



AVENTOS

Lift Systems

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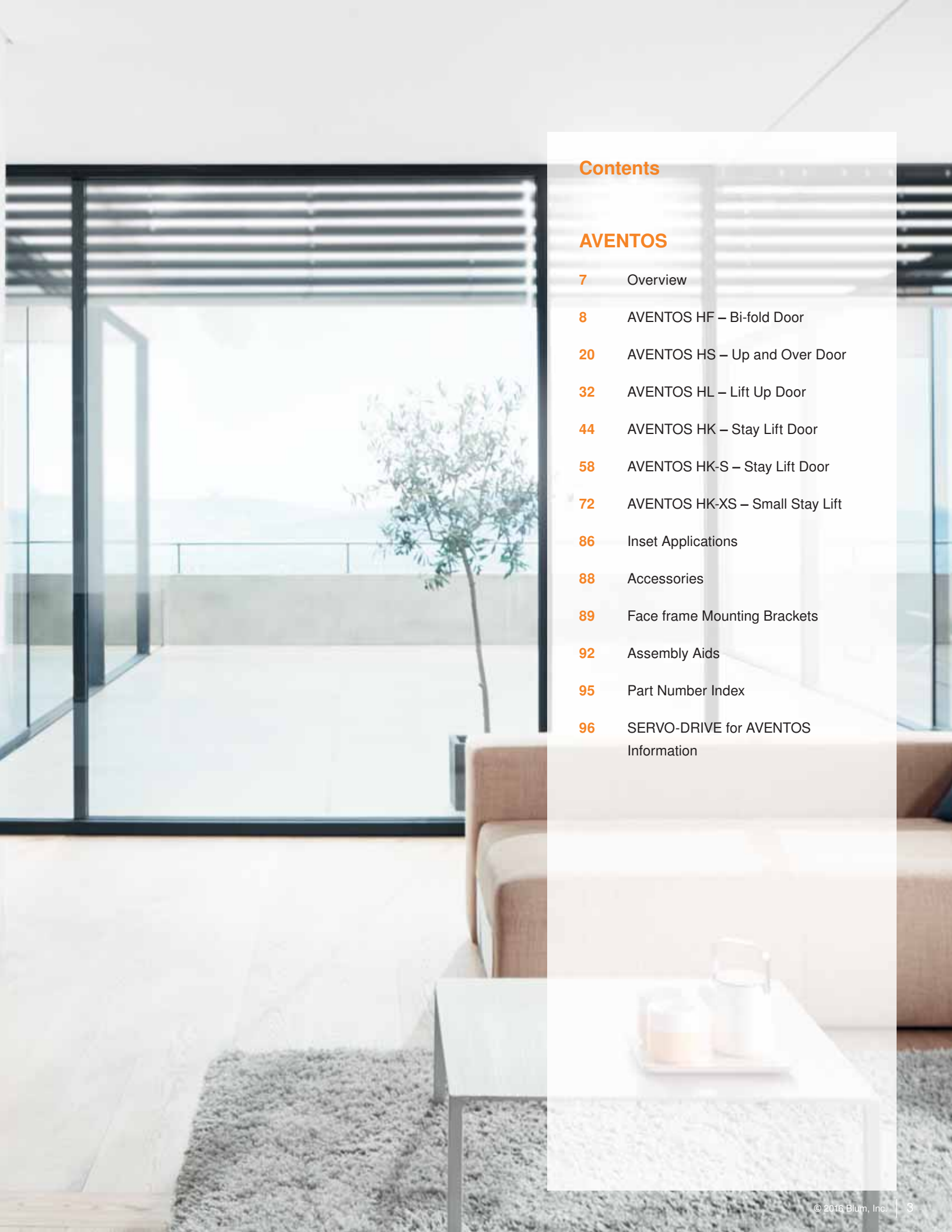
 **blum**[®]



Lifting Cabinet Doors Up and Out of the Way

AVENTOS lift systems are the premium functional hardware for upper cabinets. Doors easily lift up and out of the way, allowing complete access while not interfering with work in the kitchen. When closed, AVENTOS lift system doors glide to a soft close thanks to BLUMOTION soft closing.

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Contents

AVENTOS

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Smooth and Silent

With AVENTOS, even heavy doors open with just a light pull of the handle and stay in any position, up and out of the way. BLUMOTION soft close is available with every AVENTOS lift system for an amazingly quiet close every time.



Easy Installation and Assembly

Installation is fast and precise. Lever arms and doors snap on easily with our proven CLIP technology so there is no need for tools. Three-dimensional cam adjustments enable doors to be positioned precisely.



Optimal Access

AVENTOS lift systems for upper cabinet doors give optimal access to the contents of the cabinet and move the door completely out of the way when opened. They also ensure easy access to the handle in any position, even on tall wall cabinets.



There Are Many Good Reasons Why AVENTOS lift systems Are An Excellent Choice For Wall Cabinets.

Since the cabinet doors open upwards, AVENTOS provides an excellent view into the cabinet interior enabling comfortable and ergonomic access to storage items.

The AVENTOS program opens up a whole new world of design possibilities for kitchen and office spaces. Even the widest and heaviest doors can be accommodated. Wide base cabinet designs can now be mirrored in the wall cabinets above to create a more uniform look.



AVENTOS Planning Tools

Blum has downloadable Excel® spreadsheets that provide the required parts and calculate the mounting locations for your application. Available at blum.com/planning



AVENTOS HF		Frameless and face frame cabinet	
	Bi-fold door Height range 479 (18-7/8") – 1067 (42") Width range 381 (15") – 1828 (72")	Wood or wide aluminum frame door	Narrow aluminum frame door
	Ordering information	page 10	page 14
	Cabinet preparation	page 12	page 16

AVENTOS HS		Frameless and face frame cabinet	
	Up-and-over door Height range 350 (13-3/4") – 800 (31-1/2") Width range 381 (15") – 1828 (72")	Wood or wide aluminum frame door	Narrow aluminum frame door
	Ordering information	page 22	page 26
	Cabinet preparation	page 24	page 28

AVENTOS HL		Frameless and face frame cabinet	
	Lift up door Height range 300 (11-13/16") – 580 (22-13/16") Width range 381 (15") – 1828 (72")	Wood or wide aluminum frame door	Narrow aluminum frame door
	Ordering information	page 34	page 38
	Cabinet preparation	page 36	page 40

AVENTOS HK		Frameless and face frame cabinet		
	Stay lift door Height range 238 (9-3/8") – 610 (24") Width range 381 (15") – 1828 (72")	Wood or wide aluminum frame door	Narrow aluminum frame door	TIP-ON for AVENTOS
	Ordering information	page 46	page 50	page 54
	Cabinet preparation	page 48	page 52	page 55

AVENTOS HK-S		Frameless and face frame cabinet		
	Stay lift door Height range 238 (9-3/8") – 610 (24") Width range 381 (15") – 1828 (72")	Wood or wide aluminum frame door	Narrow aluminum frame door	TIP-ON for AVENTOS
	Ordering information	page 60	page 64	page 68
	Cabinet preparation	page 62	page 66	page 69

AVENTOS HK-XS		Frameless and face frame cabinet		
	Stay lift door Height range 238 (9-3/8") – 610 (24") Width range 381 (15") – 1828 (72")	Wood or wide aluminum frame door	Narrow aluminum frame door	TIP-ON for AVENTOS
	Ordering information	page 74	page 78	page 82
	Cabinet preparation	page 76	page 80	page 83

NOTE: For inset applications see **page 86–87**

AVENTOS HF

Up and Out of The Way

AVENTOS HF covers all common widths and heights with one small program: three lift mechanisms and four telescopic arms. This simplifies planning, ordering and warehousing.



Includes a Finger Safety Feature

The CLIP top bottom door hinge has an innovative "release" feature that ensures finger safety.



Easy Installation and Adjustment

The three-dimensional adjustment feature enables doors to be precisely aligned.



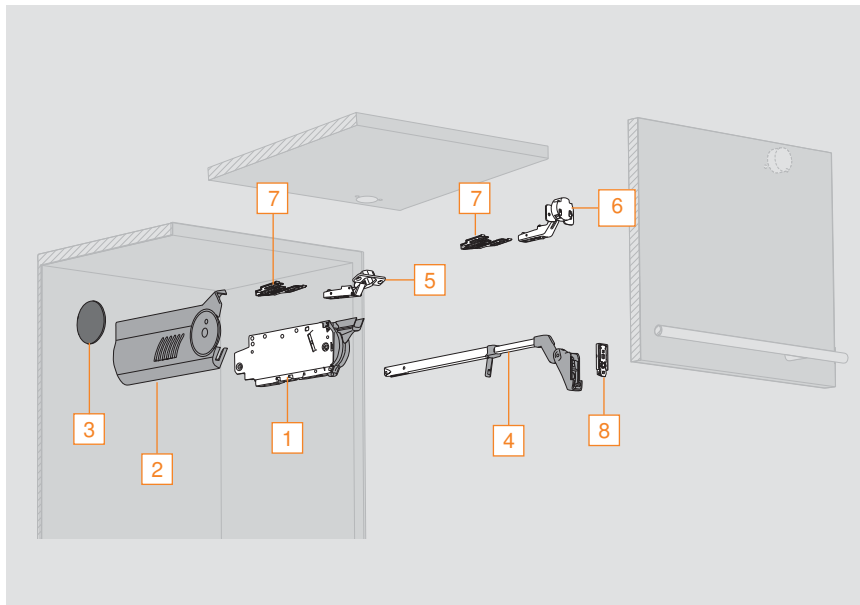
The Motion Inside

The amount of technology and components placed into each lift mechanism are what provide the unparalleled smooth operation of AVENTOS.

AVENTOS HF



Ordering Information for Frameless and Face Frame

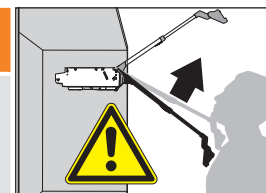


- Well suited for large cabinets
- For both frameless and face frame applications
- Cabinet height from **479** (18-7/8") to **1067** (42")
- Cabinet width from **381** (15") to **1828** (72")
- Interior depth minimum **278** (10-15/16")
- Includes a finger safety feature
- The three-dimensional adjustment feature enables doors to be precisely aligned
- Closes silently and effortlessly with BLUMOTION



Warning: Risk of injury by spring-loaded lever arm!

- Do not push lever arm down
- Secure lever arm before installing cabinet



Step 1 – Determine The Power Factor For The Application



Power factor = cabinet height (inch) x combined door weight* (lb)

Determine power factor

To select the correct lift mechanism for a given application, the power factor must first be calculated by using the formula below. Use the table at the bottom of the page to convert ounces into decimal form for easy calculation.

Power factor = cabinet height multiplied by combined door weight*

Example:

Cabinet height: 30" (within possible range)

Combined door weight = 23 lb 14 oz (14 oz = .9 lb see chart below)

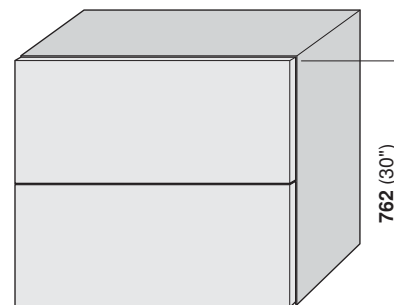
Power factor = 30 x 23.9

Power factor = 717

A power factor of 717 requires lift mechanism 20F2500.N5

*Including handle weight

NOTE: AVENTOS planning tools available at blum.com/planning



Combined door weight* = 23 lb 14 oz

Weight conversion chart

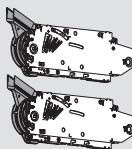
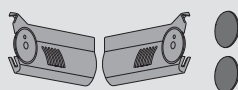
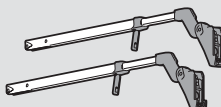
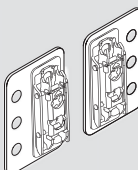
oz	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
lb	.1	.1	.2	.3	.3	.4	.4	.5	.6	.6	.7	.8	.8	.9	.9

Ordering Information

AVENTOS HF



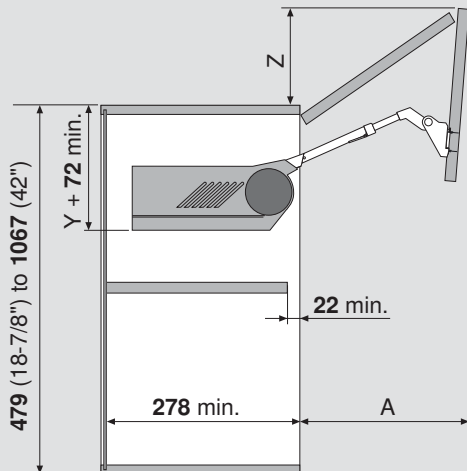
Step 2 – Select The Required Components

Lift mechanism set														
	Set includes: 1 Lift mechanism (qty 2) #7 x 35 (1-3/8") wood screw (qty 10)	NOTE: Trial application recommended when the required power factor is in a borderline area of lift mechanisms <table><tr><th>Power factor range</th><th>Part no.</th></tr><tr><td>85 – 230 (one lift mechanism required)</td><td>20F2200.N5</td></tr><tr><td>231 – 470</td><td>20F2200.N5</td></tr><tr><td>471 – 880</td><td>20F2500.N5</td></tr><tr><td>780 – 1440</td><td>20F2800.N5</td></tr><tr><td>1401 – 2300 (three lift mechanisms required)</td><td>20F2800.N5</td></tr></table>	Power factor range	Part no.	85 – 230 (one lift mechanism required)	20F2200.N5	231 – 470	20F2200.N5	471 – 880	20F2500.N5	780 – 1440	20F2800.N5	1401 – 2300 (three lift mechanisms required)	20F2800.N5
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Cover set														
	Set includes: 2 Right and left cover plate 3 Non-handed cover cap (qty 2)	<table><tr><th>Part no.</th></tr><tr><td>Cover set</td></tr><tr><td>20F8000.NA</td></tr></table>	Part no.	Cover set	20F8000.NA									
Part no.														
Cover set														
20F8000.NA														
Telescopic arm set														
	Set includes: 4 Telescopic arm (qty 2)	NOTE: One telescopic arm is required per lift mechanism <table><tr><th>Cabinet height range</th><th>Part no.</th></tr><tr><td>479 (18-7/8") – 558 (22")</td><td>20F3200.01</td></tr><tr><td>558 (22") – 686 (27")</td><td>20F3500.01</td></tr><tr><td>686 (27") – 889 (35")</td><td>20F3800.01</td></tr><tr><td>889 (35") – 1067 (42")</td><td>20F3900.01</td></tr></table>	Cabinet height range	Part no.	479 (18-7/8") – 558 (22")	20F3200.01	558 (22") – 686 (27")	20F3500.01	686 (27") – 889 (35")	20F3800.01	889 (35") – 1067 (42")	20F3900.01		
Cabinet height range	Part no.													
479 (18-7/8") – 558 (22")	20F3200.01													
558 (22") – 686 (27")	20F3500.01													
686 (27") – 889 (35")	20F3800.01													
889 (35") – 1067 (42")	20F3900.01													
Wood or wide aluminum door hardware set														
Set includes: 5 70T5580.TL – CLIP top 120° free swing hinge (qty 2) 5 32.4630 – COMPACT 33 free swing hinge (qty 2) 6 78Z5530T – CLIP top bottom door hinge (qty 2) 7 130.1130.02 – COMPACT mounting plate, 1-1/4" Overlay (qty 2) 7 175H6000 – Face frame adapter (qty 4) 8 175H3100 – Telescopic arm mounting plate (qty 2)	NOTE: Three hinges and mounting plates are required for cabinet widths over 1219 (48") or combined door weight of 26.5 lb <table><tr><th>Part no.</th></tr><tr><td>Wood or wide aluminum hardware set</td></tr><tr><td>Installation screw for wood doors</td></tr><tr><td>Installation screw for wide aluminum doors</td></tr></table>	Part no.	Wood or wide aluminum hardware set	Installation screw for wood doors	Installation screw for wide aluminum doors	<table><tr><td>78Z5530TA8</td></tr><tr><td>606N or 606P</td></tr><tr><td>7072A</td></tr></table>	78Z5530TA8	606N or 606P	7072A					
Part no.														
Wood or wide aluminum hardware set														
Installation screw for wood doors														
Installation screw for wide aluminum doors														
78Z5530TA8														
606N or 606P														
7072A														
Mounting plate with bracket set														
	Set includes: Right and left mounting plate with bracket	For use with large overlay five-piece doors <table><tr><th>Part no.</th></tr><tr><td>Mounting plate with bracket set</td></tr><tr><td>175H3F00</td></tr></table>	Part no.	Mounting plate with bracket set	175H3F00									
Part no.														
Mounting plate with bracket set														
175H3F00														

SERVO-DRIVE for AVENTOS available. See **page 96** for more information on SERVO-DRIVE for AVENTOS.

Frameless Application

Door and hardware clearance



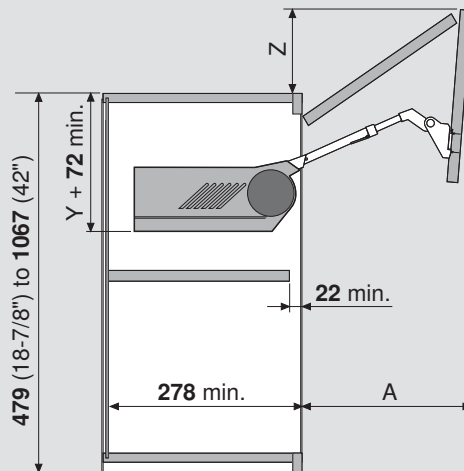
Y = See table below

Z = Top door height x .44 + 23

A = Top door height x .9 + (1.5 x bottom door thickness)

Face Frame Application

Door and hardware clearance



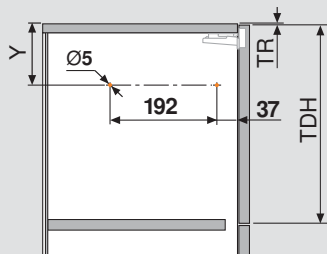
Y = See table below

Z = Top door height x .44 + 23

A = Top door height x .9 + (1.5 x bottom door thickness)

Bore for the locating pins

TR = Top reveal
TDH = Top door height



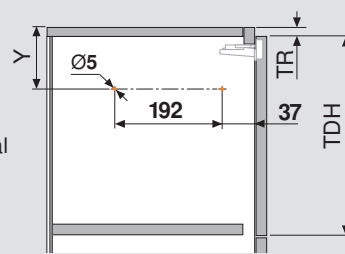
NOTE: Locating pin holes shown in orange

TDH	Y
231 – 271	TDH x .6 minus 28 + TR
272 – 531	TDH x .6 minus 57 + TR

Bore for the locating pins

TR = Top reveal
TDH = Top door height

See **page 89** for optional face frame mounting bracket or block-out side flush with frame.

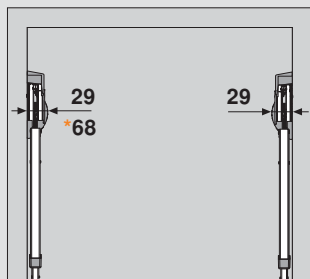


NOTE: Locating pin holes shown in orange

TDH	Y
231 – 271	TDH x .6 minus 28 + TR
272 – 531	TDH x .6 minus 57 + TR

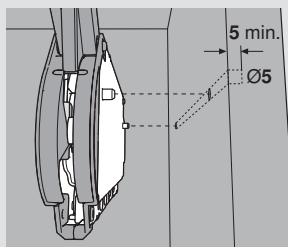
Lift mechanism clearance

*Clearance required for SERVO-DRIVE

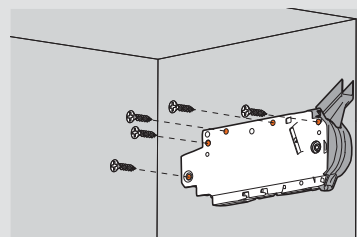


Lift mechanism positioning

Two locating pins fit into Ø5 x 5 holes bored in the side of cabinet for proper positioning.

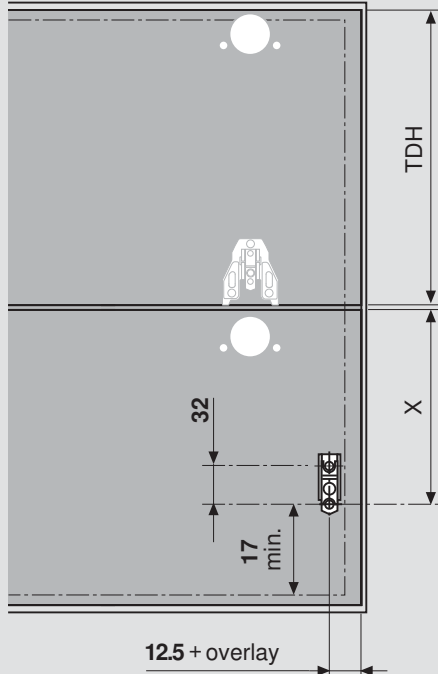


The included #7 x 35 (1-3/8") wood screws are required in the five holes marked in orange.



Refer to **page 88** for angle restriction clip options

Telescopic arm mounting plate location



TDH = Top door height

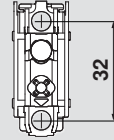
NOTE: Dimensions same for frameless and face frame applications.

TDH	X
231 – 271	$TDH \times .5 + 70$
272 – 531	$TDH \times .5 + 47$

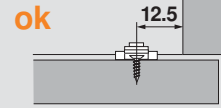
NOTE: Three hinges are required for cabinet widths over 1219 (48") or 26.5 lb combined door weight

Telescopic arm mounting plate choices

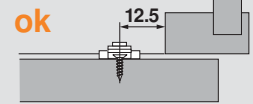
Mounting plate



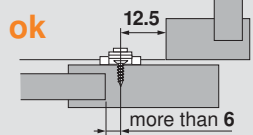
Slab door for frameless



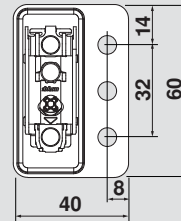
Slab door for face frame



Five-piece door

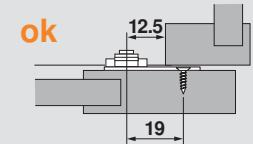


Mounting plate with bracket for large overlay five-piece doors



NOTE: Hole locations offset by 19 (example: $12.5 + \text{overlay} - 19 = \text{hole location from side}$)

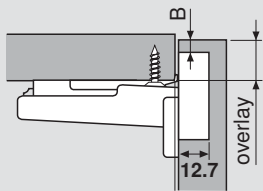
Five-piece door



Frameless Application

CLIP top hinge

Top door hinge



*Bore at 3 then adjust 1

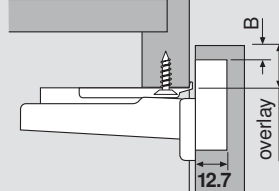
Overlay				
13*	14	15	16	17
3	3	4	5	6

B = Bore distance

Face Frame Application

CLIP top hinge

Top door hinge – small overlay

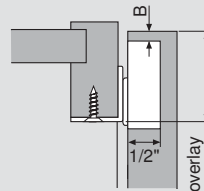


*Bore at 3 then adjust 1

Overlay				
13*	14	15	16	17
3	3	4	5	6

B = Bore distance

Top door hinge – large overlay



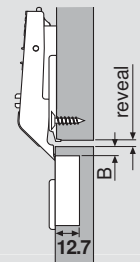
Overlay

32 (1-1/4")
3 (1/8")

B = Bore distance

CLIP top hinge

Bottom door hinge



Reveal

6	5	4	3
3	4	5	6

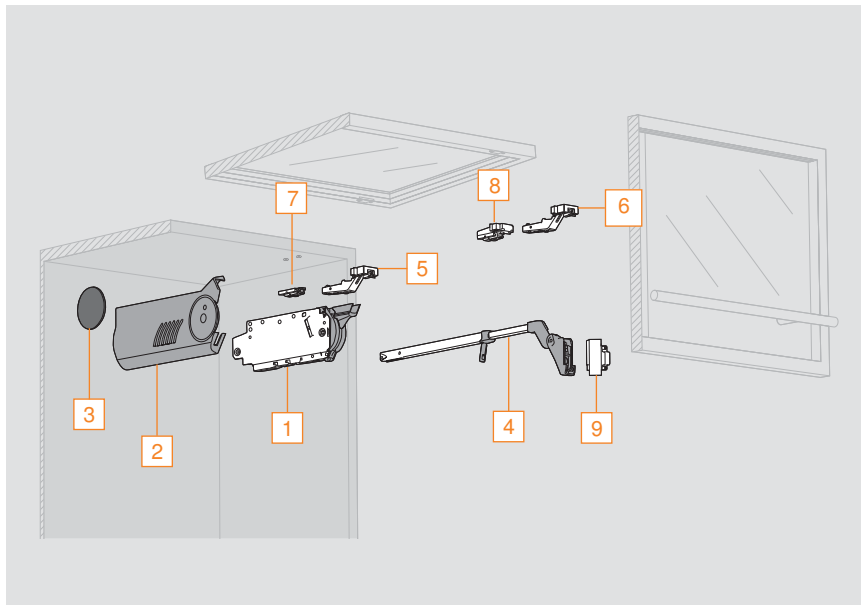
B = Bore distance

Follow the assembly instructions on **page 18**

AVENTOS HF



Ordering Information for Narrow Aluminum

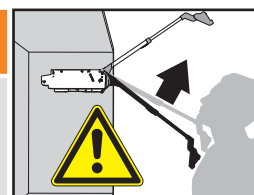


- Well suited for large cabinets
- For narrow aluminum door hardware
- Cabinet height from **479** (18-7/8") to **1067** (42")
- Cabinet width from **381** (15") to **1828** (72")
- Interior depth minimum **278** (10-15/16")
- Includes a finger safety feature
- The three-dimensional adjustment feature enables doors to be precisely aligned.
- Closes silently and effortlessly with BLUMOTION



Warning: Risk of injury by spring-loaded lever arm!

