## HS-PORTAL 300 LM



Hardware information

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Lift-slide door hardware for aluminium elements Hardware information for profile manufacturers

#### ... with these key benefits:

- Integrated airgap
- Trouble-free installation with profile cylinder
- Burglar-resistant due to 4 locking points on gear
- Bogie wheels fixed during assembly, simple rational assembly
- Smooth operation even with high sash weights

#### Size range

Sash width	(mm)	depending on profile system, max. 3350
Sash height (sliding sash)	(mm)	depending on profile system, max. 2675
Frame width	(mm)	for scheme A: max. 6700
Frame height	(mm)	depending on profile system
Sash weight	(kg)	max. 300
Backset (gear)	(mm)	37.5
Handle position (window)	(mm)	from upper edge of running rail 395
Handle position (door)	(mm)	from upper edge of running rail 995

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#### Target group of this documentation

This documentation is intended for use by specialists only. All work described in this document is to be performed by experienced professionals with training and practice in the assembly, commissioning, repair and maintenance of PORTAL hardware. Safe and proper assembly of PORTAL hardware is not possible without expert knowledge. Keep these assembly instructions in a safe place.

#### Intended use

- PORTAL HS hardware for use in windows or French doors.
- Sash weight max. 400 kg.
- The lift-slide PORTAL HS hardware is intended for use in fixed buildings.
- The lift-slide PORTAL HS hardware allows the horizontal opening and closing of doors and French doors from profiles for lift and slide elements.
- The lift and slide elements must be installed vertically, in no circumstances in a sloping position.
- PORTAL HS elements may not be installed without providing appropriate drainage and weather protection.
- Seal the threshold components and seal between the threshold and masonry or facade observing the applicable rules in the trade (Fachhandwerk) as set down in DIN 18195 section 5 paragraph 8. 1. 5.

#### Safety notes

- Maintenance must be carried out on the PORTAL HS hardware at least once a year. The maintenance instructions must be observed.
- The hardware components described in these assembly instructions are manufactured from steel, zinc plated and then treated with a special process.
- The hardware components may not be used in the following cases. Please contact your SIEGENIA sales consultant in such situations.
  - -in wet rooms
  - -in environments where the air contains aggressive, corrosive components
  - -in environments where the air contains salt.
- Use solely SIEGENIA hardware components. Otherwise, damage could occur, for which we accept no liability.
- All hardware components must be mounted properly. Do not overtighten the screws!
- The lift and slide elements may only be surface treated before
  the hardware components are assembled. Any subsequent
  surface treatment of the hardware components may limit their
  functionality. In such cases we are not obliged to honour any
  warranty.
- When block setting, please observe technical guideline no. 3 from the German Glazing Trade [Glaserhandwerk], ,ÄúBlocking glazing units,"Klotzung von Verglasungseinheiten".
- Never use acid curing sealants as they may cause the hardware components to corrode.
- Keep the running rail and all rebates free from dirt and debris, especially from deposits of cement and plaster. Avoid exposing the hardware directly to water and do not let cleaning

- agents come into contact with the hardware.
- Attach the operating sticker (slide direction DIN left or DIN right) in a visible position on the installed lift-slide sash. You can find the operating sticker in the HS 300 basic carton.

#### **Extreme** weather conditions

The PORTAL HS hardware must receive special protection in the case of extreme prevalent weather conditions e.g. gales or storms in the direct vicinity of the coast. PORTAL HS hardware must be sealed against the permeation of foreign bodies. Foreign bodies e.g. sand and building dust, lead to an abrasive impact on the hardware surface and to further damage to the hardware components. The permeation of foreign bodies must be prevented by the application of suitable seals in the profile system or geometric profile design. Especially in the case of externally running sashes, it is essential to ensure that the external hardware components must be protected against gales and storms.

Maintenance must be carried out twice a year if the hardware components are exposed to extreme weather.

- The hardware should be freed of foreign bodies by blow out or suction methods. Treat the bogie wheels and corner drive on the locking side in the same way.
- Apply a non-acidic and non-resinous care agent to the surface of the hardware component.

