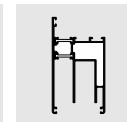
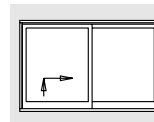


HS-PORTAL 200 LM

Lift and sliding hardware for aluminium doors
Hardware information for profile manufacturer



... with the following benefits:

- with integrated night vent
- profile cylinder accessories
- secure due to 4 locking points on the drive gear
- fixed wheels allow simple and easy assembly
- smooth operation

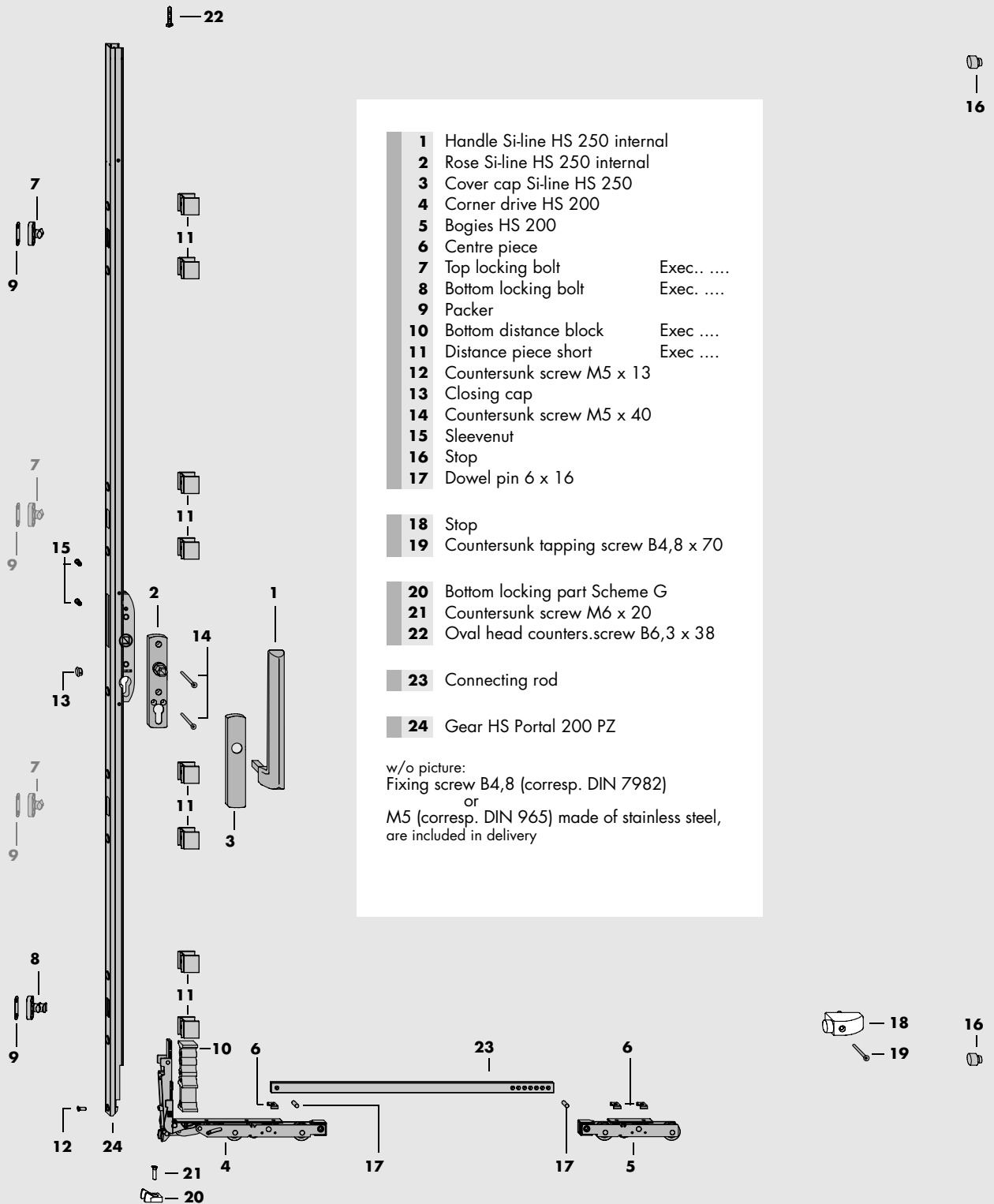
Size range

Sash width	(mm)	profile dependent max. 2485
Sash height <i>(Sliding sash)</i>	(mm)	profile dependent max. 2675
Frame width	(mm)	with Scheme A max. 5000
Frame height	(mm)	profile dependent
Sash weight	(kg)	max. 200
Backset <i>(Gear)</i>	(mm)	27,5
Handle position <i>(Window)</i>	(mm)	from top edge running rail 395
Handle position <i>(Door)</i>	(mm)	from top edge running rail 995

Contents

Size range.....	Page 1	Fitting detail(I)	Page 6
Fittings layout.....	Page 2	Fitting detail(II)	Page 7
Parts list.....	Page 3	Scheme Options.....	Page 8
Profile dependent measurements.....	Page 4	Specifics on scheme C	Page 9
Accessories.....	Page 5	Jigs.....	Page 10

Assembly instruction
HSgb7019



Flexible by optimized packing 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 17) in Carton HS-Portal 200 LM (profile dependent)
- Sash width dependent connecting rod size 150 to 335 (23)
- Sash height dependent Gear HS-Portal 300 PZ size 170, 220 and 260 (24)

HS-PORTAL 200 LM Hardware Parts list

Pos.	Pieces					Materialshorttext	Materialnumber			
	A	D	G	C	F		RAL9016 white	silver	Si-brown	