- Do not push lever arm down
- Secure lever arm before installing cabinet



Step 1 – Determine The Power Factor For The Application



Power factor = cabinet height (inch) x combined door weight* (lb)

Determine power factor

To select the correct lift mechanism for a given application, the power factor must first be calculated by using the formula below. Use the table at the bottom of the page to convert ounces into decimal form for easy calculation.

Power factor = cabinet height multiplied by combined door weight*

Example:

Cabinet height: 30" (within possible range)

Combined door weight = 23 lb 14 oz (14 oz = .9 lb see chart below)

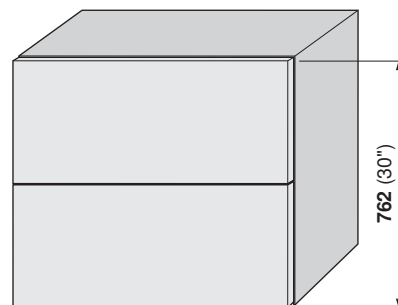
Power factor = 30 x 23.9

Power factor = 717

A power factor of 717 requires lift mechanism 20F2500.N5

*Including handle weight

NOTE: AVENTOS planning tools available at blum.com/planning

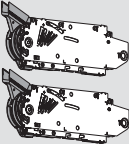


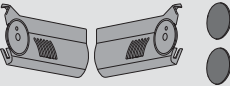
Combined door weight* = 23 lb 14 oz

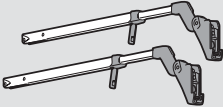
Weight conversion chart

oz	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
lb	.1	.1	.2	.3	.3	.4	.4	.5	.6	.6	.7	.8	.8	.9	.9

Step 2 – Select The Required Components

Lift mechanism set			
	Set includes: 1 Lift mechanism (qty 2) #7 x 35 (1-3/8") wood screw (qty 10)		NOTE: Trial application recommended when the required power factor is in a borderline area of lift mechanisms
	Power factor range		Part no.
	85 – 230 (one lift mechanism required)		20F2200.N5
	231 – 470		20F2200.N5
	471 – 880		20F2500.N5
	780 – 1440		20F2800.N5
1401 – 2300 (three lift mechanisms required)		20F2800.N5	

Cover set			
	Set includes: 2 Right and left cover plate 3 Non-handed cover cap (qty 2)		
			Part no.
	Cover set	20F8000.NA	

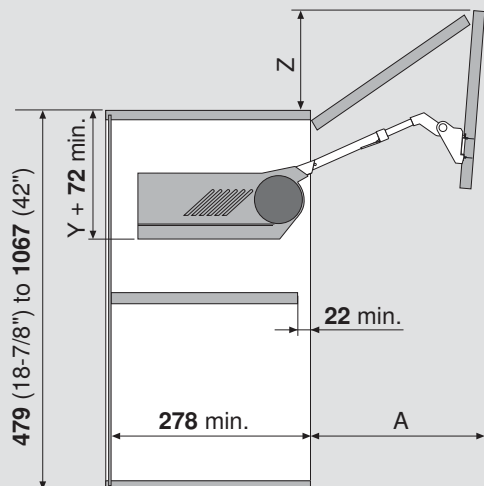
Telescopic arm set			
	Set includes: 4 Telescopic arm (qty 2)		NOTE: One telescopic arm is required per lift mechanism
	Cabinet height range		Part no.
	479 (18-7/8") – 558 (22")		20F3200.01
	558 (22") – 686 (27")		20F3500.01
	686 (27") – 889 (35")		20F3800.01
	889 (35") – 1067 (42")		20F3900.01

Narrow aluminum door hardware set			
Set includes: 5 72T550A.TL – CLIP top free swing narrow alum. top door hinge (qty 2) 6 78Z550AT – CLIP top narrow aluminum bottom door hinge (qty 2) 7 175H3100 – Top door mounting plate (qty 2) 8 175H5A00 – Bottom door mounting plate (qty 2) 9 175H5B00 – Telescopic arm mounting plate (qty 2) 669.110 – Aluminum screw for the bottom door mounting plate, bottom hinge, top hinge and telescopic arm mounting plate (qty 8)		NOTE: Three hinges and mounting plates are required for cabinet widths over 1219 (48") or combined door weight of 26.5 lb	
		Part no.	
Narrow aluminum hardware set		78Z550ATA6	
Installation screw for top mounting plate		606N or 606P	

SERVO-DRIVE for AVENTOS available. See **page 96** for more information on SERVO-DRIVE for AVENTOS.

Frameless Application

Door and hardware clearance

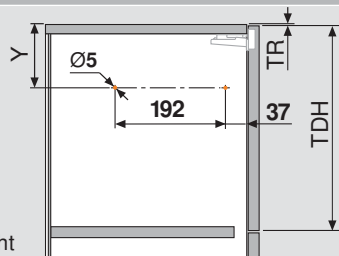


Y = See table below

Z = Top door height x .44 + 23

A = Top door height x .9 + (1.5 x bottom door thickness)

Bore for the locating pins



TR = Top reveal

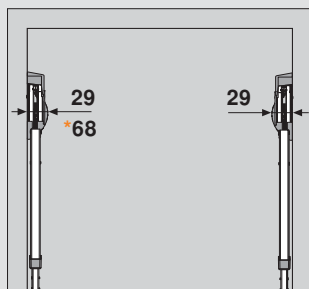
TDH = Top door height

NOTE: Locating pin holes shown in orange

TDH	Y
231 – 271	TDH x .6 minus 28 + TR
272 – 531	TDH x .6 minus 57 + TR

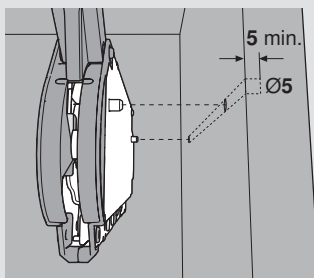
Lift mechanism clearance

*Clearance required for SERVO-DRIVE

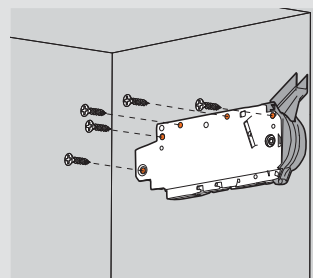


Lift mechanism positioning

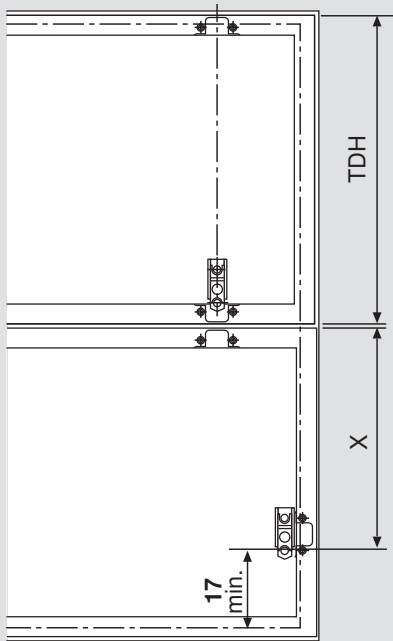
Two locating pins fit into Ø5 x 5 holes bored in the side of cabinet for proper positioning.



The included #7 x 35 (1-3/8") wood screws are required in the five holes marked in orange.



Telescopic arm mounting plate location

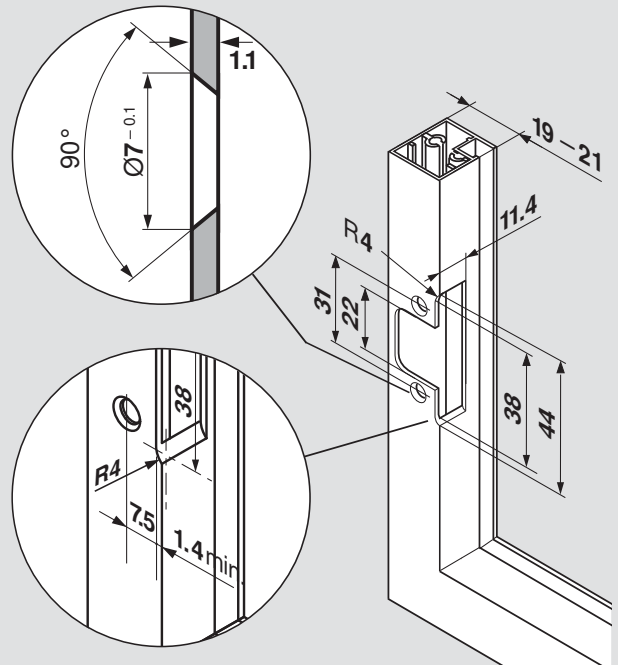


TDH = Top door height

TDH	X
231 – 271	$TDH \times .5 + 70$
272 – 531	$TDH \times .5 + 47$

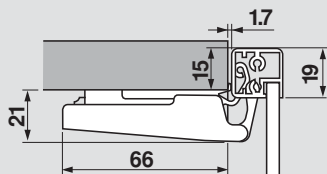
NOTE: Three hinges are required for cabinet widths over 1219 (48") or 26.5 lb combined door weight

Hinge and mounting plate attachment



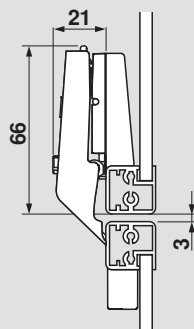
CLIP top aluminum door hinge

Top door hinge



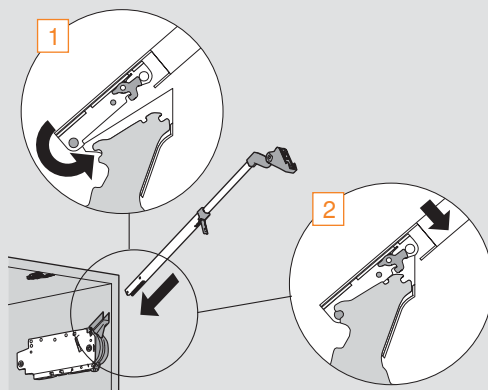
CLIP top hinge

Bottom door hinge

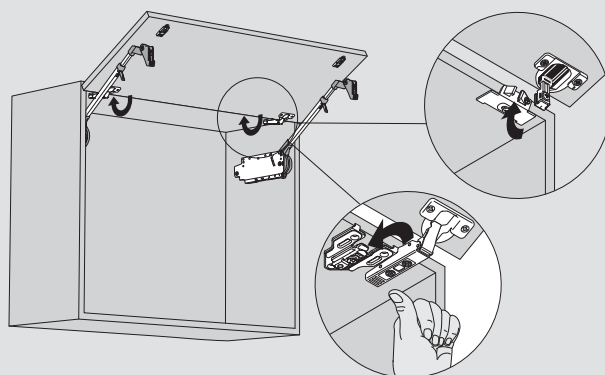


Follow the assembly instructions on **page 18**

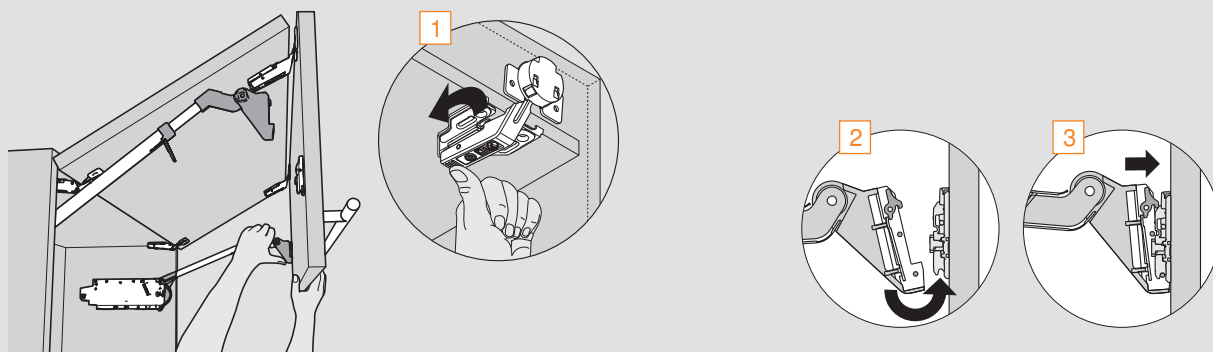
Attaching the telescopic arms



Attaching the top door to the cabinet

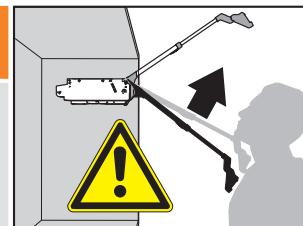


Attaching the bottom door to the cabinet



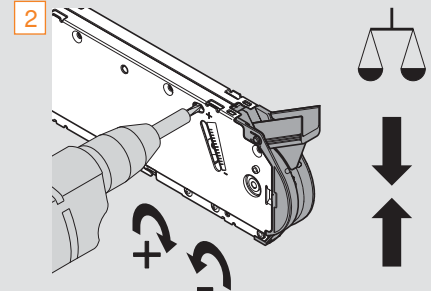
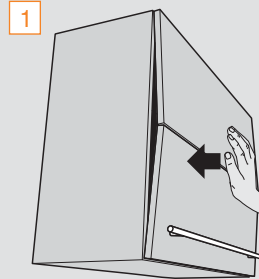
Warning: Risk of injury by spring-loaded telescopic arm!

- Do not push telescopic arm down
- Remove telescopic arm from mechanism before installing cabinet



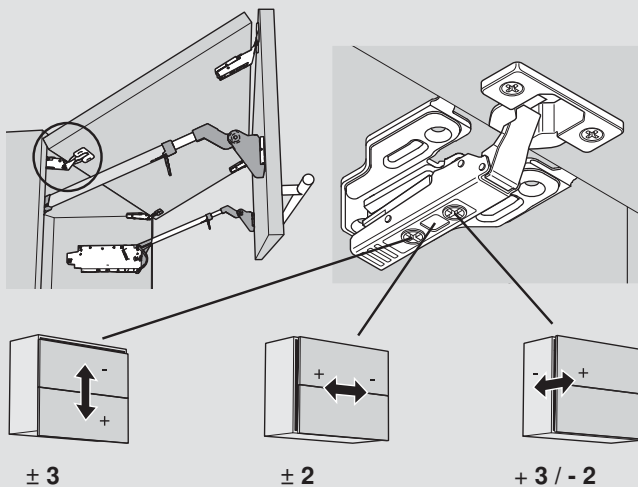
Lift mechanism tension adjustment

- 1 Close and flush doors to cabinet. Open and close door to test closing force.
- 2 Use a screw gun and a #2x2 POZI driver bit to adjust the lift mechanism to the desired tension. Test door again and repeat until desired function is achieved. Tension adjustment should be the same on both lift mechanisms.

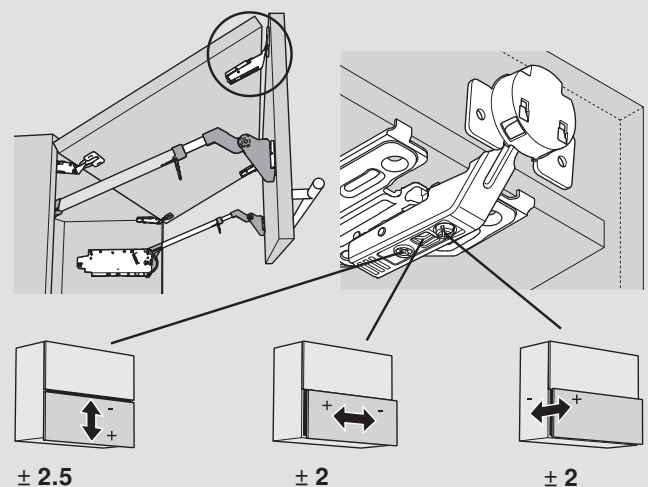


AVENTOS HF door adjustments

- 1 Adjust each top door hinge and mounting plate to properly align the top door to the cabinet.



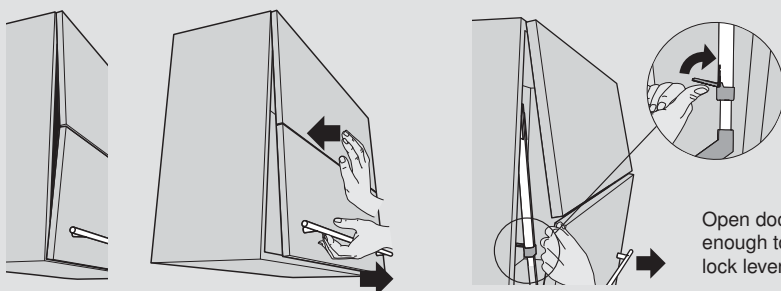
- 2 Adjust each bottom door hinge and mounting plate to properly align doors to the cabinet and to the top door.



NOTE: Although not illustrated here, telescopic arm mounting plates can also be adjusted horizontally ± 2 if needed

Adjust and lock telescopic arms

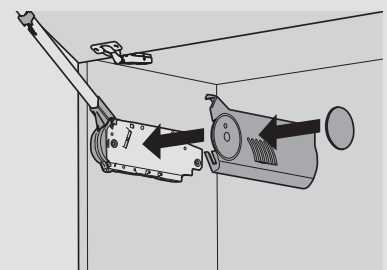
- 1 Close and flush doors to cabinet. While pressing on the top door, pull the bottom door open approximately one inch.
- 2 Slightly open door and lock the telescopic arms into position using the levers as shown.



Open door enough to lock levers

Attaching cover caps

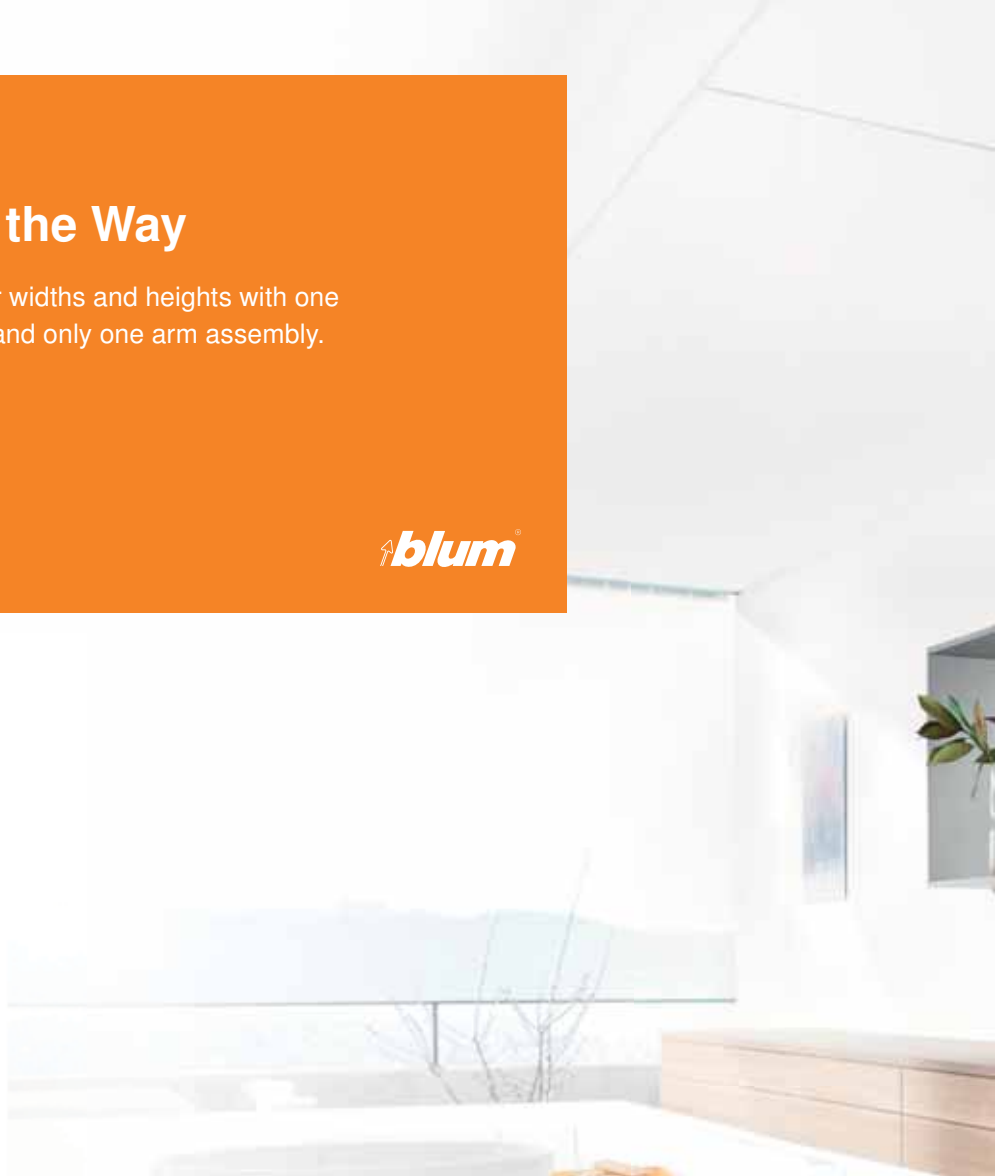
Place the left and right cover plates over the appropriate lift mechanisms and snap them in place.



AVENTOS HS

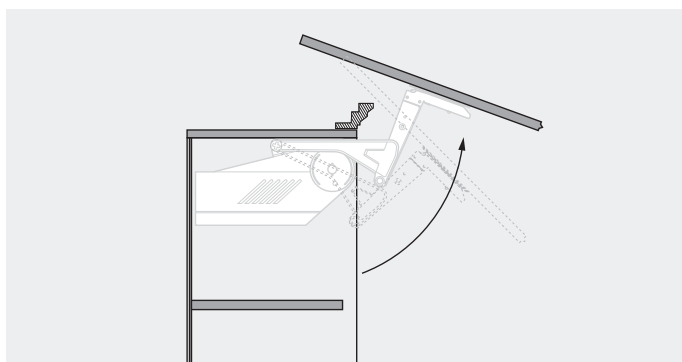
Up, Over and Out of the Way

AVENTOS HS covers all common door widths and heights with one simple program: nine lift mechanisms and only one arm assembly.