For example:

- "Corrosion protection spray KORRSHTZ-MITT-SPRAY-300ML SABESTO" from Würth,
- "ANTI-CORIT 5F SPRAY" from Fuchs-Schmierstoffe.
- Lubricate the gear via the holes in the gear sleeve of the drive rod.

#### Directives of the Trade Organisation for Locks and Fittings (Richtlinien der Gütegemeinschaft Schlösser und Beschläge e. V.).

The directives of the Trade Organisation for Locks and Fittings (Gügemeinschaft Schlösser und Beschläge e. V.) provide comprehensive information on the correct operation and maintenance of hardware for windows and French doors. We deem these directives to be binding.

You can find the latest versions of the directives, in a range of languages here:

http://www.beschlagindustrie.de/ggsb/richtlinien.asp

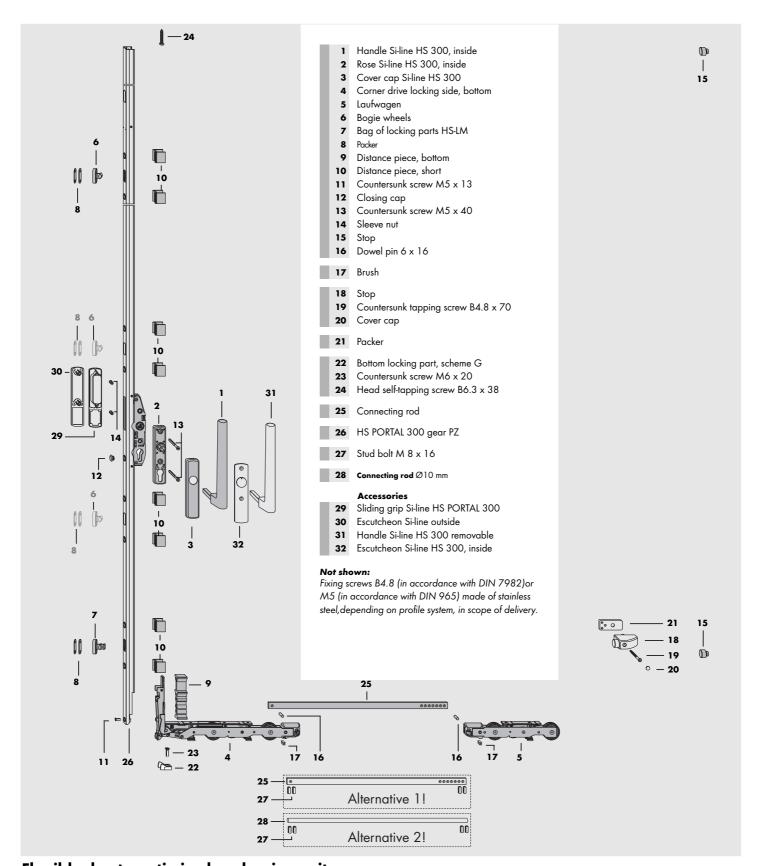
**VHBH – Hardware for windows and French doors**Guidelines/notes on the product and on liability

**VHBH - Hardware for windows and French doors**Guidelines/notes on the product and on liability

#### **Dimensions**

All dimensions are nominal values and include the general tolerances (formerly dimensional variations). All nominal nominal measurements are defined in mm.

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#### Flexible due to optimised packaging units

- Handle Si-line HS 250 internal (1) and Cover cap Si-line HS 250(3) available in white RAL 9016 – silver – si-brown
- Basic parts (4 to 16) in Carton HS-Portal 300 LM (profile dependent)
- Sash width dependent connecting rod size 150 to 335 (22)
- Sash height dependent Gear HS-Portal 300 PZ size 170, 220 and 260 (23)

