

AVENTOS

Various applications for lift systems



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AVENTOS – Moving solutions for every lift system



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Use **AVENTOS** to address individual **CUSTOMER requests**



AVENTOS is the lift system programme that provides perfect motion in the wall cabinet area: Even wide lift systems will open easily and close silently and effortlessly thanks to BLUMOTION. The variable stop ensures that AVENTOS lift systems always remain in the desired position. Your customers will be amazed at how easy it is to use.

These excellent solutions for Bi-Fold, up & over, lift up & stay lift applications can accommodate many new design options. We have further enhanced this range with a new product specifically for small stay-lifts. With these products you can fulfil all your customers' desires by offering the correct solution for any wall cabinet.

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The lift system programme





AVENTOS HF for bi-fold lift systems

- Ideal for higher wall cabinets because the handle remains easy to reach in any position.
- Due to the two-part front, the space requirement at the top is low for very high cabinet heights.
- AVENTOS HF can also be used with fronts of different heights.



AVENTOS HS for up & over lift systems

- Ideal for large-area, single fronts.
- Space requirement above the cabinet is minimised due to highly engineered movement.
- You can also use cornice or crown moulding with AVENTOS HS.



AVENTOS HL for lift ups

- Ideal for applications in high or wall cabinets with fronts above as well as recessed cabinets.
- Well-suited for small-area, single fronts.
- AVENTOS HL can be used in isolation with low wall cabinets.

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Versatile application

There are many good reasons why AVENTOS lift systems are a good choice for the wall cabinet.

Because lift systems open upwards, they provide an excellent view into the cabinet interior. This enables comfortable and ergonomic access to the items stored. The furniture user retains freedom of motion, unhindered by the lift mechanism.

Additionally, lift systems can offer a huge variety of design options for wide fronts. The visual effect achieved on the base units can often be replicated on the wall cabinets.





- Ideal solution for low cabinet heights in the wall cabinet.
- AVENTOS HK requires only a small amount of space at the top due to the pivot action.
- No hinges are required.



AVENTOS HK-S for small stay lifts

- Ideal solution for small cabinets,
 e.g. over the larder unit or refrigerator.
- AVENTOS HK-S requires only a small amount of space at the top due to the pivot action.
- No hinges are required.

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The lift system programme

Choosing the right lift system

The following graphic shows where the four AVENTOS programme types can be used in a common kitchen system.

AVENTOS HK-S AVENTOS HL AVENTOS HF AVENTOS HS AVENTOS HS AVENTOS HK AVENTOS HK AVENTOS HK AVENTOS HK AVENTOS HK AVENTOS HL

AVENTOS HL AVENTOS HL AVENTOS HK AVENTOS HK HK-S



R System*

* AVENTOS can also be used in common 4 systems in the wall cabinet area.



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at a glance

	HF	HS	HL	HK	HK-S
Area of application					
Higher wall cabinets	Х	Х			
Medium wall cabinets	Х	Х	Х	Х	
Low wall cabinets			Х	Х	Х
High cabinets			Х	Х	Х
Room planning					
Min. top space requirement	Х	Х		Х	Х
Design					
Single front		Х	Х	Х	Х
Two-part front	Х				
Can be combined with cornice or crown moulding		х	х	х	х
Cabinet height dimensions in mm	480–1.040	350-800	300–580	up to 600*	max. 400
Cabinet width dimensions in mm	up to	up to	up to	up to	**
	1.800	1.800	1.800	1.800	
Ergonomics					
Handles within easy reach	Х	Х	Х	Х	Х
Good access to cabinet interior	Х	Х	Х	Х	Х

* For ergonomic reasons, we recommend a maximum cabinet height of 600 mm. However, higher lift systems can also be used subject to the power factor limits (see page 48).

** Depending on the power factor

DYNAMIC SPACE is a marketing tool from Blum that helps to make good arguments for adding high-quality equipment to a kitchen: Better ergonomics, more comfort and more fun in the kitchen.

www.dynamicspace.com



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Motion that inspires



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Four ways of experiencing Perfect Motion

Surprise and fascinate your customers:

Frontals open effortlessly with all AVENTOS options. Even heavy fronts only require light operating forces. The variable stop means that fronts always remain in the desired position. This ensures that the handle is always within easy reach.

AVENTOS also offers a high degree of elegance and comfort when closing. The intelligent technology of the BLUMOTION adaptive system ensures that fronts always close silently and effortlessly – regardless of the size, weight and closing speed.







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Quality – for the lifetime of the furniture

AVENTOS lift systems will bring your customers years of happiness.

The core of these fitting solutions is the lift mechanism with BLUMOTION and a robust spring package. This ensures high durability and ease of use when opening and closing.



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Perfect assembly and accurate adjustment made easy

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Assembly and adjustment need to be precise if you are to guarantee that your customers receive the full "AVENTOS experience".

The lift force can be adjusted (according to the frontal weight) using a power screw driver (Pozidriv[®], size 2, length 39 mm). To make adjustment easier all AVENTOS mechanisms include a calibrated scale.

AVENTOS components are light, regardless of the frontal size, and can be assembled quickly and easily. Thanks to proven CLIP technology, assembly is almost entirely tool-free. Fronts can be adjusted in 3 dimensions to ensure the correct gap alignment.



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Every conceivable application within a concise programme

The AVENTOS programme comprises of a minumum number of symmetrical parts that can be used in multiple applications. With a straightforward programme of

lift mechanisms and lever arms, practically all front sizes and door weights are covered. The programme encompasses cabinet widths up to 1800 mm as well as every conceivable cabinet height.

AVENTOS opens up numerous design options:

All programmes can be combined with composite frontals (wood, MFC, MDF, etc) as well as narrow and wide aluminium frames.







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Harmonious design and high functionality

Technology that inspires.

