

SLIDING DOOR

Automatic sliding door

Sliding doors for escape and rescue routes according to CO48 (France)

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OVERVIEW TABLE FOR AUTOMATIC SLIDING DOOR SYSTEMS

	ECdrive T2	Slimdrive SL NT	Powerdrive PL
PRODUCT FEATURES			
Dimensions (height x depth)	100 x 190 mm	70 x 190 mm	150 x 185 mm 200 x 185 mm
Opening width 1-leaf	700 – 3000 mm ⁴	700 – 3000 mm	700 – 3000 mm
Opening width 2-leaf	900 – 3000 mm	900 – 3000 mm	800 – 3000 mm
Leaf weight (max.) 1-leaf	120 / 140 kg ³	125 kg	200 kg ¹
Leaf weight (max.) 2-leaf	2 x 120 / 140 kg ³	2 x 125 kg	2 x 180 kg ¹ 2 x 200 kg ²
Opening / closing speed (max.)	0.8 / 0.8 m/s	0.8 / 0.8 m/s	0.8 / 0.8 m/s
Redundant sliding doors for escape and rescue routes (FR)	•	•	•
SPECIAL FUNCTIONS ESCAPE AND RESCU	E ROUTES		
FR with exit only locked (FR-LL)	•	•	•
FR in both directions (FR-DUO)	•	•	•
FR locked (FR-RWS)	•	•	•
CO48 (France)	•	•	•
FITTING VARIANTS			
ISO glass fine-framed	•	•	•
MONO glass fine-framed	•	•	•
GCprofile Therm, energy-efficient profile system fine-framed	•		
Toughened safety glass clamping fitting fine-framed	•		•
All-glass system (GGS)		•	
Integrated all-glass system (IGG)		•	

^{• =} Yes | 1 = max. 160 kg for FR variant, max. 120 kg for fine-framed leaves and profile system GCprofile Therm | 2 = if applicable increased opening and hold-open times | 3 = 120 kg with single roller carriage (standard), 140 kg with double roller carriage (option) and GCprofile Therm | 4 = 700 - 1500 mm for GCprofile Therm profile system



Trendpark Neckarsulm sliding door drive (photo: Martin Jakob / GEZE GmbH)



Cologne Bonn Airport (photo: Martin Jakob / GEZE GmbH)





Standard sliding door systems

FOR COMFORT AND PERFECTION

Sliding doors are space-saving, elegant and modern. Glass sliding doors are ideal when it comes to making good use of daylight and fulfilling optical criteria. GEZE automatic sliding doors can be used to realise various user scenarios in one building.

PRODUCT FEATURES

- → The variants in the Slimdrive drive series with an overall height of only 7 centimetres blend perfectly into any building's architecture and offer a wide range of application possibilities
- → The ECdrive T2 drives are economical and extremely reliable in their functionality
- The products from the Powerdrive series are real power packs and capable of moving heavy doors conveniently and safely

AREAS OF APPLICATION

- → Public buildings and authorities
- → Office buildings and car dealerships
- Shopping centres and shop fitting
- → Airports and railway stations
- Health and care sector, e.g. hospitals, pharmacies
- → Hotels and restaurants
- Banks and education institutes e.g. schools, universities
- → Industrial buildings
- → Vestibule systems

STANDARDS

→ DIN 18650

The industrial norm DIN 18650 was created to guarantee operators and users of automatic doors optimum safety. GEZE sliding door systems have been type-tested and certified in accordance with DIN 18650.

→ EN 16005

The new European norm EN 16005 sets out the design requirements and testing methods used to ensure the safe use of automatic doors. This norm has created a Europe–wide safety standard for automatic doors.

All automatic door systems and safety sensors from GEZE meet the EN 16005 standard and are available.



Augustinum, Stuttgart, Germany (photo: Dirk Wilhelmy)

REDUNDANT SLIDING DOORS FOR ESCAPE AND RESCUE ROUTES (FR)

To guarantee the safety of escape and rescue routes, the control unit is designed in a redundant way in connection with the complete system. This redundancy guarantees that in the event of a power failure or fault, the sliding door will automatically open safely in the "Automatic" and "Exit only" modes of operation. In "Night" mode of operation the locking mechanism prevents unauthorised opening of the door. There is no escape and rescue route function in this mode of operation.



Kolbenschmidt Pierburg, Neckarsulm, Germany (photo: Nikolaus Grünwald)

DESIGN POSSIBILITIES WITH THE SLIDING DOOR SYSTEM



1 = Sliding door drive | 1 2 = Moving leaf| 3 = Side panel | 1 4 = Combined detector| 5 = Active infrared detector | 6 = Programme switch with key switch | 7 = Plastic elbow switch | 8 = LED sensor switch glass | 9 = Non-contact proximity switch | 10 = Elbow switch | 11 = LED sensor foot switch



ECdrive T2-FR automatic sliding door drive, Aldi Süd - branch in Mühldorf (photo: Robert Sprang / GEZE GmbH)

ECdrive T2







AREAS OF APPLICATION

- → Single and double leaf sliding door systems
- → Interior and exterior doors with high access frequency
- → Complete solution for entrance areas with GCprofile Therm and fanlight
- → If extra impermeability or energy efficiency are needed
- → Opening widths from 700 to 3000 mm possible
- → Door leaf weights up to 140 kg per leaf
- → Suitable profile systems are fine-framed profile systems with ISO and MONO glass, GCprofile Therm, toughened safety glass clamping profile, on-site framed moving leaf doors and wooden leaves

PRODUCT FEATURES

- → Slim design with a cover height of just 100 mm for greater creative freedom
- → With double roller carriage and GCprofile Therm up to 140 kg leaf weight
- → Efficient installation thanks to pre-drilled tracks and oblong holes
- → Continuous floor guide available for controlled diversion of rainwater
- → Integrated cable guides make it easier to lay cables
- → Can be networked, and integrated into the building automation via open standard (BACnet)
- → Independent error recognition and recording
- → Freely configurable inputs and outputs for different functions
- → Integrated rechargeable battery for emergency opening and closing in the event of a power failure
- → Self-cleaning roller carriage reduces maintenance effort and costs
- → Various mechanical and electrical locks are optionally available
- → Service interface for simple maintenance

TECHNICAL DATA

	ECdrive T2	ECdrive T2-FR	
For 1-leaf door systems	•	•	
For 2-leaf door systems	•	•	
Height	100	mm	
Depth	190	mm	
Leaf weight (max.) 1-leaf	120	kg*	
Leaf weight (max.) 1-leaf with GCprofile Therm	140 kg*		
Leaf weight (max.) 2-leaf	120	kg*	
Leaf weight (max.) 2-leaf with GCprofile Therm	140	kg*	
Opening width 1-leaf	700 to 3	000 mm	
Opening width 1-leaf with GCprofile Therm	700 to 1	500 mm	
Opening width 2-leaf	900 to 3	000 mm	
Opening width 2-leaf with GCprofile Therm	900 to 3	000 mm	
Temperature range	-15 to	50 °C	
IP rating	IP	20	
Disconnection from mains	Main switch in the drive		
Opening speed (max.)	0.8 m/s		
Closing speed (max.)	0.8	m/s	
Hold-open time	0 to	60 s	
Adjustable opening and closing force (max.)	150	O N	
Automatic adaptation to traffic flow	•	•	
Automatic reversal when an obstacle is detected	•	•	
Pharmacy opening	•	•	
Interlocking door system function	•	-	
Vestibule function	•	-	
Automatic opening in the event of a power failure	adjustable	standard	
Automatic closing in the event of a power failure	adjustable	not available	
Function in the event of a power failure	adjustable for 30 min / 30 cycles	open	
Automatic opening in the event of a fault	not available	standard	
Approvals	DIN 18650 EN 16005 DIN EN ISO 13849: Performance Level D	DIN 18650 EN 16005 DIN EN ISO 13849: Performance Level D AutSchR	

^{• =} yes | - = not available | * = 120 kg with single roller carriage (standard), 140 kg with double roller carriage (option) and GCprofile Therm

DRIVE COMPONENTS



TECHNICAL DATA

	ECdrive T2	ECdrive T2-FR
TRANSFORMER	Ring core with protec	tion and main switch
Voltage	230) V
Frequency	50	Hz
Capacity rating	140) W
LOCKING MECHANISM	Toothed belt locking, elec	ctro-magnetic, bi-stable
ROLLER CARRIAGE		
Door leaf adjustment vertical	10 r	nm
Door leaf adjustment horizontal	15 r	nm
Tiling protection	stan	dard
Self-cleaning	•	•
CONTROL UNIT	DCU1-NT	DCU1-2M-NT
With fault memory	•	•
With memory for statistical data	•	•
Software update possible	•	•
Bus interface optional	•	•
Connection for fire alarm system	•	•
Power supply for peripherals	•	•
Programmable inputs	3 ;	oc.
Programmable outputs	2 p	OC.
RECHARGEABLE BATTERY	NiCd, 24 V	, 700 mAh
MOTOR	Motor gear unit	Double motor gear unit
Torque	400	Ncm
= Ves		

^{• =} yes

FITTING VARIANTS

Door fittings	ECdrive T2
ISO glass fine-framed	•
MONO glass fine-framed	•
GCprofile Therm, energy-efficient profile system fine-framed	•
Toughened safety glass clamping profile	•
All-glass system (GGS)	-
Integrated all-glass system (IGG)	-
Wooden leaf (on-site)	•

^{● =} yes I - = not available

CALCULATION OF THE DRIVE LENGTH AL IN MM*

	ECdrive T2		ECdrive T2-FR**	
	Opening width (ÖW)	Drive length	Opening width (ÖW)	Drive length
2-leaf	900 – 1000	ÖW + 1100	900 – 1070	ÖW + 1170
	1000 – 3000	2 x ÖW + 100	1070 – 3000	2 x ÖW + 100
1-leaf left hand slide to open	700 – 3000	2 x ÖW + 75	700 – 800	ÖW + 880
			800 – 3000	2 x ÖW + 75
1-leaf	700 – 3000	2 x ÖW + 75	700 – 800	ÖW + 880
right hand slide to open			800 – 3000	2 x ÖW + 75

^{* =} Minimum installation length of the complete system with profile system ISO glass fine-framed | ** For FR variants (FR-RWS, FR-LL) request drawing no. 70518-0-001!



Note:

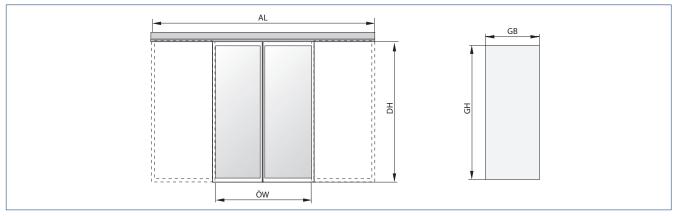


Opening widths of escape route sliding doors < 1000 mm are only permitted in exceptional cases. A continuous floor guide is recommended for external systems from an opening width of 2000 mm. The minimum opening widths depend on the requirements of building law.

CALCULATION OF LEAF AND GLASS DIMENSIONS IN MM

		ISO glass with aluminium secondary closing edge	ISO glass with rubber secondary closing edge	Toughened safety glass
Leaf width	1-leaf	ÖW + 40	ÖW + 35	ÖW + 35
	2-leaf	ÖW / 2 + 40	ÖW / 2 +35	ÖW / 2 +35
Leaf height	1-leaf / 2-leaf	FH = DH		
Glass width	1-leaf / 2-leaf	FB – 41	FB – 36	FB – 26
Glass height		FH – 90	FH – 90	FH – 85
Glass thickness		ISO = 22, MONO = 10		

 \rightarrow **Note:** max. leaf ratio width to height 1:4

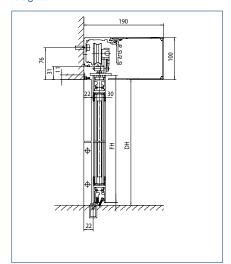


AL = Drive length | DH = Passage height | GB = Glass width | GH = Glass height | ÖW = Opening width

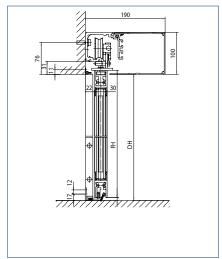
WITH ISO/MONO GLASS FITTING - WITHOUT SIDE PANEL

Drawing no. 70518-ep01 / 70518-ep02

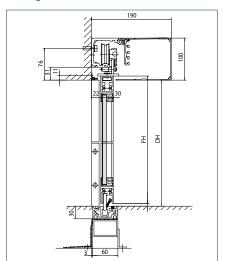
Wall installation, angled floor guide, ISO glass



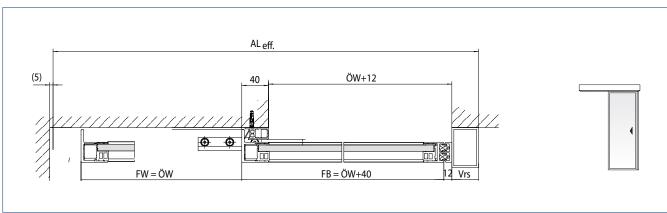
Wall installation, angled floor guide, ISO glass