1	1	2	1	2	4	Carton Handle Si-line HS 250 internal A0156	267226	267219	267240	
	2	1	2	1	4	Handle Si-line HS 250 internal A0156				
	3	1	2	1	2	4				Rose Si-line HS 250 internal
4	1	2	1	2	4	Carton HS-PORTAL 200 LM consisting of: A....			
	5	1	2	1	2	4	Corner drive HS 200 VSU HS TS	PEUB7010-100010		
	6	3	6	3	6	12	Bogie HS 200 HS TS	PLVWB7010-100010		
7	1	2	1	2	4	Centre piece PLZB0010-096010				
	8	1	2	1	2	4	Bag locking parts HSLM A....			
	9	1	2	1	2	4	Top locking parts A.... <i>air gap dependent</i>	See page 7		
8	1	2	1	2	4	Bottom locking parts A.... <i>air gap dependent</i>	See page 7			
	8	1	2	1	2	4	Packer 1 mm / 2 mm <i>airgap dependent</i>	See page 7		
	9	1	2	1	2	4	Bag sash parts HSLM A....			
10	1	2	1	2	4	Lower distance block A.... <i>profile dependent</i>	See page 7			
	11	8	16	8	16	32	Distance piece short A.... <i>profile dependent</i>	See page 7		
	12	1	2	1	2	4	Countersunk screw M5 x 13 800850			
13	1	2	1	2	4	Closing cap grey 819708				
	1	2	1	2	4	Closing cap brown 819869				
	14	2	4	2	4	8	Countersunk screw M5 x 40 801048			
15	2	4	2	4	8	Sleeve nut 800287				
16	2	4	1	4	1	Stop 824412				
17	1	2	1	2	4	Bag screws HSLM A...				
	2	4	2	4	8	Dowel pin 6 x 16 823132				
							Screws <i>profile dependent</i>			
18	-	1	1	-	2	Bag stop consisting of: 821237	860649	831922		
	18	-	1	1	-	2	Stop 800812	861004	855898	
	19	-	1	1	-	2	Counter sunk screw B4,8 x 70 844090	844090	844090	
20	-	-	1	1	1	Bag locking parts HS Scheme G 238691				
	20	-	-	1	1	1	Locking part bottom Scheme G 848272			
	21	-	-	1	1	1	Countersunk screw M6 x 20 848289			
22	-	-	1	1	1	Pan head tap. screw B6,3 x 38 848296				