Along with high functionality, the AVENTOS programme also inspires through its simple yet elegant design. This was also the opinion of the expert jury at the 2007 Interzum Awards. As winner of the "best of the best" category. This award was won by AVENTOS on the combined strengths of; unsurpassed function and sleek design. The lift system won the "red dot award for product design" in 2008 and was nominated for the "Design Prize from the Federal Republic of Germany" in 2009.



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AVENTOS HF



The bi-fold lift system can be used in the kitchen and living area.

Whether wooden fronts, narrow or wide alu frames or a combination of different materials: AVENTOS HF creates numerous design options. It can also be used with fronts of different heights.



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Other persuasive advantages



up to 1.800 mm

Small programme – wide range of solutions

AVENTOS HF completely covers all common lift system widths and heights with just one small programme. The product line comprises 3 lift mechanisms and 4 telescopic arms. What's more; all main components are symmetrical.

The narrow programme range simplifies ordering, commissioning and warehousing.

AVENTOS HF is suitable for cabinet widths up to 1.800 mm and for cabinet heights from 480 to 1.040 mm.





Free positioning of handles

Every type of handle can be used alongside AVENTOS HF. Ideally the handle should be located near the bottom edge of the lower frontal to ensure that it is always within easy reach. AVENTOS HF can also be used with handle-less frontals (where the lower frontal slightly overhangs the underside of the cabinet).

Similar shelves possible

Optimal use of storage space: Lift mechanisms are attached so that depending on the height of the cabinet up to two identical shelves can be used (with a space allowance/cut back of only 22 mm).



Includes a finger safety feature The CLIP top centre hinge is characterized by an innovative "release" feature that ensures finger safety.



No protruding parts

As the telescopic arm can be removed, there are no protruding parts to obstruct internal transport during furniture manufacturing. This is also an advantage during kitchen assembly.

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Assembly in just a few steps

Nearly all steps are tool-free thanks to CLIP assembly. We recommend removing the front for safe and easy cabinet assembly onsite. This is also made very easy with CLIP technology.



 The telescopic arms are attached to the lift mechanism using CLIP technology.



2. The upper front is placed on the telescopic arm and CLIP top hinges are attached.



3. CLIP top centre hinges are used to connect both fronts.





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Warning

There is a danger of injury if the telescopic arm springs upward. Remove the telescopic arm rather than pushing it down.

Special warning and safety information must be sent out when used in North America.



 The telescopic arm and lower front are connected to each other via the CLIP mechanism.

Quick adjustment, precise adjustment

Both bi-fold lift system fronts can be adjusted in all 3 dimensions for a precise gap design.

The fine adjustment for the opening and closing forces for AVENTOS HF is carried out using a power screwdriver. The force can be adjusted precisely to the corresponding door weight. It's child's play thanks to the integrated callibrated scale.

Perfect motion requires precise adjustment:



 Simple and infinitely variable: A power screwdriver is used to properly set the lift mechanism (Pozidriv[®], size 2, length 39 mm).



If the front falls when let go, it must be turned clockwise.



If the front rises when let go, it must be turned anti-clockwise.



2. The telescopic arms adjust themselves by closing the front. They are fastened using the centre lever. This process also adjusts the tensions in the front.

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 You can set the desired gap between the fronts using the CLIP top centre hinge.

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Order specifications

Wooden fronts and wide alu frames symmetrical/asymmetrical



3 types of lift mechanisms are enough to cover a wide range of applications.

Using the power factor, you can calculate the required lift mechanisms. The power factor required depends on the weight of the lower and upper front (incl. handle) and cabinet height.

The power factor and the door weight can be increased by 50% when a third lift mechanism is used.

The larger front must be at the top for asymmetrical fronts.

This is how it's done: Power factor LF = cabinet height¹⁾ [mm] x door weight including handle [kg]

	LF 2.600-5.500		LF 9.000–1	7.250	
	20F2200.05		20F2800	.05	
20F2200.05		20F2500.05		2	0F2800.05
LF 960-2.650		LF 5.350-10.150		LF 1	3.500–25.900
Lift mechanism one-sideo	Lift me	echanism two-sided	Additional 3rd lift	mechanism	LF Power factor

A trial application is recommended when you are in a borderline area for the individual lift mechanism.

1	Lift mechanism set			2	Telescopic arm set	
	Power factor LF				Nickel plated steel	
	2.600-5.500	20F2200.05		and.	Cabinet height ¹⁾ 480-570 mm	20F3200
	5.350–10.150	20F2500.05	500.05		Cabinet height ¹⁾ 560-710 mm	20F3500
Marine P	9.000–17.250	20F2800.05			Cabinet height ¹⁾ 700-900 mm	20F3800
	Composed of:				Cabinet height ¹⁾ 760-1,040 mm	20F3900
	2 x symmetrical lift mechanisms				Composed of:	
	10 x chipboard screws, Ø 4 x 35 mm				2 x symmetrical telescopic arms	

¹⁾ "Theoretical cabinet height" for asymmetrical fronts = upper front height (FHO) x 2 (including gaps)

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3	Cover cap set	t								
2 Or	light grey, silk v	white, nickel plated								
	20F8000									
	Composed of:									
3a	2 x cover plates left/right									
3b	2 x round cove	r caps								
4	Mounting plat	te for telescopic arm								
i Da	All horizontal n	nounting plates with 0 mm dista	nce	¢						
	Recommenda	tion								
	Screws ²⁾	Spacing 0 mm	175H5400							
	EXPANDO	Spacing 0 mm	177H5400E							
	Knock-in	Spacing 0 mm	177H5100							
5	Mounting plat	te for CLIP top 120° hinge								
	Standard mounting plates, spacing depends on the top gap									
	Becommendation									
	Screws ²⁾	Spacing 0 mm	175H5400							
	EXPANDO	Spacing 0 mm	177H5400E							
	Knock-in	Spacing 0 mm	177H5100							
6	Mounting plat	e for CLIP top centre hinge								
	Standard mour	nting plates with 0 mm distance								
	Recommenda	tion								
	Screws ²⁾	Spacing 0 mm	175H5400							
	Only use a cruciform mounting plate for wide alu frames under a 55 mm frame width									

7			
1	CLIP top 120° n	inge	
	Boss: Steel boss	Screws ²⁾ unsprung	70T5550.TL
	Boss: Steel boss	INSERTA unsprung	70T5590BTL
8	CLIP top centre	hinge	
	Boss: Zinc boss	Screws ²⁾ unsprung	78Z5500T
	Boss: Zinc boss	EXPANDO unsprung	78Z553ET
	Opening angle s	stop	
	83°		20F7011
	104°		20F7051
	Bit PZ cross slo	t	
	Size 2, length 39	mm	BIT-PZ KS2

²⁾ Use chipboard screws (609.1x00) for wooden fronts. Use self tapping screw, countersunk head (608.085) for wide alu frames.