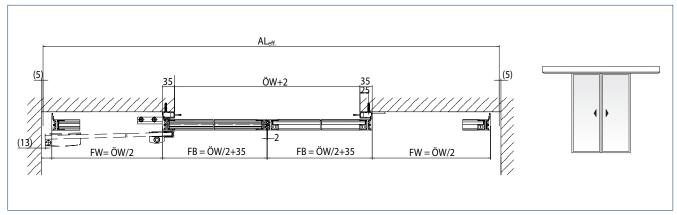
Wall installation, continuous floor guide, MONO glass



1-leaf, wall installation, ALU secondary closing edge, angled floor guide, left hand slide to open, MONO glass



2-leaf, wall installation, rubber secondary closing edge, angled floor guide / adjustable floor guide, with protective leaf, ISO and MONO glass

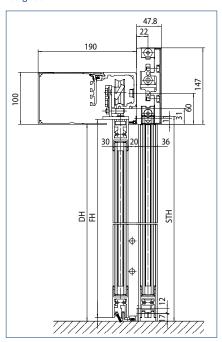


DH = Passage height | FH = Left height | FW = Travel path | FB = Leaf width | ÖW = Opening width | Vrs = Drive extension right | ALeff. = Effective drive length

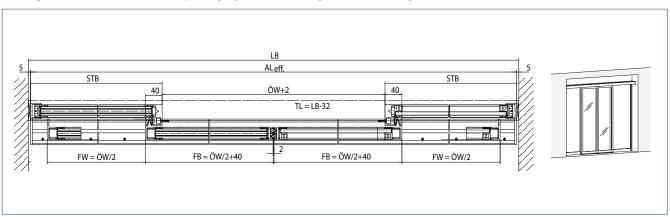
WITH ISO/MONO GLASS FITTING - WITH SIDE PANEL - MOUNTING WITHIN REVEAL

Drawing no. 70518-ep10

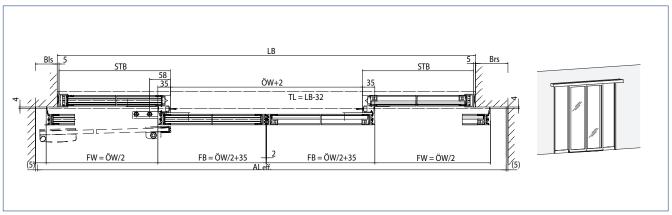
Mounting within reveal (thin), adjustable floor guide, ISO glass



Mounting within reveal, aluminium secondary closing edge, continuous floor guide, ISO and MONO glass



Mounting within reveal, rubber secondary closing edge, angled / adjustable floor guide, with protective leaf, ISO and MONO glass

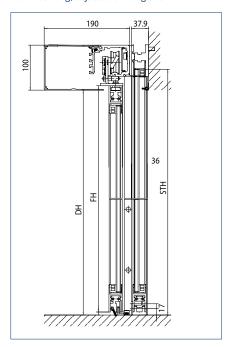


LB = Clear components | STB = Side panel width | STH = Side panel height | FH = Leaf height | FB = Leaf width | FW = Travel path | ÖW = Opening width | DH = Passage height | TL = Lintel length | Bls = Fastening left | Brs = Fastening right | ALeff. = Effective drive length

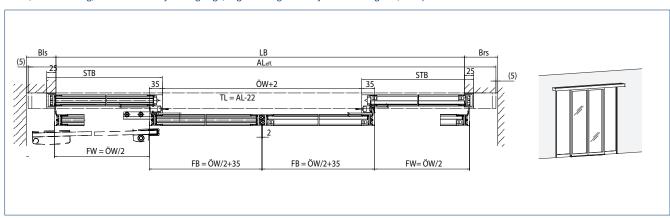
WITH ISO/MONO GLASS FITTING - WITH SIDE PANEL - WALL MOUNTING

Drawing no. 70518-ep14

Wall mounting, adjustable floor guide



2-leaf, wall mounting, rubber secondary closing edge, angled floor guide / adjustable floor guide, with protective leaf

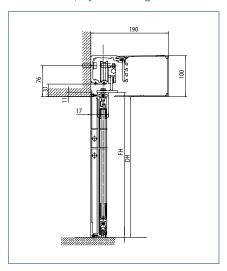


LB = Clear components | STB = Side panel width | STH = Side panel height | FH = Leaf height | FB = Leaf width | FW = Travel path | ÖW = Opening width | DH = Passage height | BIs = Fastening left | Brs = Fastening right | ALeff. = Effective drive length

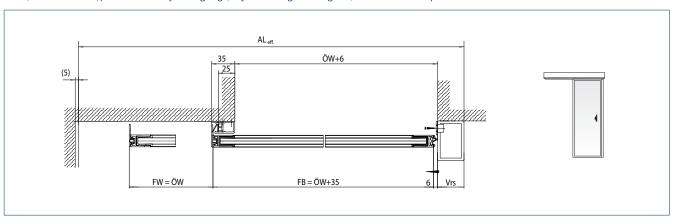
WITH TOUGHENED SAFETY GLASS CLAMPING FITTING - WITHOUT SIDE PANEL

Drawing no. 70518-ep03 / 70518-ep04

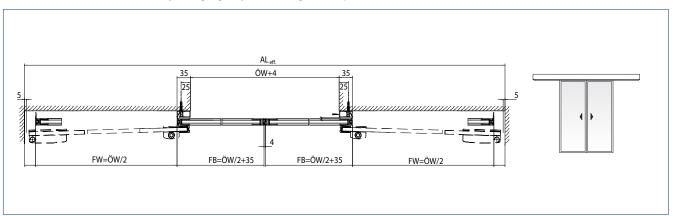
Wall installation, adjustable floor guide



1-leaf, wall installation, plastic secondary closing edge, adjustable angled floor guide, left hand slide to open



2-leaf, wall installation, rubber secondary closing edge, adjustable floor guide with protective leaf

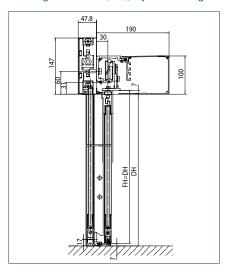


FW = Travel path | FB = Leaf width | ÖW = Opening width | Vrs = Drive extension right | DH = Passage height | FH = Lead height | ALeff = Effective drive extension

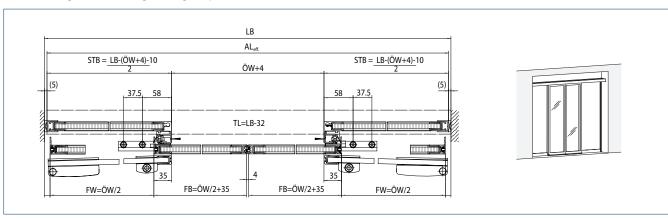
WITH TOUGHENED SAFETY GLASS CLAMPING FITTING - WITH SIDE PANEL

Drawing no. 70504-ep12

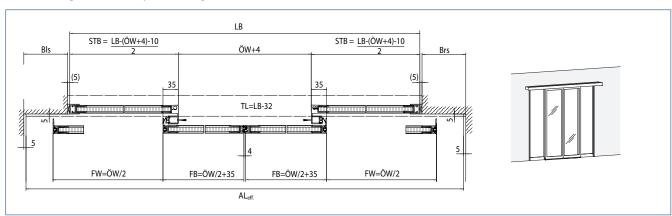
Mounting within reveal (thin), adjustable floor guide



2-leaf, mounting within reveal, angled floor guide, protective leaf



2-leaf, mounting within reveal, adjustable floor guide



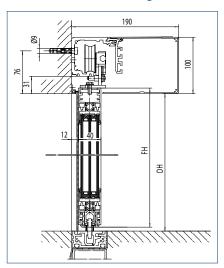
LB = Clear components | STB = Side panel width | FH = Leaf height | FB = Leaf width | FW = Travel path | ÖW = Opening width | DH = Passage height | TL = Lintel length | Bls = Fastening left | Brs = Fastening right | ALeff. = Effective drive length

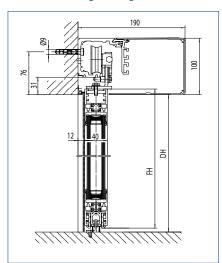
WITH GCPROFILE THERM, ENERGY-EFFICIENT PROFILE SYSTEM FINE-FRAMED -WITHOUT SIDE PANEL

Drawing no. 70518-ep100 / 70518-ep110

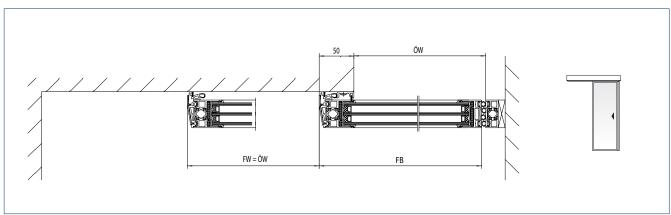
Wall installation, continuous floor guide



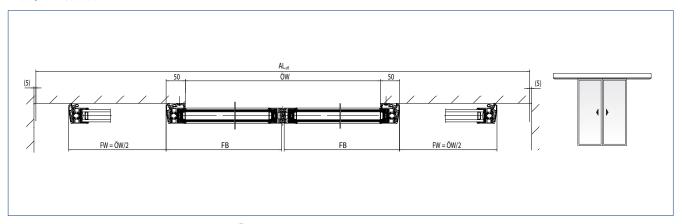




1-leaf, wall installation



2-leaf, wall installation

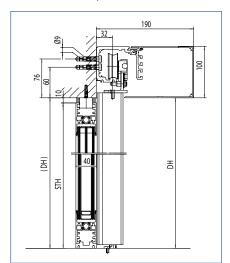


FH = Leaf height | FB = Leaf width | FW = Travel path | ÖW = Opening width | DH = Passage height | ALeff. = Effective drive length

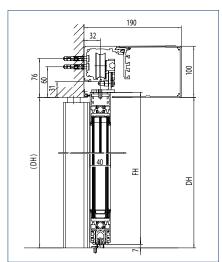
WITH GCPROFILE THERM, ENERGY-EFFICIENT PROFILE SYSTEM FINE-FRAMED -WITH SIDE PANEL BELOW LINTEL

Drawing no. 70518-ep103

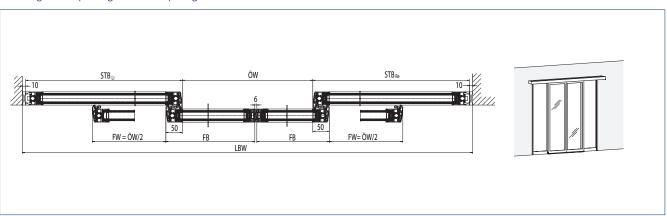
Vertical section side panel



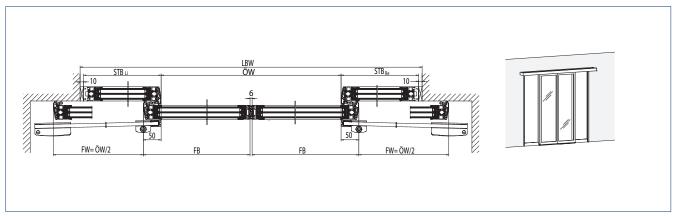
Vertical section moving leaf



Drive length corresponding to the clear opening



Drive length larger than clear opening

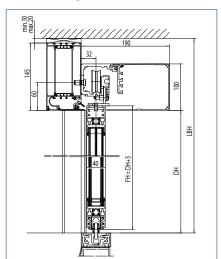


LBW = Clear installation width | STB Li = Side panel width left | STB Re = Side panel width right | FW = Travel path | FB = Leaf width | ÖW = Opening width | DH = Passage height

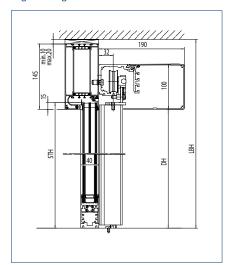
WITH ISO/MONO GLASS FITTING - WITH SIDE PANEL -**PARTITION WALL INSTALLATION**

Drawing no. 70518-ep101

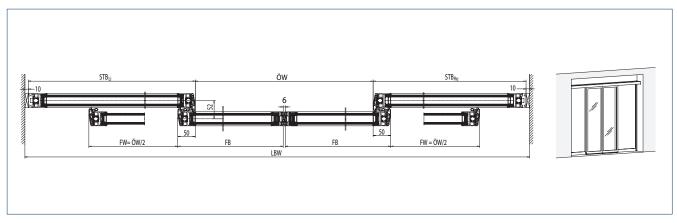
Vertical section moving leaf, continuous floor guide



Vertical section side panel, angled floor guide



2-leaf, horizontal section

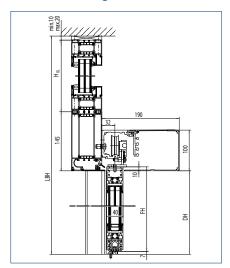


LBW = Clear installation width | LBH = Clear installation height | STH = Side panel height | STB Li = Side panel width left | STB Re = Side panel width right | FW = Travel path | FB = Leaf width | FH = Leaf height | ÖW = Opening width | DH = Passage height

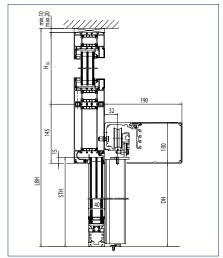
WITH GCPROFILE THERM ENERGY-EFFICIENT PROFILE SYSTEM -WITH SIDE PANEL AND FANLIGHT