	Piece									Material number		
	ltem			Piec	9		Mat	erial description		materiai numbei		
		A	D	G	С	F		· ·	White	Silver	Brown	
		1	2	1	2	4	Hebel Si-line HS PORTAL 300 LM consisting of:			See page 4		
	1	1	2	1	2	4	Handle Siline HS 300, inside					
	2	1	2 2	1	2	4	Rose Siline HS 300, inside Cover cap Siline HS 300					
	3		i	i	İ	i	Carton HS PORTAL 300 LM	A		****		
		1	2	1	2	4	consisting of:					
	4 5	1	2 2	1	2	4	Corner drive locking side, bottom  Bogie wheels	HS HS		PEUB0030-10001_ PLWB0040-10001		
	J	1	2		11)	3 <sup>1)</sup>	Bag of locking parts HS-LM	А		PLVVB0040-10001_		
	6	1	2	_1)	11)	31)	Locking part, top	A depending on chamber dimensions		See page 4		
	7	1	2	_1)	11)	31)	Locking part, bottom	A depending on chamber dimensions		See page 4		
	8						Packer	1 mm / 2 mm depending on chamber dimensions		See page 4		
		1	2	1	2	4	Bag of sash parts HS-LM	A				
	9	1	2	1	2	4	Distance piece, bottom	A depending on profile system		See page 4		
	10	8	16	8	16	32	Distance piece, short	Adepending on profile system		See page 4		
	11	1	2 2	1	2	4	Countersunk screw M5 x 13 Closing cap	grey		800850 819708		
8	12	1	2	1	2	4	Closing cap	Brown		819869		
Generally required	13	2	4	2	4	8	Countersunk screw M5 x 40			801048		
erally	14	2	4	2	4	8	Sleeve nut			800287		
Gen	15	2	4	_1)	4	-1)	Stop			824412		
		1	2	1	2	4	Bag of screws HSLM	A				
	16	2	4	2	4	8	Dowel pin 6 x 16 Screws	depending on profile system		823132		
							Sciews	depending on profile system				
	1 <i>7</i>	01	01	01	02	02	Brush	for corner drive and bogie wheels		On request		
		-	1	1	-	2	Bag stop consisting of:		RAL 9003 signal white <b>821237</b>	RAL 7040 window grey PMZB0140-0E601_	RAL 9005 jet black <b>831922</b>	
	18	-	1	1	-	2	Stop					
	19	-	1	1	-	2	Countersunk tapping screw B4.8 x 70					
	20	-	1	1	-	2	Cover cap					
	21	-	01	01	-	02	Packer	for stop		RAL 9005 jet black <b>901441</b>		
		-	-	1	1	1	Bag of locking parts HS consisting of:	Scheme G		238691		
	22	-	-	1	1	1	Bottom locking part, scheme G					
	23	-	-	1	1	1	Countersunk screw M6 x 20					
	24	-	-	1	1	1	Head self-tapping screw B6.3 x 38					
SW							Connecting rod	Size Length (in mm) SW (in mm)				
depending on SW	25	١,	2	1	2	4		150 898 720 to 1500 200 1398 1501 to 2000		719282 719480		
pendi		Ľ	_	•	_	•		250 1898 2001 to 2500		719497		
P								335 2748 2501 to 3350		719725		
n SH							HS PORTAL 300 gear PZ	Size Handle position (in mm) SH (in mm)	EV 1 silver	EV 1 silver	C 34 dark bronze	
0								170 1190 to 1790 220 1791 to 2290	PGKB0010-52401_ PGKB0020-52401_	PGKB0010-52401_	PGKB0010-53201_	
ding o.	26	1	2	1	2	4				PGKB0020.52401	PGKB0020-53201	
depending on SF	26	1	2	1	2	4		260 2291 to 2690	PGKB0030-52401_	PGKB0020-52401_ PGKB0030-52401_	PGKB0020-53201_ PGKB0030-53201_	
	26 Alter				2	4			_	_		
					2	4	Connecting rod	260 2291 to 2690  Size Length (in mm) SW (in mm)	_	_		
	Alter	rnati	ve 1				Connecting rod	260 2291 to 2690  Size Length (in mm) SW (in mm) 150 898 720 to 1500	_	PGKB0030-52401_ 719282		
					2	4	Connecting rod	Size Length (in mm) SW (in mm) 150 898 720 to 1500 200 1398 1501 to 2000 250 1898 2001 to 2500	_	719282 719480 719497		
	Alter 25	rnati 1	ive 1	1	2	4		Size Length (in mm) SW (in mm) 150 898 720 to 1500 200 1398 1501 to 2000 250 1898 2001 to 2500 335 2748 2501 to 3350	_	719282 719480 719497 719725		
	Alter 25 27	nati	ve 1	1 01	2	4	Connecting rod Stud bolt M 8 $\times$ $16^{2}$	Size Length (in mm) SW (in mm) 150 898 720 to 1500 200 1398 1501 to 2000 250 1898 2001 to 2500	_	719282 719480 719497		
	Alter 25	nati	ve 1	1 01	2	4	Stud bolt M 8 x 16 <sup>2)</sup>	Size Length (in mm) SW (in mm) 150 898 720 to 1500 200 1398 1501 to 2000 250 1898 2001 to 2500 335 2748 2501 to 3350 for connecting rod	_	719282 719480 719497 719725		
	Alter 25 27	nati 1 01	2 02	01	2	4		260 2291 to 2690  Size Length (in mm) SW (in mm) 150 898 720 to 1500 200 1398 1501 to 2000 250 1898 2001 to 2500 335 2748 2501 to 3350 for connecting rod  Size Length (in mm) SW (in mm) 130 1015 770 to 1600	_	719282 719480 719497 719725 KDNA4020-10057_		
	Alter 25 27 Alter	nati 1 01	ve 1	01	2	4	Stud bolt M 8 x 16 <sup>2)</sup> Connecting rod Đò 10 mm	Size Length (in mm) SW (in mm) 150 898 720 to 1500 200 1398 1501 to 2000 250 1898 2001 to 2500 335 2748 2501 to 3350 for connecting rod  Size Length (in mm) SW (in mm)	_	719282 719480 719497 719725 KDNA4020-10057_		

