein Thüringen e.V.
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Dipl.-Ing. (FH) Reichelt
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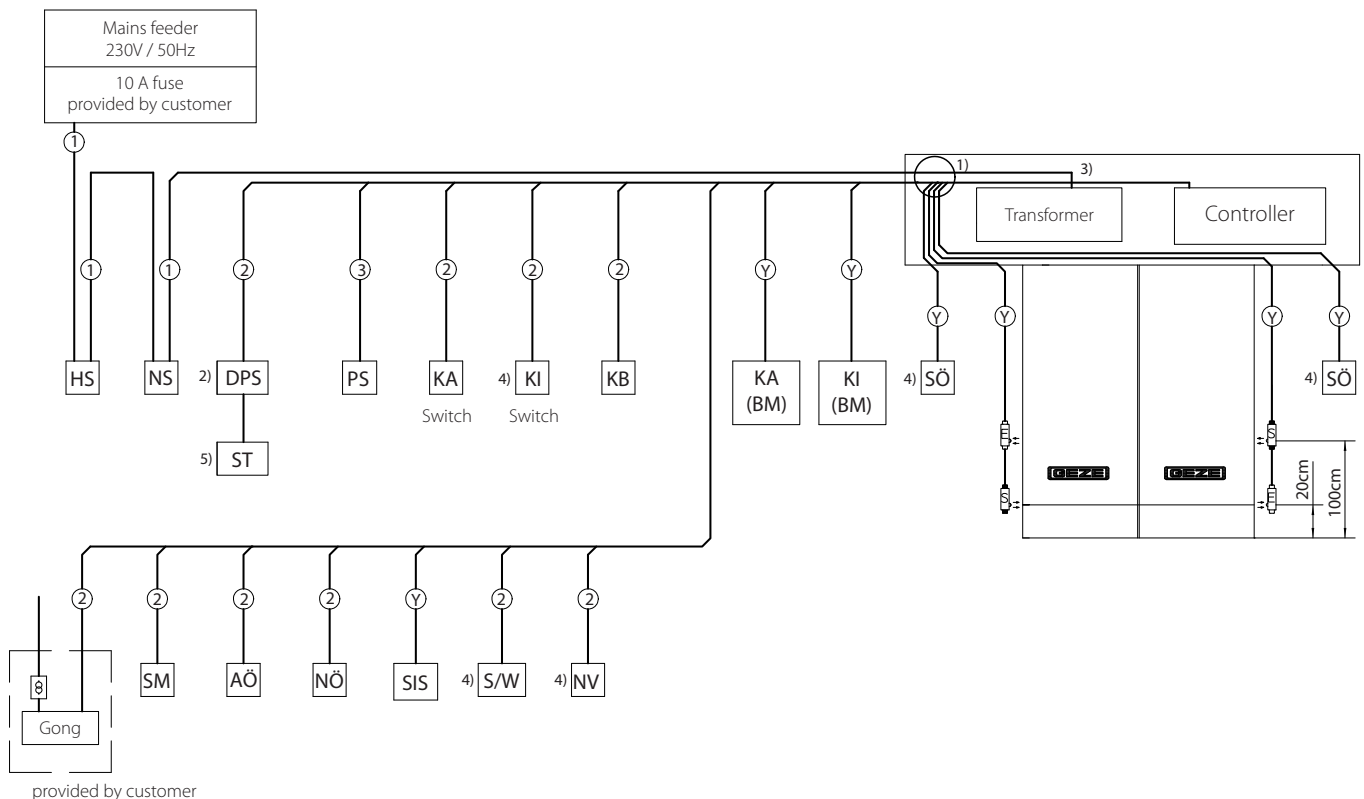


Cable plan DCU1, DCU1-2M

HS	Main switch
NS	Emergency stop button (optional)
DPS	Display programming switch
ST	Key programming switch
PS	Program selector
KA	Contact sensor, outside
KI	Contact sensor, inside
KB	Contact sensor, authorised
BM	Motion detector
SÖ	Safety sensor, "Open"
SM	Fault indicator Fault indicator lamp or klaxon
AÖ	Limited opening width
NÖ	Emergency opening
SIS	Light curtain with motion detector KA or KI
S/W	Draught lobby, draught-proofing
NV	Emergency lock

Notes:

- 1) Cable inlet through the side plate or on the left or right side, concealed from behind.
Avoid sharp edges or use edge protectors to protect the cables.
- 2) Max. cable length 100 m
- 3) Leave at least 5 m of signal cables and at least 2 m of power cables protruding from the wall.
- 4) Not for DCU1-2M
- 5) Required for DCU1-2M

**Drawing no. 70484-9-9861**

See wiring diagram
Standard drives (DCU1) 70484-9-9847, 105127
FR drives (DCU1-2M) 70484-9-9850, 105130

Safety notes:

Run cables as per VDE 0100

The cables must be run, wired up and the system commissioned only by authorised and trained personnel.

We shall accept no warranty or service claims if GEZE products are used in combination with non-GEZE products.

Wire cross-section:

- ① NYM-J 3 x 1,5 mm²
- ② I-Y(ST)Y 2 x 2 x 0,6 mm
- ③ I-Y(ST)Y 3 x 2 x 0,6 mm
- Y To be supplied by GEZE

References



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