Drawing no. 70518-ep102

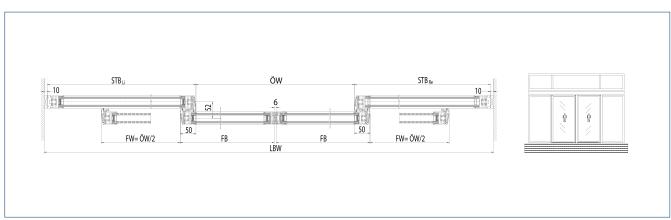
Vertical section moving leaf



Vertical section side panel



Horizontal section



HOL = High fanlight | LBW = Clear installation width | LBH = Clear installation height | STH = Side panel height | STB Li = side panel width left | STB Re = side panel width right | FW = Travel path | FB = Leaf width | FH = Leaf height | ÖW = Opening width | DH = Passage height

Slimdrive SL NT



Automatic linear sliding door system with low overall height and clear design line

AREAS OF APPLICATION

- → Single and double leaf sliding door systems
- → Interior and exterior doors with high access frequency
- → Façades with slim mullion-transom constructions
- → Glass façades with maximum design demands
- → Opening widths from 700 to 3000 mm possible
- → Door leaf weights up to 125 kg per leaf
- → Suitable profile systems are fine-framed profile systems with ISO and MONO glass, all-glass systems (GGS), integrated all-glass systems (IGG) and on-site framed moving leaf doors and wooden leaves

PRODUCT FEATURES

- → Very quiet-running, low-wear direct current drive with height of only 7 cm
- → Can be networked, and integrated into the building automation via open standard (BACnet)
- → Independent error recognition and recording
- → Freely configurable inputs and outputs for different functions
- → Integrated rechargeable battery for emergency opening in the event of safety-relevant faults such as a power
- → Self-cleaning roller carriage reduces maintenance effort and costs
- > Various mechanical and electrical locks are optionally available

TECHNICAL DATA

	SL NT	SL NT-FR	
For 1-leaf door systems	•	•	
For 2-leaf door systems	•	•	
Height	70	mm	
Depth	190	mm	
Leaf weight (max.) 1-leaf	125	5 kg	
Leaf weight (max.) 2-leaf	125	5 kg	
Opening width 1-leaf	700 – 3	000 mm	
Opening width 2-leaf	900 – 3	000 mm	
Temperature range	-15 to	50 °C	
IP rating	IP20		
Disconnection from mains	Main switch in the drive		
Opening speed (max.)	0.8 m/s		
Closing speed (max.)	0.8 m/s		
Hold-open time	0 to 60 s		
Adjustable opening and closing force (max.)	150 N		
Automatic adaptation to traffic flow	•	•	
Automatic reversal when an obstacle is detected	•	•	
Pharmacy opening	•	•	
Interlocking door system function	•	-	
Vestibule function	•	-	
Automatic opening in the event of a power failure	adjustable	standard	
Automatic closing in the event of a power failure	adjustable	not available	
Function in the event of a power failure	adjustable for 30 min / 30 cycles	open	
Automatic opening in the event of a fault	not available	standard	
Approvals	DIN 18650, EN 16005, DIN EN ISO 13849: Performance Level D	DIN 18650, EN 16005, DIN EN ISO 13849: Performance Level D, AutSchR	

^{● =} yes I - = not available

DRIVE COMPONENTS



1 = Transformer | 2 = Locking mechanism | 3 = Roller carriage | 4 = Control unit | 5 = Rechargeable battery | 6 = Motor

TECHNICAL DATA

	SL NT	SL NT-FR
TRANSFORMER	Ring core with protec	ction and main switch
Voltage	23	0 V
Frequency	50	Hz
Capacity rating	14	0 W
LOCKING MECHANISM	Toothed belt locking, ele	ectro-magnetic, bi-stable
ROLLER CARRIAGE		
Door leaf adjustment vertical	10	mm
Door leaf adjustment horizontal	6 r	nm
Tiling protection	star	ndard
Self-cleaning	•	•
CONTROL UNIT	DCU1-NT	DCU1-2M-NT
With fault memory	•	•
With memory for statistical data	•	•
Software update possible	•	•
Bus interface optional	•	•
Connection for fire alarm system	•	•
Power supply for peripherals	•	•
Programmable inputs	3	pc.
Programmable outputs	2	pc.
RECHARGEABLE BATTERY	NiCd, 24 \	V, 700 mAh
MOTOR	Motor gear unit	Double motor gear unit
Torque	400	Ncm
	400	110111

^{• =} yes

FITTING VARIANTS

Door fittings	SL NT	
ISO glass fine-framed	•	
MONO glass fine-framed	•	
GCprofile Therm, energy-efficient profile system fine-framed	-	
Toughened safety glass clamping profile	-	
All-glass system (GGS)	•	
Integrated all-glass system (IGG)	•	
Wooden leaf (on-site)	•	

^{● =} yes I - = not available

CALCULATION OF THE DRIVE LENGTH AL IN MM*

	Slimdrive SL NT		Slimdrive SL NT-FR**	
	Opening width (ÖW)	Drive length	Opening width (ÖW)	Drive length
2-leaf	900 – 1000	ÖW + 1100	900 – 1070	ÖW + 1170
	1000 – 3000	2 x ÖW + 100	1070 – 3000	2 x ÖW + 100
1-leaf	700 – 3000	2 x ÖW + 60	700 – 800	ÖW + 860
left hand slide to open			800 – 3000	2 x ÖW + 60
1-leaf	700 – 3000	2 x ÖW + 60	700 – 800	ÖW + 860
right hand slide to open			800 – 3000	2 x ÖW + 60

When using Lock A, the drive length increases by 100 mm. I When using Lock M at 1-leaf doors, the drive length increases by 100 mm. For Lock M on 2-leaf doors, the drive only extends by 100 mm if an optional bolt message is installed I * Minimum installation length of the complete system with profile system ISO glass fine-framed | ** For FR variants (FR-RWS, FR-LL) request drawing!



Note:

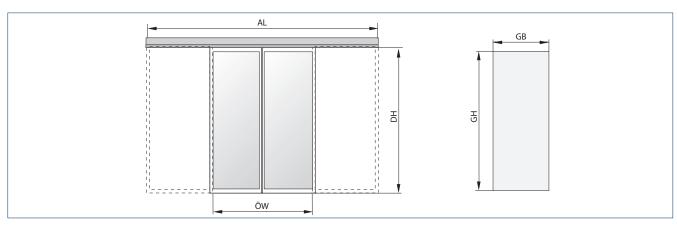


Opening widths of escape route sliding doors < 1000 mm are only permitted in exceptional cases. A continuous floor guide is recommended for external systems from an opening width of 2000 mm. The minimum opening widths depend on the requirements of building law.

CALCULATION OF LEAF AND GLASS DIMENSIONS IN MM (ISO GLASS PROFILE SYSTEM)

		ISO glass
Leaf width	1-leaf	ÖW + 35
	2-leaf	ÖW / 2 + 35
Leaf height	1-leaf / 2-leaf	FH = DH – 2
Glass width	1-leaf	ÖW
	2-leaf	OW / 2
Glass height	1-leaf / 2-leaf	FH – 90
Glass thickness		22

Note: max. leaf ratio width to height 1:4

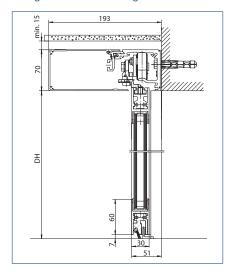


AL = Drive length | DH = Passage height | GB = Glass width | GH = Glass height | ÖW = Opening width

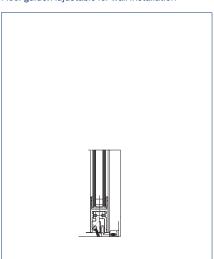
WITH ISO/MONO GLASS FITTING - WITHOUT SIDE PANEL

Drawing no. 70511-ep01

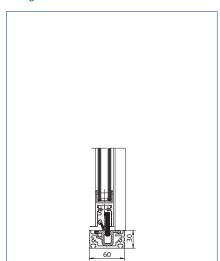
Floor guide: For floor mounting



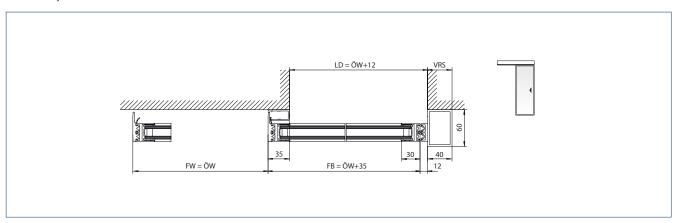
Floor guide: Adjustable for wall installation



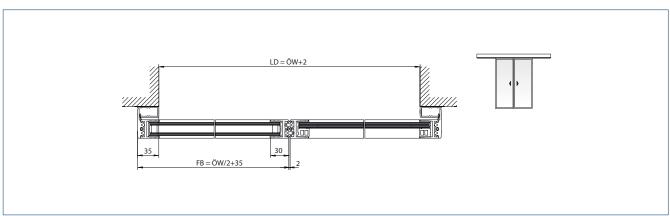
Floor guide: Continuous



1-leaf door system



2-leaf door system

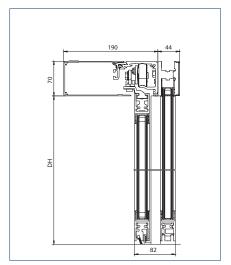


LD = Clear passage | FW = Travel path | FB = Leaf width | ÖW = Opening width | VRS = Drive extension right | DH = Passage height

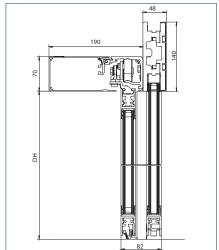
WITH ISO/MONO GLASS FITTING - WITH SIDE PANEL

Drawing no. 70511-ep02 + 70511-ep04

Low girder section

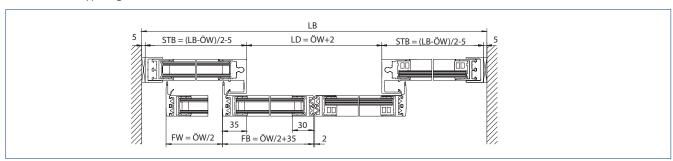


High girder section

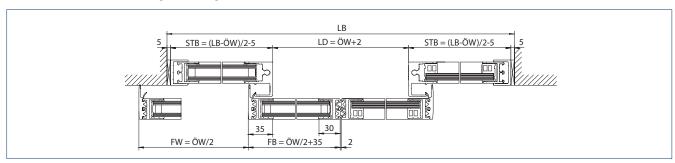


Note: See installation drawing for area of application

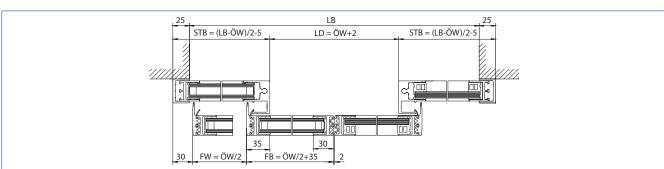
Installation: Self-supporting installation



Installation: Wall installation with longer drive and girder section between the walls



Installation: Wall installation



LB = Clear installation width | STB Side panel width | LD = Clear passage | FW = Travel path | FB = Leaf width | ÖW = Opening width | DH = Passage height

Powerdrive PL



Automatic linear sliding door system for large and heavy doors up to 200 kg leaf weight

AREAS OF APPLICATION

- → Single and double leaf sliding door systems
- → Interior and exterior doors with high access frequency
- → Opening widths from 700 to 3000 mm possible
- → Door leaf weights up to 200 kg per leaf
- → Suitable profile systems are fine-framed profile systems with ISO and MONO glass, all-glass systems (GGS), integrated all-glass systems (IGG), on-site framed moving leaf doors and wooden leaves
- → Suitable for various profile systems

PRODUCT FEATURES

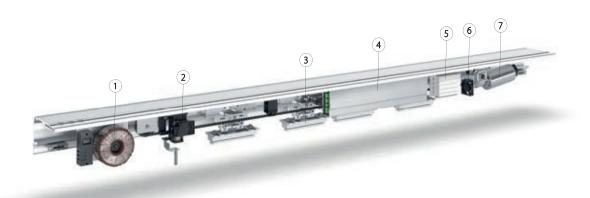
- → Very powerful drive for large heavy door leaves and wide opening widths
- → Can be networked, and integrated into the building automation via open standard (BACnet)
- → Independent error recognition and recording
- → Adjustment options for all door motion parameters
- → Freely configurable inputs and outputs for different functions
- → Integrated rechargeable battery for emergency opening and closing in the event of a power failure
- → Various mechanical and electrical locks are optionally available