sash width dep.	23	1	2	1	2	4	Connecting rod			719282	719480	719497	719725
							Size	Length (in mm)	FB (in mm)				
							150	898	590 to 1450				
							200	1398	1451 to 1950				
							250	1898	1951 to 2450				
							335	2748	2451 to 2485				

sash height dep.	24	1	2	1	2	4	Gear HS-PORTAL 200 PZ			PGKB0040-524010	PGKB0040-524010	PGKB0040-532010
							Size	Handle pos. (in mm)	FH (in mm)			
							170		1190 to 1790			
							220		1791 to 2290			
							260		2291 to 2690			



Accessories

Accessories	25	0..1	0..2	0..1	0..2	0..4	Sliding grip Si-line		880869	880838	885239
							long	long			
	26	0..1	0..2	0..1	0..2	0..4	Rose Si-line außen		-	881569	-
	27	0..1	0..2	0..1	0..2	0..4	Handle Si-line HS 250, detachable		891735 ²⁾	-	-
	28	0..1	0..2	0..1	0..2	0..4	Rose Si-line internal		-	881613	-



1) Actual need; delivery contains further parts.

2) Color RAL 9003 white

Distance block(10) and Distance piece, short(11)


	DIM F (mm)	Execution	Distance block Part number	Distance piece, short Part number
10 	16	A0001	862711	PDZB0040-096010
	18	A0020	634.2341.5021.A0	PDZB0050-096010
	20	A0029	856000	PDZB0060-096010
	23	A0007	855997	PDZB0070-096010
	25	A0004	856161	PDZB0080-096010
	27	A0008	863282	PDZB0100-096010
11 	30	A0006	857465	PDZB0110-096010
	31	A0018	897577	PDZB0120-096010
	32	A0015	849200	PDZB0130-096010
	35	A0002	859049	PDZB0140-096010

Locking bolts (7 and 8)

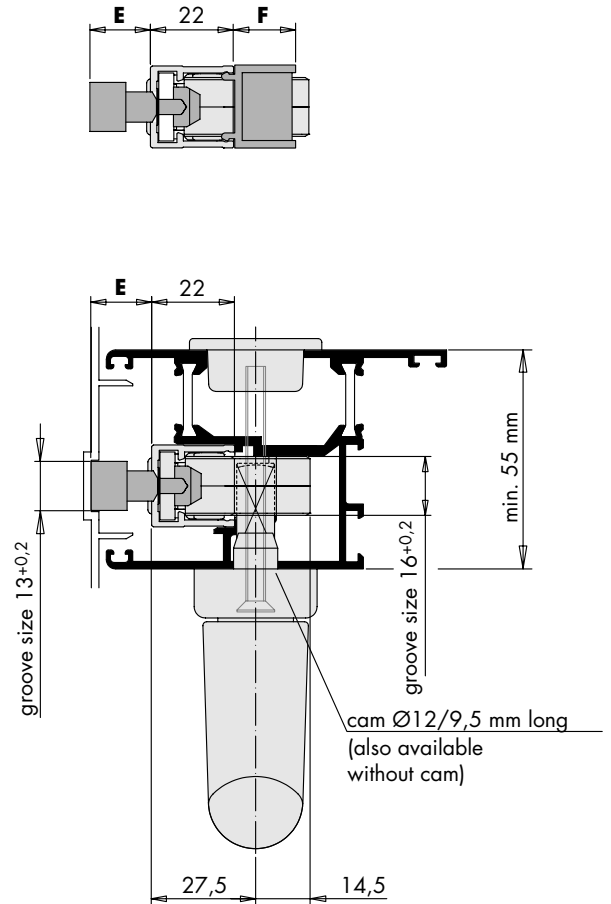
	DIM E ¹⁾ (mm)	Execution	Top locking bolt Part number	Bottom locking bolt Part number
7 	4	A0012	719398	719404
	7	A0020	719305	719312
	8	A0001	719190	634.2834.5004X60
	8,5	A0005	719206	719220
	9	A0006	719213	719237
8 	14	A0009	719329	719343
	16	A0013	719244	719268
	19,5	A0002	722220	719299
	20	A0004	719251	722534