<sup>1)</sup> Actual requirement; additional parts are included in the scope of delivery.



<sup>2)</sup> Note: On application of the Stud bolt M 8 x 16 for the fixation of the connecting rod, Dowel pin 6 x 16 may not be used!

#### Distance blocks (9) and distance pieces, short (10)

	Dimen-	Version	Distance block	Distance piece, short
	(mm)		Material number	Material number
	11.5	A0169 A0179	863336 -	- PDZB0010-096010
	16	A0001	862711	PDZB0040-096010
	18	A0020	634.2341.5021.A0	PDZB0050-096010
	19	A0237	328186-001	-
10-	20	A0029	856000	PDZB0060-096010
E	23	A0007	855997	PDZB0070-096010
	25	A0004	856161	PDZB0080-096010
=	27	A0008	863282	PDZB0100-096010
11-1	30	A0006	857465	PDZB0110-096010
	31	A0018	897577	PDZB0120-096010
	32	A0015	849200	PDZB0130-096010
	35	A0002	859049	PDZB0140-096010

#### Locking parts (6 and 7)

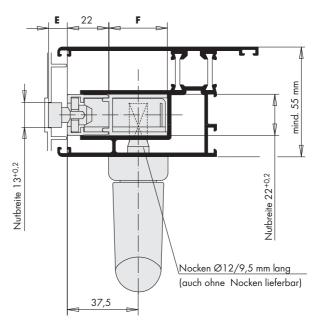
	Dimensions E <sup>1)</sup> (mm)	Version	Locking part, top  Material number	Locking part, bottom  Material number
	4	A0012	719398	719404
	7	A0020	719305	719312
	8	A0001	719190	634.2834.5004X60
	8.5	A0005	719206	719220
7 — lb	9	A0006	719213	719237
7 —∭∞	12	A0229	PRTB4010-100010	PRTB4000-100010
8 — Jan	14	A0009	719329	719343
	16	A0013	719244	719268
	19.5	A0002	722220	719299
	20	A0004	719251	722534