TECHNICAL DATA

	PL	PL-FR	
For 1-leaf door systems	•	•	
For 2-leaf door systems	•	•	
Height	150 / 2	00 mm	
Depth	185	mm	
Leaf weight (max.) 1-leaf	200 kg	160 kg	
Leaf weight (max.) 2-leaf	200 kg	160 kg	
Opening width 1-leaf	700 to 3	000 mm	
Opening width 2-leaf	800 to 3	3000 mm	
Temperature range	-15 to	50 °C	
IP rating	IP20		
Disconnection from mains	Main switch in the drive		
Opening speed (max.)	0.8 m/s		
Closing speed (max.)	0.8 m/s		
Hold-open time	0 to 60 s		
Adjustable opening and closing force (max.)	150 N		
Automatic adaptation to traffic flow	•	•	
Automatic reversal when an obstacle is detected	•	•	
Pharmacy opening	•	•	
Interlocking door system function	•	-	
Vestibule function	•	-	
Automatic opening in the event of a power failure	adjustable	standard	
Automatic closing in the event of a power failure	adjustable	not available	
Function in the event of a power failure	adjustable for 30 min / 30 cycles	open	
Automatic opening in the event of a fault	not available	standard	
Approvals	DIN 18650 EN 16005 DIN EN ISO 13849: Performance Level D	DIN 18650 EN 16005 DIN EN ISO 13849: Performance Level D AutSchR	

^{• =} yes I - = not available

DRIVE COMPONENTS



^{1 =} Transformer | 2 = Locking mechanism | 3 = Roller carriage | 4 = Control unit | 5 = Rechargeable battery | 6 = Fan | 7 = Motor

TECHNICAL DATA

	PL	PL-FR		
TRANSFORMER	Ring core with protec	Ring core with protection and main switch		
Voltage	230	230 V		
Frequency	50	50 Hz		
Capacity rating	200	200 W		
LOCKING MECHANISM	Toothed belt locking, ele	ctro-magnetic, bi-stable		
ROLLER CARRIAGE				
Door leaf adjustment vertical	12 mm			
Door leaf adjustment horizontal	40 mm			
Tiling protection	standard			
Self-cleaning	•	•		
CONTROL UNIT	DCU1-NT	DCU1-2M-NT		
With fault memory	•	•		
With memory for statistical data	•	•		
Software update possible	•	•		
Bus interface optional	•	•		
Connection for fire alarm system	•	•		
Power supply for peripherals	•	•		
Programmable inputs	3 pc.			
Programmable outputs	2 pc.			
RECHARGEABLE BATTERY	NiCd, 24 V, 700 mAh			
MOTOR	Motor gear unit	Double motor gear unit		
Torque	400	400 Ncm		
- VAS				

^{• =} yes

FITTING VARIANTS

Door fittings	PL	
ISO glass fine-framed	•	
MONO glass fine-framed	•	
GCprofile Therm, energy-efficient profile system fine-framed	-	
Toughened safety glass clamping profile	•	
All-glass system (GGS)	-	
Integrated all-glass system (IGG)	-	
Wooden leaf (on-site)	•	

^{● =} yes I - = not available

CALCULATION OF THE DRIVE LENGTH AL IN MM*

Powerdrive	PL	PL		PL-FR**	
	Opening width (ÖW)	Drive length (AL)	Opening width (ÖW)	Drive length (AL)	
2-leaf	800 – 3000	2 x ÖW + 100	800 – 3000	2 x ÖW + 100	
1-leaf	700 – 3000	2 x ÖW + 65	700 – 3000	2 x ÖW + 65	

^{* =} Minimum installation length of the complete system with profile system ISO glass fine-framed | *For FR variants (FR-RWS, FR-LL) request drawing!



Note:

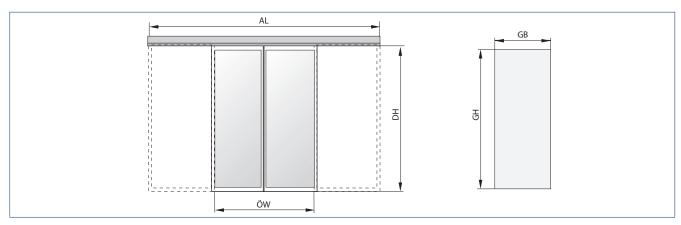


Opening widths of escape route sliding doors < 1000 mm are only permitted in exceptional cases. A continuous floor guide is recommended for external systems from an opening width of 2000 mm. The minimum opening widths depend on the requirements of building law.

CALCULATION OF LEAF AND GLASS DIMENSIONS IN MM

		ISO glass with aluminium secondary closing edge	ISO glass with rubber secondary closing edge	Toughened safety glass
Leaf width	1-leaf	ÖW + 40	ÖW + 35	ÖW + 35
	2-leaf	ÖW / 2 + 40	ÖW / 2 +35	ÖW / 2 +35
Leaf height	with cover 150 mm	DH		
	for cover 200 mm	DH + 50		
Glass width	1-leaf	ÖW	ÖW	ÖW + 9
	2-leaf	ÖW/2	ÖW/2	ÖW / 2 + 9
Glass height		FH – 90	FH – 90	FH – 85
Glass thickness		22	22	10, 12

→ Note: max. leaf ratio width to height 1:4

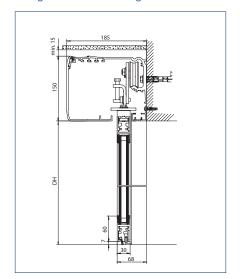


AL = Drive length | DH = Passage height | GB = Glass width | GH = Glass height | ÖW = Opening width

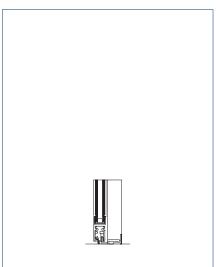
WITH ISO/MONO GLASS FITTING - WITHOUT SIDE PANEL

Drawing no. 70506-ep01

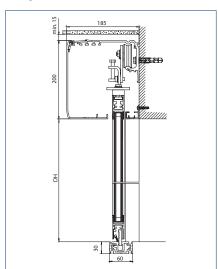
Floor guide: For floor mounting



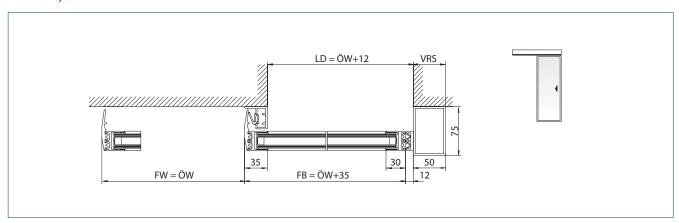
Floor guide: Adjustable for wall installation



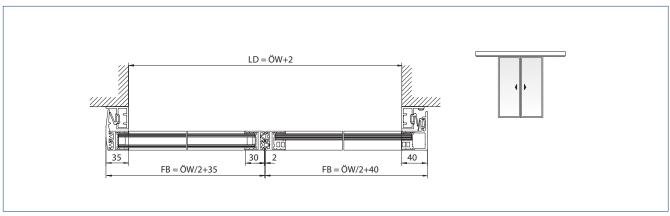
Floor guide: Continuous



1-leaf door system



2-leaf door system

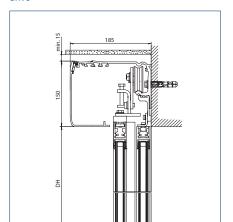


LD = Clear passage | FW = Travel path | FB = Leaf width | ÖW = Opening width | VRS = Drive extension right | DH = Passage height

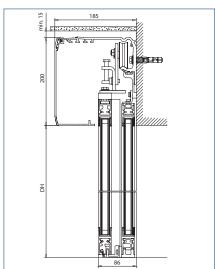
WITH ISO/MONO GLASS FITTING - WITH SIDE PANEL

Drawing no. 70506-ep02

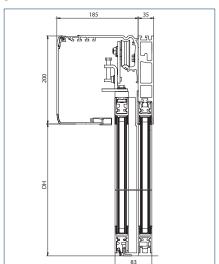
Door system with door leaf and side panels under drive



Door system with door leaf and side panels under drive

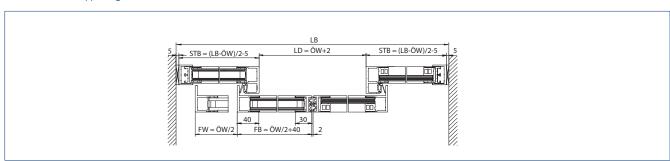


Door system with door leaf and side panels under girder section

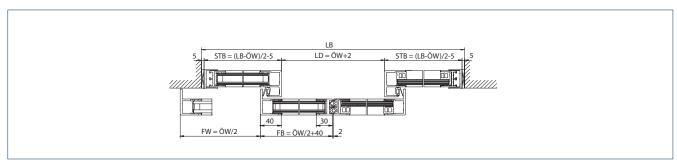


Note: See installation drawing for area of application

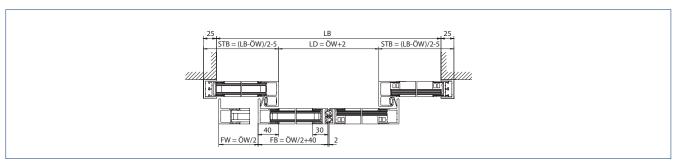
Installation: Self-supporting installation



Installation: Wall installation with longer drive and girder section between the walls



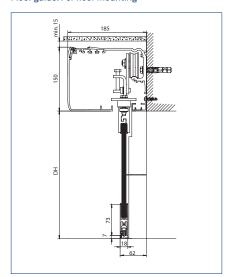
Installation: Wall installation



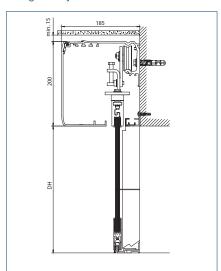
WITH TOUGHENED SAFETY GLASS CLAMPING FITTING - WITHOUT SIDE PANEL

Drawing no. 70506-ep03

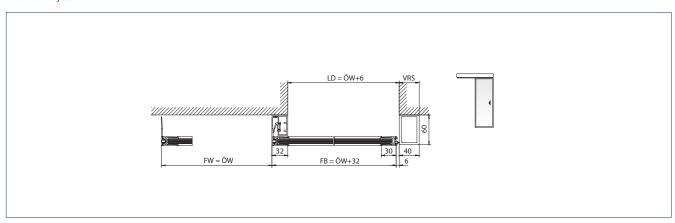
Floor guide: For floor mounting



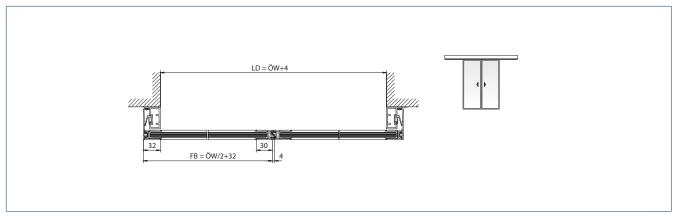
Floor guide: Adjustable for wall installation



1-leaf door system



2-leaf door system

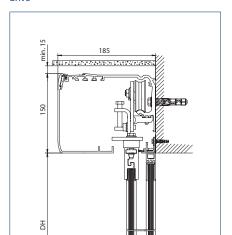


LD = Clear passage | FW = Travel path | FB = Leaf width | ÖW = Opening width | VRS = Drive extension right | DH = Passage height

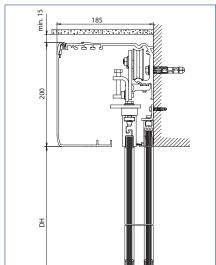
WITH TOUGHENED SAFETY GLASS CLAMPING FITTING - WITH SIDE PANEL

Drawing no. 70506-ep04

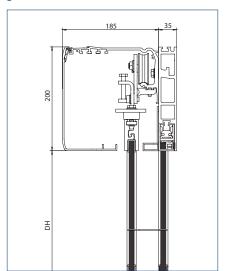
Door system with door leaf and side panels under drive



Door system with door leaf and side panels under drive

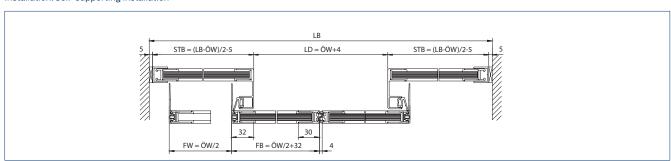


Door system with door leaf and side panels under girder section

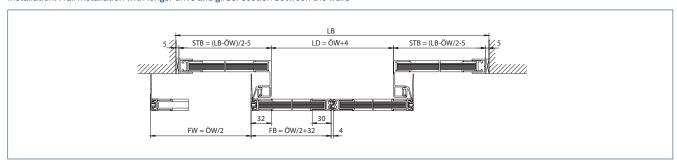


Note: See installation drawing for area of application

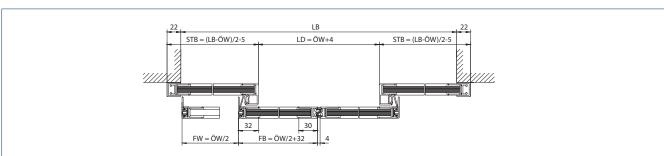
Installation: Self-supporting installation



Installation: Wall installation with longer drive and girder section between the walls



Installation: Wall installation with girder section



LB = Clear installation width | STB Side panel width | LD = Clear passage | FW = Travel path | DH = Passage height | FB = Leaf width | ÖW = Opening width





Sliding door systems special variants

SOLUTIONS FOR SPECIAL PURPOSES

The Slimdrive SL drive is available in numerous special variants. These are always used when the standard variant of the sliding door system is not suitable.