1) intermediate sizes with packs of 1 mm and 2 mm possible

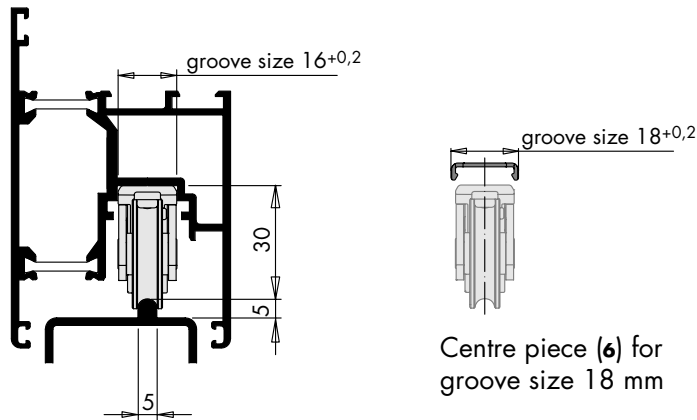
Packers (9) for locking bolts

		Part number
9 	1 mm	721285
	2 mm	721292

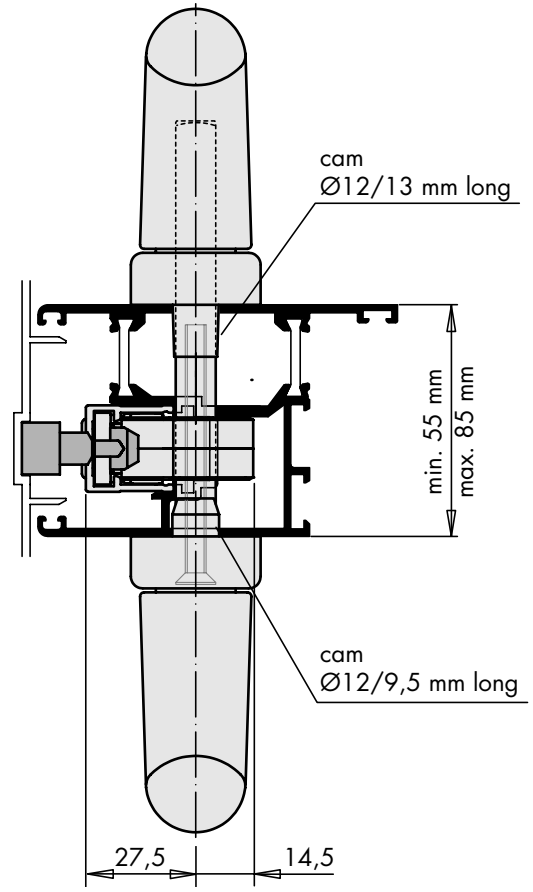
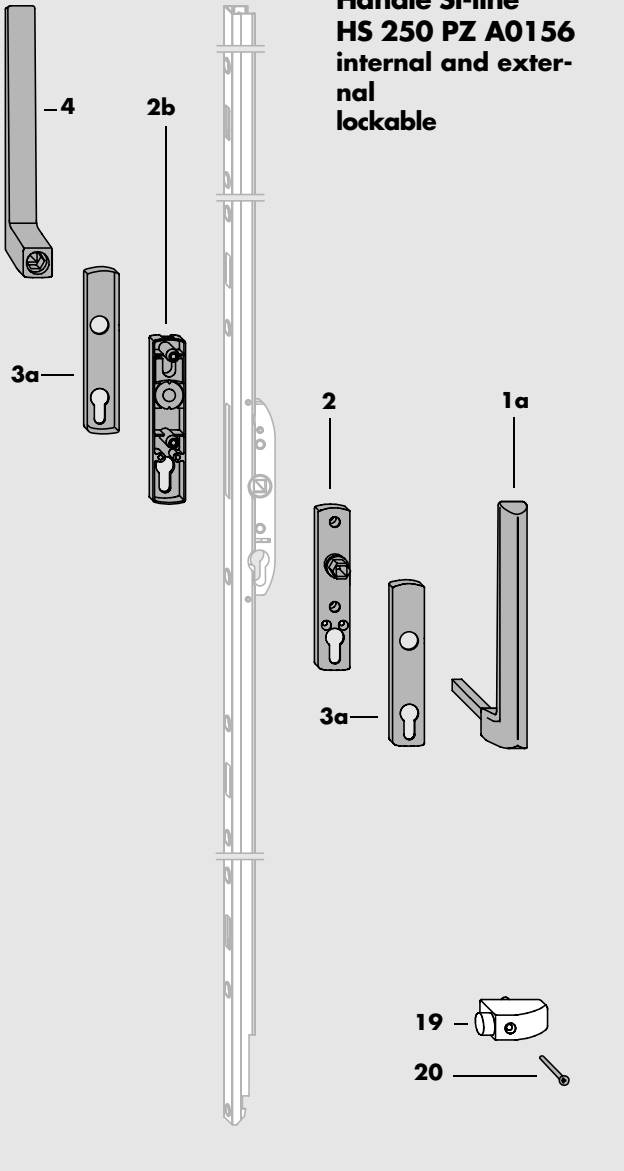
Cross section A-B