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Planning Information

Wooden fronts and wide alu frames symmetrical

Peg positions for lift mechanism



* Drilling depth 5 mm

Cabinet height KH	Н
480–549 mm	KH x 0.3 - 28 mm
550-1.040 mm	KH x 0.3 - 57 mm



4 x 1 mm Ø 4 x 35 mm

Space requirement



Front assembly



SFA Side front overlay

3 hinges starting at cabinet width 1200 mm and/or 12 kg door weight 4 hinges starting at cabinet width 1800 mm and/or 20 kg door weight

Cabinet height KH	X Screw-on/ EXPANDO	X Knock-in
480–549 mm	68 mm	70 mm
550–1.040 mm	45 mm	47 mm

Screw-on

CLIP top 120° hinge unsprung





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Drilling distance TB

	Front overlay FA												
	5	6	7	8	9	10	11	12	13	14	15	16	17
0										3	4	5	6
3							3	4	5	6			
6				3	4	5	6						
9	3	4	5	6									
L Mounting plate													

INSERTA/knock-in/EXPANDO assembly



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CLIP top centre hinge



* 37 mm for cruciform mounting plates (37/32)

Min. gap F = 1.5 mm

Drilling distance TB

	Centre gap F													
		3	4	5	6									
0		6	5	4	3									
3														
6														
9														
▲_	Mounting plate													





Wooden fronts and wide alu frames asymmetrical

Peg positions for lift mechanism



* Drilling depth 5 mm

ТКН	Н
480–549 mm	TKH x 0.3 - 28 mm
550–1.040 mm	TKH x 0.3 - 57 mm

Front assembly



- FHo Upper front height
- TKH Theoretical cabinet height
- SFA Side front overlay

FAu Lower front overlay

ТКН	X Screw-on/ EXPANDO	X Knock-in
480–549 mm	FHo/2 + 68 mm	FHo/2 + 70 mm
550–1.040 mm	FHo/2 + 45 mm	FHo/2 + 47 mm

Min. lower front height





Fixing positions for lift mechanism

4 x Dammar Ø 4 x 35 mm

CLIP top 120° hinge unsprung

Drilling distance TB

	Front overlay FA													
	5	6	7	8	9	10	11	12	13	14	15	16	17	
0										3	4	5	6	
3							3	4	5	6				
6				3	4	5	6							
9	3	4	5	6										
▲	L Mounting plate													

Number of Hinges

3 hinges starting at cabinet width 1200 mm and/or 12 kg door weight

4 hinges starting at cabinet width 1800 mm and/or 20 kg door weight

Space requirement

TKH Theoretical cabinet height

- FHo Upper front height
- FHu Lower front height
- TKH = FHo mm x 2 (including gaps)

CLIP top centre hinge

Drilling distance TB

Space requirement

OEB = Opening angle stop

Without OEB	Y = FH x 0.44 + 38
OEB 104°	$Y = FH \times 0.24 + 34$
OEB 83°	Y = 0

Order specifications

Narrow alu frames symmetrical/asymmetrical

3 types of lift mechanisms are enough to cover a wide range of applications.

Using the power factor, you can calculate the required lift mechanisms. The power factor required depends on the weight of the lower and upper front and the cabinet height.

The larger front must be at the top for asymmetrical fronts.

This is how it's done: Power factor LF = cabinet height¹⁾ [mm] x door weight including handle [kg]

		LF 2.600-5.500		LF 9.000–17.250	
		20F2200.05		20F2800.05	
20	F2200.05		20F2500.05		
L	F 960–2.650		LF 5.350-10.150	_	
Lit	ft mechanism	one-sided	Lift mechanism two-sided		LF Power factor

A trial application is recommended when you are in a borderline area for the individual lift mechanism.

1	Lift mechanism set		2	Telescopic arm set	
A State of	Power factor LF			Nickel plated steel	
Laure 1	2.600-5.500	20F2200.05	- Th	Cabinet height ¹⁾ 480-570 mm	20F3200
	5.350–10.150	20F2500.05		Cabinet height ¹⁾ 560-710 mm	20F3500
	9.000–17.250	20F2800.05		Cabinet height ¹⁾ 700-900 mm	20F3800
	Composed of:			Cabinet height ¹⁾ 760-1,040 mm	20F3900
	2 x symmetrical lift mechanisms			Composed of:	
	10 x chipboard screws, Ø 4 x 35 mm			2 x symmetrical telescopic arms	

¹⁾ "Theoretical cabinet height" for asymmetrical fronts = upper front height (FHO) x 2 (including gaps)

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3	Cover cap set		7
0 0,	light grey, silk white, nickel plated		_
		20F8000	م لا ا
	Composed of:		
3a	2 x cover plates left/right		
3b	2 x round cover caps		8
			ſG
4	CLIP adapter plate for telescopic arms		
	Distance 0 mm left/right	175H5B00	
5	Mounting plate for CLIP top 120° hinge		
	Standard mounting plates, spacing depends	on the top gap	

7	CLIP top 120° a	lu frame hinge	
	Boss: Steel boss	Screw-on unsprung	72T550A.TL
8	CLIP top alu fra	me centre hinge	
	Boss: Zinc boss	Screw-on unsprung	78Z550AT
	Opening angle s	stop	
	83°		20F7011
	104°		20F7051
	Bit PZ cross slo	t	