Intermediate dimensions with packers
 mm and 2 mm thickness possible

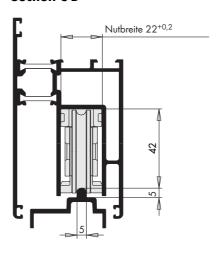
#### Packer (8) for locking parts

8 — fi 1 mm	721285
2 mm	721292

#### **Section A-B**



#### **Section C-D**



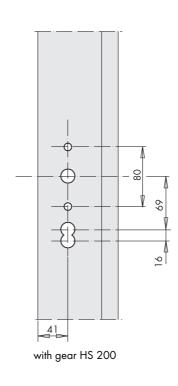
#### Handle

папс			
Item	Material description	Colour	Material number
1, 2, 3	Carton handle Si-line PORTAL HS 300 LM	RAL 9016 traffic white	PMHB7070-504010
		RAL 8022 black brown	РМНВ7070-512010
		EV 1 silver	РМНВ7070-524010
		RAL 9010 pure white	PMHB7070-503010
		Surface uncoated (untreated)	РМНВ7070-500010
	Accessories		
		i .	
29	Sliding grip Si-line HS PORTAL 300	RAL 9016 traffic white	880869
		RAL 8022 black brown	PSMB0020-512010
		Si-silver	880838
		Surface uncoated (untreated)	900048
30	Escutcheon Si-line outside	Si-silver	PHZB0030-525010
31	Handle Si-line HS 300 removable	White	PHIB0060-502010
32	Escutcheon Si-line HS 300, inside	RAL 9003 signal white	PHZB0020-502010
		RAL 8022 black brown	PHZB0020-512010
		Si-silver	PHZB0020-525010

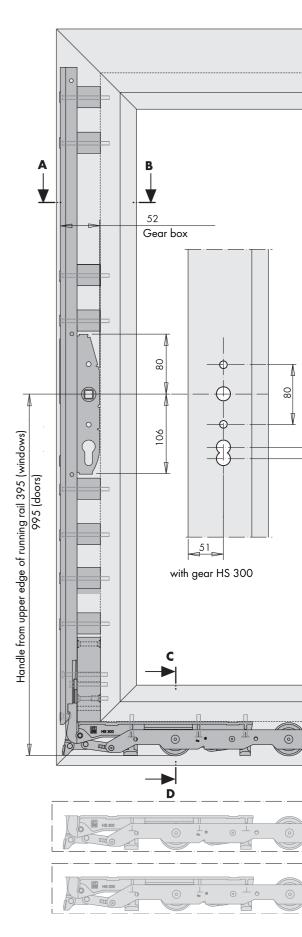
# 10 ⋖ 100 Upper edge of running rail ( ) 250

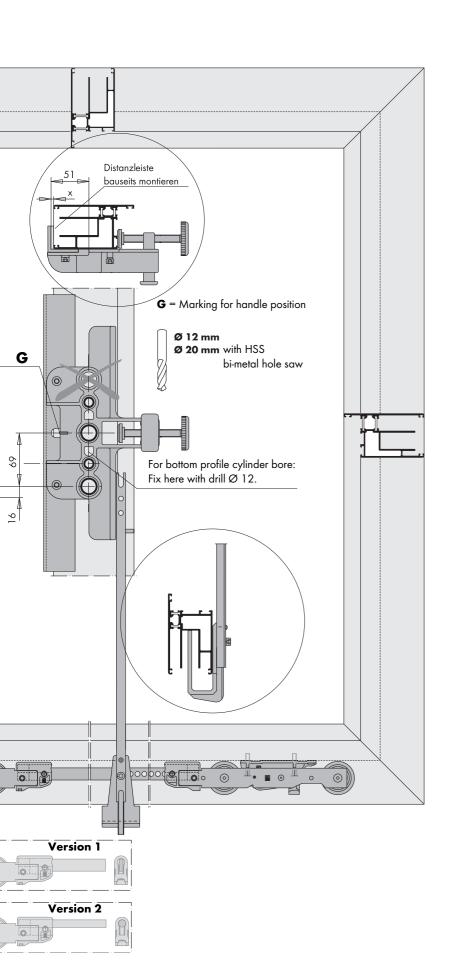
#### Sash cover strip

(depending on profile system)