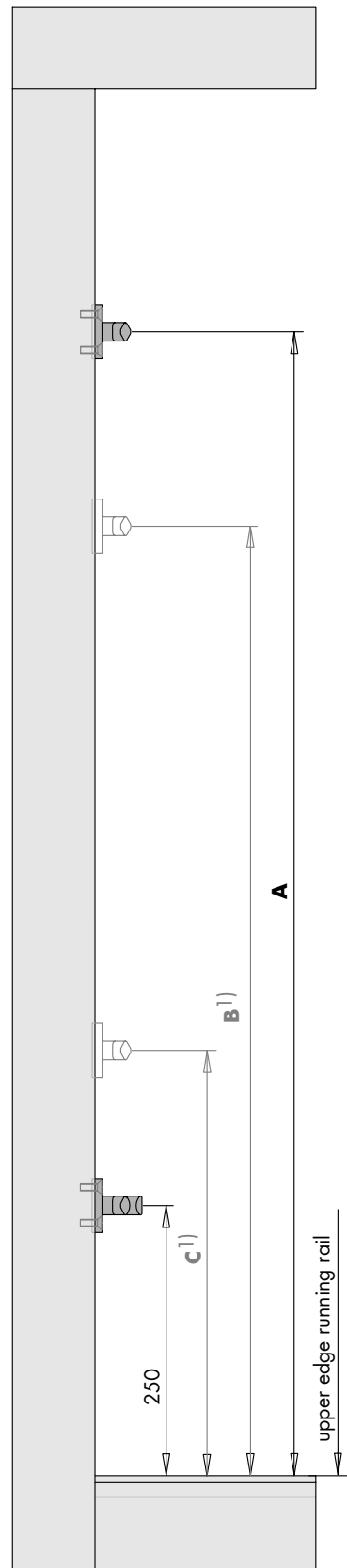
Cross section C-D



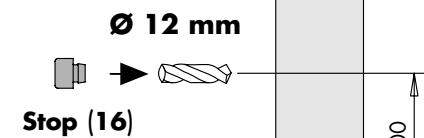
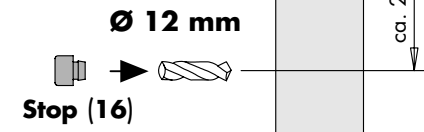