Size 2, length 39 mm

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175H5400

177H5100

177H5400E

BIT-PZ KS2

6	CLIP adapter plate for centre hinges	
	Symmetrical	175H5A00

Spacing 0 mm

Spacing 0 mm

Spacing 0 mm

Recommendation

Screw-on

EXPANDO

Knock-in

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Planning Information

Narrow alu frames symmetrical

Fixing positions for lift mechanism

550-1.040 mm

480–549 mm

* Drilling depth 5 mm Cabinet height KH

3 hinges starting at cabinet width 1200 mm and/or 12 kg door weight 4 hinges starting at cabinet width 1800 mm and/or 20 kg door weight

Cabinet height KH	Х
480–549 mm	54 mm
550–1.040 mm	31 mm

CLIP top 120° alu frame hinge unsprung

4 x Damme Ø 4 x 35 mm

CLIP top alu frame centre hinge

Min. gap F = 1.5 mm

An adjustment has to be made for frame thicknesses over 20.5 mm

Space requirement

Front assembly

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* When changing material thickness, adjust

the assembly dimensions accordingly

Front assembly

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KH x 0.3 - 28 mm

KH x 0.3 - 57 mm

Narrow alu frames asymmetrical

Drining depth 5 min	
ТКН	Н
480–549 mm	TKH x 0.3 - 28 mm
550–1.040 mm	TKH x 0.3 - 57 mm

FHO

Fixing positions for lift mechanism

4 x Dammer Ø 4 x 35 mm

CLIP top 120° alu frame hinge unsprung

Front assembly

TKH	Theoretical	cabinet	height
-----	-------------	---------	--------

ТКН	Х
480–549 mm	FHo/2 + 54 mm
550-1.040 mm	FHo/2 + 31 mm

nin

Min. lower front height

Screw-on

Number of Hinges

3 hinges starting at cabinet width 1200 mm and/or 12 kg door weight 4 hinges starting at cabinet width 1800 mm and/or 20 kg door weight

* When changing material thickness, adjust the assembly dimensions accordingly

Space requirement

TKH Theoretical cabinet height

- FHo Upper front height
- FHu Lower front height
- TKH = FHo mm x 2 (including gaps)

CLIP top alu frame centre hinge

Min. gap F = 1.5 mm

An adjustment has to be made for frame thicknesses over 20.5 mm

Space requirement

OEB = Opening angle stop

Without OEB	Y = FH x 0.44 + 38
OEB 104°	Y = FH x 0.24 + 34
OEB 83°	Y = 0
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AVENTOS HS

Design freedom for cornice or crown mouldings.

The AVENTOS HS up & over lift system can easily be combined with cabinets fitted with cornice or crown mouldings because the frontal swings up over the cabinet with enough space. AVENTOS HS opens up a variety of design options.

Other persuasive advantages

up to 1,800 mm

Small programme, huge application variety

AVENTOS HS completely covers all common frontal widths and heights with one simple programme: 9 different lift mechanisms and only 1 lever arm cover every size and front weight.

AVENTOS HS is suitable for cabinet widths up to 1800 mm and for cabinet heights from 350 to 800 mm. The narrow programme range simplifies ordering, commissioning and warehousing. Because of its symmetrical design, the lift mechanism can be used on both the right and left.

Option of shelves

With AVENTOS HS, storage space is optimised in wall cabinets. Even smaller wall cabinets can be easily fitted with a shelf. A shelf with a recess of only 22 mm from the front can be used starting at a cabinet height of 500 mm. Starting with a cabinet height of 740 mm, two shelves are possible.

No protruding parts

There are no protruding parts thanks to the removable lever arm. This guarantees a high degree of safety during internal transport, furniture manufacturing and delivery to the customer.

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Assembly in just a few steps

AVENTOS HS assembly is almost entirely tool-free. For final assembly onsite, the wall cabinet front can be removed and then later reattached without the use of tools thanks to proven CLIP technology. This makes cabinet assembly easier, faster and safer.

 The lift mechanism is attached. Installing the lever arm requires no tools.

2. The cross stabiliser is attached to the lift mechanism for optimal side stability.

 The symmetrical front fixing bracket is attached to the front.

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Warning

There is a danger of injury if the lever arm HL springs upward. Remove the lever arm HL rather than pushing it down.

Special warning and safety information must be added for use in North America.

4. The lever arm and the front are connected via the CLIP mechanism.

Quick adjustment, precise adjustment

The front can be adjusted quickly in all 3 dimensions. Width, depth and height adjustment can be carried out onsite for perfect gap alignment.

Perfect motion requires a precise setting:

 Lift mechanisms are set to the respective door weight using a power screwdriver (Pozidriv[®], size 2, length 39 mm).

If the lift system falls when let go, it must be turned to the right.

If the lift system rises when let go, it must be turned to the left.

2. The front can be manually adjusted in all 3 dimensions.

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1	Lift mechanism set						
(TS)	Cabinet height 350-525				20S2A00.05	20S2B00.05	20S2C00.05
Contra de la contr	Cabinet height 526-675				20S2D00.05	20S2E00.05	20S2F00.05
	Cabinet height 676-800				20S2G00.05	20S2H00.05	20S2I00.05
and a	Composed of:						
	2 x symmetrical lift mechanisms						
	10 x chipboard screws, Ø 4 x 35 mm						
2	Lever arm set		4	Front fixing	bracket set		
	Nickel plated steel	20\$3500.05	A _	Nickel plated	ł		
	Composed of:			Wooden fronts and wide alu frames ¹⁾			20\$4200
	2 x level arm left/right			Narrow alu frames		20S4200A	
	2 x stabiliser adapters	Composed	of:				
	2 x cross stabiliser cover caps			2 x symmetr	ical front fixing br	ackets	
3	Cover cap set		5	Cross stabi	liser rod round		
\sim^0	light grey, silk white, nickel plated			Alu, Ø 16 mr	n		
		20\$8000		For cutting t	o size, 1061 mm		20Q1061U
	Composed of:						
3a	2 x cover plates left/right			Connecting	piece for cross	stabiliser set	
3b	2 x round cover caps			Alu, Ø 16 mr	m, KB 1219 mm a	nd higher	20Q091Z
			5000	Composed	of:		
	Bit PZ cross slot			1 x connecti	ng piece, 1 x fixin	ig, 2 x connectors	s, 2 x cover
	Size 2, length 39 mm	BIT-PZ KS2		caps			
		_					

¹⁾ Use 4 chipboard screws (609.1x00) for wooden fronts. Use 4 self tapping screw, countersunk head (608.085) for wide alu frames.