- → Slimdrive SLT: Use in slim glass façades for 2- or 4-leaf doors.
- → Slimdrive SL RC2: Sliding doors with burglar resistance in accordance with resistance class 2. Also optionally available as a variant for escape and rescue routes (SL RC2-FR).
- Slimdrive SL-BO: This variant is used in escape and rescue routes. In addition to the sliding function, the doors can be swung open using a turn-tilt fitting.
- → Slimdrive SL-T30: For applications where both fire-retardant doors in accordance with DIN 4102 and smoke-proof doors in accordance with DIN 18095 are necessary.
- → Slimdrive SLV: This variant can be used for corner sliding doors with angles between 90° and 270°.
- → Slimdrive SL inclined: For the use of 2-leaf sliding doors in inclined glass façades with opening widths of up to 2500mm.



Slimdrive SLT with IGG, Café Luitpold Munich, Germany (photo: Robert Sprang)

Slimdrive SLT



Automatic telescopic sliding door system for use in extremely narrow glass façades

AREAS OF APPLICATION

- → Double and four leaf sliding door systems
- → If space is limited with low clear opening width or little space next to the door opening
- → Interior and exterior doors with high access frequency
- → Opening widths from 1000 to 3600 mm possible
- → Door leaf weights up to 80 kg per leaf
- → Suitable profile systems are fine-framed profile systems with ISO Glass and integrated all-glass systems (IGG)

- ightarrow Two parallel tracks carry the door leaf and thus achieve large opening widths
- → Very quiet-running, low-wear direct current drive with height of only 7 cm
- → Can be networked, and integrated into the building automation via open standard (BACnet)
- → Independent error recognition and recording
- → Freely configurable inputs and outputs for different functions
- → Integrated rechargeable battery for emergency opening and closing in the event of a power failure
- → Various mechanical and electrical locks are optionally available

TECHNICAL DATA

	SLT	SLT-FR	
For 1-leaf door systems	-	-	
For 2-leaf door systems	•	•	
For 4-leaf door systems	•	•	
Height	70 n	nm	
Depth	247 ו	mm	
Leaf weight (max.) 2-leaf	80	kg	
Leaf weight (max.) 4-leaf	70	kg	
Opening width 2-leaf	1000 – 30	000 mm	
Opening width 4-leaf	1600 – 36	600 mm	
Temperature range	−15 to 50 °C		
Disconnection from mains	Main switch in the drive		
Opening speed (max.)	0.8 m/s		
Closing speed (max.)	0.8 m/s		
Hold-open time	0 to 60 s		
Adjustable opening and closing force (max.)	150 N		
Automatic adaptation to traffic flow	•		
Automatic reversal when an obstacle is detected	•	•	
Pharmacy opening	•	•	
Interlocking door system function	•	-	
Vestibule function	•	-	
Automatic opening in the event of a power failure	adjustable	standard	
Automatic closing in the event of a power failure	adjustable	not available	
Function in the event of a power failure	adjustable for 30 min / 30 cycles	open	
Automatic opening in the event of a fault	not available standard		
Approvals	DIN 18650 EN 16005 DIN EN ISO 13849: Performance Level D		

● = yes I - = not available

DRIVE COMPONENTS



1 = Transformer | 2 = Locking mechanism | 3 = Control unit | 4 = Rechargeable battery | 5 = Motor

TECHNICAL DATA

	SLT	SLT-FR
TRANSFORMER	Ring core with protection and main switch	
Voltage	23	30 V
Frequency	50) Hz
Capacity rating	140 W	
LOCKING MECHANISM	Toothed belt locking, ele	ectro-magnetic, bi-stable
ROLLER CARRIAGE		
Door leaf adjustment vertical	7 r	mm
Door leaf adjustment horizontal	7 mm	
Tiling protection	Optional	
Self-cleaning	-	-
CONTROL UNIT	DCU1-NT	DCU1-2M-NT
With fault memory	•	•
With memory for statistical data	•	•
Software update possible	•	•
Bus interface optional	•	•
Connection for fire alarm system	•	•
Power supply for peripherals	•	•
Programmable inputs	3 pc.	
Programmable outputs	2 pc.	
RECHARGEABLE BATTERY	NiCd, 24 V, 700 mAh	
MOTOR	Motor gear unit	Double motor gear unit
Torque	400	Ncm

^{• =} yes I - = not available

FITTING VARIANTS

OLI	
•	
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	- - -

^{• =} yes I - = not available

CALCULATION OF THE DRIVE LENGTH AL IN MM*

	Slimdrive SLT		Slimdrive SLT-FR	
	Opening width (ÖW)	Drive length (AL)	Opening width (ÖW)	Drive length (AL)
4-leaf	1600 – 1999	ÖW + 1180	1600 – 1999	ÖW + 1180
	2000 – 3600	1.5 x ÖW + 150	2000 – 3600	1.5 x ÖW + 150
2-leaf left hand slide to open	1000 – 1360	ÖW + 770	1000 – 1560	ÖW + 870
	1360 – 3000	1.5 x ÖW + 90	1560 – 3000	1.5 x ÖW + 90
2-leaf right hand slide to open	1000 – 1460	ÖW + 780	1000 – 1660	ÖW + 880
	1460 – 3000	1.5 x ÖW + 50	1660 – 3000	1.5 x ÖW + 50

^{* =} Minimum overall length of the complete system with profile system ISO glass fine-framed



Note:



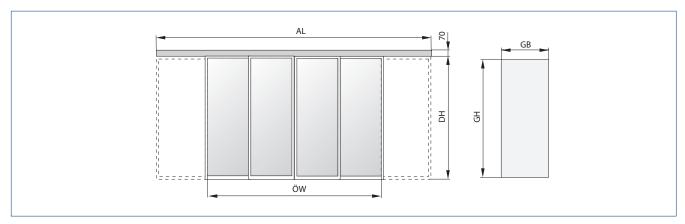
Opening widths of escape route sliding doors < 1000 mm are only permitted in exceptional cases. A continuous floor guide is generally recommended for outdoor systems. The minimum opening widths depend on the requirements of building law.

CALCULATION OF LEAF AND GLASS DIMENSIONS IN MM

depending on the opening width and passage height

		Internal leaf	External leaf	
Leaf width	2-leaf	ÖW / 2 + 40	·	
	4-leaf	ÖW / 4 + 40	ÖW / 4 + 40	
Leaf height	2 or 4-leaf	DH – 17	DH – 17	
Glass width	2-leaf	ÖW/2	ÖW / 2 – 10	
	4-leaf	ÖW / 4	ÖW / 4 – 10	
Glass height	2 or 4-leaf	FH – 90	FH – 90	
Glass thickness	·	22	22	

 \rightarrow **Note:** max. leaf ratio width to height 1:4 or 1:5 in the case of 4-leaf systems, ÖW 1600 - 2000 mm

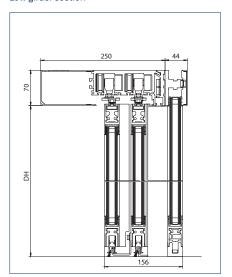


AL = Drive length | DH = Passage height | GB = Glass width | GH = Glass height | ÖW = Opening width

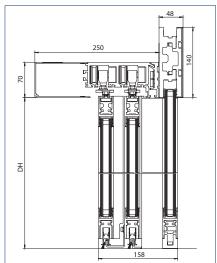
WITH ISO/MONO GLASS FITTING - WITH SIDE PANEL

Drawing no. 70717-ep02 + 70717-ep04

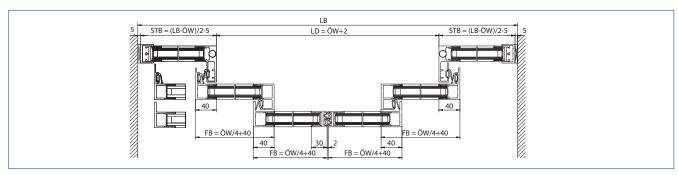
Low girder section



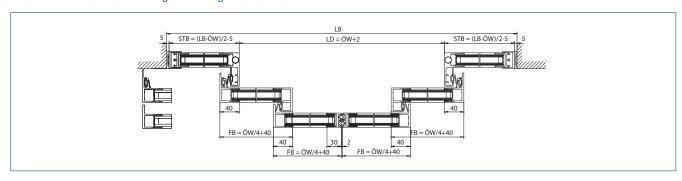
High girder section



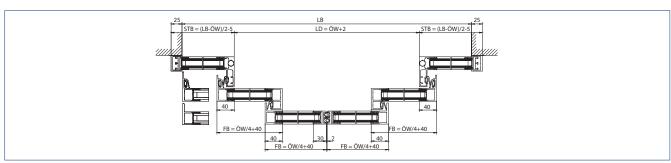
Installation: Self-supporting installation



Installation: Wall installation with longer drive and girder section between the walls



Installation: Wall installation



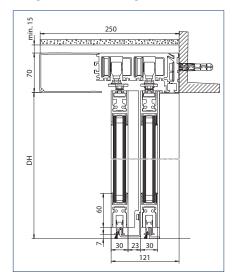
LB = Clear installation width | STB = Side panel width | LD = Clear passage | FB = Leaf width | ÖW = Opening width | DH = Passage height

Note: See installation drawing for area of application

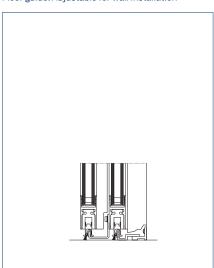
WITH ISO/MONO GLASS FITTING - WITHOUT SIDE PANEL

Drawing no. 70487-ep01

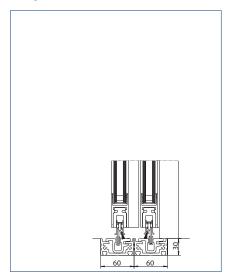
Floor guide: For floor mounting



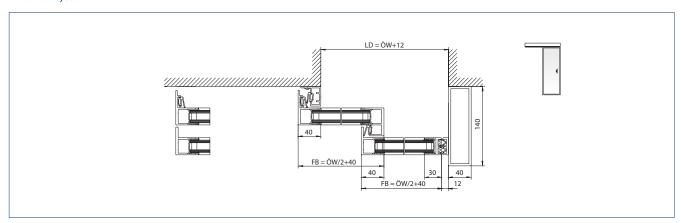
Floor guide: Adjustable for wall installation



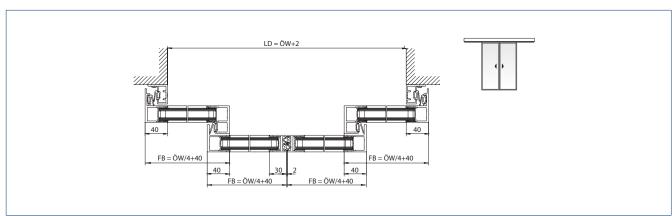
Floor guide: Continuous



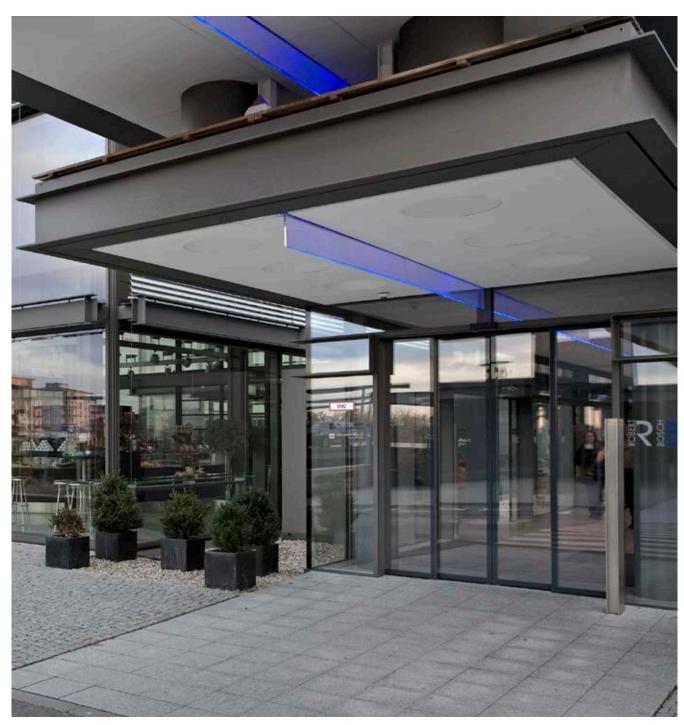
1-leaf door system



2-leaf door system



LD = Clear passage | FB = Leaf width | $\ddot{\text{OW}}$ = Opening width | DH Passage height



Slimdrive SLT-FR + IGG, Robert Bosch Hospital (photo: GEZE GmbH)

Slimdrive SL RC2



Automatic linear sliding door system with burglar resistance in accordance with resistance class RC2

AREAS OF APPLICATION

- → Single and double leaf sliding door systems
- → Interior and exterior doors with maximum security requirements
- → Opening widths from 800 to 3000 mm possible
- → Door leaf weight of up to 120 kg per leaf
- → Suitable profile systems are fine-framed profile system with ISO and MONO glass according to resistance class RC2

- → Certified burglar resistance according to resistance class RC2
- → Function RC2 is only available in "Night" mode of operation, in which the door is locked with rod locking
- → Fitted with rod locking and reinforced profile components
- → Very quiet-running, low-wear direct current drive with height of only 7 cm
- → Can be networked, and integrated into the building automation via open standard (BACnet)
- → Independent error recognition and recording
- → Freely configurable inputs and outputs for different functions
- → Integrated rechargeable battery for emergency opening in the event of safety-relevant faults such as a power failure
- → Self-cleaning roller carriage reduces maintenance effort and costs
- → Various mechanical and electrical locks are optionally available



Hycro Grand Centre, Zagreb, Croatia (photo: Robert Les)



Sihlpost Switzerland (photo: Lorenz Frey / GEZE GmbH)

CALCULATION OF THE DRIVE LENGTH AL IN MM*

	Slimdrive SL RC2		Slimdrive SL-FR RC2**	Slimdrive SL-FR RC2**	
	Opening width (ÖW)	Drive length (AL)	Opening width (ÖW)	Drive length (AL)	
2-leaf	900 – 1000	ÖW + 1100	900 – 1000	ÖW + 1100	
	1000 – 3000	2 x ÖW + 100	1000 – 3000	2 x ÖW + 100	
1-leaf left hand slide to open	800 – 3000	2 x ÖW + 120	800 – 870	ÖW + 990	
			870 – 3000	2 x ÖW + 120	
1-leaf right hand slide to open 800 – 3000	2 x ÖW + 120	800 – 820	ÖW + 940		
			820 – 3000	2 x ÖW + 120	

^{* =} Minimum installation length of the complete system with profile system ISO glass fine-framed | 1 ** For FR variants (FR-RWS, FR-LL) request drawing!