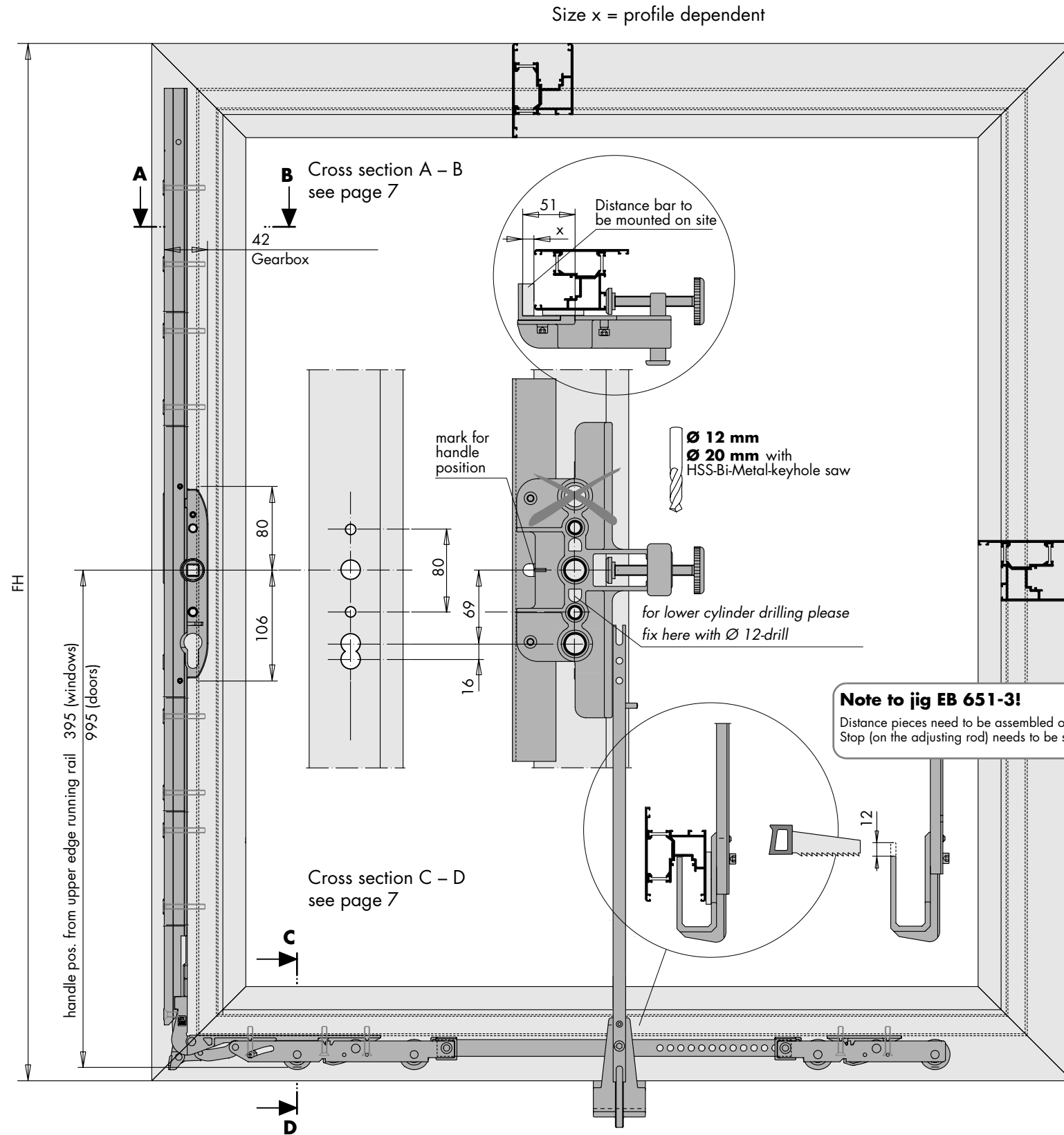
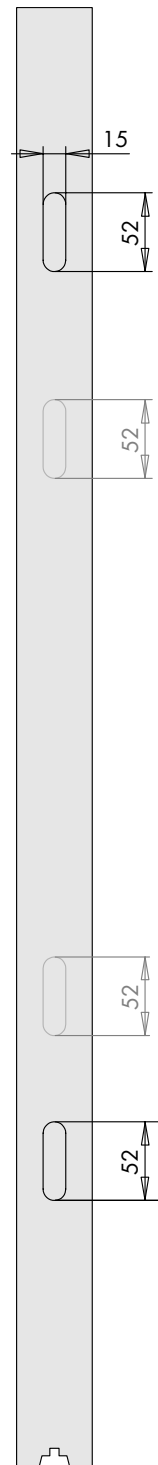
**Handle Si-line
HS 250 PZ A0156
internal and external
lockable**