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The cabinet front and door weight is required in order to select the correct lift mechanism.

Example: Cabinet height KH = 600 mm Weight of front = 10 kg Lift mechanism selection =

20S2E00.05

Cabinet height KH = 602 mm rounded to KH = 600 mm Cabinet height KH = 603 mm rounded to KH = 605 mm

	Door weight (kg)		
KH (mm)	20S2G00.05	20S2H00.05	20S2I00.05
800	4.00-7.00	6.00-12.25	10.50-20.00
795	4.00-7.00	6.00-12.25	10.50-20.00
790	4.00-7.00	6.00–12.25	10.75-20.00
785	4.00-7.00	6.25-12.50	10.75-20.00
780	4.00-7.00	6.25-12.50	10.75-20.25
775	3.75-7.00	6.25-12.50	11.00-20.25
770	3.75-7.00	6.25-12.50	11.00-20.25
765	3.75-7.25	6.50-12.50	11.00-20.25
760	3.75–7.25	6.50-12.75	11.25–20.25
755	3.75–7.25	6.50-12.75	11.25-20.50
750	3.50-7.25	6.50-12.75	11.50-20.50
745	3.50-7.25	6.50–12.75	11.50–20.50
740	3.50–7.25	6.50–12.75	11.75–20.75
735	3.50-7.50	6.50–13.00	11.75–20.75
730	3.50-7.50	6.75–13.00	11.75–21.00
725	3.50-7.50	6.75–13.00	12.00–21.00
720	3.50-7.50	6.75–13.00	12.00–21.25
715	3.50-7.50	6.75–13.00	12.00–21.25
710	3.50-7.75	6.75–13.25	12.25–21.25
705	3.50-7.75	6.75–13.25	12.25–21.50
700	3.50-7.75	6.75–13.25	12.50–21.50
695	3.50-7.75	6.75–13.25	12.50–21.50
690	3.50-7.75	6.75–13.25	12.75–21.50
685	3.50-8.00	7.00–13.25	12.75–21.50
680	3.50-8.00	7.00–13.50	13.00–21.50
676	3.50-8.00	7.00–13.50	13.00–21.50
KH (mm)	2002000.05	2002500.05	2002500.05
	2052000.05	2052E00.05	2052F00.05
675	3 00 5 25	5 00 11 00	00 75 10 00
670	3.00-5.25	5.00-11.00	09.75-19.00
665	3.00-5.25	5.00-11.00	09.75-19.00
660	3.00-5.50	5 25-11 25	10 00-19 00
655	3.00-5.50	5 25-11 25	10.00-19.00
650	3 00-5 50	5.25 11.25	10.00 19.00
645	3 00-5 50	5 25-11 25	10.00-18.75
640	3 00-5 50	5 25-11 25	10.00-18.75
635	3 00-5 50	5 25-11 50	10.25-18.75
630	3 00-5 75	5.50-11.50	10.25 10.75
625	3 00-5 75	5 50-11 50	10 25-18 75
620	3 00-5 75	5.50-11.50	10 25-18 75
615	3.00-5.75	5.50-11.50	10.25-18.75
610	3.00-6.00	5.50-11.75	10.50-18.50

605

3.00-6.00

5.50-11.75

600	3.00-6.00	5.50-11.75	10.50–18.50
595	3.00-6.00	5.50-11.75	10.50-18.50
590	3.00-6.00	5.50-12.00	10.75-18.25
585	3.00-6.25	5.75-12.00	10.75–18.25
580	3.00-6.25	5.75-12.00	11.00–18.00
575	3.00-6.25	5.75-12.00	11.00–18.00
570	3.00-6.25	5.75-12.25	11.25-17.75
565	3.00-6.25	5.75-12.25	11.25–17.75
560	3.00-6.50	6.00-12.25	11.25-17.50
555	3.00-6.50	6.00-12.50	11.50–17.50
550	3.00-6.50	6.00-12.50	11.50-17.25
545	3.00-6.50	6.00-12.50	11.50–17.25
540	3.00-6.50	6.00-12.75	11.75–17.00
535	3.00-6.75	6.25-12.75	11.75–16.75
530	3.00-6.75	6.25-12.75	11.75-16.75
526	3.00-6.75	6.25-13.00	12.00-16.50