Note:

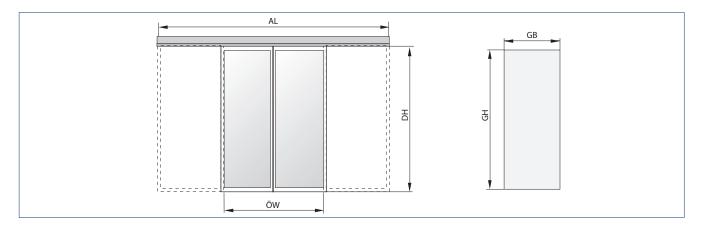


Opening widths of escape route sliding doors < 1000 mm are only permitted in exceptional cases. The minimum opening widths depend on the requirements of building law.

CALCULATION OF LEAF AND GLASS DIMENSIONS IN MM (ISO GLASS PROFILE SYSTEM)

		ISO glass (in accordance with RC2)
Leaf width	1-leaf	ÖW + 40
	2-leaf	ÖW / 2 + 40
Leaf height	1-leaf / 2-leaf	DH – 17
Glass width	1-leaf	ÖW – 20
	2-leaf	ÖW / 2 – 20
Glass height	1-leaf / 2-leaf	FH – 90
Glass thickness	1-leaf / 2-leaf	max. 23.5

Note: max. leaf ratio width to height 1:4



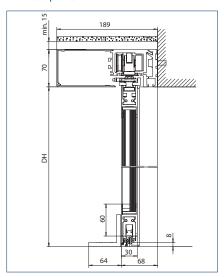
AL = Drive length | DH = Passage height | GB = Glass width | GH = Glass height | ÖW = Opening width

→ Note: The burglar-resistant function RC2 is only enabled in the "NIGHT" mode of operation. In the "NIGHT" mode of operation, the door does not fulfil any escape route demands. It is therefore important to ensure that there is nobody in the building or that sufficient other escape route doors are available.

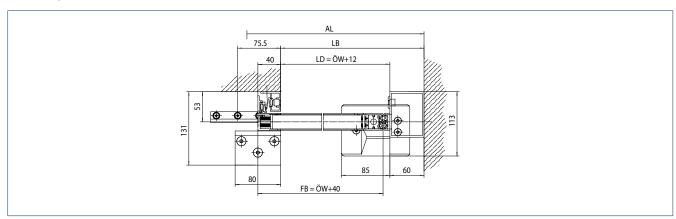
WITH ISO/MONO GLASS FITTING - WITHOUT SIDE PANEL

Drawing no. 70484-ep-46/47

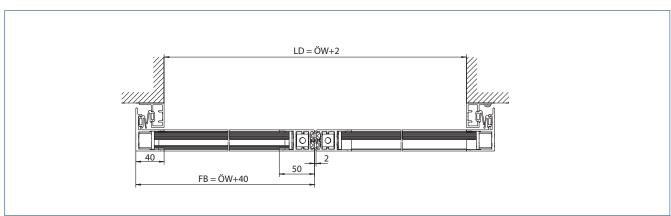
Floor guide: With reinforced supporting bracket at individual points



1-leaf door system



2-leaf door system

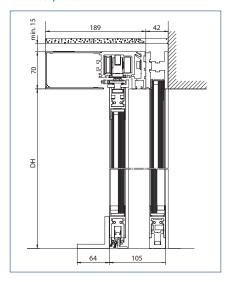


AL = Drive length | LB = Clear installation width | DH = Passage height | LD = Clear passage | FB = Leaf width | ÖW = Opening width

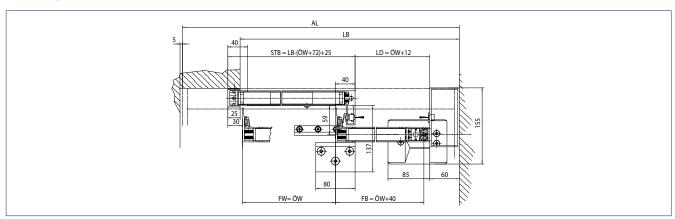
WITH ISO/MONO GLASS FITTING - WITH SIDE PANEL

Drawing no. 70484-ep-46/47

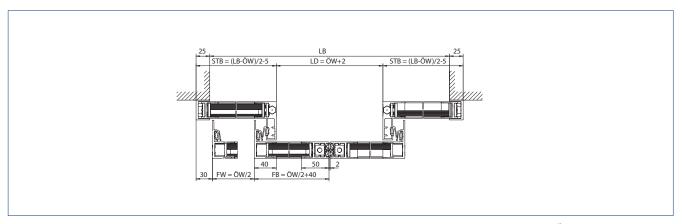
Floor guide: With reinforced supporting bracket at individual points



1-leaf door system



Installation: Wall installation



AL = Drive length | FB = Leaf width | FW = Travel path | DH = Passage height | LB = Clear installation width | LD = Clear passage | ÖW = Opening width |

Note: See installation drawing for area of application



Sihlpost Switzerland (photo: Lorenz Frey / GEZE GmbH)

Slimdrive SL-BO



Automatic sliding door system for escape and rescue routes with break-out function

AREAS OF APPLICATION

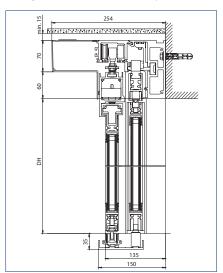
- → Single and double leaf sliding door systems along escape and rescue routes
- → Interior and exterior doors with maximum security requirements
- → Façades with slim mullion-transom constructions
- → Opening widths from 900 to 2500 mm possible
- → Door leaf weights of up to 100 kg per leaf
- → Suitable profile systems are fine-framed profile system with ISO and MONO glass

- Function BO allows the leaf and side panels to swing open in the direction of escape
- → Electrical locking mechanisms for "Night" mode of operation integrated
- → Very quiet-running, low-wear direct current drive with height of only 7 cm
- → Can be networked, and integrated into the building automation via open standard (BACnet)
- > Independent error recognition and recording
- → Freely configurable inputs and outputs for different functions
- → Integrated rechargeable battery for emergency opening in the event of safety-relevant faults such as a power failure
- → Self-cleaning roller carriage reduces maintenance effort and costs
- > Various mechanical and electrical locks are optionally available

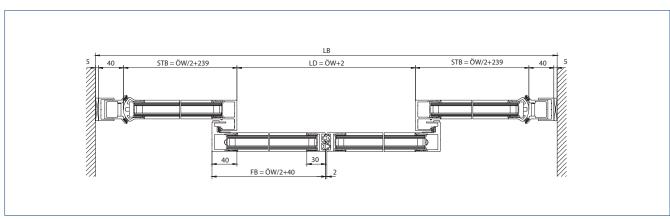
WITH ISO/MONO GLASS FITTING

Drawing no. 70485-ep51

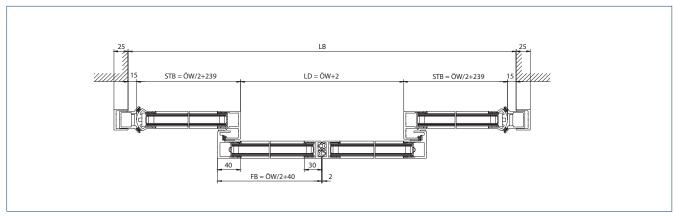
Door system with door leaf and side panels



Installation: Self-supporting installation



Installation: Wall installation



LB = Clear installation width | STB Side panel width | LD = Clear passage | FB = Leaf width | ÖW = Opening width | DH = Passage height



Auditorium centre Klinikum to the right of the Isar, Munich, Germany (photo: Robert Sprang)



 $Slimdrive\ SL-BO\ automatic\ sliding\ door\ drive, in stalled\ at\ Madrid-Barajas\ airport\ (photo:\ Rafael\ Vargas\ /\ GEZE\ GmbH)$

Slimdrive SL-T30



Automatic sliding door drive for fire protection doors with resistance class T30

AREAS OF APPLICATION

- → Single and double leaf sliding door systems
- → Door leaf weight of up to 120 kg per leaf
- → Opening widths from 900 to 2500 mm possible

- → Very quiet-running, low-wear direct current drive with height of only 7 cm
- → Independent error recognition and recording
- → Various mechanical and electrical locks are optionally available

Slimdrive SLV



Automatic sliding door system for use on angled façades or corners

AREAS OF APPLICATION

- → Double leaf sliding door systems
- → Use on angled façades or corners
- → Interior and exterior doors with high access frequency
- → Façades with slim mullion-transom constructions
- → Glass façades with maximum design demands
- → Opening widths from 900 to 2500 mm possible
- → Door leaf weight of up to 120 kg per leaf
- → Suitable profile systems are fine-framed profile system with ISO and MONO glass
- → Suitable for various profile systems

- → Product is projected and manufactured building-specifically
- → Very quiet-running, low-wear direct current drive with height of only 7 cm
- → Angle in the drive rail 90° to 270°
- → Can be networked, and integrated into the building automation via open standard (BACnet)
- → Independent error recognition and recording
- → Freely configurable inputs and outputs for different functions
- → Integrated rechargeable battery for emergency opening and closing in the event of a power failure
- → Self-cleaning roller carriage reduces maintenance effort and costs
- > Various mechanical and electrical locks are optionally available



Slimdrive SLV automatic sliding door drive (corner sliding door), Hotel Parador National del Saler, Valencia (photo: Pau Esculies / GEZE GmbH)



Häussler Global Office GmbH, Stuttgart, Germany (photo: Dirk Wilhelmy / GEZE GmbH)

Slimdrive SL inclined



Automatic linear sliding door system for use on inclined glass façades

AREAS OF APPLICATION

- → Double leaf sliding door systems
- → Use on inclined glass façades in mullion-transom constructions
- → Interior and exterior doors with high access frequency
- → Opening widths up to 2500 mm possible
- → Door leaf weights depending on the angle of inclination, up to 100 kg per leaf
- → Suitable profile systems are fine-framed profile system with ISO and MONO glass

- → Freely selectable angle of inclination up to 9.9° (larger possible upon request)
- Continuous floor guide
- → Very quiet-running, low-wear direct current drive with height of only 7 cm
- Integrated infrared movement detector
- → Can be networked, and integrated into the building automation via open standard (BACnet)
- → Independent error recognition and recording
- → Adjustment options for all door motion parameters
- → Freely configurable inputs and outputs for different functions
- → Integrated rechargeable battery for emergency opening in the event of safety-relevant faults such as a power failure
- → Self-cleaning roller carriage reduces maintenance effort and costs
- → Various mechanical and electrical locks are optionally available



Villa Soravia, Millstatt, Carinthia, Austria (photo: Helmut Kolaric)



Villa Soravia, Millstatt, Carinthia, Austria (photo: Helmut Kolaric)





FR-LL



Sparkasse, Ulm, Germany (photo: Nikolaus Grünwald)

Redundant sliding doors for escape and rescue routes with locked exit only function (one way)

AREAS OF APPLICATION

- → Use in the Slimdrive, ECdrive and Powerdrive product families
- → For areas where the exit only mode of operation is supposed to be used for a longer period
- → In particular in banks, theatres and universities

- → Type-tested FR-LL variants
- → Greater security against unauthorised opening of the door from outside
- > Permanently redundantly monitored locking mechanism
- → Also locked by the intelligent control unit for night mode locking mechanism

FR-DUO



Cafe Luitpold, Munich, Germany (photo: Robert Sprang)

Redundant sliding doors for escape and rescue routes in both directions

AREAS OF APPLICATION

- → Use in the Slimdrive, ECdrive and Powerdrive product families
- → For specific areas in public buildings, where escape must be possible in both directions
- → In particular in office buildings, airports and stations

- → Type-tested automatic sliding door variants FR-DUO
- → With bilaterally monitored movement detectors

FR-RWS



Airport, Cologne-Bonn, Germany (photo: Martin Jakob)

Redundant sliding doors for locked escape and rescue routes

AREAS OF APPLICATION

- → Use in the Slimdrive, ECdrive and Powerdrive product families
- in particular in airports, stations and senior and care homes

- → Setting by intelligent control unit and monitored locking mechanism possible
- → Passage of the door then only possible upon request
- → In the event of a power failure or other problems, the door reliably opens the escape route
- → Additional locking mechanism with monitored duplicate processing system and redundant emergency opening button

Sliding doors according to CO48 (France)



Grottes de Lascaux, France (photo: Jean-Luc Kokel)

Sliding doors for escape and rescue routes according to CO48

AREAS OF APPLICATION

- → Use in the Slimdrive, ECdrive and Powerdrive product families
- → Special variants for use in France and other regions where this solution is recognised

PRODUCT FEATURES

→ Single opening of the door in the event of power failure via the installed rubber cable





SLIDING DOOR

Solutions and functions

Accessible toilets and vestibule systems – both function with automatic sliding door systems, but need special solutions. This means that accessible toilets must guarantee convenience and absolutely reliable operation and provide, for example, special emergency open push buttons. In contrast, for vestibule systems, you need radar movement detectors which detect directions. Whatever the use – we can offer you the right automatic sliding doors which meet your needs.