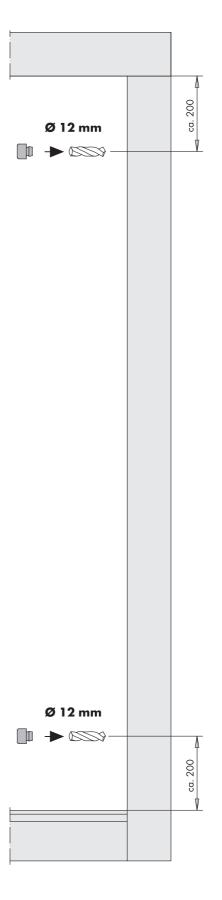


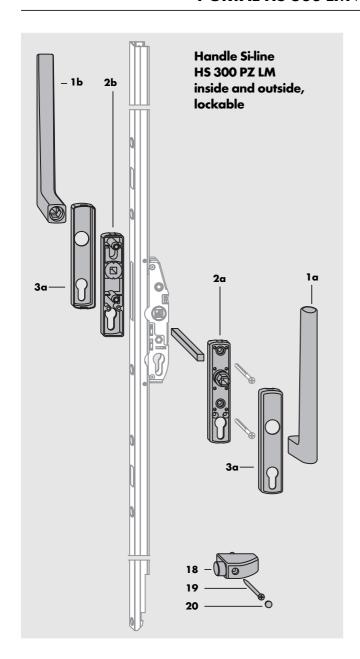
- If requested 2 pcs top locking bolts (6) can be used as additional centre lock. The locking points on Gear HS-Portal 300 PZ (23) must be opened.
- 2) Small deviations possible (profile dependent)

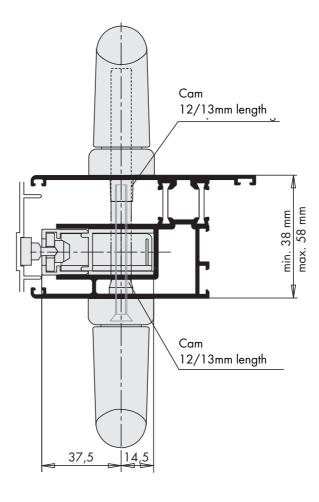




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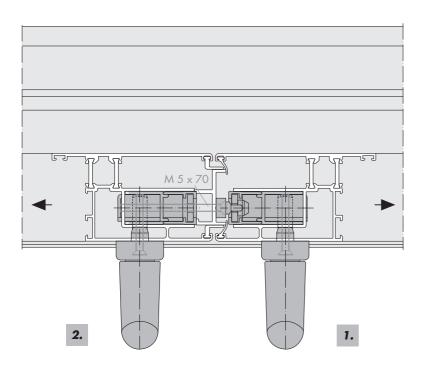


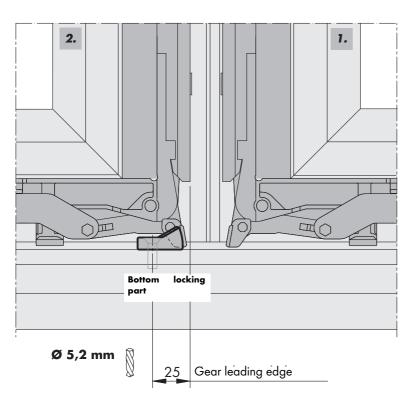




Item	ı	Pieces	with s	cheme	•	Material description		
IICIII	A	D	G	C	F	muleilui descripilori		
	1	2	1	12	34	Carton handle Si-line HS PORTAL 300 PZ inside		
						consisting of:	Only in conjunction with handle Siline HS	
1a	1	2	1	12	34	Handle Si-line HS 300 PZ inside	300 PZ, outside For lockable elements-with profile cylinders	
2a	1	2	1	12	34	Rose Si-line HS 300 PZ inside	inside and outside	
3	1	2	1	12	34	Cover cap Si-line HS 300 PZ		
	1	2	1	12	34	Carton handle Si-line HS PORTAL 300 PZ, outside		
						consisting of:	Only in conjunction with handle Siline HS 300 PZ inside	
1b	1	2	1	12	34	Handle Si-line HS 300 PZ outside	For lockable elements-with profile cylinders	
2b	1	2	1	12	34	Rose Si-line HS 2300 PZ outside	inside and outside	
3	1	2	1	12	34	Cover cap Si-line HS 300 PZ		
	1	2	1	12	34	Bag stop		
						consisting of:		
18	1	2	1	12	34	Stop		
19	1	2	1	12	34	Countersunk tapping screw B4.8 x 70		
20	1	2	1	12	34	Cover cap		

Colour	Material number
RAL 9003 signal white	PMHB0050-50201_
RAL 9016 traffic white	PMHB0050-50401_
RAL 8022 black brown	PMHB0050-51201_
EV 1 silver	PMHB0050-52401_
RAL 9003 signal white	PMHB0040-50201_
RAL 9016 traffic white	PMHB0040-50401_
RAL 8022 black brown	PMHB0040-51201_
EV 1 silver	PMHB0040-52401_
White	821237
Black	831922





#### **Notes for Scheme C:**

- The locking points are lowered by 4mm
   Reduce Dim A to C on page 14
   by 4 mm
- screw a self tapping screw B6,3 x 38 (21) into the frame ~ 50 mm from the sash leading edge above the slave sash
   [see also page 9]
- To avoid misoperation of the two leaves , the master and slave sashes should be clearly identified.