KH (mm)	20S2A00.05	20S2B00.05	20S2C00.05
525	2.50-4.00	3.25-7.50	7.25–15.00
520	2.50-4.00	3.50-7.50	7.25-15.00
515	2.50-4.00	3.50-7.50	7.25–14.75
510	2.50-4.00	3.50-7.75	7.50–14.75
505	2.50-4.00	3.50-7.75	7.50–14.75
500	2.50-4.25	3.50-7.75	7.50–14.75
495	2.50-4.25	3.75–7.75	7.50–14.50
490	2.50-4.25	3.75-8.00	7.75–14.50
485	2.50-4.25	3.75-8.00	7.75–14.25
480	2.50-4.25	3.75-8.00	7.75–14.25
475	2.50-4.25	3.75-8.00	7.75–14.00
470	2.50-4.25	4.00-8.25	8.00-14.00
465	2.25-4.25	4.00-8.25	8.00–13.75
460	2.25-4.25	4.00-8.25	8.00-13.75
455	2.25-4.25	4.00-8.50	8.25-13.50
450	2.25-4.25	4.00-8.50	8.25-13.50
445	2.25-4.50	4.25-8.50	8.25-13.25
440	2.25-4.50	4.25-8.50	8.25-13.00
435	2.25-4.50	4.25-8.75	8.50-13.00
430	2.25-4.50	4.25-8.75	8.50-12.75
425	2.25-4.50	4.25-8.75	8.50-12.75
420	2.25-4.50	4.25-8.75	8.50-12.50
415	2.25-4.50	4.25-8.75	8.50-12.50
410	2.25-4.50	4.25-9.00	8.75–12.25
405	2.25-4.50	4.25-9.00	8.75–12.00
400	2.00-4.75	4.25-9.00	8.75–12.00
395	2.00-4.75	4.50-9.00	8.75–11.75
390	2.00-4.75	4.50-9.00	8.75–11.50
385	2.00-4.75	4.50-9.25	9.00–11.50
380	2.00-4.75	4.50-9.25	9.00–11.25
375	2.00-4.75	4.50-9.25	9.00–11.25
370	2.00-4.75	4.50-9.25	9.00–11.00
365	2.00-4.75	4.50-9.25	9.00–11.00
360	2.00-4.75	4.50-9.50	9.25–10.75
355	2.00-4.75	4.50-9.50	9.25–10.50
350	2.00-5.00	4.50–9.50	9.25–10.50

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10.50-18.50

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Planning Information

* Drilling depth 5 mm

SOB Top panel thickness

Front assembly

Fixing positions for lift mechanism

Planning narrow alu frames

¹⁾ Use 4 chipboard screws (609.1x00) for wooden fronts. Use 4 self tapping screw, countersunk head (608.085) for wide alu frames.

Dimensions depend on tilt adjustment

Cornice and crown moulding clearance

X max	Y max
35 mm	101 mm
31 mm	101 mm
28 mm	101 mm
	X max 35 mm 31 mm 28 mm

Cross stabiliser

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AVENTOS HL

Full access.

Because the AVENTOS HL parallel lift can be completely raised it provides excellent access to the cabinet interior. The different lever arms always ensure the best access to storage items in the cabinet interior - even for mid height cabinets.

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Other persuasive advantages

up to 1,800 mm

Small programme – wide range of solutions

AVENTOS HL completely covers all common lift system widths and heights, and is also suitable for wide fronts. AVENTOS HL is suitable for cabinet widths up to 1800 mm and for cabinet heights from 300 to 580 mm.

This small programme comprises just 5 different lift mechanisms and 4 lever arms. This selection enables a variable stop for every front size and weight. The straightforward programme range simplifies ordering, commissioning and warehousing.

Because the AVENTOS HL opens parallel to the cabinet, it can be used in wall cabinets or in the upper half of tall units. At mid-height it can be adapted to conceal small appliances (i.e. microwaves).

No protruding parts

There are no protruding parts thanks to the removable lever arm. This makes furniture manufacturing, transport and final assembly both easier and safer.

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AVENTOS HL

Assembly in just a few steps

Nearly all steps for AVENTOS HL assembly are tool-free. We recommend removing and reattaching the fronts later on (again tool-free) for simple, safe and quick cabinet assembly onsite.

1. The lever arm is attached to the lift mechanism without the need for tools.

2. The cross stabiliser is attached to the lift mechanism for optimal side stability.

 The symmetrical front fixing bracket is attached to the front.

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Warning

There is a danger of injury if the lever arm HL springs upward. Remove the lever arm HL rather than pushing it down.

Special warning and safety information must be added for use in North America.

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- 4. The lever arm and the front are connected via the CLIP mechanism.

Quick adjustment, precise adjustment

The front can be adjusted in all 3 dimensions in only a few steps. Therefore the; front height, width and tilt positions can be precisely set. A calibrated scale is used for the fine adjustment of lift mechanism opening and closing forces.

Perfect motion requires a precise setting:

 Lift mechanisms are set to the respective door weight using an electric screwdriver (Pozidriv[®], size 2, length 39 mm).

If the lift system falls when let go, it must be turned to the right.

If the lift system rises when let go, it must be turned to the left.

 Optimal front adjustment via the 3-dimensional setting.

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Order specifications

5 types of lift mechanisms are enough to cover a wide range of applications.

In order to select the correct lift mechanism, it is necessary to establish both; the cabinet height and the weight of the front (including the handle)

Cabinet height	Lever arm	Lift mechanism					
		20L2100.05	20L2300.05	20L2500.05	20L2700.05	20L2900.05	
300–349 mm	20L3200.05	1.25–4.25 kg	3.50–7.25 kg	6.50–12.00 kg	11.00–20.00 kg		
350–399 mm	20L3500.05	1.25–2.50 kg	1.75–5.00 kg	4.25–9.00 kg	8.00–14.75 kg	13.50–20.00 kg	
400–550 mm	20L3800.05		1.75–3.50 kg	2.75–6.75 kg	5.75–11.75 kg	10.50–20.00 kg	
450–580 mm	20L3900.05			2.00–5.25 kg	4.25–9.25 kg	8.25–16.50 kg	

A trial application is recommended when you are in a borderline area for the individual lift mechanism.