Easy Installation and Adjustment

The three-dimensional adjustment feature enables doors to be precisely aligned.



Crown Molding Clearance

When developing the AVENTOS HS up-and-over lift mechanism, we also took into account cabinets with decorative molding.



The Motion Inside

The amount of technology and components placed into each lift mechanism are what provide the unparalleled smooth operation of AVENTOS.

Step 1 – Select The Required Lift Mechanism Set

Using the charts

Each chart covers three different lift mechanisms (nine total). To select the required lift mechanism set, find the cabinet height on the left side of the chart, then go across to the range that contains the weight of your door in pounds and ounces. Follow that column to the top orange box to get the part number for the lift mechanism set required for your application.

NOTE: Part numbers in **ORANGE**, pounds and millimeters are **bold**

Cabinet height		Door weight – lb/oz		
inch	mm	20S2A00.N5	20S2B00.N5	20S2C00.N5
14	349 – 359	4/6 – 10/5	10/6 – 20/11	20/12 – 23/2
	360 – 364	4/6 – 10/5	10/6 – 20/11	20/12 – 23/10
	365 – 374	4/6 – 10/5	10/6 – 20/3	20/4 – 23/3
15	375 – 384	4/6 – 10/5	10/6 – 20/3	20/4 – 24/11
	385 – 389	4/6 – 10/5	10/6 – 20/3	20/4 – 24/5
	390 – 394	4/6 – 10/5	10/6 – 19/10	19/11 – 25/5
16	395 – 399	4/6 – 10/5	10/6 – 19/10	19/11 – 25/13
	400 – 409	5/0 – 9/11	9/12 – 19/10	19/11 – 26/7
	410 – 414	5/0 – 9/11	9/12 – 19/10	19/11 – 26/15
17	415 – 424	5/0 – 9/11	9/12 – 19/2	19/3 – 27/8
	425 – 434	5/0 – 9/11	9/12 – 19/2	19/3 – 28/0
	435 – 439	5/0 – 9/11	9/12 – 19/2	19/3 – 28/10
18	440 – 444	5/0 – 9/11	9/12 – 18/8	18/9 – 28/10
	445 – 449	5/0 – 9/11	9/12 – 18/8	18/9 – 29/2
	450 – 459	5/0 – 9/3	9/4 – 18/8	18/9 – 29/11
19	460 – 464	5/0 – 9/3	9/4 – 18/0	18/1 – 30/3
	465 – 469	5/8 – 9/3	9/4 – 18/0	18/1 – 30/3
	470 – 474	5/8 – 9/3	9/4 – 18/0	18/1 – 30/13
20	475 – 479	5/8 – 9/0	9/1 – 17/7	17/8 – 30/13
	480 – 489	5/8 – 9/0	9/1 – 17/7	17/8 – 31/5
	490 – 494	5/8 – 9/0	9/1 – 17/7	17/8 – 31/15
21	495 – 499	5/8 – 9/0	9/1 – 16/15	17/0 – 31/15
	500 – 514	5/8 – 8/8	8/9 – 16/15	17/0 – 32/7
	515 – 519	5/8 – 8/8	8/9 – 16/5	16/6 – 32/7
22	520 – 525	5/8 – 8/8	8/9 – 16/5	16/6 – 33/0

Cabinet height		Door weight – lb/oz		
inch	mm	20S2D00.N5	20S2E00.N5	20S2F00.N5
21	526 – 539	6/9 – 14/8	14/9 – 27/7	27/8 – 36/13
	540 – 544	6/9 – 14/0	14/1 – 27/7	27/8 – 37/7
	545 – 554	6/9 – 14/0	14/1 – 26/15	27/0 – 27/15
22	555 – 559	6/9 – 14/0	14/1 – 26/15	27/0 – 38/8
	560 – 564	6/9 – 14/0	14/1 – 26/5	26/6 – 38/8
	565 – 574	6/9 – 13/7	13/8 – 26/5	26/6 – 39/0
23	575 – 584	6/9 – 13/7	13/8 – 25/13	25/14 – 39/10
	585 – 589	6/9 – 13/7	13/8 – 25/11	25/12 – 40/2
	590 – 594	6/9 – 12/15	13/0 – 25/11	25/12 – 40/2
24	595 – 614	6/9 – 12/15	13/0 – 25/2	25/3 – 40/11
	615 – 634	6/9 – 12/8	12/9 – 24/10	24/11 – 41/3
	635 – 639	6/9 – 11/15	12/0 – 24/10	24/11 – 41/3
25	640 – 649	6/9 – 11/15	12/0 – 24/0	24/1 – 41/3
	650 – 664	6/9 – 11/15	12/0 – 24/0	24/1 – 41/13
	665 – 675	6/9 – 11/7	11/8 – 23/8	23/9 – 41/13

Cabinet height		Door weight – lb/oz		
inch	mm	20S2G00.N5	20S2H00.N5	20S2I00.N5
26	676 – 684	7/11 – 17/0	17/1 – 29/7	29/8 – 47/5
	685 – 689	7/11 – 17/0	17/1 – 28/13	28/14 – 47/5
	690 – 694	7/11 – 16/7	16/8 – 28/13	28/14 – 47/5
27	695 – 704	7/11 – 16/7	16/8 – 28/11	28/12 – 47/5
	705 – 709	7/11 – 16/7	16/8 – 28/8	28/9 – 47/5
	710 – 714	7/11 – 16/7	16/8 – 28/8	28/9 – 46/11
28	715 – 724	7/11 – 16/0	16/1 – 28/0	28/1 – 46/11
	725 – 729	7/11 – 16/0	16/1 – 28/0	28/1 – 46/3
	730 – 734	7/11 – 16/0	16/1 – 27/15	28/0 – 46/3
29	735 – 739	7/11 – 15/15	16/0 – 27/15	28/0 – 45/10
	740 – 744	7/11 – 15/8	15/9 – 27/7	27/8 – 45/10
	745 – 749	7/11 – 15/8	15/9 – 27/5	27/6 – 45/2
30	750 – 754	8/4 – 15/8	15/9 – 27/5	27/6 – 45/2
	755 – 759	8/4 – 15/8	15/9 – 27/3	27/4 – 45/2
	760 – 764	8/4 – 15/8	15/9 – 27/0	27/1 – 44/8
31	765 – 769	8/4 – 15/8	15/9 – 26/10	27/11 – 44/8
	770 – 774	8/4 – 14/15	15/0 – 26/10	26/11 – 44/8
	775 – 779	8/12 – 14/15	15/0 – 26/10	26/11 – 44/8
32	780 – 784	8/12 – 14/15	15/0 – 26/8	26/9 – 44/8
	785 – 789	8/12 – 14/15	15/0 – 26/8	26/9 – 44/8
	790 – 800	8/12 – 14/13	14/14 – 25/15	26/0 – 44/0

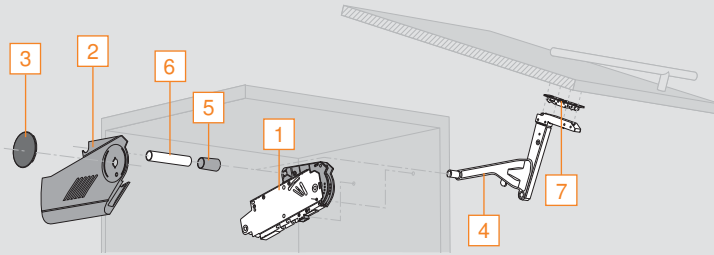


**Warning: Risk of injury
by arm assembly!**

- Do not push arm assembly down
- Remove arm assembly from mechanism before installing cabinet

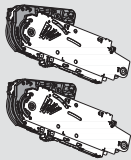


Required components



Step 2 – Select The Required Components

Lift mechanism set



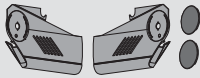
Set includes:

- 1** Lift mechanism (qty 2)
- #7 x 35 (1-3/8") wood screw (qty 10)

NOTE: For correct ordering of lift mechanism set, use the charts on the previous page

20S2A00.N5	20S2B00.N5	20S2C00.N5
20S2D00.N5	20S2E00.N5	20S2F00.N5
20S2G00.N5	20S2H00.N5	20S2I00.N5

Cover set

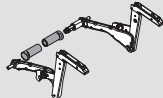


Set includes:

- 2** Right and left cover plate
- 3** Non-handed cover cap (qty 2)

Part no.	
Cover set	20S8000.NA

Arm assembly set



Set includes:

- 4** Right and left arm assembly
- 5** Stabilizer rod cover cap (qty 2)

Part no.	
Arm assembly set	20S3500.06

Round stabilizer rod



- 6** Round stabilizer rod

NOTE: Cabinets wider than 48" a stabilizer rod connector set is required, see **page 92**

— Aluminum rod length 1061 (41-3/4"), cut to size — Length = inside cabinet width minus 129 (5-1/16") for SERVO-DRIVE minus 164 (6-7/16")	Part no.
Round stabilizer rod	20Q1061UN

Wood or wide aluminum door hardware set



Set includes:

- 7** Arm assembly mounting plate (qty 2)

	Part no.
Wood or wide aluminum hardware set	20S4200
Installation screw for wood doors	606N or 606P
Installation screw for wide aluminum doors	7072A

Mounting plate with bracket set



Set includes:

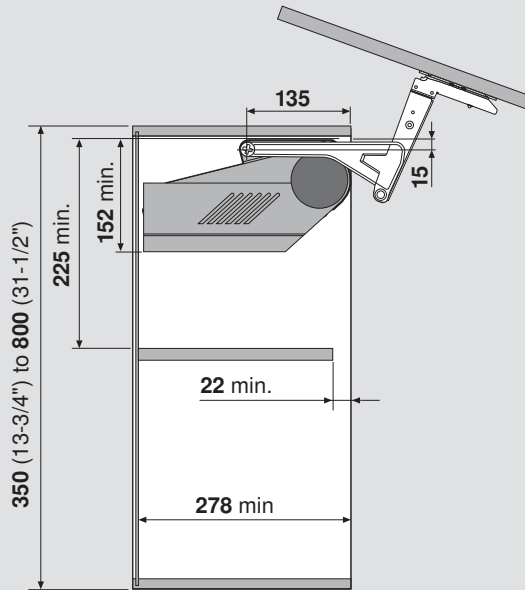
- Mounting plate with bracket (qty 2)

For use with large overlay five-piece doors	Part no.
Mounting plate with bracket set	20S4F01

SERVO-DRIVE for AVENTOS available. See **page 96** for more information on SERVO-DRIVE for AVENTOS.

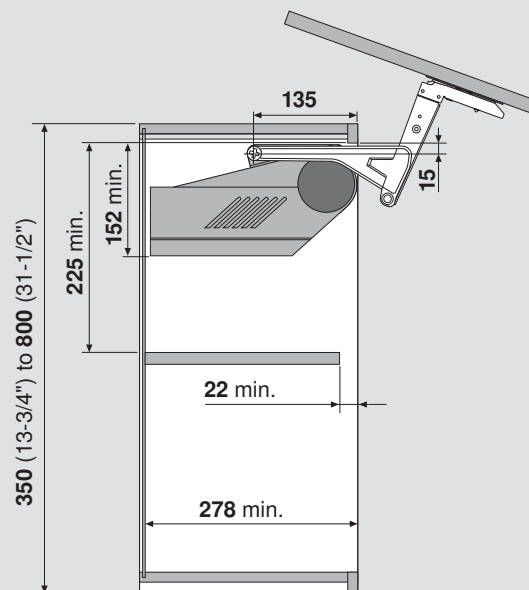
Frameless Application

Door and hardware clearance

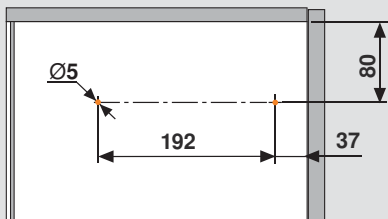


Face Frame Application

Door and hardware clearance

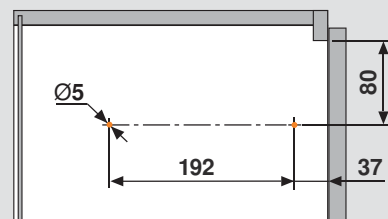


Bore for the locating pins



NOTE: Locating pin holes shown in orange

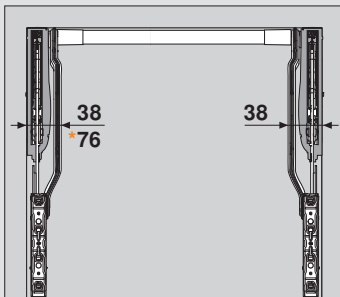
Bore for the locating pins



NOTE: Locating pin holes shown in orange

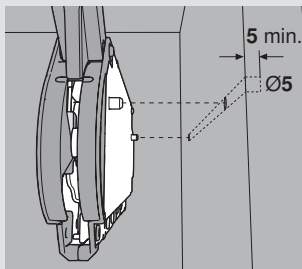
Lift mechanism clearance

*Clearance required for SERVO-DRIVE

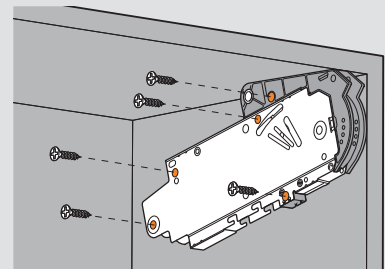


Lift mechanism positioning

Two locating pins fit into Ø5 x 5 holes bored in the side of cabinet for proper positioning.

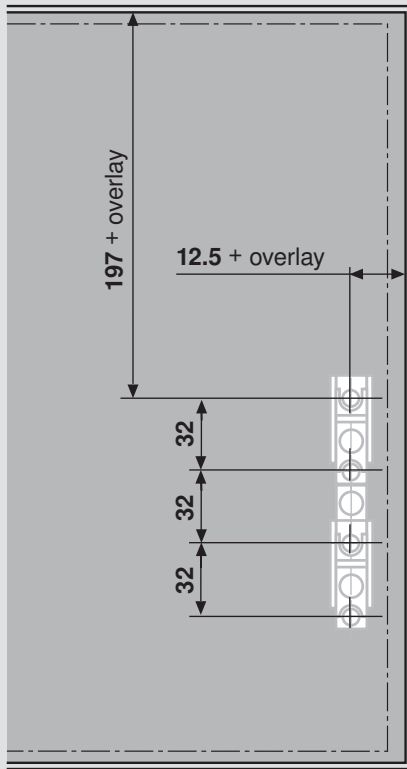


The included #7 x 35 (1-3/8") wood screws are required in the five holes marked in orange.



NOTE: Face frame cabinets must be blocked-out on the sides flush with the frame.

Arm assembly mounting plate location

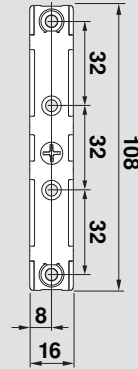


Minimum 5 side reveal when adjacent to wall

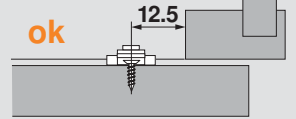
NOTE: Attach mounting plate with four 606N or 606P wood screws for wood doors or 7072A for wide aluminum doors

Arm assembly mounting plate choices

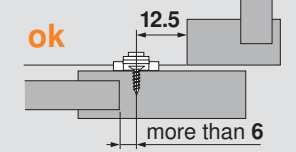
Mounting plate



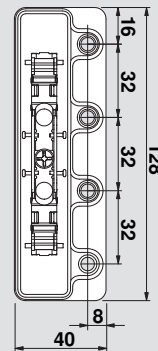
Slab door



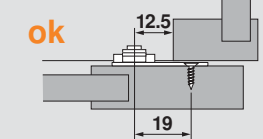
Five-piece door



Mounting plate with bracket for large overlay five-piece doors



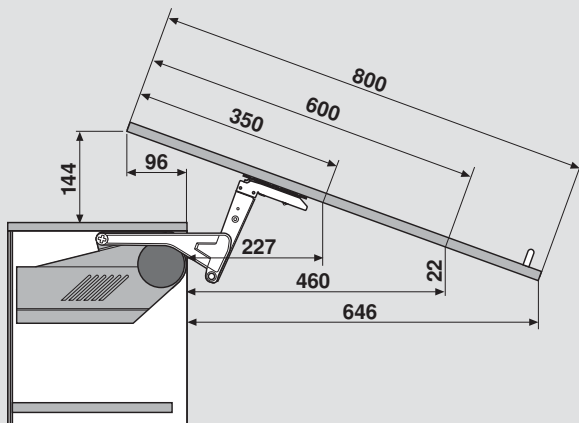
Five-piece door



NOTE: Hole locations offset by 19 (example: $12.5 + \text{overlay} - 19 = \text{hole location from side}$)

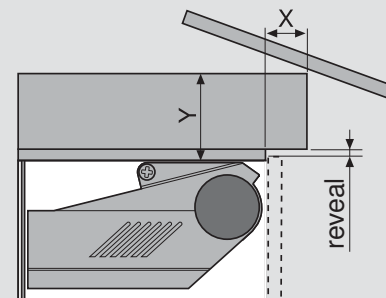
Door and Hardware Clearance

Door protrusion for common cabinet heights



NOTE: Based on 19 panel thickness and panel overlay

Crown molding clearance



Reveal	Maximum X	Maximum Y
3 (1/8")	35 (1-3/8")	101 (4")
2 (1/16")	31 (1-1/4")	101 (4")
1.5 (1/16")	28 (1-1/8")	101 (4")

Follow the assembly instructions on **page 30**

Step 1 – Select The Required Lift Mechanism Set

Using the charts

Each chart covers three different lift mechanisms (nine total). To select the required lift mechanism set, find the cabinet height on the left side of the chart, then go across to the range that contains the weight of your door in pounds and ounces. Follow that column to the top orange box to get the part number for the lift mechanism set required for your application.

NOTE: Part numbers in **ORANGE**, pounds and millimeters are **bold**

Cabinet height		Door weight – lb/oz		
inch	mm	20S2A00.N5	20S2B00.N5	20S2C00.N5
14	349 – 359	4/6 – 10/5	10/6 – 20/11	20/12 – 23/2
	360 – 364	4/6 – 10/5	10/6 – 20/11	20/12 – 23/10
	365 – 374	4/6 – 10/5	10/6 – 20/3	20/4 – 23/3
15	375 – 384	4/6 – 10/5	10/6 – 20/3	20/4 – 24/11
	385 – 389	4/6 – 10/5	10/6 – 20/3	20/4 – 24/5
	390 – 394	4/6 – 10/5	10/6 – 19/10	19/11 – 25/5
16	395 – 399	4/6 – 10/5	10/6 – 19/10	19/11 – 25/13
	400 – 409	5/0 – 9/11	9/12 – 19/10	19/11 – 26/7
	410 – 414	5/0 – 9/11	9/12 – 19/10	19/11 – 26/15
17	415 – 424	5/0 – 9/11	9/12 – 19/2	19/3 – 27/8
	425 – 434	5/0 – 9/11	9/12 – 19/2	19/3 – 28/0
	435 – 439	5/0 – 9/11	9/12 – 19/2	19/3 – 28/10
18	440 – 444	5/0 – 9/11	9/12 – 18/8	18/9 – 28/10
	445 – 449	5/0 – 9/11	9/12 – 18/8	18/9 – 29/2
	450 – 459	5/0 – 9/3	9/4 – 18/8	18/9 – 29/11
19	460 – 464	5/0 – 9/3	9/4 – 18/0	18/1 – 30/3
	465 – 469	5/8 – 9/3	9/4 – 18/0	18/1 – 30/3
	470 – 474	5/8 – 9/3	9/4 – 18/0	18/1 – 30/13
20	475 – 479	5/8 – 9/0	9/1 – 17/7	17/8 – 30/13
	480 – 489	5/8 – 9/0	9/1 – 17/7	17/8 – 31/5
	490 – 494	5/8 – 9/0	9/1 – 17/7	17/8 – 31/15
21	495 – 499	5/8 – 9/0	9/1 – 16/15	17/0 – 31/15
	500 – 514	5/8 – 8/8	8/9 – 16/15	17/0 – 32/7
	515 – 519	5/8 – 8/8	8/9 – 16/5	16/6 – 32/7
22	520 – 525	5/8 – 8/8	8/9 – 16/5	16/6 – 33/0

Cabinet height		Door weight – lb/oz		
inch	mm	20S2D00.N5	20S2E00.N5	20S2F00.N5
21	526 – 539	6/9 – 14/8	14/9 – 27/7	27/8 – 36/13
	540 – 544	6/9 – 14/0	14/1 – 27/7	27/8 – 37/7
	545 – 554	6/9 – 14/0	14/1 – 26/15	27/0 – 27/15
22	555 – 559	6/9 – 14/0	14/1 – 26/15	27/0 – 38/8
	560 – 564	6/9 – 14/0	14/1 – 26/5	26/6 – 38/8
	565 – 574	6/9 – 13/7	13/8 – 26/5	26/6 – 39/0
23	575 – 584	6/9 – 13/7	13/8 – 25/13	25/14 – 39/10
	585 – 589	6/9 – 13/7	13/8 – 25/11	25/12 – 40/2
	590 – 594	6/9 – 12/15	13/0 – 25/11	25/12 – 40/2
24	595 – 614	6/9 – 12/15	13/0 – 25/2	25/3 – 40/11
	615 – 634	6/9 – 12/8	12/9 – 24/10	24/11 – 41/3
	635 – 639	6/9 – 11/15	12/0 – 24/10	24/11 – 41/3
25	640 – 649	6/9 – 11/15	12/0 – 24/0	24/1 – 41/3
	650 – 664	6/9 – 11/15	12/0 – 24/0	24/1 – 41/13
	665 – 675	6/9 – 11/7	11/8 – 23/8	23/9 – 41/13

Cabinet height		Door weight – lb/oz		
inch	mm	20S2G00.N5	20S2H00.N5	20S2I00.N5
26	676 – 684	7/11 – 17/0	17/1 – 29/7	29/8 – 47/5
	685 – 689	7/11 – 17/0	17/1 – 28/13	28/14 – 47/5
	690 – 694	7/11 – 16/7	16/8 – 28/13	28/14 – 47/5
27	695 – 704	7/11 – 16/7	16/8 – 28/11	28/12 – 47/5
	705 – 709	7/11 – 16/7	16/8 – 28/8	28/9 – 47/5
	710 – 714	7/11 – 16/7	16/8 – 28/8	28/9 – 46/11
28	715 – 724	7/11 – 16/0	16/1 – 28/0	28/1 – 46/11
	725 – 729	7/11 – 16/0	16/1 – 28/0	28/1 – 46/3
	730 – 734	7/11 – 16/0	16/1 – 27/15	28/0 – 46/3
29	735 – 739	7/11 – 15/15	16/0 – 27/15	28/0 – 45/10
	740 – 744	7/11 – 15/8	15/9 – 27/7	27/8 – 45/10
	745 – 749	7/11 – 15/8	15/9 – 27/5	27/6 – 45/2
30	750 – 754	8/4 – 15/8	15/9 – 27/5	27/6 – 45/2
	755 – 759	8/4 – 15/8	15/9 – 27/3	27/4 – 45/2
	760 – 764	8/4 – 15/8	15/9 – 27/0	27/1 – 44/8
31	765 – 769	8/4 – 15/8	15/9 – 26/10	27/11 – 44/8
	770 – 774	8/4 – 14/15	15/0 – 26/10	26/11 – 44/8
	775 – 779	8/12 – 14/15	15/0 – 26/10	26/11 – 44/8
32	780 – 784	8/12 – 14/15	15/0 – 26/8	26/9 – 44/8
	785 – 789	8/12 – 14/15	15/0 – 26/8	26/9 – 44/8
	790 – 800	8/12 – 14/13	14/14 – 25/15	26/0 – 44/0

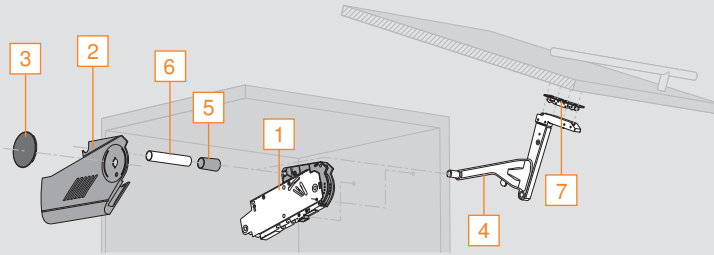


**Warning: Risk of injury
by arm assembly!**

- Do not push arm assembly down
- Remove arm assembly from mechanism before installing cabinet

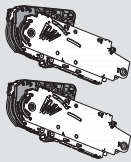


Required components



Step 2 – Select The Required Components

Lift mechanism set



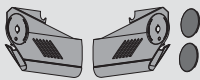
Set includes:

- 1** Lift mechanism (qty 2)
- #7 x 35 (1-3/8") wood screw (qty 10)

NOTE: For correct ordering of lift mechanism set, use the charts on the previous page

20S2A00.N5	20S2B00.N5	20S2C00.N5
20S2D00.N5	20S2E00.N5	20S2F00.N5
20S2G00.N5	20S2H00.N5	20S2I00.N5

Cover set



Set includes:

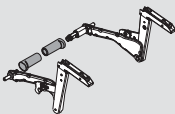
- 2** Right and left cover plate
- 3** Non-handed cover cap (qty 2)

Part no.