The sliding doors should only be operated in the following sequence!

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Opening: first the master [1.], then the slave sash [2.]

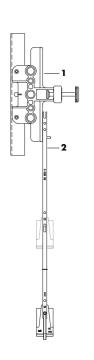
Closing: first the slave sah I [2.], and then the master [1.]

#### Installation of bottom locking part Scheme G

- A Mark the running rail 25 mm behind the gear front edge and ctr punch for a csk screw M6  $\times$  20 (20).
- B Pre drill with a Ø 5,2 mm drill.

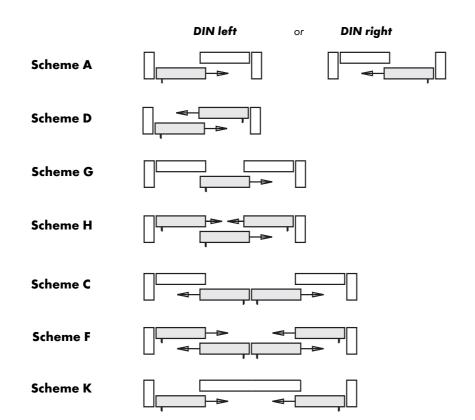
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C Screw in the locking part for Scheme G (19).



Mat	terial description	Tool	Material number
Jig EB 651-3 consisting of:  Item 1	for gear drills  Jig has backset 51; Adjust to profile-specific backset using distance piece provided by customer  for EB 650-3 and EB 651-3	Drill: Ø 12 mm Ø 20 mm	PABB0010-521010 157244
Centre punch PVC	to centre-punch the screw holes for the lock- ing parts		PALB4010-100010

#### **Design versions**



#### Intended use

Any use of this product that is not in accordance with its intended use, or any adaptation of or modification to the product and its associated components for which our express consent has not been obtained, is strictly prohibited. We accept no liability whatsoever for any material losses or injury to people caused by failure to comply with this stipulation.

#### **Product liability**

Our products are guaranteed – subject to correct installation and proper use – for a period of one year from the date of receipt by a company (according to our general terms and conditions) or as otherwise agreed, and for a period of two years for end consumers, in accordance with statutory provisions. As part of our ongoing improvements, we reserve the right to replace individual components or entire products. Consequential losses are excluded from the warranty in as far as this is legally permissible. The warranty shall become void if modifications that are not authorised by us or have not been described in this documentation are performed on the product and/or individual components, or if the product and/or individual components is/are dismantled or (partly) dismantled, and the defect is due to the changes made.

#### **Disclaimer of liability**

The product and its components are subject to stringent quality controls. The product functions reliably and safely when used correctly. Our liability for consequential losses and/or claims for damages is excluded, except in the case of wilful misconduct or gross negligence, or where we are responsible for injury to life, physical injury or damage to health. Strict liability under the German Product Liability Act (Produkthaftungsgesetz) remains unaffected. Liability for the culpable violation of significant contractual obligations also remains unaffected; liability in this case is limited to losses that are specific to the contract and that could have been foreseen. The above regulations do not imply a change in the burden of proof to the detriment of the consumer.

#### **Environmental protection**

Although our products do not fall within the scope of the German Electrical and Electronic Equipment Act (ElektroG), SIEGENIA will continue to meet the requirements of this Act and will endeavour to completely eliminate the use of substances that are hazardous to the environment as soon as this becomes technically feasible. Electrical products should not be disposed of as household waste.

#### Feedback on documentation

We welcome your comments and suggestions on how to improve our documentation. Please e-mail us your comments to dokumentation@siegenia.com.

07.2017 **SIEGENIA**° H48.HSLMS0004EN 11/12

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