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1	Lift mechanism set		2	Lever arm set		
		20L2100.05	M M	Nickel plated steel		
		20L2300.05		Cabinet height 300-349 mm	left/right	20L3200.05
		20L2500.05		Cabinet height 350-399 mm	left/right	20L3500.05
		20L2700.05	• •	Cabinet height 400-550 mm	left/right	20L3800.05
		20L2900.05		Cabinet height 450-580 mm	left/right	20L3900.05
	Composed of:			Composed of:		
	2 x symmetrical lift mechanisms		2	2 x lever arm variants		
	10 x chipboard screws, Ø 4 x 35 mm		6b	2 x oval stabiliser adapters		
			6c	2 x oval cross stabiliser cover caps		

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3	Cover cap set		6a	Cross stabiliser rod oval	
0 0/1	light grey, silk white, nickel plated			Alu	
		20L8000.01		For cutting to size, 1061 mm	20Q1061UA
	Composed of:				
3a	2 x cover plates left/right			Connecting piece for cross stabiliser set	
3b	2 x round cover caps			Alu, Ø 16 mm, cabinet width	
			S Des	1219 mm and nigher	20Q091ZA
				Composed of:	
4	Front fixing bracket set		~	1 x connecting piece	
4	Nickel plated			1 x fixing	
	Wooden fronts and wide alu frames ¹⁾			2 x attachments	
18		20\$4200		2 x cover caps	
	Narrow alu frames	20S4200A			
	Composed of:			Bit PZ cross slot	
	2 x symmetrical front fixing brackets			Size 2, length 39 mm	BIT-PZ KS2

¹⁾ Use 4 chipboard screws (609.1x00) for wooden fronts. Use 4 self tapping screw, countersunk head (608.085) for wide alu frames.

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Planning Information

Fixing positions for lift mechanism

Front assembly

Narrow alu frames

Wooden fronts and wide alu frames¹⁾

Lever arm	X (mm)	FAo Upper front overlay
20L3200.05	153	SFA Side front overlay
20L3500.05	203	Wall application: Requires 5 mm min. gap
20L3800.05	253	
20L3900.05	303	

Planning narrow alu frames

* Dimensions apply to lower gap = 0 mm

SFA Side front overlay

For frame width 19 mm: SFA of 11-18 mm possible

* When changing material thickness, adjust the assembly dimensions accordingly

¹⁾ Use 4 chipboard screws (609.1x00) for wooden fronts. Use 4 self tapping screw, countersunk head (608.085) for wide alu frames.

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Lever arm	a (mm)*	b (mm)*
20L3200.05	114	257
20L3500.05	146	345
20L3800.05	178	433
20L3900.05	210	522

* Dimensions apply to lower gap = 0 mm

Cornice/Crown moulding clearance

SOB (mm)	X (mm)
16	28
18	30
19	31

Cross stabiliser
[1] KB (KS 16-19 mm) -158 mm and/or inner width -120 mm
Connecting piece
[2] half KB (KS 16–19 mm) -158 mm
KB Cabinet width
KS Cabinet thickness

SOB Top panel thickness

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AVENTOS HK

Design freedom for cornice or crown mouldings.

When developing AVENTOS HK, we also took into account cabinets with cornices and crown moulding. This provides more design freedom for kitchen planning.

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Other persuasive advantages

up to 1,800 mm

Small programme – wide range of solutions

The AVENTOS HK programme only has 4 lift mechanism types. This completely covers all common lift system widths and heights. The small programme range simplifies ordering, commissioning and warehousing. Because of its symmetrical design, the lift mechanism can be used on both the left and right. Hinges are not necessary.

AVENTOS HK can be used for cabinet widths up to 1800 mm.

No protruding parts

The AVENTOS HK fitting is delivered with a closed lever. This way no parts protrude over the cabinet front edge. The result is safer, more convenient transport - both within and out of the factory.

 * For ergonomic reasons, we recommend a maximum cabinet height of 600 mm.
 However, higher flaps can also be used subject to the power factor limits.

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Assembly in just a few steps

AVENTOS HK assembly can be carried out by hand. The front of the wall cabinet can be removed, without the need of tools, thanks to CLIP technology. This makes cabinet assembly easier, faster and safer.

 Lift mechanism assembly: The symmetrical design enables it to be used on both the left and the right.

2. The symmetrical front fixing bracket is attached to the front.

 Tool-free front assembly to the lift mechanism using CLIP technology.

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Warning

There is a danger of injury if the lever springs upward. After opening, do not push down on the lever.

Special warning and safety information must be added for use in North America.

Quick adjustment, precise adjustment

The AVENTOS HK front can be adjusted in all 3 dimensions. This enables you to create perfect gap alignment onsite - it's quick, precise and easy.

The power calibration feature of AVENTOS HF is used to make the fine adjustment to the opening and closing power.

The force adjustment can be set exactly to the respective door weight. A calibrated scale facilitates the correct setting.

 The fine adjustment to the opening and closing forces on the lift mechanism are made using an electric screwdriver (Pozidriv[®], size 2, length 39 mm).

If the lift system falls when let go, it must be turned to the right.

If the lift system rises when let go, it must be turned to the left.

2. The front can be manually adjusted in all 3 dimensions.

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Perfect motion requires a precise setting:

Order specifications

4 types of lift mechanisms are enough to cover a wide range of applications.

By establishing the power factor you can calculate the type and quantity of lift mechanisms. The power factor required depends on the weight of the lower and upper front (incl. double the handle weight) and cabinet height.

The power factor and the door weight can be increased by 50% when a third lift mechanism is used.

LF Power factor

This is how i	ť
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how it's done: Power factor = cabinet height (KH) [mm] x front weight including double the handle weight [kg]

	E 750 0 500		
L	F /50-2.500		LF 3.200-9.000
2	20K2500.05		20K2900.05
20K2300.05	20K2700.0	5	
LF 480-1.500	LF 1.500-4.9	00	

Lift mechanism two-sided

A trial application is recommended when you are in a borderline area for the individual lift mechanism.

Lift mechanism set Power factor LF Opening angle 20K2300.05 480-1.500 107° 750-2.500 107° 20K2500.05 1.500-4.900 107° 20K2700.05 3.200-9.000 20K2900.05 100° Max. door weight 18 kg for two lift mechanisms Composed of: 2 x symmetrical lift mechanisms 10 x chipboard screws, Ø 4 x 35 mm

Note

We recommend a lift mechanism attached to the centre panel for wide cabinets. The reason for this is to prevent the middle of the front from sagging when open.