Pos.	Pcs per scheme					Description	Part number			
	A	D	G	C	F		RAL9016 white	silver	si-brown	
	1	2	-	1..2	3..4	Handle Si-line HS 250-PZ internal (only in conn. with Si-line HS 250-PZ external) consisting of:	A0156	272725	267264	267271
						i. u. ex. lockable				
1a	1	2	-	1..2	3..4	Handle Si-line HS 250 PZ internal	A0156			
2	1	2	-	1..2	3..4	Rose Si-line internal				
3a	2	2	-	2..4	6..8	Cover cap Si-line HS 250	884898	876602	876633	
	1	2	-	1..2	3..4	Handle Si-line HS 250-PZ external (only in conn. with Si-line HS 250-PZ internal) consisting of:	A0156	272749	272732	272756
						i. u. ex. lockable				
4	1	2	-	1..2	3..4	Handle Si-line HS 250 PZ external	A0156			
2b	1	2	-	1..2	3..4	Rose Si-line external				
3a	2	2	-	2..4	6..8	Cover cap Si-line HS 250	884898	876602	876633	
	1	2	-	1..2	3..4	Bag Stop		821237	860649	821244
19	1	2	-	1..2	3..4	Stop				
20	1	2	-	1..2	3..4	Countersunk tap. screw B4,8 x 70				



Sash cover plate (profile dependent)



Gear	Size A	Size B ¹⁾	Size C ¹⁾	Sash height ²⁾
Gr. 170	1000	600	-	1175 - 1775
Gr. 220	1600	1200	750	1776 - 2275
Gr. 260	2200	1200	750	2276 - 2675

1) 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.

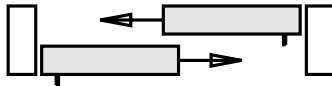
2) Small deviations possible (profile dependent)