Accessible toilet

Accessible toilets must be designed in such a way that people with all sorts of different handicaps can use the facilities without needing help. GEZE sliding door drives provide an indispensable service for this application, and guarantee a high level of convenience.

FUNCTIONAL DESCRIPTION

The non-contact proximity switch is installed at hand height and detects persons and objects at a distance of 10 to 60 cm (adjustable). Approaching the switch is sufficient to open the door. When the "internal push button" is triggered with the door closed, the system switches into the exit only mode of operation, meaning the outer push button on the door can no longer open. Both proximity switches switch from green to red and signal that the WC is occupied.

The drive uses motor power to hold the door in the closed position. Triggering the "internal push button" again switches the mode of operation back to automatic. Both proximity switches switch from red to green. The door opens and the "external push button" is cleared again.

An optional pull switch can be used to transmit a message to an alarm system.

If the WC is occupied for longer than 30 minutes, a message is also transmitted to an alarm system or an optional audio alert.



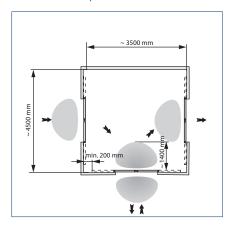
1 = Non-contact proximity switch (internal and external) | 2 = emergency off switch (recommended installation height: 1600 mm) | 3 = active infrared light curtain | 4 = emergency call pull switch | 5 = sliding panel

Vestibule systems

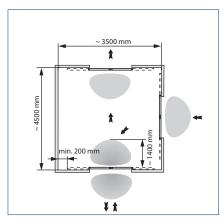
Vestibule systems are used to avoid draughts and reduce heat exchange. Preferably only one door should be opened.

Direction-detecting radar movement detector only activate the door when people move towards it. This means the door closes more quickly behind people. A separate programme switch is compulsory for door systems in escape and rescue routes.

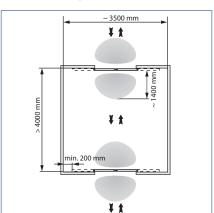
Combination example 1



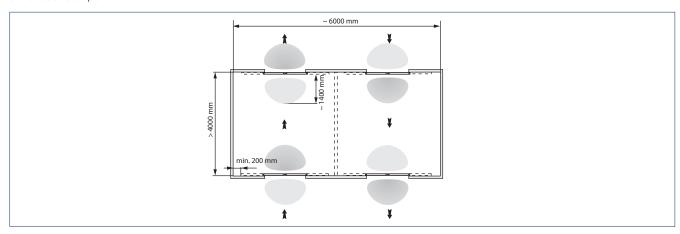
Combination example 2



Combination example 3



Combination example 4



grey = Detection area





Fitting variants

GEZE SUPPLIES THE FOLLOWING FITTING VARIANTS FOR SLIDING DOOR SYSTEMS:

ISO GLASS FINE-FRAMED

Attractive door leaves with an extremely slim aluminium frame. They combine the advantages of the frame (e.g. seals) with an inconspicuous design.

MONO GLASS FINE-FRAMED

Same frame as with the ISO variant, but with one single glass pane made of 10 mm toughened safety glass or laminated safety glass.

VSG = Verbund-Sicherheits-Glas (laminated safety glass)

ESG = Einscheiben-Sicherheits-Glas (toughened safety glass)

GCPROFILE THERM

Thermally separated profile system in fine-framed design for a sophisticated appearance. For installation situations where special emphasis is placed on high energy efficiency, i.e. the lowest possible heat loss in winter or cold loss in summer. This profile system is also used when there are increased requirements for the tightness of the sliding door system. It is particularly suitable for exterior doors that are exposed to weather conditions and for interior doors that have to meet increased demands for sound insulation.

TOUGHENED SAFETY GLASS CLAMPING PROFILE

Profile system for 10 mm or 12 mm toughened safety glass. The glass pane is clamped in place near the top. Additional aluminium profiles at the sides and bottom ensure tightness, floor guide and compatibility with DIN 18650.

ALL-GLASS SYSTEM (GGS)

All-glass design fittings for single point fixing offer maximum transparency. All the visible door fittings are made of solid stainless steel.

INTEGRATED ALL-GLASS SYSTEM (IGG)

The profiles and the fitting system are integrated invisibly between the panes – without protruding or visible parts on the glass pane.

FRAMED MOVING LEAF DOOR (ON-SITE)

The drive can be combined with door leaves made of a wide range of different frame profile systems, also thermally separated.

WOODEN LEAF (ON-SITE)

The drive can be combined with door leaves on-site made of a wide range of materials e.g. wood.

HERMETIC LEAF

Use in areas with increased hygiene requirements, see GEZE Hygienic Doors on our website.

	ECdrive T2	Slimdrive SL NT	Slimdrive SL RC2	Powerdrive PL	Slimdrive SLT	Slimdrive SL BO	Slimdrive SL SF
ISO glass fine-framed	•	•	•	•	•	•	•
MONO glass fine-framed	•	•	-	•	-	-	•
GCprofile Therm, energy-efficient profile system fine-framed	•	-	-	-	-	-	-
Toughened safety glass clamping profile	•	-	-	•	-	-	-
All-glass system (GGS)	-	•	-	-	-	-	-
Integrated all-glass system (IGG)	-	•	-	-	•	-	_
Framed moving leaf door (on-site)	•	•	-	•	-	-	_
Wooden leaf (on-site)	•	•	-	•	-	-	_
Hermetic leaf	-	-	-	•	-	-	_

● = yes I - = not available



ISO glass fine-framed





GCprofile Therm



Toughened safety glass clamping profile



All-glass system (GGS)



Integrated all-glass system (IGG)



Framed moving leaf door (on-site)



Wooden leaf (on-site)



Hermetic leaf





Operation of automatic sliding doors

PROGRAMME SWITCHES FOR SELECTING THE MODE OF OPERATION FOR AUTOMATIC SLIDING DOORS

GEZE offers programme switches for a wide range of individual demands. The switches are suitable for universal use — for surface-mounted or flush-mounted installation. The following switch types are available:

DISPLAY PROGRAMME SWITCH (DPS)

KEYPAD PROGRAMME SWITCH (TPS)

MECHANICAL PROGRAMME SWITCH (MPS)

The following modes of operation can be set:

- → "Hold open": The door moves to the OPEN position and remains open. Movement detector or opening push button are deactivated.
- → "Night": The movement detectors are switched inactive, the door closes. Option: The door leaves are locked electrically to prevent forced opening.
- → "Exit only" (one-way): The door only opens and closes when someone goes out from the inside. The movement detector outside is switched inactive, the one inside is switched active.
- "Automatic": The door opens as soon as it is activated via the movement detector or keys, and closes after a certain time that can be individually adjusted. Safety sensors protect the leaves' travel path. If there is someone in the door opening, the door will not close.
- → "Reduced opening width": The door opens only part of the possible opening width (can be set). In emergency exits, the reduced opening width must be at least as large as the required escape route width. The reduced opening width may not be less than 30 % of the opening width.
- → "OFF": Drive and sensors are switched off, the door leaves can be moved manually.

PROTECTION OF THE PROGRAMME SWITCHES

Automatic sliding doors in escape and rescue routes must be secured against operation by unauthorised persons. The mechanical programme switch (MPS) is also available in a lockable version. The display programme switch (DPS) and keypad programme switch (TPS) can be combined with a key switch. Alternatively, these programme switches can be secured using a code.







Keypad programme switch (TPS)



Mechanical programme switch (MPS)

Automatic activation

RELIABLE ACTIVATION WITH GEZE SENSORS

COMBINED DETECTORS

Combined detectors are radar movement detectors using an infrared light curtain. Activation and protection are integrated in the sensor, reducing installation efforts. Individual attachment possibilities through wall, ceiling or integrated ceiling recess installation provide lots of design freedom. The use of a remote control guarantees quick and easy commissioning. The sensor is activated reliably on the basis of direction detection and cross-traffic suppression. Slow movements can be detected thanks to the "slow motion detection" feature. The protection area can be configured as required. Combined detectors for escape and rescue routes offer maximum safety thanks to the integrated self-monitoring function.

RADAR MOVEMENT DETECTOR

Radar movement detectors register all objects that move within the radar field. All movements within the radiation range cause a time-delayed reflection which is forwarded as a door opening signal. The pre-programmed convenience setting of the GEZE radar movement detectors ensures they can be put into operation quickly. Automatic configuration is possible via keys or a remote control. Reliable detection is achieved with a clearly defined radar field. Energy can be saved through detection of people's direction of movement. Unwanted door opening is avoided since cross-traffic can be faded out.







GC 365 combined detector



GC 304 radar movement detector

Manual activation

PUSH BUTTON

Push buttons for the wireless activation of doors - reliable, convenient and safe at the push of a button.

CAPACITIVE LED SENSOR SWITCH

The design-oriented and sturdy LED sensor switch makes intuitive and straightforward operation possible. No great efforts are required for activation – touching the button slightly is sufficient. Suitable for indoor and outdoor use, the LED sensor switch can be recognised easily in the dark thanks to the blue LED lighting. In addition, the sensor has Braille lettering on it. An acoustic and visual signal signalises activation through the push button. The push button is waterproof, impact-resistant and protected against vandalism. This makes it very well suited for outdoor use or installation in the floor.

NON-CONTACT PROXIMITY SWITCH

With the GC 307+ interior doors without a haptic perception requirement can also be activated cleanly and comfortably. The sensor ensures bacteria-free access to toilets, for example, or germ-free conditions in hotel kitchens, swimming pools and doctors' surgeries. The pulse generator is installed at hand height and precisely detects people and objects - independently of their direction of movement - both in the direct vicinity of only 10 cm, as well as 60 cm away. The different scanning ranges can be optimally adapted to existing environmental conditions and the interests of the user groups. Non-contact sensors offer a high level of operating comfort - people only need to approach them to trigger the automatic opening mechanism – and the advantage of absolute hygiene. The optimum system structure permits simple and time-saving installation in the flush-mounted box. The colours of the LEDs can be set, and it is also possible to use individual pictograms to visualize the areas of application.

WIRELESS ACTIVATION

Radio transmitter are used for wireless activation of doors and windows as a multi-channel solution. For every additional channel, an additional electrical device or function can be switched at the push of a button. Thanks to the very small size of the wireless modules, radio transmitter can easily be integrated in the drive or in a flush-mounted box. They can also be clipped directly into the elbow switch and mounted without wires, e.g. on glass.









GC 307+ non-contact proximity switch



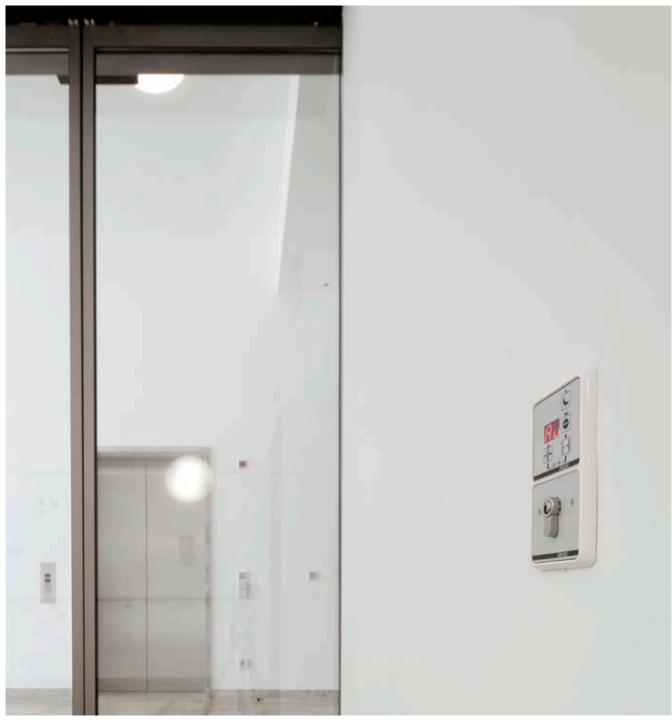




Wireless activation

Plastic elbow switch

Stainless steel elbow switch IP65



 ${\sf Key \, switch + Display \, programme \, switch + Slimdrive \, SL-FR \, (photo: Dirk \, Wilhelmy \, / \, {\sf GEZE \, GmbH})}$

Electronic protection

ACTIVE INFRARED DETECTOR

GEZE light curtains are used to protect posts, main and secondary closing edges for both internal and external applications. The light curtains have an invisible and non-contact protective device. Precise detection is possible through a clearly defined field, the size of which can be adjusted. Individual applications allow the use of light curtains as safety sensors or opening impulse generators.