Cover set

20S8000.NA

Arm assembly set



Set includes:

- 4** Right and left arm assembly
- 5** Stabilizer rod cover cap (qty 2)

Part no.

Arm assembly set

20S3500.06

Round stabilizer rod



- 6** Round stabilizer rod

NOTE: Cabinets wider than 48" a stabilizer rod connector set is required, see **page 92**

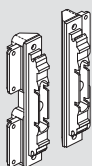
- Aluminum rod length **1061** (41-3/4"), cut to size
- Length = inside cabinet width minus **129** (5-1/16") for SERVO-DRIVE minus **164** (6-7/16")

Part no.

Round stabilizer rod

20Q1061UN

Narrow aluminum door hardware set



Set includes:

- 7** Narrow aluminum arm assembly mounting plate (qty 2)
- 699.110 – Aluminum screw for narrow aluminum lever arm mounting plate (qty 8)

Part no.

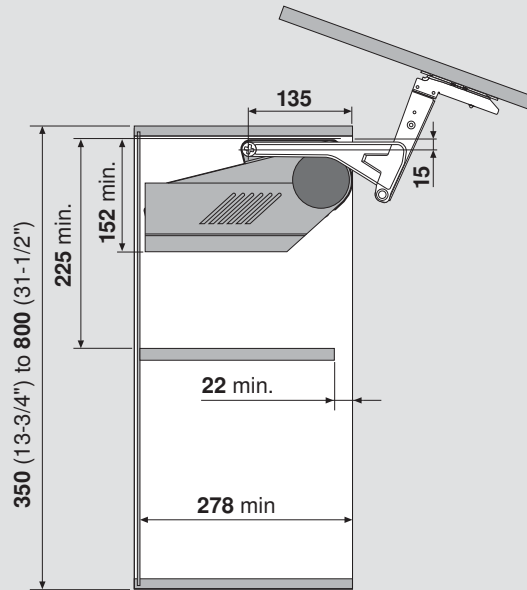
Narrow aluminum hardware set

20S4200A

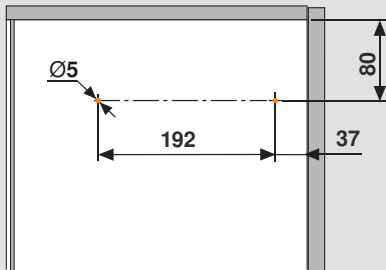
SERVO-DRIVE for AVENTOS available. See **page 96** for more information on SERVO-DRIVE for AVENTOS.

Frameless Application

Door and hardware clearance



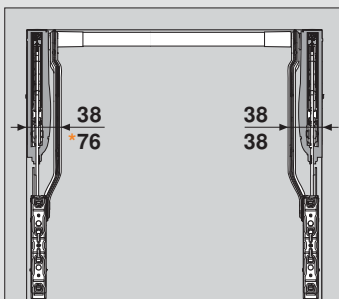
Bore for the locating pins



NOTE: Locating pin holes shown in orange

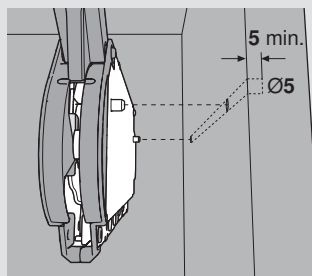
Lift mechanism clearance

*Clearance required for SERVO-DRIVE

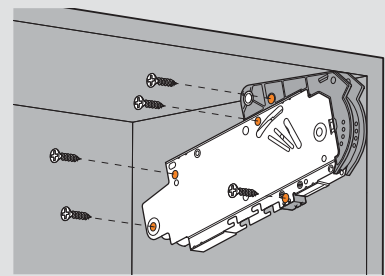


Lift mechanism positioning

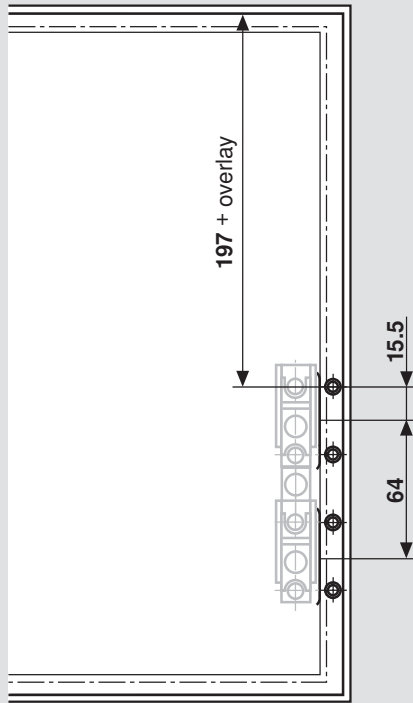
Two locating pins fit into Ø5 x 5 holes bored in the side of cabinet for proper positioning.



The included #7 x 35 (1-3/8") wood screws are required in the five holes marked in orange.



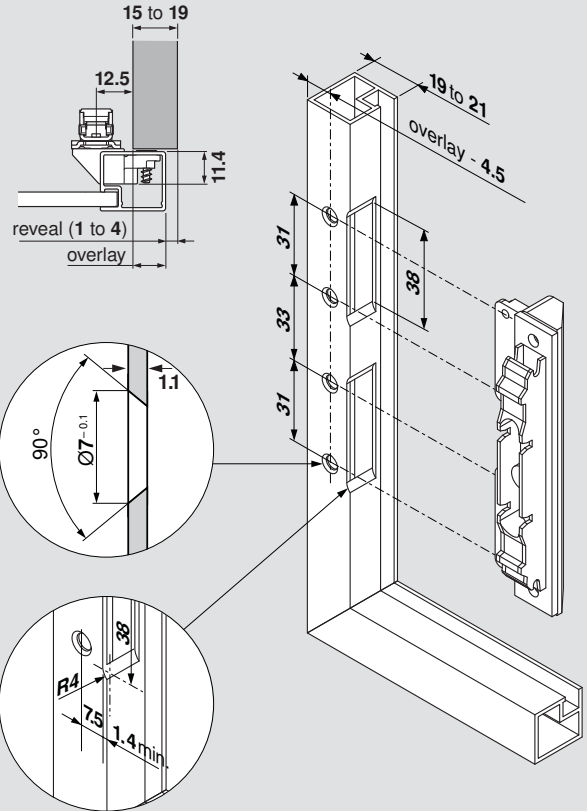
Arm assembly mounting plate location



Minimum 5 side reveal when adjacent to wall

NOTE: Attach mounting plate with four 669.110 screws provided

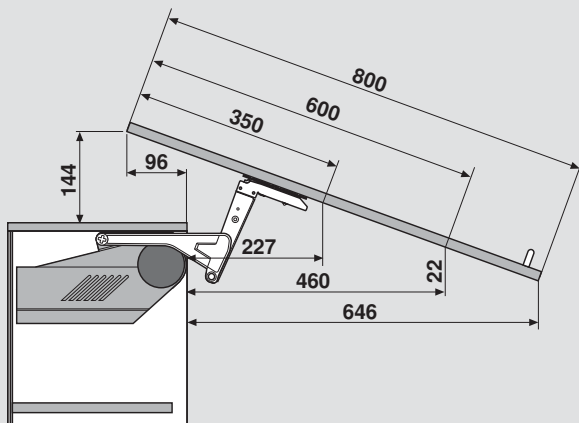
Arm assembly mounting plate



NOTE: When changing material thickness, adjust assembly dimensions accordingly

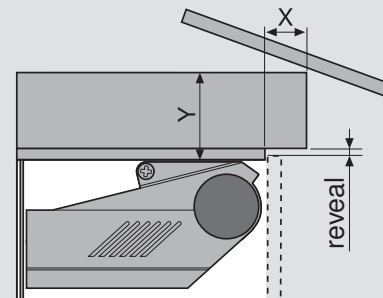
Door and Hardware Clearance

Door protrusion for common cabinet heights



NOTE: Based on 19 panel thickness and panel overlay

Crown molding clearance

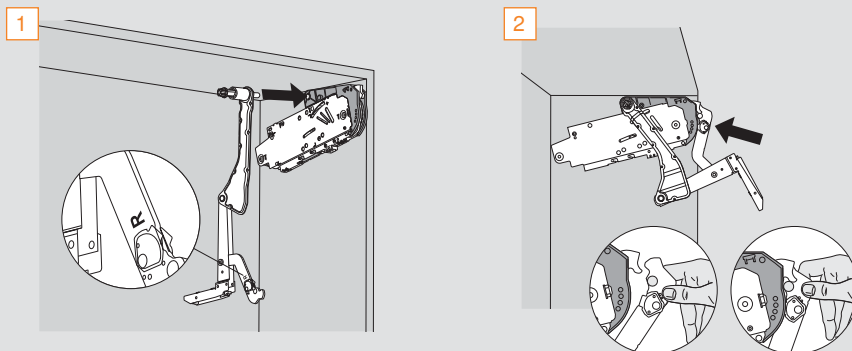


Reveal	Maximum X	Maximum Y
3 (1/8")	35 (1-3/8")	101 (4")
2 (1/16")	31 (1-1/4")	101 (4")
1.5 (1/16")	28 (1-1/8")	101 (4")

Attaching the arm assembly

Find the right and left arm assemblies and match them to the correct side of the cabinet.

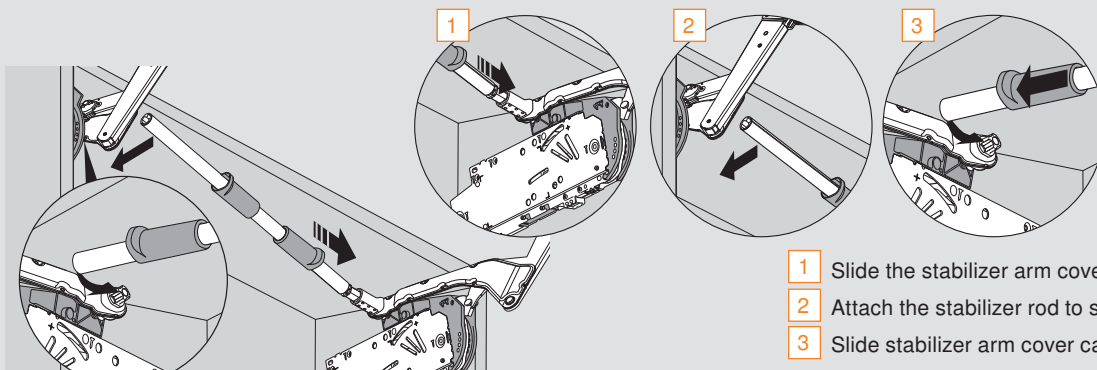
- 1 Attach the arm assembly to the lift mechanism as shown
- 2 Lift up on the arm assembly to lock into place



Attaching the stabilizer rod

Cut the stabilizer rod to fit the cabinet. Length = interior cabinet width minus **129** (5-1/16")

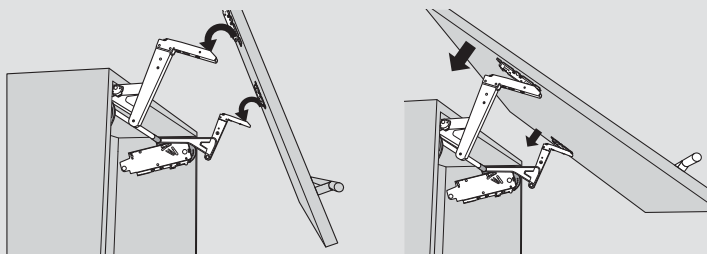
After cutting the rod to size follow steps 1, 2, and 3 below.



- 1 Slide the stabilizer arm cover caps onto the rod
- 2 Attach the stabilizer rod to spring loaded arm assembly
- 3 Slide stabilizer arm cover caps over rod on each end

Attaching the doors

Attach the door using the CLIP mechanism to the arm assembly



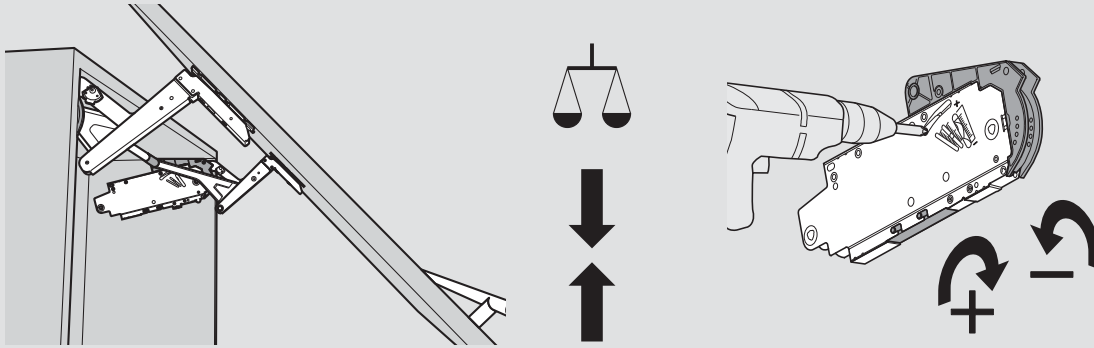
Warning: Risk of injury by arm assembly!

- Do not push arm assembly down arm down
- Remove arm assembly from mechanism before installing cabinet



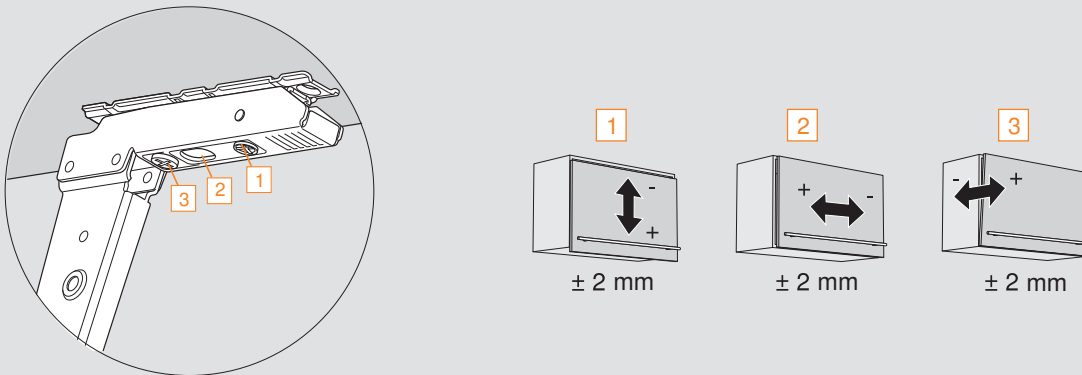
Adjusting the lift mechanism

Use a screw gun and a #2 x 2 POZI driver bit to adjust the lift mechanism to the desired tension (door weight balanced).



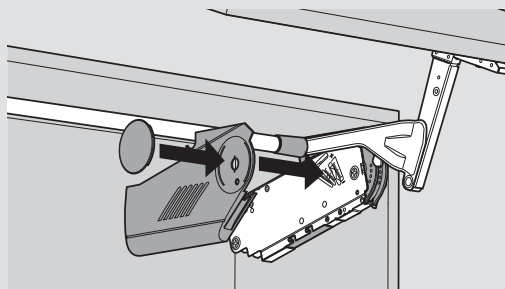
AVENTOS HS door adjustments

Use a POZI screwdriver to adjust cam adjustments for each of the three-dimensional door adjustments.



Attaching cover caps

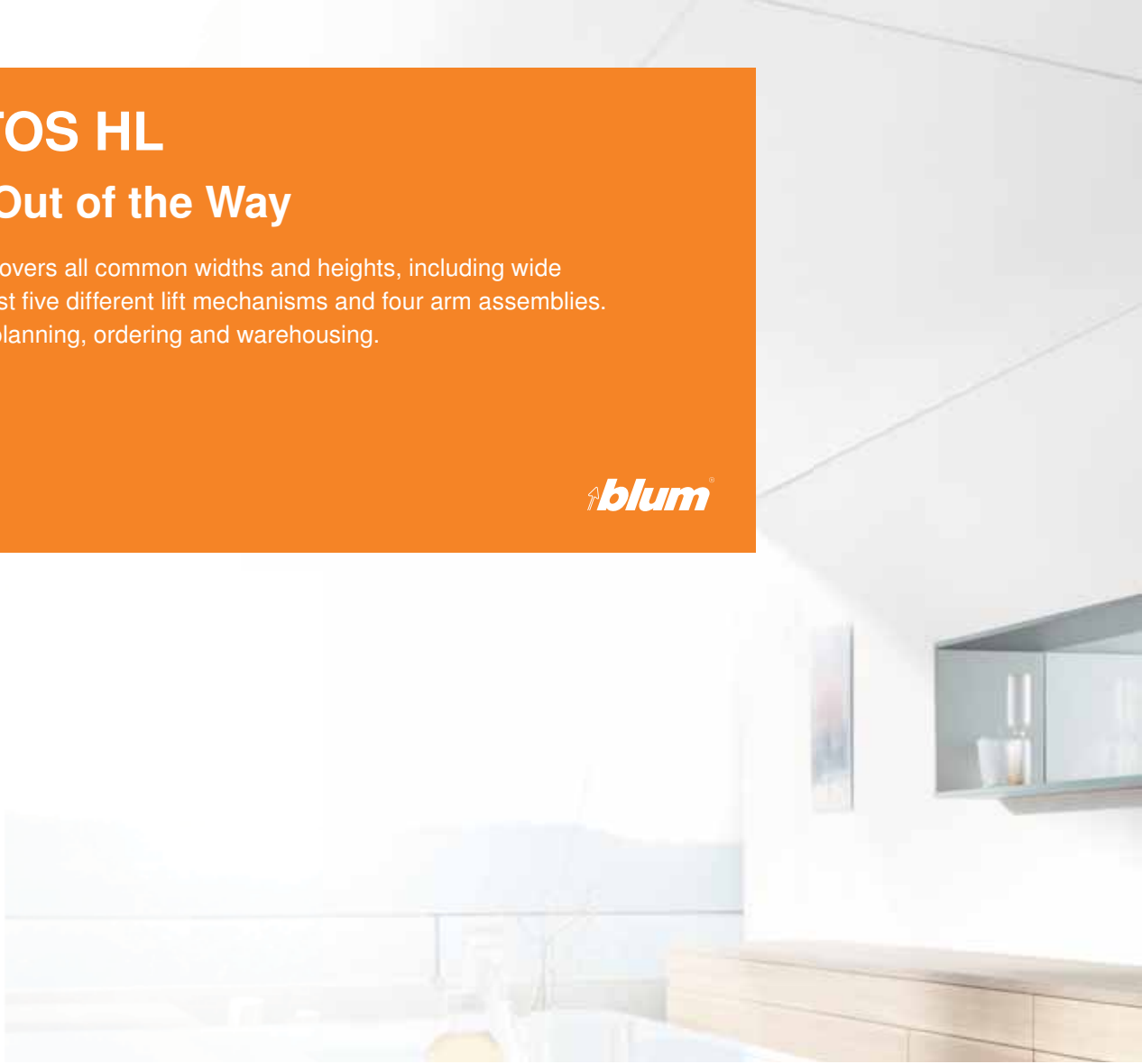
Place the left and right cover plates over the appropriate lift mechanisms and snap them in place.



AVENTOS HL

Up and Out of the Way

AVENTOS HL covers all common widths and heights, including wide cabinets with just five different lift mechanisms and four arm assemblies. This simplifies planning, ordering and warehousing.



Numerous Design Options

Because the AVENTOS HL opens parallel to the cabinet, it can be used in wall cabinets, in a pantry or below another AVENTOS cabinet. On the counter top it can be used for an appliance garage.



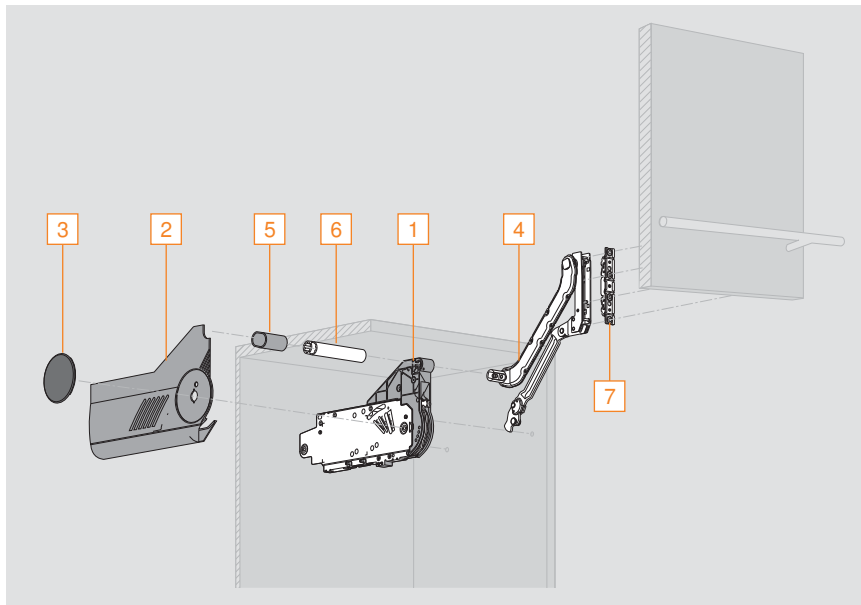
Easy Installation and Adjustment

The three-dimensional adjustment feature enables doors to be precisely aligned.



The Motion Inside

The amount of technology and components placed into each lift mechanism are what provide the unparalleled smooth operation of AVENTOS.



- Suited for wall cabinets and/or as an appliance garage application
- For both frameless and face frame application
- Cabinet height from **300** (11-13/16") to **580** (22-13/16")
- Cabinet width from **381** (15") to **1828** (72")
- Interior cabinet depth minimum of **278** (10-15/16")
- Closes silently and effortlessly with BLUMOTION
- Simple, virtually tool-free assembly and easy adjustment



Warning: Risk of injury by spring-loaded lever arm!

- Do not push lever arm down
- Secure lever arm before installing cabinet

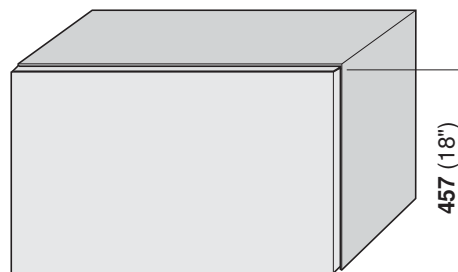


Step 1 – Determine The Required Hardware Based On Application

Find the required cabinet height in the first column. This will give you the required arm assembly. Continue right in that row to find the mechanism that works for the weight of your door.