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2	Cover cap set		3	Front fixing bracket set	
DQ	light grey, silk white, nickel plated		8	Nickel plated	
		20K8000		Wooden fronts and wide alu frames ¹⁾	20\$4200
				Narrow alu frames	20S4200A
	Composed of:			Composed of:	
2a	2 x cover plates left/right			2 x symmetrical front fixing brackets	
2b	2 x round cover caps				
				Opening angle stop	
	Bit PZ cross slot		3	Nylon	
-	Size 2, length 39 mm	BIT-PZ KS2	\cup	100°	20K7041
				75°	20K7011

¹⁾ Use 4 chipboard screws (609.1x00) for wooden fronts. Use 4 self tapping screw, countersunk head (608.085) for wide alu frames.

Planning Information

Fixing positions for lift mechanism

SFA Side front overlay

Planning narrow alu frames

* Left

** Right

SFA Side front overlay

For frame width 19 mm, a SFA of 11–18 mm is possible

* When changing material thickness, adjust the assembly dimensions accordingly

¹⁾ Use 4 chipboard screws (609.1x00) for wooden fronts. Use 4 self tapping screw, countersunk head (608.085) for wide alu frames.

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AVENTOS HK-S

Used in small stay lift applications

AVENTOS HK-S is well-suited for small cabinets, e.g. over the larder unit or refrigerator. Therefore there is a corresponding lift system for any installation situation. If the height of the room allows, you can even use design elements such as cornice or crown moulding.

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Other persuasive advantages

Depending on the power factor

The fitting for small stay lift applications

The performance of the lift mechanism was specially designed for smaller stay lift applications. AVENTOS HK-S is suited for cabinet heights up to a max. of 400 mm.

Compact proportions

Due to its minimal size, AVENTOS HK-S fits harmoniously into smaller cabinets. In a direct comparison, this version is even more compact than AVENTOS HK.

No protruding parts

The AVENTOS HK-S fitting is delivered with a closed lever. Thus no protruding parts, providing the best possible safety during internal transport.

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Assembly in just a few steps

AVENTOS HK-S is quick and easy to install. The front of the wall cabinet can be removed tool-free for cabinet assembly onsite. This is due to our proven CLIP technology.

 Lift mechanism assembly: It can be installed on the left or the right – thanks to its symmetrical design.

2. The symmetrical front fixing bracket is attached to the front.

 CLIP technology enables tool-free front assembly to the lift mechanism.

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Warning

There is a danger of injury if the lever springs upward. After opening, do not push down on the lever.

Special warning and safety information must be added for use in North America.

Quick adjustment, precise adjustment

The AVENTOS HK-S lift system front can also be adjusted in 3 dimensions: To ensure correct visual effect. The fine adjustment to opening and closing forces is very easy and carried out via the lift mechanism. A calibration feature makes this easy.

Perfect motion requires a precise setting:

 The fine adjustment of the lift mechanism requires an electric screwdriver (Pozidriv[®], size 2, length 39 mm).

If the lift system rises when let go, it must be turned to the left.

 The front can be manually adjusted in all 3 dimensions.

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Order specifications

3 types of lift mechanisms are enough to cover a wide range of applications.

By establishing the power factor you can calculate the type and quantity of lift mechanisms. The power factor required depends on the weight of the lower and upper front (incl. double the handle weight) and cabinet height.

The power factor and the door weight can be increased by 50% when a third lift mechanism is used.

This is how it's done: Power factor = cabinet height (KH) [mm] x front weight including double the handle weight[kg]

A trial application is recommended when you are in a borderline area for the individual lift mechanism.

Lift mechanism set Power factor LF Spring Opening angle 220-500 Weak 107° 20K2B00 400-1.000 Medium 107° 20K2C00 960-2.215* Strong 107° 20K2E00 Composed of: 1a 2 x symmetrical lift mechanisms 1b 2 x cover caps left/right 10 x chipboard screws, Ø 4 x 35 mm

* autumn 2010

Note

We recommend a lift mechanism attached to the centre panel for wide cabinets. The reason for this is to prevent the middle of the front from sagging when open.

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2	Front fixing bracket set		
	Nickel plated		
	Wooden fronts and wide alu		
	trames'	20K4A00	
	Narrow alu frames	20K4A00A	
	Composed of:		
	2 x symmetrical front fixing brackets		
			-

	Opening angle stop	
	Nylon	
	100°	20K7A41
- Ja	75°	20K7A11
	Bit PZ cross slot	
	Size 2, length 39 mm	BIT-PZ KS2

¹⁾ Use 2 chipboard screws (609.1x00) for wooden fronts. Use 2 self tapping screw, countersunk head (608.085) for wide alu frames.

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Fixing positions for lift mechanism

* min. 240 with visible wall hanging bracket

Front assembly

Narrow alu frames

Wooden fronts and wide alu $frames^{\scriptscriptstyle 1)}$

F	Gap
SFA	Side front overlay
SOB	Top panel thickness

Planning narrow alu frames

* When changing material thickness, adjust the assembly dimensions accordingly

¹⁾ Use 2 chipboard screws (609.1x00) for wooden fronts. Use 2 self tapping screw, countersunk head (608.085) for wide alu frames.

MF Min. gap top and bottom (2 mm)

Perfecting motion

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Our understanding of perfect **Motion**

Blum turns the opening and closing of furniture into an experience that significantly increases the comfort of motion in the kitchen. Several thousand employees are continually working worldwide implementing our concept of perfect motion. Within this process, we place the needs of the kitchen user as the focus of our actions. We are only satisfied when the kitchen user is satisfied. All of our partners who participate in the furniture making process profit from this focus.

For over 50 years, quality has been the highest principle for the development and manufacture of our products. Our fittings systems shout "high quality" with their well-thought-out function, recognised design and high durability. They are designed to inspire and trigger fascination for perfect motion. We also set the bar very high for the services we offer. They must provide the best possible support to our partners. So that we can target our efforts at all levels, we are in a constant dialogue with kitchen users and regularly exchange information with furniture manufacturers, joiners and distributors.

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Blum Fittings For the lifetime of your kitchen

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