GC 339 active infrared detector



GC 341 active infrared detector

Mechanical protection

PROTECTIVE LEAF

Protective leaves are used on escape and rescue routes if it is not possible to secure the secondary closing edges using light curtains. Automatic sliding doors on escape and rescue routes must be able to be opened at any time.

SAFETY LEAF

Safety leaves are used to protect the cavities behind automatic sliding doors in mullion-transom constructions.

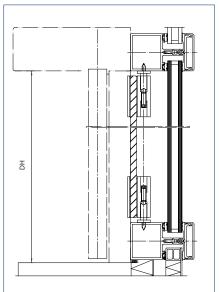


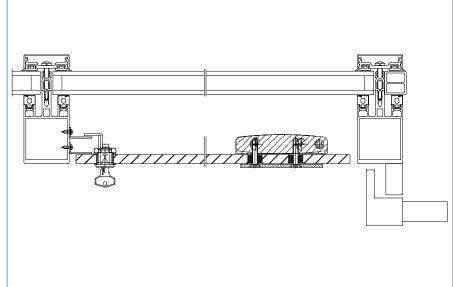


Protective leaf

Safety leaf

Protective leaf





DH = passage height

Locking mechanisms

LOCK M HOOK BOLT LOCK

Lock M is a manual hook bolt lock for the Slimdrive SL NT and ECdrive T2 sliding door systems. This high-quality locking mechanism is invisibly built into the vertical profile of the door leaves, allowing the door to be locked and unlocked quickly and reliably. The door can be locked and unlocked from the inside or outside using a key in the lock which is installed at a convenient height. The lock possesses an euro profile cylinder with 3, 6 or 9 keys with the construction length 32 mm (16/16). If standard construction lengths such as 60 mm (30/30 Euro-profile double cylinder) or 40 mm (30/10 Euro-profile half cylinder) are used, danger areas emerge on the basis of the surviving cylinder, so that a restriction of the opening width is necessary.

The Euro profile cylinder can survive without restrictions if no protective leaves are available on the inside. As an option, GEZE can provide an escutcheon plate for standard lock cylinders for installation on the drive side / inside. The extremely sturdy Lock M provides excellent protection against vandalism and unauthorised access.

LOCK A HOOK BOLT LOCK

Lock A is an motorised hook bolt lock for the Slimdrive SL NT and ECdrive T2 sliding door systems. This high-quality single or two-point locking mechanism allows the door to be locked and unlocked quickly and reliably. The locking motor is invisibly integrated into the vertical profile of the door leaves. The sliding door control unit makes parameter setting and control easy. The manual emergency unlocking facility allows the door to be opened from the inside at any time in the event of a power failure.







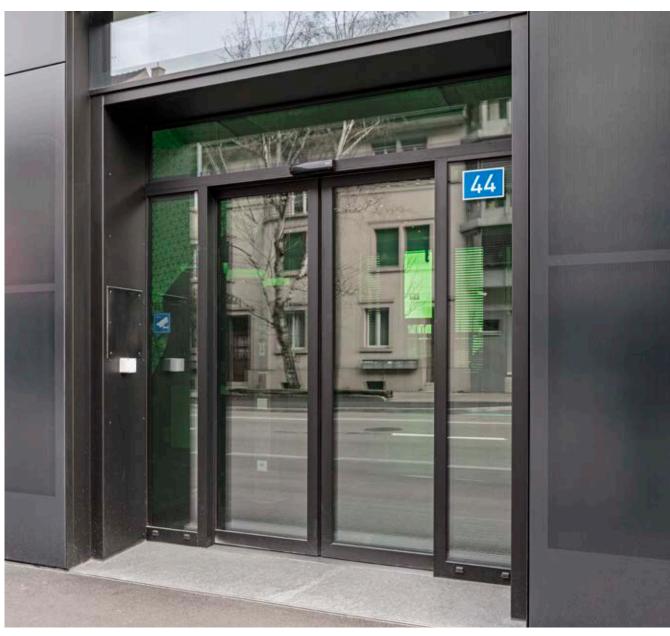
Lock M hook bolt lock installed







Lock A hook bolt lock installed



 ${\sf GEZE\ Slimdrive\ SL\ NT-FR\ sliding\ door\ system,\ Grosspeter tower\ Z\"{u}rich\ (photo:\ Lorenz\ Frey\ /\ GEZE\ GmbH)}$

TOOTHED BELT LOCKING

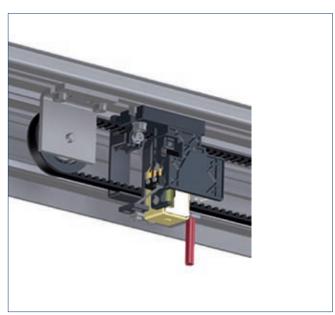
This electromagnetic two-stages locking system ensures more safety, because it stays locked even without electric current. Manual emergency unlocking is possible at any time. Typical for this type of locking mechanism is permanent monitoring by the control unit. Up to two contacts for external applications (e.g. alarm systems) can be integrated as an option. Thanks to the free choice of positioning in the drive, the toothed belt locking is not only easy to install, it also makes special locking functions possible, e.g. locked pharmacy opening of the sliding doors.

FLOOR LOCK

The floor lock is used for the easy locking of door leaves with the fine-framed ISO profile system at floor level. Customary Euro profile cylinders can be used for the floor locks. This means the solution is suitable for optimum integration in closing systems. Operation is manual, with the key, either only from the inside or from both the inside and outside.

ROD LOCKING

Rod locking increases safety and protection against burglary. The multi-point locking – both upwards and in the ground – provides solid resistance against attempts to be levered open. The locking bar is integrated invisibly in the fine-framed ISO profile system. The system can be unlocked both electrically and mechanically. Rod locking can be used in the Slimdrive SL and Slimdrive SLT drives. Escape and rescue routes can also be protected by rod locking.



Toothed belt locking





Rod locking

Service tools

GEZECONNECTS

The GEZEconnects software makes wireless connection via Bluetooth possible between a computer and the automatic door systems from GEZE. All door system settings can be carried out via an intuitive graphic interface, stored, sent by e-mail and transferred to a word processing programme as a protocol. Diagnosis functions show the most important function parameters of the door system in real time, so that faults are recognised at a glance and can be eliminated. All the pre-settings can be taken over very easily for further door systems. The convenient documentation of commissioning, maintenance and diagnosis protocols as well as all statistical data can be downloaded at any time. Password protection to freeze operating parameters and servicing data guarantees there will be no unauthorised modifications.

ST 220 SERVICE TERMINAL

Mobile, handy and straightforward - that is parameter setting for the automatic GEZE door systems using the ST 220 service terminal. Communication and data exchange between the service terminal and the drive unit is via an integrated RS485 interface. The large illuminated display is easy to operate thanks to the plain text display. The service terminal is equipped with a readout function for servicing and diagnosis work. Power is supplied via the door system. Password protection to freeze operating parameters and servicing data guarantees there will be no unauthorised modifications.

Note: Changes to parameters on GEZE drives may only be carried out by experts authorised by the manufacturer (GEZE) in accordance with DIN 18650/EN 16005







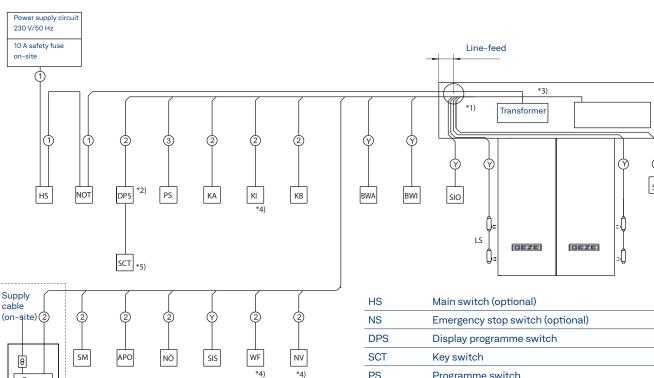
ST 220 service terminal





Cable plan sliding door control units

For more detailed information about connection of the activation devices and sensors see the wiring diagram 160924 (English version).



Wire cross–section: 1 = NYM–J 3 x 1.5 mm² I 2 = I–Y(ST)Y 2 x 2 x 0.6 mm I 3 = I–Y(ST)Y 3 x 2 x 0.6 mm I Y = GEZE scope of delivery

→ Safety:

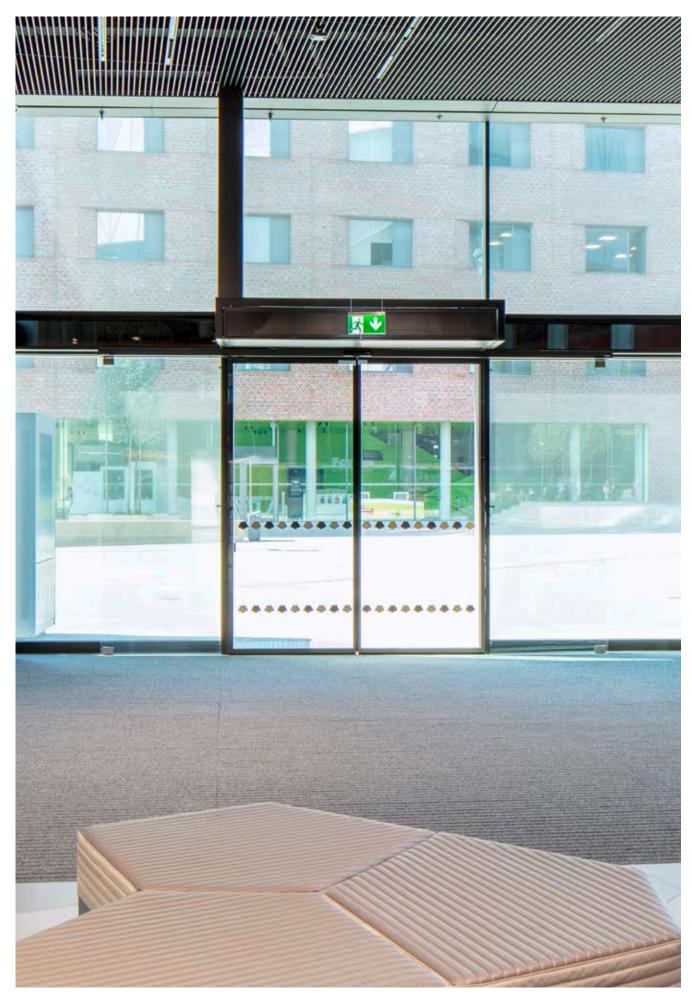
Special element

- → Wiring according to VDE 0100
- \rightarrow Wiring, connection and commissioning may only be carried out by authorised specialists.
- → GEZE does not accept any warranty and service performances in combination with third-party products

HS	Main switch (optional)
NS	Emergency stop switch (optional)
DPS	Display programme switch
SCT	Key switch
PS	Programme switch
KA	Activation device outside (push button)
KI	Activation device inside (push button)
KB	Activation device "authorized"
BWI/BWA	Movement detector (inside/outside)
SIO	Safety sensor "Open"
SM	Fault indicator Fault lamp or fault horn
APO	Pharmacy opening (only possible in combination with toothed belt locking)
NÖ	Emergency opening
SIS	Light curtain with movement detector KA or KI
WF	Interlocking door system, vestibule
NV	Emergency lock
LS	Photoelectric barrier *6)

\rightarrow Notes:

- 1 Cable feed through the side plate or through the track on the left. To protect the cables, avoid sharp edges or use edge protection.
- 2 Cable length max. 100 m
- 3 Signal wires min. 5 m and power supply circuits min. 2 m from the wall
- 4 Push button (KI) not permitted in escape and rescue routes
- 5 Optionally, connect to escape and rescue route control units, alternatives without key switch: Program access code to the DPS via ST 220 or GEZEconnects
- 6 Photoelectric barriers, according to DIN 18650 / EN 16005 must not be used as the only protection in the closing area



Slimdrive SL NT-FR with IGG glass leaves (photo: Jürgen Pollak / GEZE GmbH)





SLIDING DOOR

References

Discover a selection of innovative buildings which we were able to equip with our automatic sliding door systems. Customers all over the world have praised the diverse functions and elegant design: Be it a first-class hotel, a state-of-the-art hospital, a representative retirement home, a renowned museum, an elegant administrative building or a heavily frequented station – the products and services by GEZE for automatic sliding doors are the first choice. We provide convenient and reliable drive units.



 $Powerdrive\ PL-FR, Grosspetertower\ Zurich, Switzerland, (photo: Lorenz\ Frey\ for\ GEZE\ GmbH)$



ECdrive T2 (photo: GEZE GmbH)



ECdrive T2 (photo: GEZE GmbH)



Slimdrive SL NT with vestibule, Augustinum, Stuttgart, Germany (photo: Dirk Wilhelmy)

We are GEZE.

For liveable buildings

GEZE stands for innovation, high quality and comprehensive support of building technologies. From the initial idea, planning and operational implementation with standard products to customised system solutions and individual service and maintenance plans. We offer an extensive product range of door, window and safety technology products and are a major driving force behind the digital networking of building automation.

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