Example:

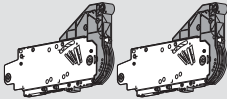
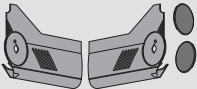
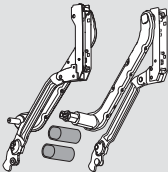
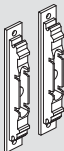
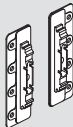
Cabinet height of **457** (18") = arm assembly 20L3800.06
Door weight of **10 lb 5 oz** = lift mechanism 20L2500.N5



Door weight including handle = **10 lb 5 oz**

Cabinet height	Min. opening required	Arm assembly	Lift mechanism (door weight – lb/oz)				
			20L2100.N5	20L2300.N5	20L2500.N5	20L2700.N5	20L2900.N5
11-13/16" – 13-3/4"	10-5/16"	20L3200.06	2 / 12 – 8 / 7	8 / 8 – 13 / 7	13 / 8 – 25 / 4	25 / 5 – 44 / 0	–
13-13/16" – 15-11/16"	12-5/16"	20L3500.06	2 / 12 – 4 / 10	4 / 11 – 10 / 2	10 / 3 – 18 / 10	18 / 11 – 28 / 4	28 / 5 – 44 / 0
15-3/4" – 21-5/8"	14-1/4"	20L3800.06	–	3 / 13 – 6 / 13	6 / 14 – 13 / 11	13 / 12 – 24 / 7	24 / 8 – 44 / 0
17-11/16" – 22-13/16"	16-1/4"	20L3900.06	–	2 / 3 – 3 / 4	3 / 5 – 10 / 6	10 / 7 – 19 / 3	19 / 4 – 36 / 5

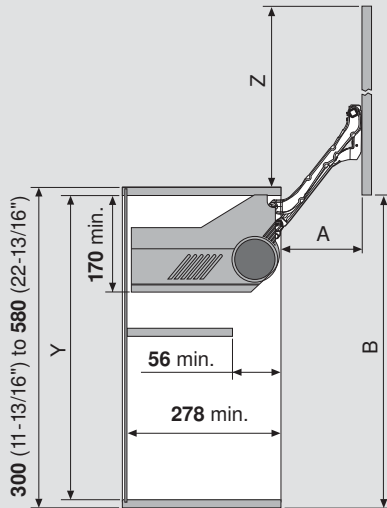
Step 2 – Select The Required Components

Lift mechanism set			
	Set includes: 1 Lift mechanism (qty 2) #7 x 35 (1-3/8") wood screw (qty 10)	NOTE: Trial application recommended when the required door weight is in a borderline area of lift mechanisms	
		Part no.	
		20L2100.N5	
		20L2300.N5	
		20L2500.N5	
		20L2700.N5	
		20L2900.N5	
Cover set			
	Set includes: 2 Right and left cover plate 3 Non-handed cover cap (qty 2)	Part no.	
		Cover set	
		20L8000.N1	
Arm assembly set			
	Set includes: 4 Right and left arm assembly 5 Stabilizer rod cover cap (qty 2)	Cabinet height range	
		Part no.	
		300 (11-13/16") – 349 (13-3/4")	
		350 (13-13/16") – 399 (15-13/16")	
		400 (15-3/4") – 550 (21-5/8")	
		450 (17-11/16") – 580 (22-13/16")	
		20L3200.06	
		20L3500.06	
		20L3800.06	
		20L3900.06	
Oval stabilizer rod			
	6 Oval stabilizer rod NOTE: Cabinets wider than 48" a stabilizer rod connector set is required, see page 92	# Aluminum rod length 1061 (41-3/4"), cut to size # Length = inside cabinet width minus 129 (5-1/16") for SERVO-DRIVE minus 164 (6-7/16")	
		Part no.	
		Oval stabilizer rod	
		20Q1061UA	
Wood or wide aluminum door hardware set			
	Set includes: 7 Arm assembly mounting plate (qty 2)	Part no.	
		Wood or wide aluminum hardware set	
		Installation screw for wood doors	
		Installation screw for wide aluminum doors	
		20S4200	
		606N or 606P	
		7072A	
Mounting plate with bracket set			
	Set includes: # Right and left mounting plate with bracket	For use with large overlay five-piece doors	
		Part no.	
		Mounting plate with bracket set	
		20S4F01	

SERVO-DRIVE for AVENTOS available. See **page 96** for more information on SERVO-DRIVE for AVENTOS.

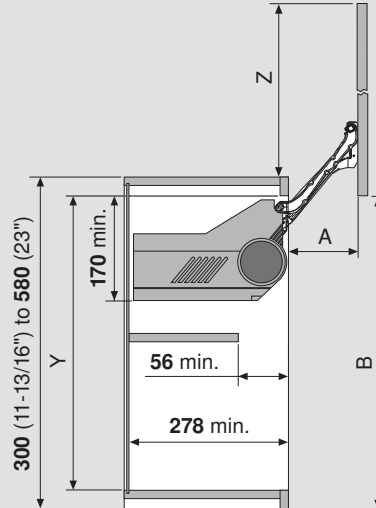
Frameless Application

Door and hardware clearance



Face Frame Application

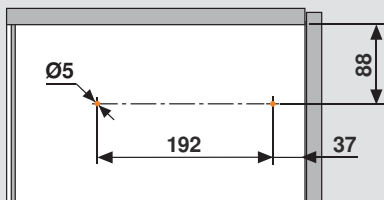
Door and hardware clearance



Arm assembly	Cabinet height range	Minimum Y	A	B	Z
20L3200.06	300 (11-13/16") – 349 (13-3/4")	262	114	257*	257*
20L3500.06	350 (13-13/16") – 399 (15-13/16")	312	146.5	345*	345*
20L3800.06	400 (15-3/4") – 550 (21-5/8")	362	178.5	433*	433*
20L3900.06	450 (17-11/16") – 580 (22-13/16")	412	211	522*	522*

*Based on top and bottom reveals of 0 – B and Z dimensions can be ± 15 due to range of adjustment, overpush and accuracy of installation

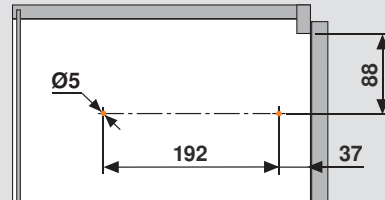
Bore for the locating pins



NOTE: Locating pin holes shown in orange

Bore for the locating pins

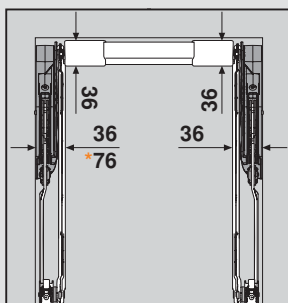
See **page 89** for optional face frame mounting bracket or block-out side flush with frame.



NOTE: Locating pin holes shown in orange

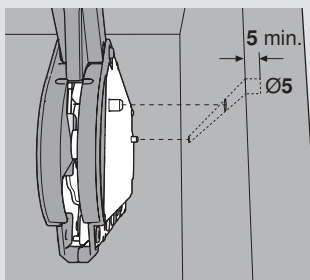
Lift mechanism clearance

*Clearance required for SERVO-DRIVE

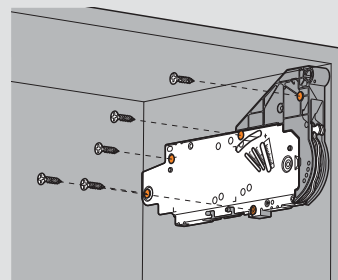


Lift mechanism positioning

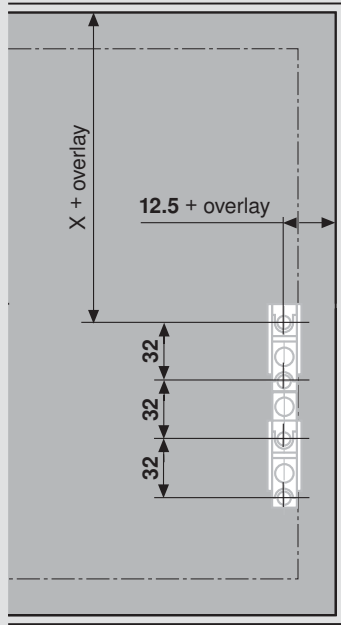
Two locating pins fit into $\text{Ø}5 \times 5$ holes bored in the side of cabinet for proper positioning.



The included #7 x $35 (1-3/8")$ wood screws are required in the five holes marked in orange.



Arm assembly mounting plate location



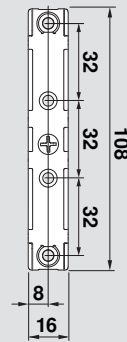
Minimum 5 side reveal when adjacent to wall

NOTE: Dimensions same for frameless and face frame applications. Attach mounting plate with four 606N or 606P wood screw for wood doors or 7072A for wide aluminum doors

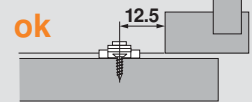
Arm assembly	X
20L3200.06	153
20L3500.06	203
20L3800.06	253
20L3900.06	303

Arm assembly mounting plate choices

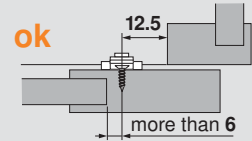
Mounting plate



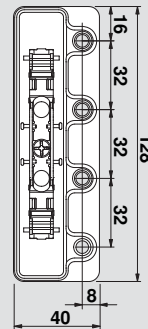
Slab door



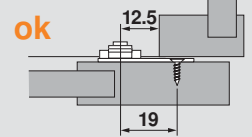
Five-piece door



Mounting plate with bracket for large overlay five-piece doors



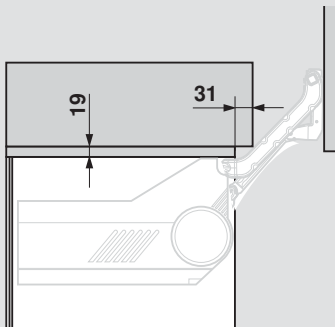
Five-piece door



NOTE: Hole locations offset by 19 (example: 12.5 + overlay - 19 = hole location from side)

Door and Hardware Clearance

Decorative molding clearance

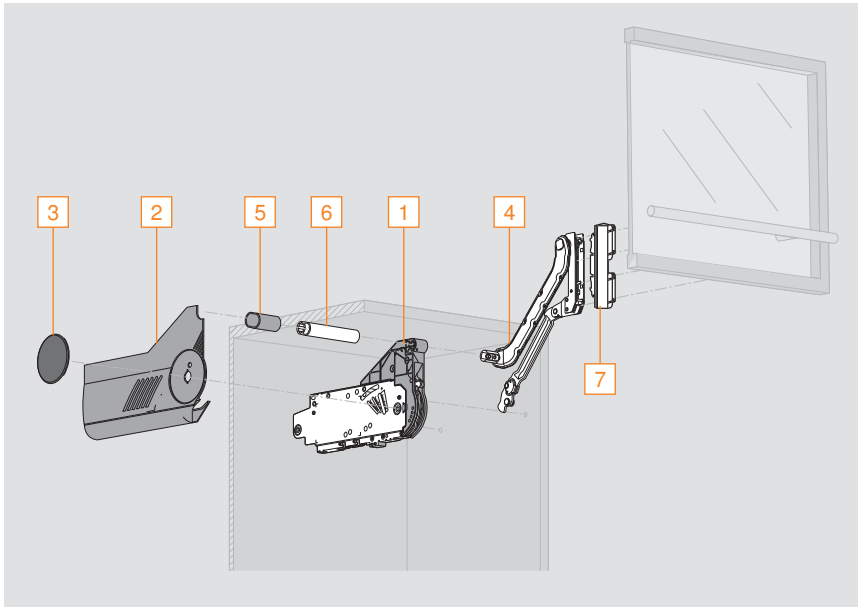


Follow the assembly instructions on **page 42**

AVENTOS HL



Ordering Information for Narrow Aluminum

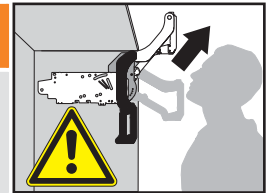


- Suited for wall cabinets and/or as an appliance garage application
- For both frameless and face frame applications
- Cabinet height from **300** (11-13/16") to **580** (22-13/16")
- Cabinet width from **381** (15") to **1828** (72")
- Interior cabinet depth minimum of **278** (10-15/16")
- Closes silently and effortlessly with BLUMOTION
- Simple, virtually tool-free assembly and easy adjustment



Warning: Risk of injury by spring-loaded lever arm!

- Do not push lever arm down
- Secure lever arm before installing cabinet



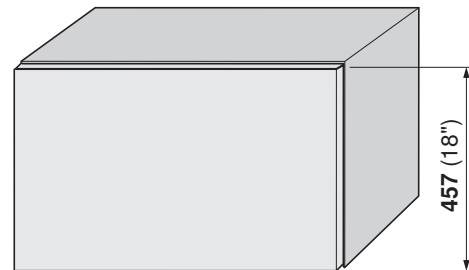
Step 1 – Determine The Required Hardware Based On Application

Find the required cabinet height in the first column. This will give you the required arm assembly. Continue right in that row to find the mechanism that works for the weight of your door.

Example:

Cabinet height of **457** (18") = arm assembly 20L3800.06

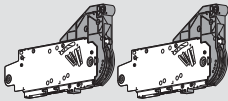
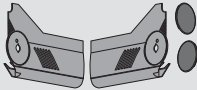
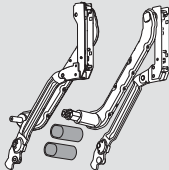
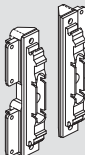
Door weight of **10 lb 5 oz** = lift mechanism 20L2500.N5



Door weight including handle = **10 lb 5 oz**

Cabinet height	Min. opening required	Arm assembly	Lift mechanism (door weight – lb/oz)				
			20L2100.N5	20L2300.N5	20L2500.N5	20L2700.N5	20L2900.N5
11-13/16" – 13-3/4"	10-5/16"	20L3200.06	2 / 12 – 8 / 7	8 / 8 – 13 / 7	13 / 8 – 25 / 4	25 / 5 – 44 / 0	–
13-13/16" – 15-11/16"	12-5/16"	20L3500.06	2 / 12 – 4 / 10	4 / 11 – 10 / 2	10 / 3 – 18 / 10	18 / 11 – 28 / 4	28 / 5 – 44 / 0
15-3/4" – 21-5/8"	14-1/4"	20L3800.06	–	3 / 13 – 6 / 13	6 / 14 – 13 / 11	13 / 12 – 24 / 7	24 / 8 – 44 / 0
17-11/16" – 22-13/16"	16-1/4"	20L3900.06	–	2 / 3 – 3 / 4	3 / 5 – 10 / 6	10 / 7 – 19 / 3	19 / 4 – 36 / 5

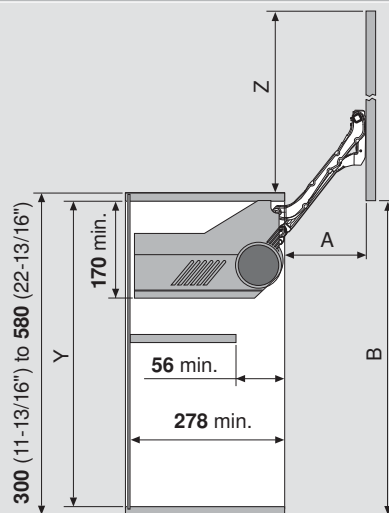
Step 2 – Select The Required Components

Lift mechanism set			
	Set includes: 1 Lift mechanism (qty 2) ■ #7 x 35 (1-3/8") wood screw (qty 10)	NOTE: Trial application recommended when the required door weight is in a borderline area of lift mechanisms	
		Part no.	
		20L2100.N5	
		20L2300.N5	
		20L2500.N5	
		20L2700.N5	
		20L2900.N5	
Cover set			
	Set includes: 2 Right and left cover plate 3 Non-handed cover cap (qty 2)		
		Part no.	
		Cover set	20L8000.N1
Arm assembly set			
	Set includes: 4 Right and left arm assembly 5 Stabilizer rod cover cap (qty 2)	Cabinet height range	
		Part no.	
		300 (11-13/16") – 349 (13-3/4")	20L3200.06
		350 (13-13/16") – 399 (15-13/16")	20L3500.06
		400 (15-3/4") – 550 (21-5/8")	20L3800.06
450 (17-11/16") – 580 (22-13/16")	20L3900.06		
Oval stabilizer rod			
	6 Oval stabilizer rod NOTE: Cabinets wider than 48" a stabilizer rod connector set is required, see page 92	■ Aluminum rod length 1061 (41-3/4"), cut to size	
		■ Length = inside cabinet width minus 129 (5-1/16") for SERVO-DRIVE minus 164 (6-7/16")	
		Part no.	
		Oval stabilizer rod	20Q1061UA
Narrow aluminum door hardware set			
	Set includes: ■ Narrow aluminum arm mounting plate (qty 2) 7 699.110 – Aluminum screw for narrow aluminum lever arm mounting plate (qty 8)		
		Part no.	
		Narrow aluminum hardware set	20S4200A

SERVO-DRIVE for AVENTOS available. See **page 96** for more information on SERVO-DRIVE for AVENTOS.

Frameless Application

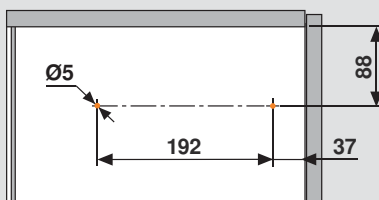
Door and hardware clearance



Arm assembly	Cabinet height range	Minimum Y	A	B	Z
20L3200.06	300 (11-13/16") – 349 (13-3/4")	262	114	257*	257*
20L3500.06	350 (13-13/16") – 399 (15-13/16")	312	146.5	345*	345*
20L3800.06	400 (15-3/4") – 550 (21-5/8")	362	178.5	433*	433*
20L3900.06	450 (17-11/16") – 580 (22-13/16")	412	211	522*	522*

*Based on top and bottom reveals of 0 – B and Z dimensions can be ± 15 due to range of adjustment, overpush and accuracy of installation

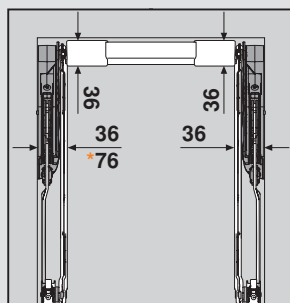
Bore for the locating pins



NOTE: Locating pin holes shown in orange

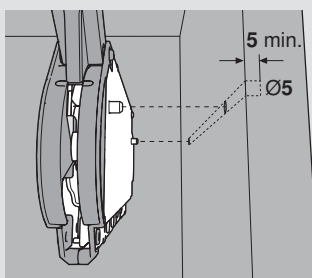
Lift mechanism clearance

*Clearance required for SERVO-DRIVE

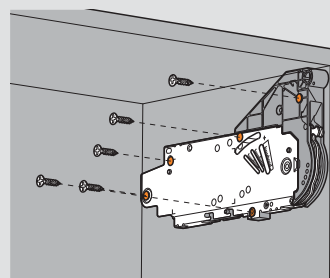


Lift mechanism positioning

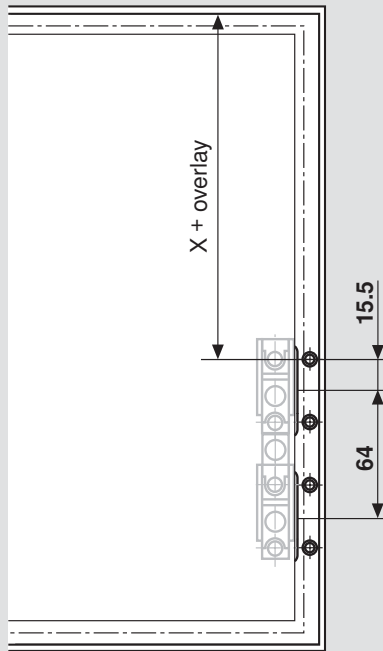
Two locating pins fit into Ø5 x 5 holes bored in the side of cabinet for proper positioning.



The included #7 x 35 (1-3/8") wood screws are required in the five holes marked in orange.



Arm assembly mounting plate location

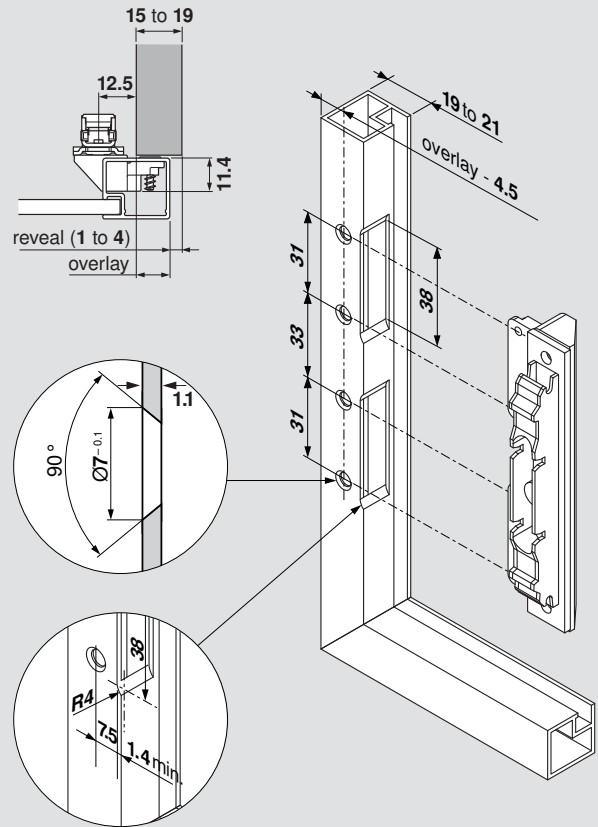


Minimum 5 side reveal when adjacent to wall

NOTE: Attach mounting plate with four 699.110 screws provided

Arm assembly	X
20L3200.06	153
20L3500.06	203
20L3800.06	253
20L3900.06	303

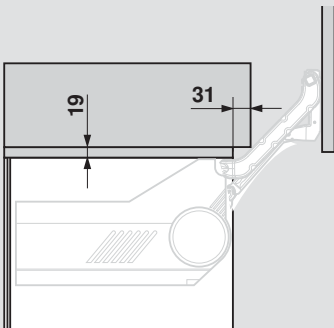
Hinge and mounting plate attachment



NOTE: When changing material thickness, adjust assembly dimensions accordingly

Door and Hardware Clearance

Decorative molding clearance

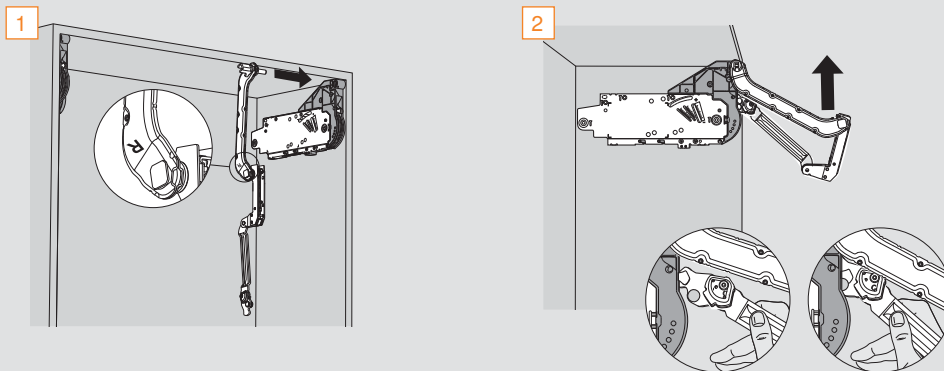


Follow the assembly instructions on **page 42**

Attaching the arm assembly

Find the right and left arm assemblies and match them to the correct side of the cabinet.