DIN left hand or **DIN right hand**

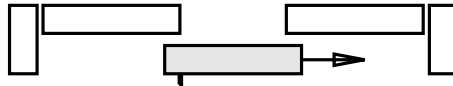
Scheme A



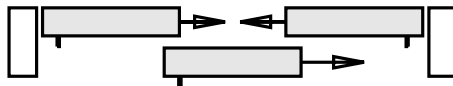
Scheme D



Scheme G



Scheme H



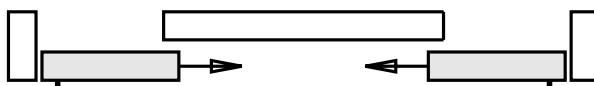
Scheme C

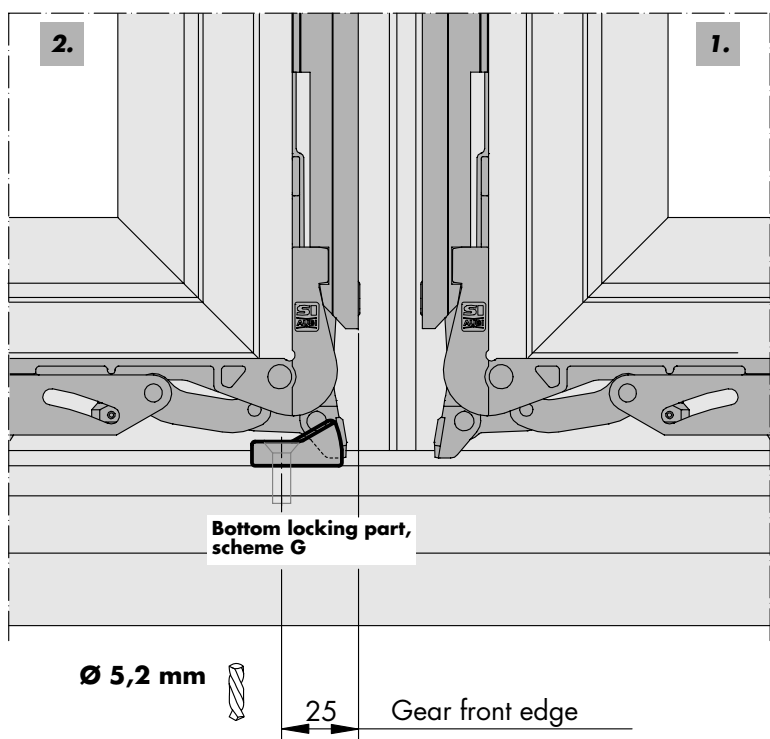
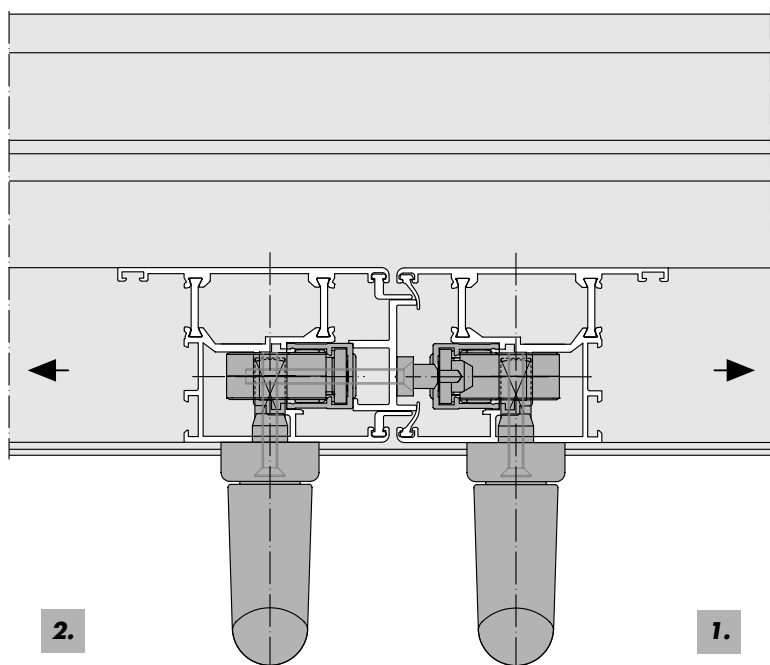


Scheme F



Scheme K





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 **(22)**
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.

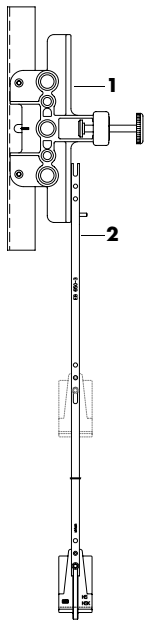
The sliding doors should only be operated in the following sequence !

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

Fitting the locking parts , bottom, Scheme G

- A Mark the running rail 25 mm behind the gear front edge
and ctr punch for a csk screw M6 x 20 (21).
- B Pre drill with a Ø 5,2 mm drill.
- C Screw in the locking part for Scheme G, bottom**(20)**

HS-PORTAL 200 LM Hardware information Jigs



Materialshorttext	Tool	Materialnumber
<p>Jig EB 651-3 <i>consisting of: for gear drillings</i></p> <p>Pos. 1 Bohrlehre EB 651-3* <i>Jig has backset 51; According to profile dependent back- set please use distance piece on site</i></p> <p>Pos. 2 Adjusting rod (incl. lower stop) <i>for EB 650-3 and EB 651-3 Lower stop needs to be shortened by 12mm! See page 5 a. 6</i></p>	<p>Drill: Ø 12 mm Ø 20 mm</p>	<p>PABB0010-521010</p> <p>157244</p>
<p>Centre punch KF <i>for ctr punching the hole for the lock- ing part</i></p>		<p>141892</p>