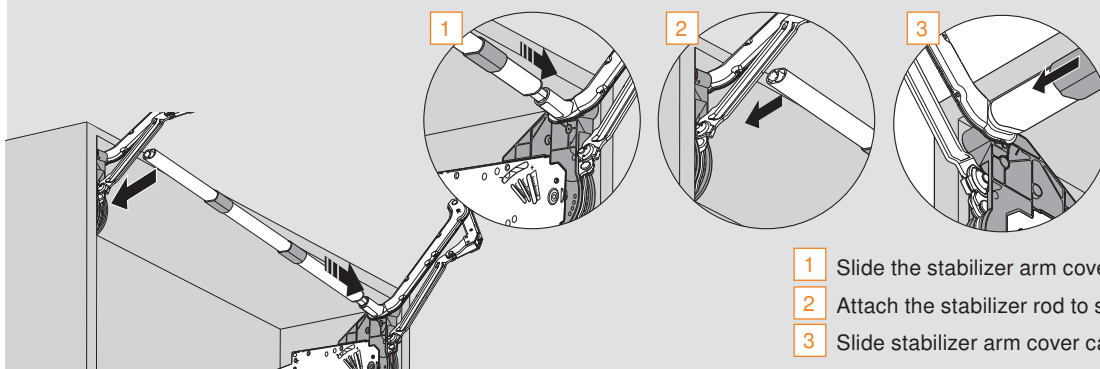
- 1 Attach the arm assembly to the lift mechanism as shown
- 2 Lift up on the arm assembly to lock into place



Attaching the stabilizer rod

Cut the stabilizer rod to fit the cabinet. Length = interior cabinet width minus **129** (5-1/16").

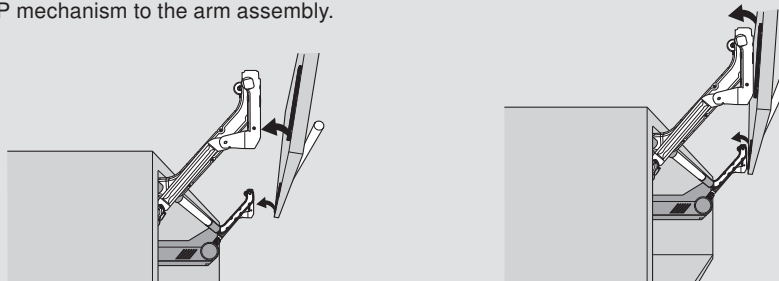
After cutting the rod to size follow steps 1, 2, and 3 below.



- 1 Slide the stabilizer arm cover caps onto the rod
- 2 Attach the stabilizer rod to spring loaded arm assembly
- 3 Slide stabilizer arm cover caps over rod on each end

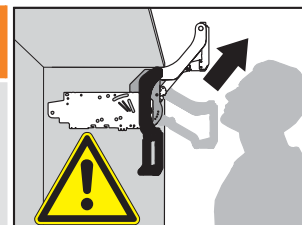
Attaching AVENTOS HL doors

Attach the door using the CLIP mechanism to the arm assembly.



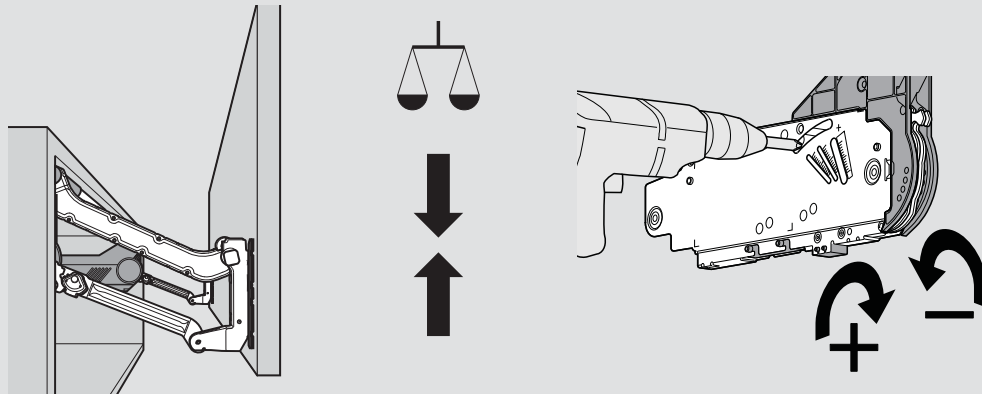
Warning: Risk of injury by spring-loaded arm assembly!

- Do not push arm assembly down
- Remove arm assembly from mechanism before installing cabinet



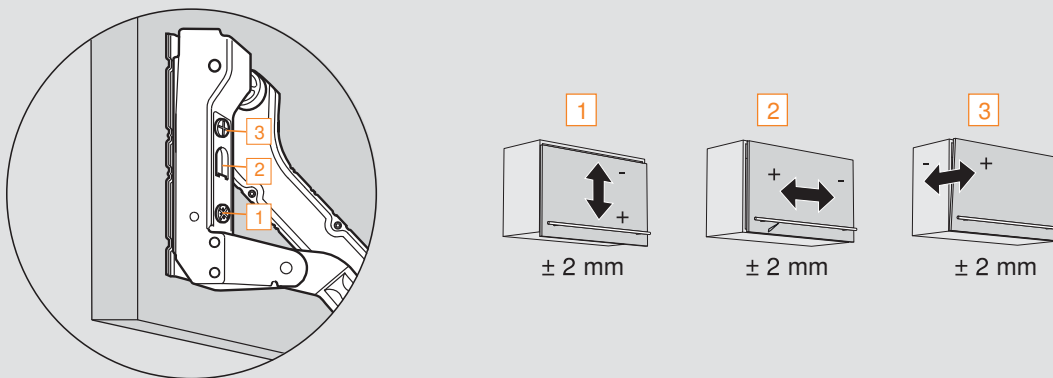
Adjusting the lift mechanism

Use a screw gun and a #2 x 2 POZI driver bit to adjust the lift mechanism to the desired tension (door weight balanced).



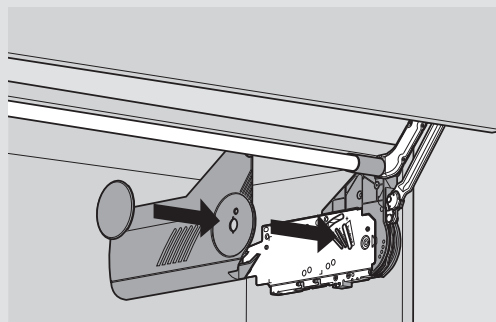
AVENTOS HL door adjustments

Use a POZI screwdriver to adjust cam adjustments for each of the three-dimensional door adjustments.



Attaching cover caps

Place the left and right cover plates over the appropriate lift mechanisms and snap them in place.



AVENTOS HK

A Complete View of the Cabinet Interior

AVENTOS HK program has only four lift mechanisms and covers all common door widths and heights. This simplifies planning, ordering and warehousing.



Numerous Design Options

AVENTOS HK can be used in wall cabinets, in a pantry or above a refrigerator or other appliance.



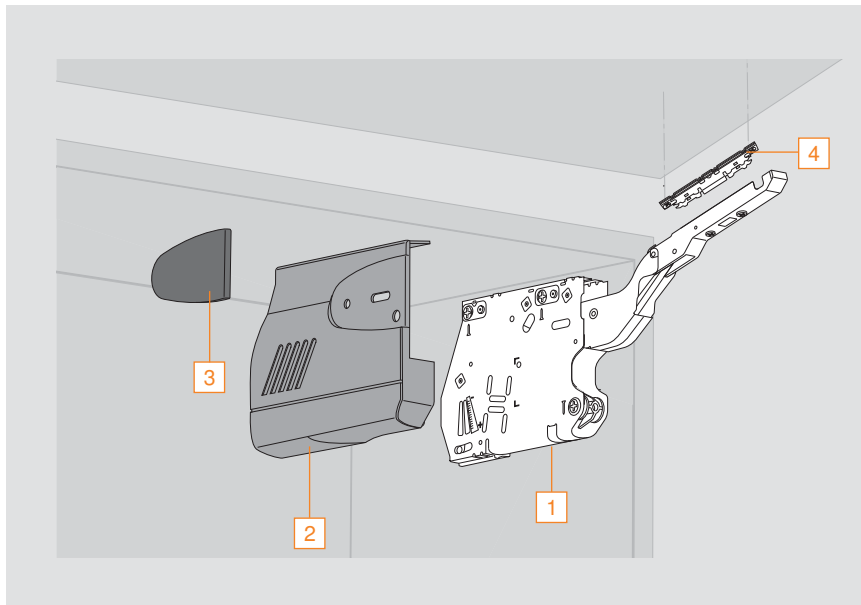
Easy Installation and Adjustment

The three-dimensional adjustment feature enables doors to be precisely aligned.



The Motion Inside

The amount of technology and components placed into each lift mechanism are what provide the unparalleled smooth operation of AVENTOS.

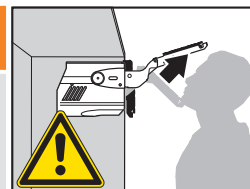


- Suited for wall cabinets and/or above a pantry or refrigerator
- Cabinet height from **300** (11-13/16") to **610** (24")
- Cabinet width from **381** (15") to **1828** (72")
- Interior cabinet depth minimum of **210** (8-1/4")
- Closes silently and effortlessly with BLUMOTION
- Simple, virtually tool-free assembly and easy adjustment



Warning: Risk of injury by spring-loaded lever arm!

- Do not push lever arm down
- Secure lever arm before installing cabinet



Step 1 – Determine The Power Factor For The Application



Power factor = cabinet height (inch) x door weight* (lb)

Determine power factor

To select the correct lift mechanism for a given application, the power factor must first be calculated by using the formula below. Use the table at the bottom of the page to convert ounces into decimal form for easy calculation.

Power factor = cabinet height multiplied by door weight*

Example:

Cabinet height: 20" (within possible range)

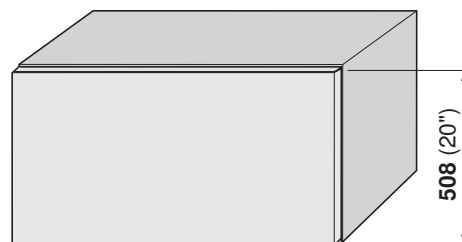
Door weight including twice the handle weight = 13 lb 14 oz (14 oz = .9 lb see chart below)

Power factor = 20 x 13.9

Power factor = 278

A power factor of 278 requires lift mechanism 20K2700.N5

*Including twice the handle weight



Door weight + twice handle weight = **13 lb 14 oz**

NOTE: AVENTOS planning tools available at blum.com/planning

Weight conversion chart

oz	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
lb	.1	.1	.2	.3	.3	.4	.4	.5	.6	.6	.7	.8	.8	.9	.9

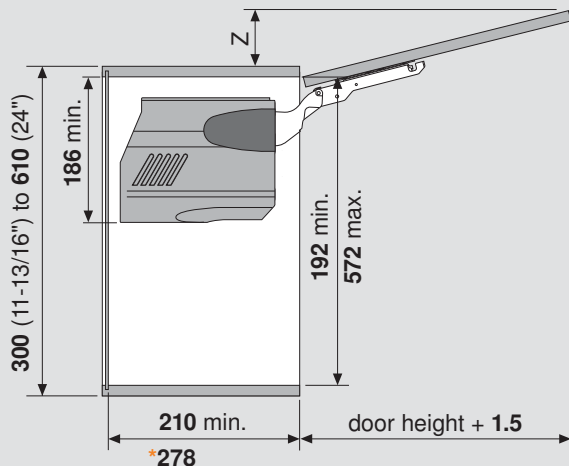
Step 2 – Select The Required Components

Lift mechanism set			
	Set includes:		NOTE: Trial application recommended when the required power factor is in a borderline area of lift mechanisms
	1	Lift mechanism (qty 2)	
	—	#7 x 35 (1-3/8") wood screw (qty 6)	
		Power factor range	Opening angle
		43 – 99	107°
		100 – 174	107°
		175 – 349	107°
		350 – 792	100°
			Part no.
			20K2300.N5
			20K2500.N5
			20K2700.N5
			20K2900.N5
Cover set			
	Set includes:		
	2	Right and left cover plate	
	3	Non-handed cover cap (qty 2)	
			Part no.
		Cover set	20K8000.NA
Wood or wide aluminum door hardware set			
	Set includes:		
	4	Arm assembly mounting plate (qty 2)	
			Part no.
		Wood or wide aluminum hardware set	20S4200
		Installation screw for wood doors	606N or 606P
		Installation screw for wide aluminum doors	7072A
Mounting plate with bracket set			
	Set includes:		
	—	Mounting plate with bracket (qty 2)	
			Part no.
		Mounting plate with bracket set	20S4F01

SERVO-DRIVE for AVENTOS available. See **page 96** for more information on SERVO-DRIVE for AVENTOS.

Frameless Application

Door and hardware clearance

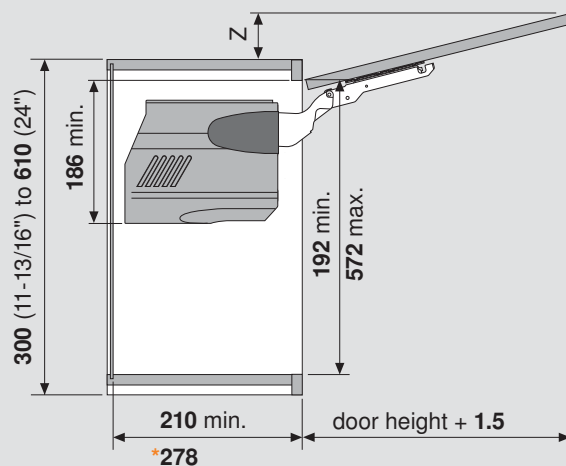


*Clearance required for SERVO-DRIVE

Z = door height x .29 minus 23 + door thickness

Face Frame Application

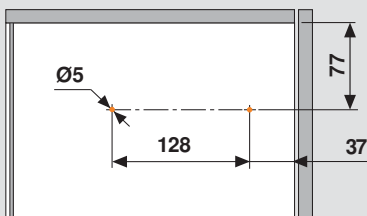
Door and hardware clearance



*Clearance required for SERVO-DRIVE

Z = door height x .29 minus 14.5 + door thickness

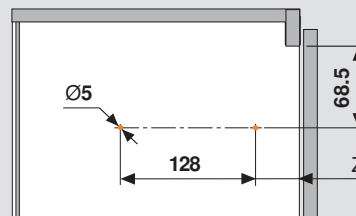
Bore for the locating pins



NOTE: Locating pin holes shown in orange

Bore for the locating pins

See **page 89** for optional face frame mounting bracket or block-out side flush with frame.

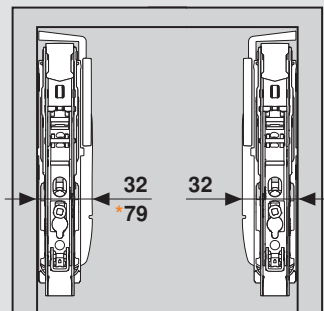


NOTE: Locating pin holes shown in orange

Overlay	up to 28	32	35
Z	37	35	33

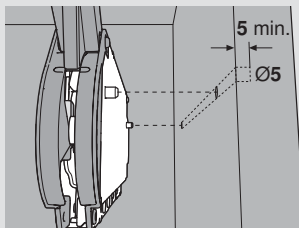
Lift mechanism clearance

*Clearance required for SERVO-DRIVE

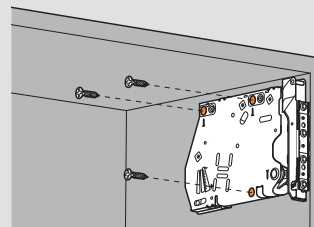


Lift mechanism positioning

Two locating pins fit into Ø5 x 5 holes bored in the side of cabinet for proper positioning.

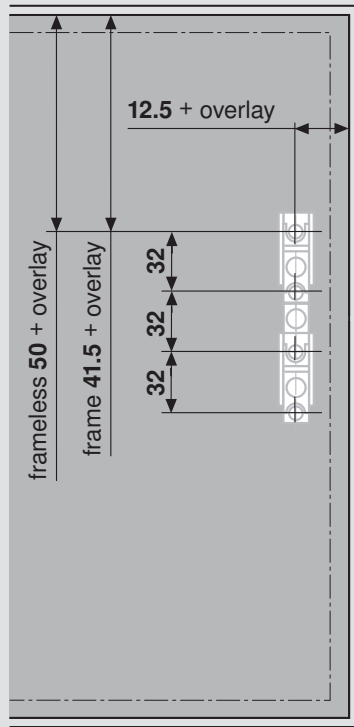


The included #7 x 35 (1-3/8") wood screws are required in the three holes marked in orange.



Refer to **page 88** for angle restriction clip options

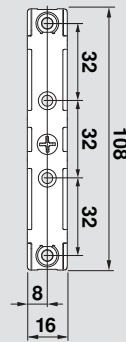
Arm assembly mounting plate location



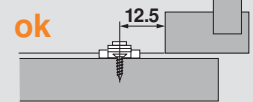
NOTE: Attach mounting plate with four 606N or 606P wood screw for wood doors or 7072A for wide aluminum doors

Arm assembly mounting plate choices

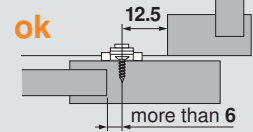
Mounting plate



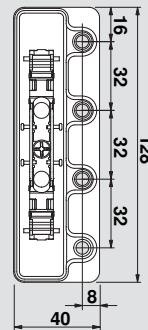
Slab door



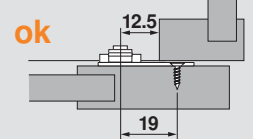
Five-piece door



Mounting plate with bracket for large overlay five-piece doors



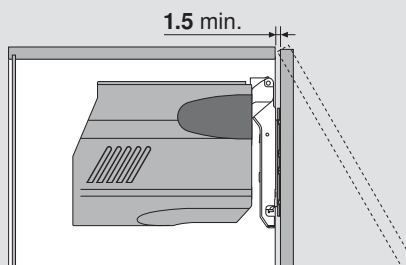
Five-piece door



NOTE: Hole locations offset by 19 (example: 12.5 + overlay - 19 = hole location from side)

Door and Hardware Clearance

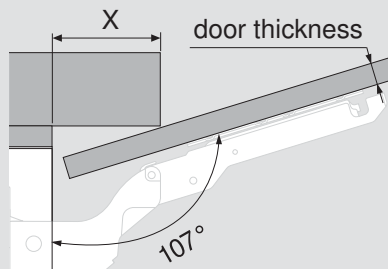
Minimum gap



NOTE: Min gap assumes door radius of 1

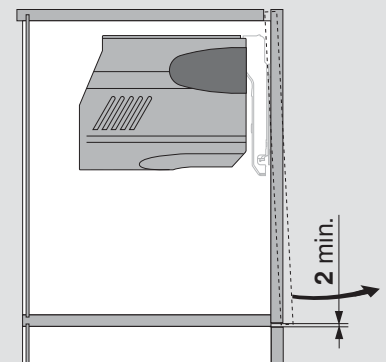
Overlay	up to 28	32	35
gap	1.5	4	5

Decorative molding clearance

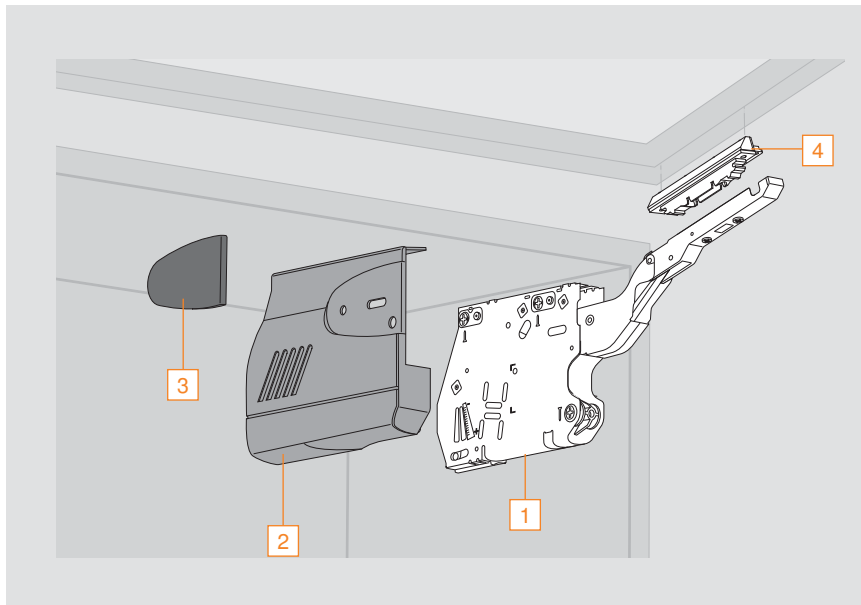


Door thickness	16	19	22	26
maximum X	70	59	49	35

Minimum bottom reveal



Follow the assembly instructions on **page 56**

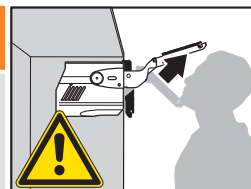


- Suited for wall cabinets and/or above a pantry or refrigerator
- Cabinet height from **300** (11-13/16") to **610** (24")
- Cabinet width from **381** (15") to **1828** (72")
- Interior cabinet depth minimum of **210** (8-1/4")
- Closes silently and effortlessly with BLUMOTION
- Simple, virtually tool-free assembly and easy adjustment



Warning: Risk of injury by spring-loaded lever arm!

- Do not push lever arm down
- Secure lever arm before installing cabinet



Step 1 – Determine The Power Factor For The Application



Power factor = cabinet height (inch) x door weight* (lb)

Determine power factor

To select the correct lift mechanism for a given application, the power factor must first be calculated by using the formula below. Use the table at the bottom of the page to convert ounces into decimal form for easy calculation.

Power factor = cabinet height multiplied by door weight*

Example:

Cabinet height: 20" (within possible range)

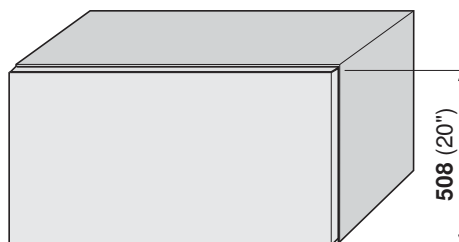
Door weight including twice the handle weight = 13 lb 14 oz (14 oz = .9 lb see chart below)

Power factor = 20 x 13.9

Power factor = 278

A power factor of 278 requires lift mechanism 20K2700.N5

*Including twice the handle weight



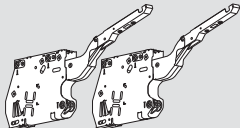
Door weight + twice handle weight = **13 lb 14 oz**

NOTE: AVENTOS planning tools available at blum.com/planning

Weight conversion chart

oz	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
lb	.1	.1	.2	.3	.3	.4	.4	.5	.6	.6	.7	.8	.8	.9	.9

Step 2 – Select The Required Components

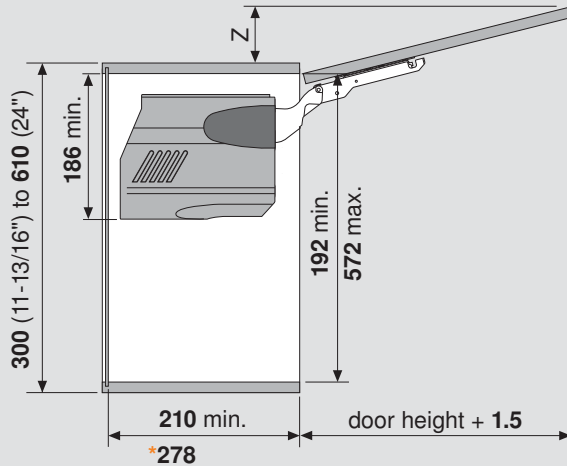
Lift mechanism set				
	Set includes: 1 Lift mechanism (qty 2) ■ #7 x 35 (1-3/8") wood screw (qty 6)	NOTE: Trial application recommended when the required power factor is in a borderline area of lift mechanisms		
		Power factor range	Opening angle	Part no.
		43 – 99	107°	20K2300.N5
		100 – 174	107°	20K2500.N5
		175 – 349	107°	20K2700.N5
350 – 792	100°	20K2900.N5		

Cover set			
	Set includes: 2 Right and left cover plate 3 Non-handed cover cap (qty 2)		
Part no.			
Cover set	20K8000.NA		
Narrow aluminum door hardware set			
	Set includes: 4 Arm assembly mounting plate (qty 2) ■ 699.110 – Aluminum screw for narrow aluminum lever arm mounting plate (qty 8)		
Part no.			
Narrow aluminum door hardware set		20S4200A	

SERVO-DRIVE for AVENTOS available. See **page 96** for more information on SERVO-DRIVE for AVENTOS.

Door and Hardware Clearance and Positioning

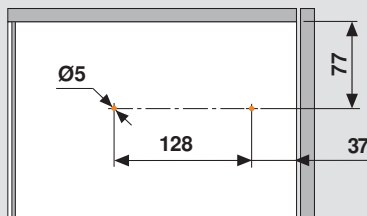
Door and hardware clearance



*Clearance required for SERVO-DRIVE

$Z = \text{door height} \times .29 \text{ minus } 23 + \text{door thickness}$

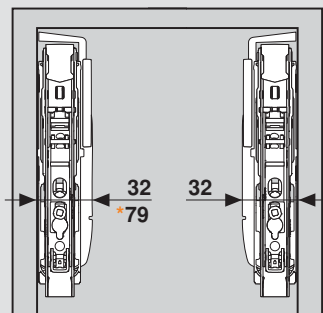
Bore for the locating pins



NOTE: Locating pin holes shown in orange

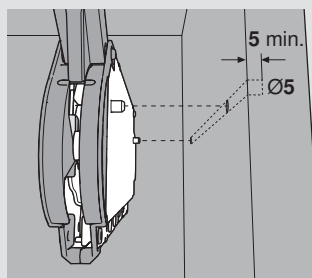
Lift mechanism clearance

*Clearance required for SERVO-DRIVE

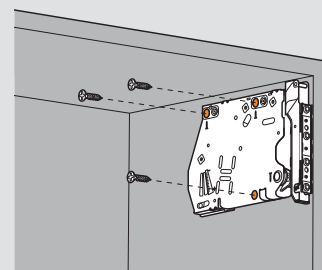


Lift mechanism positioning

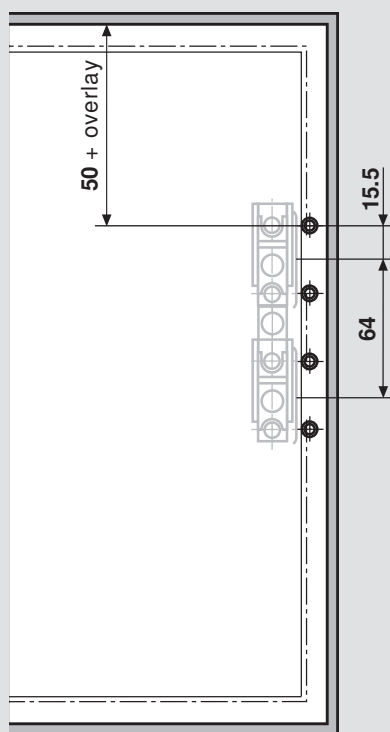
Two locating pins fit into Ø5 x 5 holes bored in the side of cabinet for proper positioning.



The included #7 x 35 (1-3/8") wood screws are required in the three holes marked in orange.

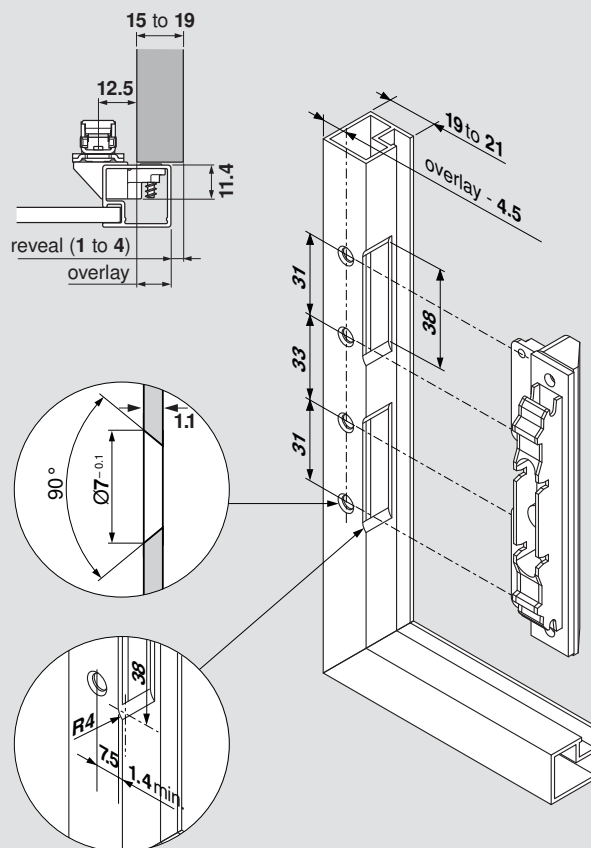


Telescopic arm mounting plate location



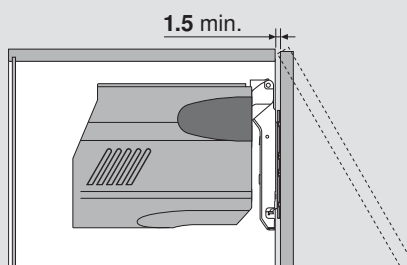
NOTE: Three hinges are required for cabinet widths over **1219 (48")** or 26.5 lb combined door weight

Hinge and mounting plate attachment



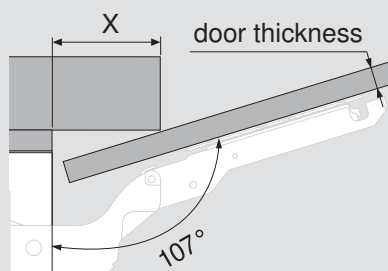
Door and Hardware Clearance

Minimum gap



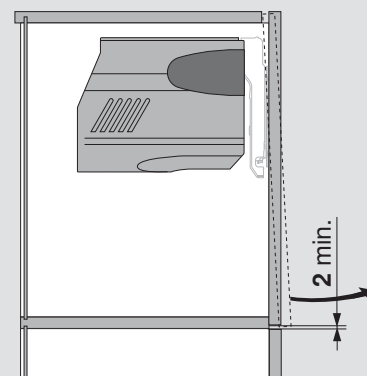
NOTE: Min gap assumes door radius of 1

Decorative molding clearance



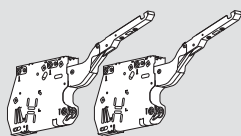
Door thickness	16	19	22	26
maximum X	70	59	49	35

Minimum bottom reveal



Follow the assembly instructions on **page 56**

Lift mechanism set



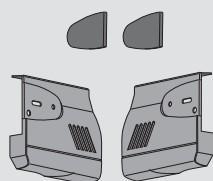
Set includes:

- Lift mechanism (qty 2)
- #7 x 35 mm (1-3/8") wood screw (qty 10)

NOTE: Trial application recommended when the required power factor is in a borderline area of lift mechanisms.

Power factor	Opening angle	Part no.
43 – 99	107°	20K2300TNA
100 – 174	107°	20K2500TNA
175 – 349	107°	20K2700TNA
350 – 792	100°	20K2900TNA

Cover set

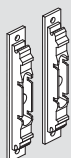


Set includes:

- Right and left cover plate
- Non-handed cover cap (qty 2)

Part no.
Cover set
20K8000.NA

Wood or wide aluminum door hardware set



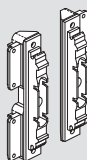
Set includes:

- Arm assembly mounting plate (qty 2)

Part no.
Wood or wide aluminum hardware set
20S4200
Installation screw for wood doors
606N or 606P
Installation screw for wide aluminum doors
7072A

NOTE: Refer to **page 48–49** for installation specifications

Narrow aluminum door hardware set



Set includes:

- Arm assembly mounting plate (qty 2)
- 669.110 aluminum screw for narrow aluminum lever arm mounting plate (qty 8)

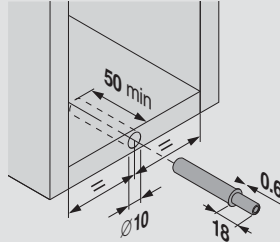
Part no.
Narrow aluminum door hardware set
20S4200A

NOTE: Refer to **page 52–53** for installation specifications

TIP-ON set for standard doors



Use of Screw-on catch plate required for all applications



- Nylon gray unit with magnet tip
- Adjustment range +4 mm to -1 mm
- For door heights up to **400** (15-3/4")
- Works for overlay and inset applications
- Can be bored into the panel or used with an adapter plate

Set includes:

- TIP-ON unit
- Self-adhesive catch plate
- Screw-on catch plate
- Wood screw

Part no.

NOTE: Due to various door weights and sizes, trial application recommended

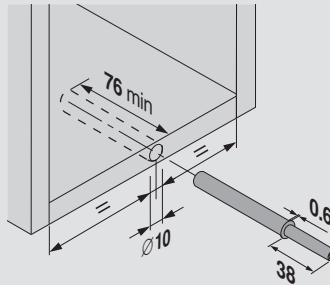
Standard door set

956.1004

TIP-ON set for large doors



Use of Screw-on catch plate required for all applications



- Nylon gray unit with magnet tip
- Adjustment range +4 mm to -1 mm
- For door heights greater than **400** (15-3/4")
- Works for overlay and inset applications
- Can be bored into the panel or used with an adapter plate

Set includes:

- TIP-ON unit
- Self-adhesive catch plate
- Screw-on catch plate
- Wood screw

Part no.

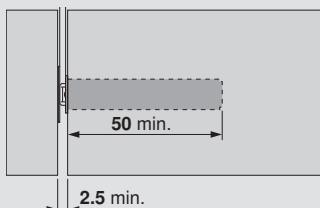
NOTE: Due to various door weights and sizes, trial application recommended

Large door set

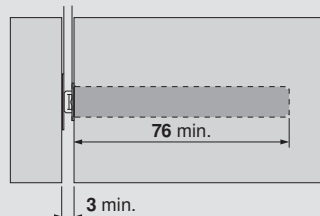
956A1004

TIP-ON for AVENTOS specifications

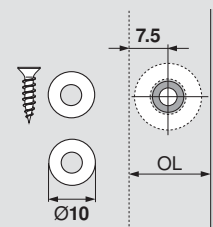
Standard doors



Large doors



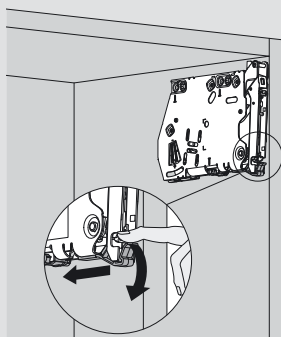
Screw-on catch plate specifications



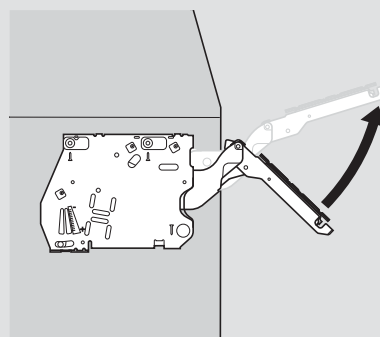
Pre-boring $\varnothing 2.5$ countersunk pilot holes are required

Remove transport tab

1 Carefully remove the transport tab



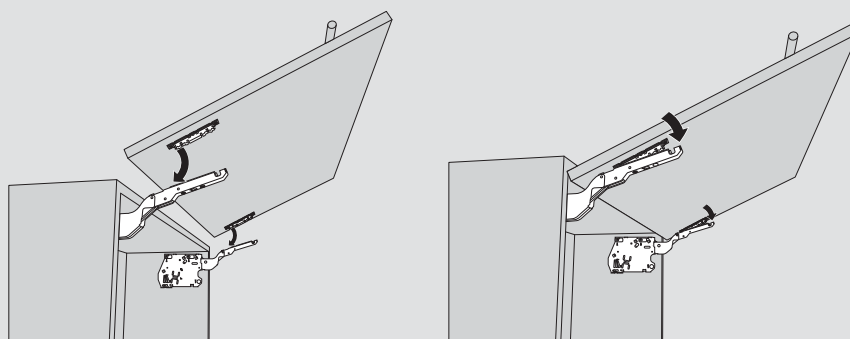
2 Raise the arm to the upright position



NOTE: Do not remove transport tab until just before attaching the door

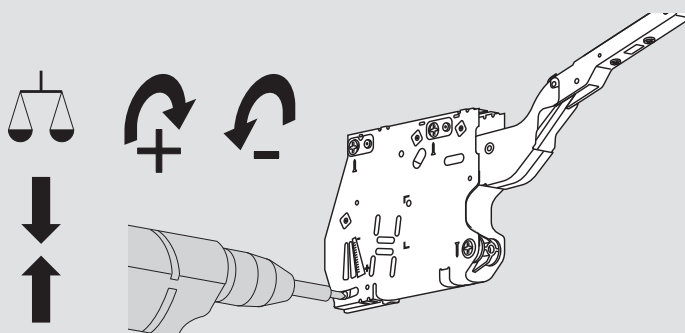
Attaching AVENTOS HK/HK-S doors

Attach the door using the CLIP mechanism to the arm assembly.



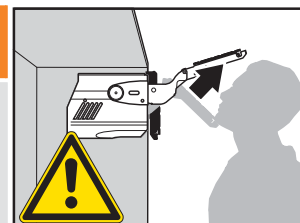
Adjust the lift mechanism

Use a screw gun and a #2 x 2 POZI driver bit to adjust the lift mechanism to the desired tension (door weight balanced).



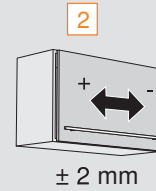
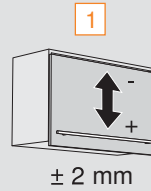
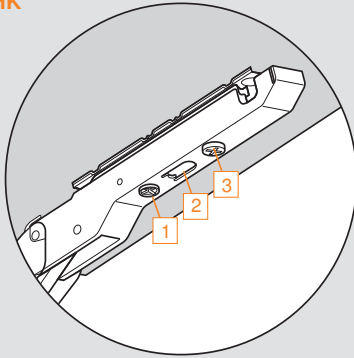
Warning: Risk of injury by spring-loaded lever arm!

- Do not push lever arm down
- Secure lever arm before installing cabinet

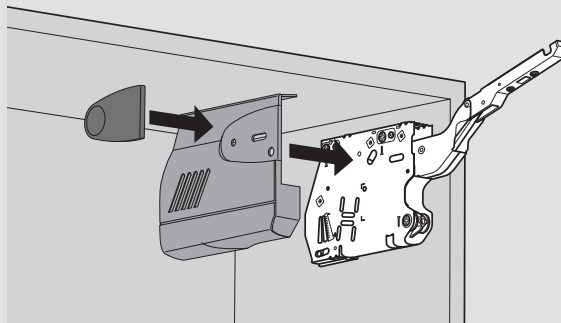


AVENTOS HK/HK-S door adjustments

Use a POZI screwdriver to adjust cam adjustments for each of the three-dimensional door adjustments.

AVENTOS HK**Attaching cover caps**

Place the left and right cover plates over the appropriate lift mechanisms and snap them in place.



AVENTOS HK-S

Stay Lift for the Smallest of Cabinets

AVENTOS HK-S program has only three lift mechanisms and covers all common door widths and heights. This simplifies planning, ordering and warehousing.



Numerous Design Options

AVENTOS HK-S can be used in small wall cabinets, above a refrigerator or in a pantry.



Easy Installation and Adjustment

The three-dimensional adjustment feature enables doors to be precisely aligned.



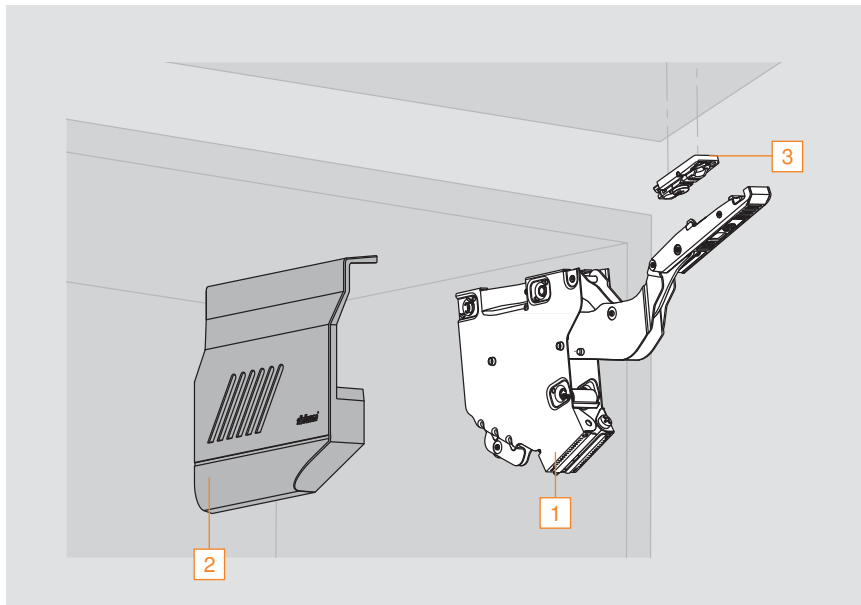
The Motion Inside

The amount of technology and components placed into each lift mechanism are what provide the unparalleled smooth operation of AVENTOS.

AVENTOS HK-S



Ordering Information for Frameless and Face Frame



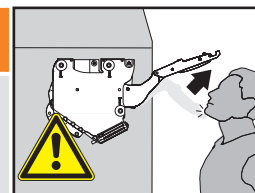
- Suited for small wall cabinets and/or above a pantry or refrigerator
- For both frameless and face frame applications
- Cabinet height from **186** (7-3/8") to **610** (24")*
- Cabinet width from **381** (15") to **1828** (72")*
- Interior cabinet depth minimum of **165** (6-1/2")
- Closes silently and effortlessly with BLUMOTION
- Simple, virtually tool-free assembly and easy adjustment

*Dependent on power factor



Warning: Risk of injury by spring-loaded lever arm!

- Do not push lever arm down
- Secure lever arm before installing cabinet



Step 1 – Determine The Power Factor For The Application



Power factor = cabinet height (inch) x door weight* (lb)

Determine power factor

To select the correct lift mechanism for a given application, the power factor must first be calculated by using the formula below. Use the table at the bottom of the page to convert ounces into decimal form for easy calculation.

Power factor = cabinet height multiplied by door weight*

Example:

Cabinet height: 9" (within possible range)

Door weight including twice the handle weight = 5 lb 14 oz (14 oz = .9 lb see chart below)

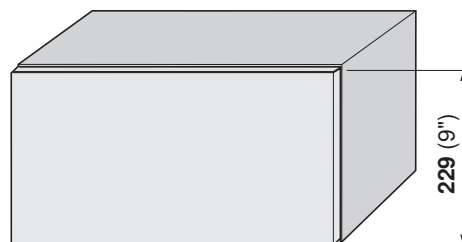
Power factor = 9 x 5.9

Power factor = 53.1

A power factor of 53.1 requires lift mechanism 20K2C00.N1

*Including twice the handle weight

NOTE: AVENTOS planning tools available at blum.com/planning



Door weight + twice handle weight = 5 lb 14 oz

Weight conversion chart

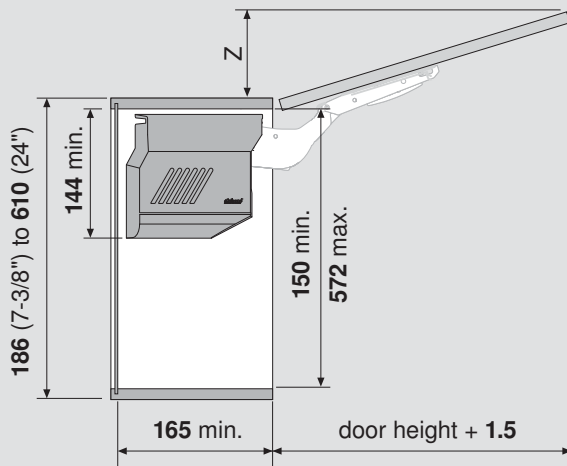
oz	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
lb	.1	.1	.2	.3	.3	.4	.4	.5	.6	.6	.7	.8	.8	.9	.9

Step 2 – Select The Required Components

Lift mechanism set		
	Set includes: 1 Lift mechanism (qty 2) 2 Cover plate (left and right) — #7 x 35 (1-3/8") wood screw (qty 6)	NOTE: Trial application recommended when the required power factor is in a borderline area of lift mechanisms
	Power factor range	Opening angle
	19 – 39	107°
	40 – 85	107°
	86 – 177	107°
		Part no.
		20K2B00.N1
		20K2C00.N1
		20K2E00.N1
Wood or wide aluminum door mounting plate set		
	Set includes: 3 Wood or wide aluminum arm assembly mounting plate (qty 2)	
		Part no.
	Wood or wide aluminum mounting plate	175H3100
	Installation screw for wood doors	606N or 606P
	Installation screw for wide alum doors	7072A
Mounting plate with bracket set		
	Set includes: — Right and left mounting plate with bracket	For use with large overlay five-piece doors
		Part no.
	Mounting plate with bracket set	175H3F00

Frameless Application

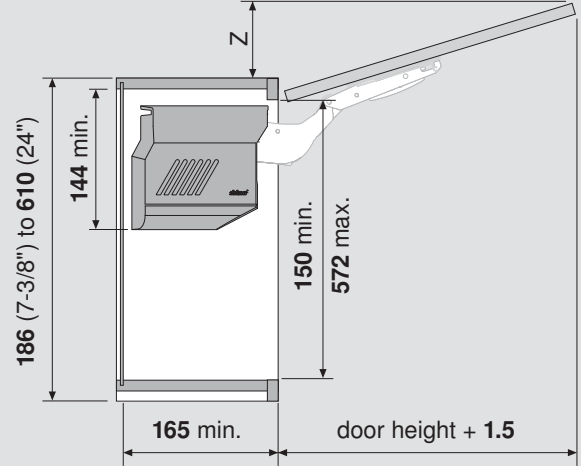
Door and hardware clearance



$Z = \text{door height} \times .29 \text{ minus } 23 + \text{door thickness}$

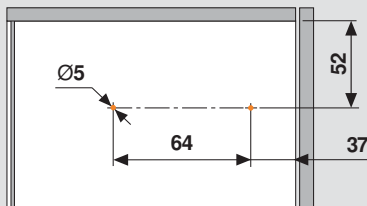
Face Frame Application

Door and hardware clearance



$Z = \text{door height} \times .29 \text{ minus } 23 + \text{door thickness}$

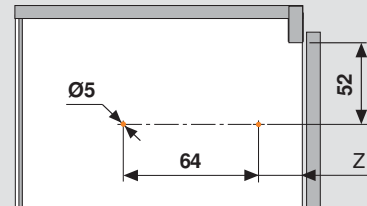
Bore for the locating pins



NOTE: Locating pin holes shown in orange

Bore for the locating pins

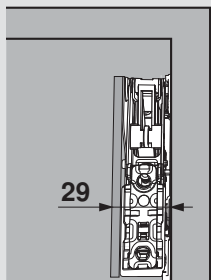
See **page 89** for optional face frame mounting bracket or block-out side flush with frame.



NOTE: Locating pin holes shown in orange

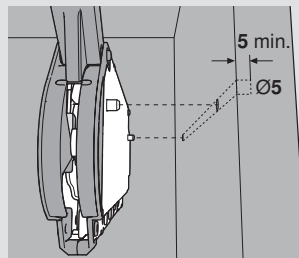
overlay	up to 28	32	35
Z	37	35	33

Lift mechanism clearance

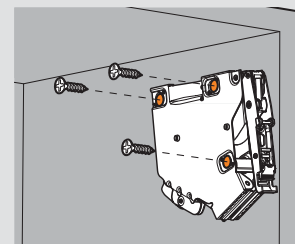


Lift mechanism positioning

Two locating pins fit into Ø5 x 5 holes bored in the side of cabinet for proper positioning.

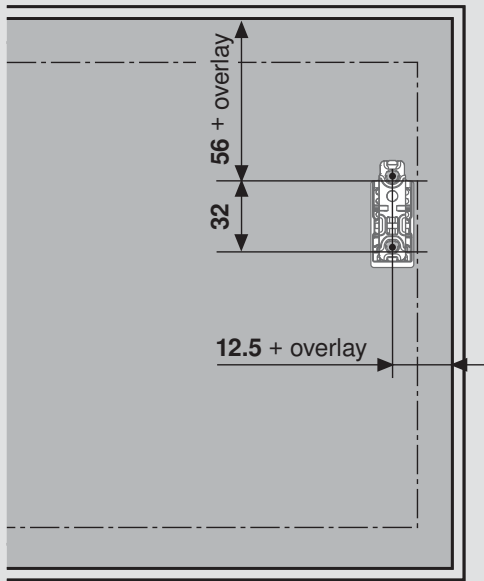


The included #7 x 35 (1-3/8") wood screws are required in the three holes marked in orange.



Refer to **page 88** for angle restriction clip options

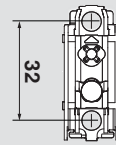
Arm assembly mounting plate location



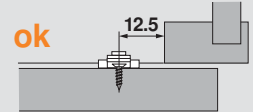
NOTE: Attach mounting plate with four 606N or 606P wood screw for wood doors or 7072A for wide aluminum doors

Arm assembly mounting plate choices

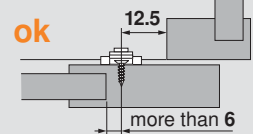
Mounting plate



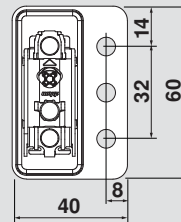
Slab door



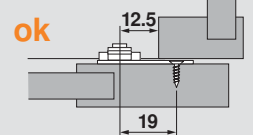
Five-piece door



Mounting plate with bracket for large overlay five-piece doors



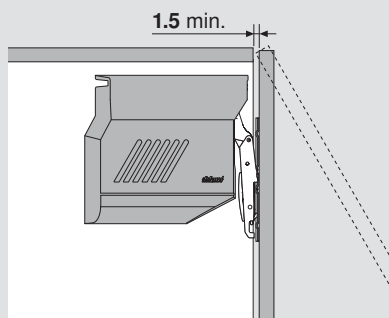
Five-piece door



NOTE: Hole locations offset by 19 (example: $12.5 + \text{overlay} - 19 =$ hole location from side)

Door and Hardware Clearance

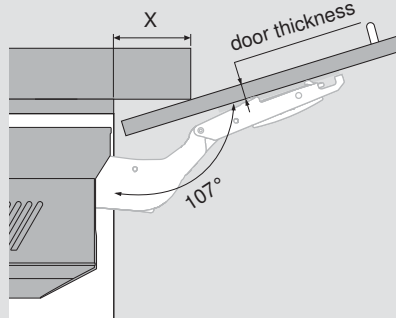
Minimum gap



NOTE: Min gap assumes door radius of 1

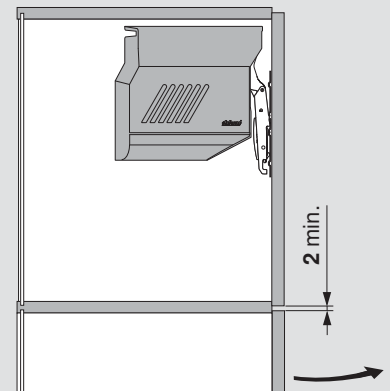
Overlay	up to 28	32	35
gap	1.5	4	5

Decorative molding clearance



Door thickness	16	19	22	26
maximum X	70	59	49	35

Minimum bottom reveal

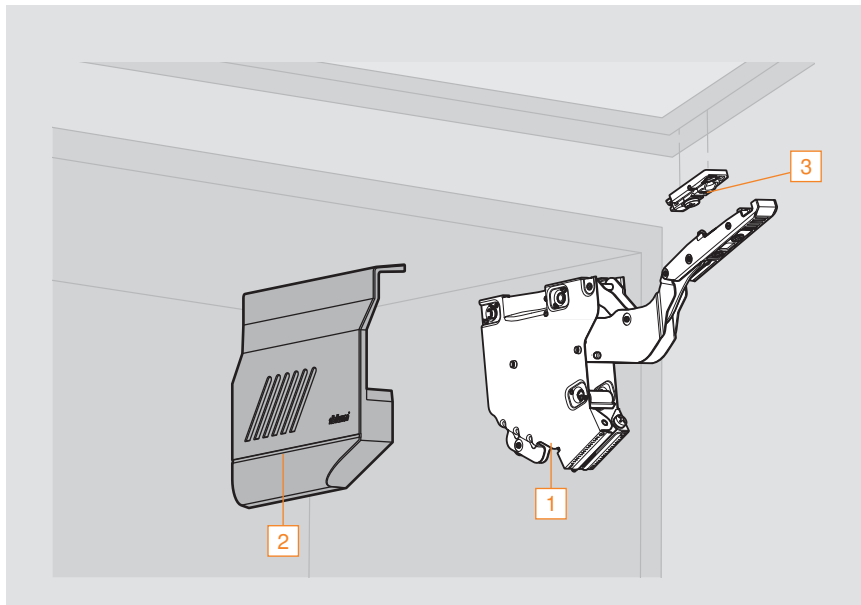


Follow the assembly instructions on **page 76**

AVENTOS HK-S



Ordering Information for Narrow Aluminum



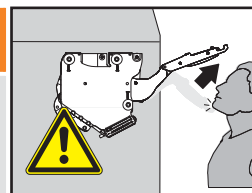
- Suited for small wall cabinets and/or above a pantry or refrigerator
- For both frameless and face frame applications
- Cabinet height from **186** (7-3/8") to **610** (24")*
- Cabinet width from **381** (15") to **1828** (72")*
- Interior cabinet depth minimum of **165** (6-1/2")
- Closes silently and effortlessly with BLUMOTION
- Simple, virtually tool-free assembly and easy adjustment

*Dependent on power factor



Warning: Risk of injury by spring-loaded lever arm!

- Do not push lever arm down
- Secure lever arm before installing cabinet



Step 1 – Determine The Power Factor For The Application



Power factor = cabinet height (inch) x door weight* (lb)

Determine power factor

To select the correct lift mechanism for a given application, the power factor must first be calculated by using the formula below. Use the table at the bottom of the page to convert ounces into decimal form for easy calculation.

Power factor = cabinet height multiplied by door weight*

Example:

Cabinet height: 9" (within possible range)

Door weight including twice the handle weight = 5 lb 14 oz (14 oz = .9 lb see chart below)

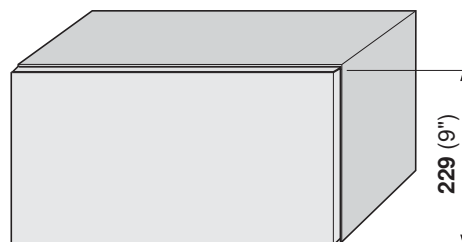
Power factor = 9 x 5.9

Power factor = 53.1

A power factor of 53.1 requires lift mechanism 20K2C00.N1

*Including twice the handle weight

NOTE: AVENTOS planning tools available at blum.com/planning



Door weight + twice handle weight = 5 lb 14 oz

Weight conversion chart

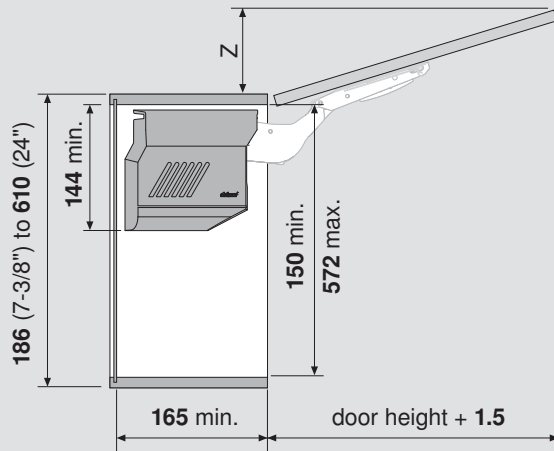
oz	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
lb	.1	.1	.2	.3	.3	.4	.4	.5	.6	.6	.7	.8	.8	.9	.9

Step 2 – Select The Required Components

Lift mechanism set			
	Set includes: 1 Lift mechanism (qty 2) 2 Right and left cover plate — #7 x 35 (1-3/8") wood screw (qty 6)		NOTE: Trial application recommended when the required power factor is in a borderline area of lift mechanisms
	Power factor range	Opening angle	Part no.
	19 – 39	107°	20K2B00.N1
	40 – 85	107°	20K2C00.N1
	86 – 177	107°	20K2E00.N1
Narrow aluminum door mounting plate			
	Set includes: 3 Narrow aluminum arm assembly mounting plate (qty 2) — 699.110 – Aluminum screw for mounting plate attachment (qty 4)		Part no.
	Narrow aluminum door mounting plate		20K4A00A02

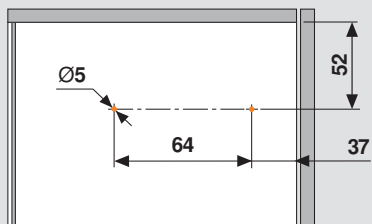
Door and Hardware Clearance and Positioning

Door and hardware clearance



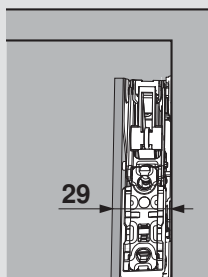
$Z = \text{door height} \times .29 \text{ minus } 23 + \text{door thickness}$

Bore for the locating pins



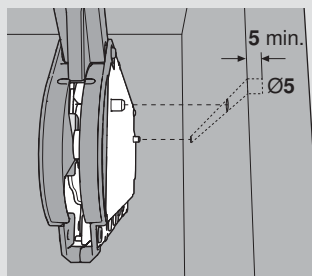
NOTE: Locating pin holes shown in orange

Lift mechanism clearance

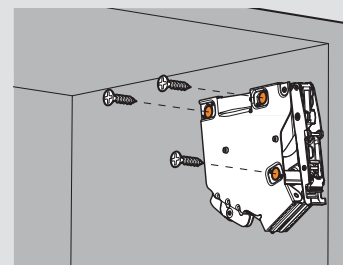


Lift mechanism positioning

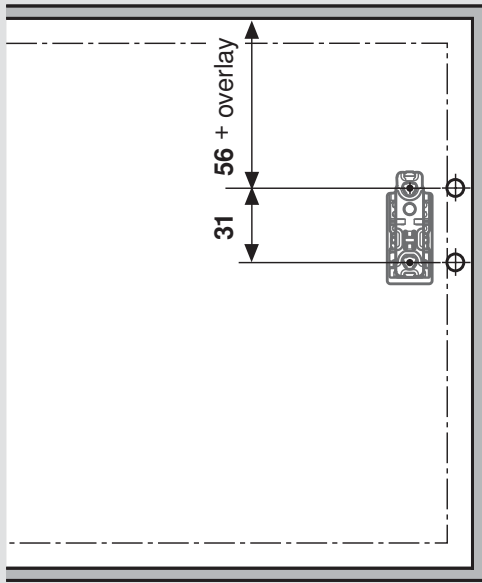
Two locating pins fit into Ø5 x 5 holes bored in the side of cabinet for proper positioning.



The included #7 x 35 (1-3/8") wood screws are required in the three holes marked in orange.

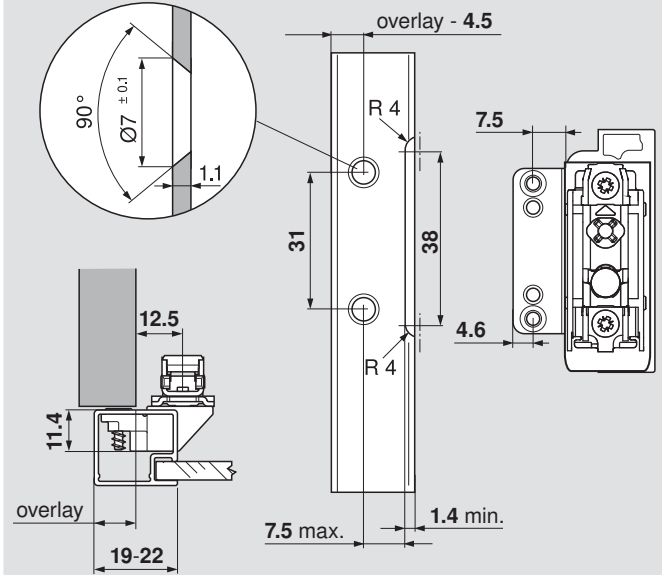


Telescopic arm mounting plate location



NOTE: Attach mounting plate with two 699.110 aluminum screws

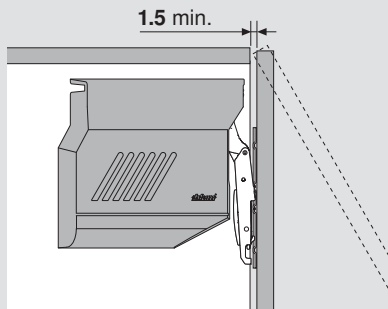
Hinge and mounting plate attachment



NOTE: When changing material thickness, adjust assembly dimensions accordingly

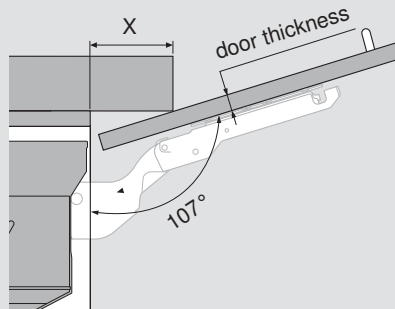
Door and Hardware Clearance

Minimum gap



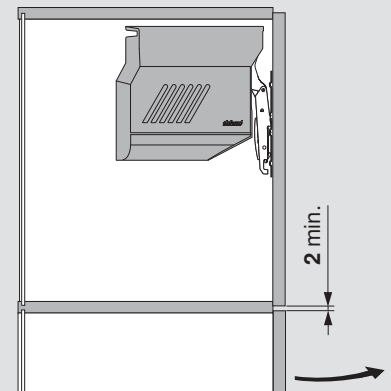
NOTE: Min gap assumes door radius of 1

Decorative molding clearance



Door thickness	16	19	22	26
maximum X	70	59	49	35

Minimum bottom reveal



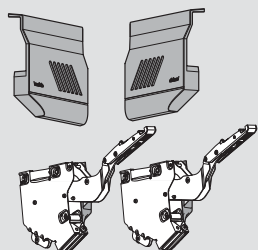
Follow the assembly instructions on **page 76**

AVENTOS HK-S



Ordering Information for TIP-ON

Lift mechanism set

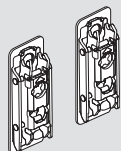


Set includes:

- Lift mechanism (qty 2)
- Right and left cover plate
- #7 x 35 mm (1-3/8") wood screw (qty 10)

Power factor	Opening angle	Part no.
19 – 39	107°	20K2B00TNA
40 – 85	107°	20K2C00TNA
86 – 177	107°	20K2E00TNA

Wood or wide aluminum door hardware set



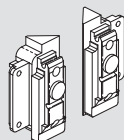
Set includes:

- Arm assembly mounting plate (qty 2)

	Part no.
Wood or wide aluminum hardware set	175H3100
Installation screw for wood doors	606N or 606P
Installation screw for wide aluminum doors	7072A

NOTE: Refer to **page 62–63** for installation specifications

Narrow aluminum door hardware set



Set includes:

- Arm assembly mounting plate (qty 2)
- 669.110 aluminum screw for narrow aluminum lever arm mounting plate (qty 4)

	Part no.
Narrow aluminum door hardware set	20S4200A

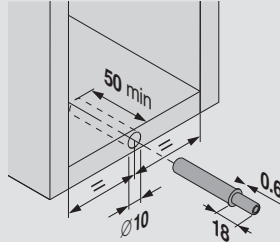
NOTE: Refer to **page 66–67** for installation specifications

Refer to **page 88** for angle restriction clip options

TIP-ON set for standard doors



Use of Screw-on catch plate required for all applications



- Nylon gray unit with magnet tip
- Adjustment range +4 mm to -1 mm
- For door heights up to **400** (15-3/4")
- Works for overlay and inset applications
- Can be bored into the panel or used with an adapter plate

Set includes:

- TIP-ON unit
- Self-adhesive catch plate
- Screw-on catch plate
- Wood screw

Part no.

NOTE: Due to various door weights and sizes, trial application recommended

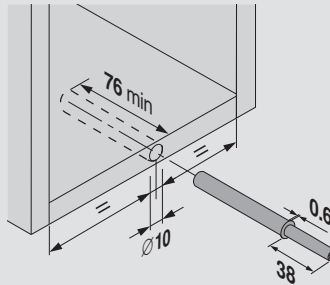
Standard door set

956.1004

TIP-ON set for large doors



Use of Screw-on catch plate required for all applications



- Nylon gray unit with magnet tip
- Adjustment range +4 mm to -1 mm
- For door heights greater than **400** (15-3/4")
- Works for overlay and inset applications
- Can be bored into the panel or used with an adapter plate

Set includes:

- TIP-ON unit
- Self-adhesive catch plate
- Screw-on catch plate
- Wood screw

Part no.

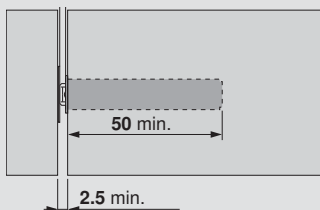
NOTE: Due to various door weights and sizes, trial application recommended

Large door set

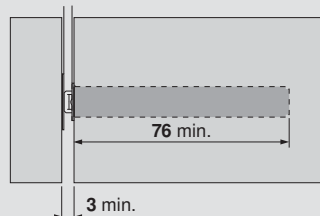
956A1004

TIP-ON for AVENTOS specifications

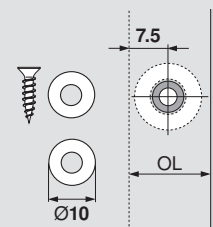
Standard doors



Large doors



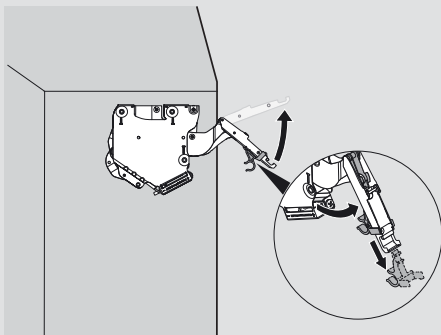
Screw-on catch plate specifications



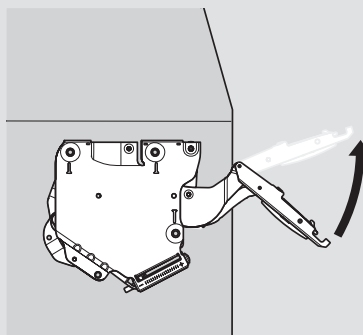
Pre-boring $\varnothing 2.5$ countersunk pilot holes are required

Remove transport tab

1 Carefully remove the transport tab



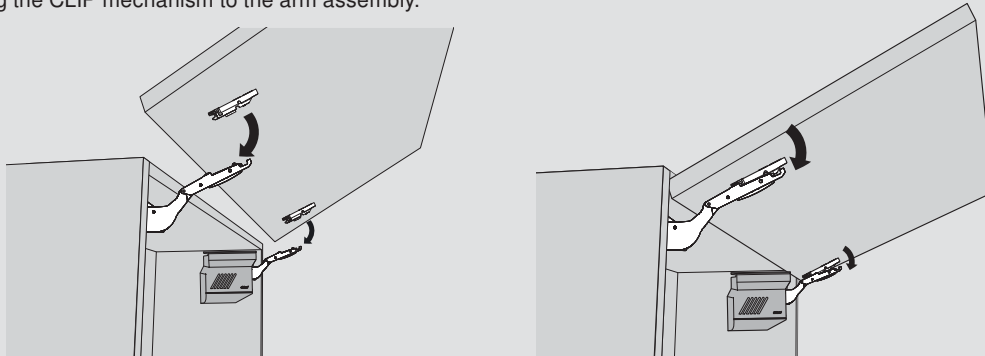
2 Raise the arm to the upright position



NOTE: Do not remove transport tab until just before attaching the door

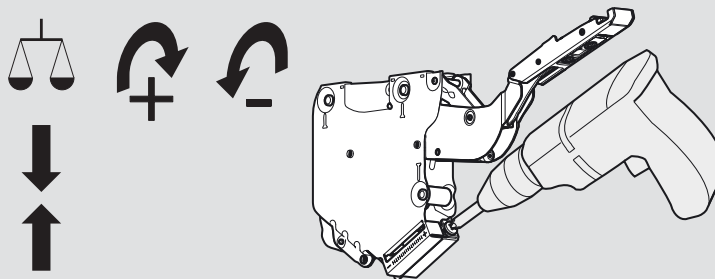
Attaching AVENTOS HK-S doors

Attach the door using the CLIP mechanism to the arm assembly.



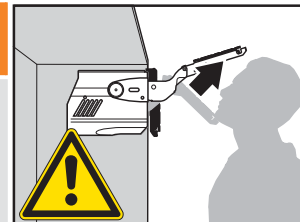
Adjust the lift mechanism

Use a screw gun and a #2 x 2 POZI driver bit to adjust the lift mechanism to the desired tension (door weight balanced).



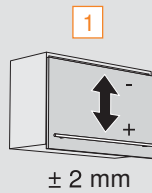
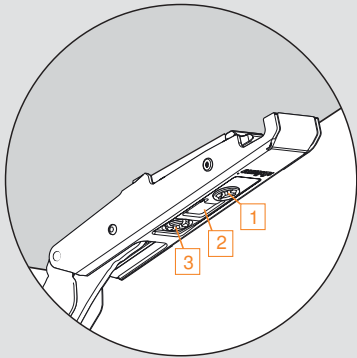
Warning: Risk of injury by spring-loaded lever arm!

- Do not push lever arm down
- Secure lever arm before installing cabinet

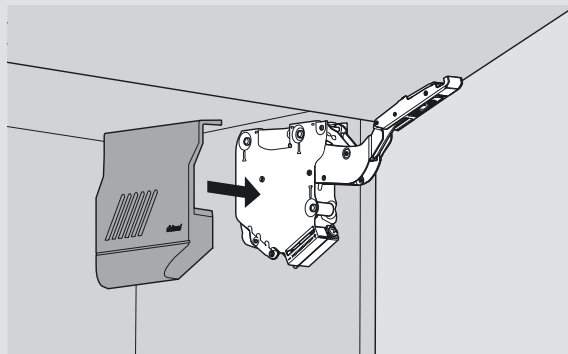


AVENTOS HK-S door adjustments

Use a POZI screwdriver to adjust cam adjustments for each of the three-dimensional door adjustments.

**Attaching cover caps**

Place the left and right cover plates over the appropriate lift mechanisms and snap them in place.



AVENTOS HK-XS

Smaller, Cost-Effective Lift System

The design of the AVENTOS HK-XS means that cabinets with small internal depths can be equipped easily. The symmetrical lift mechanism can be used on one or both sides, for the widest range of applications and design freedom.



Numerous Design Options

AVENTOS HK-XS can be used in small wall cabinets, above a refrigerator or in a pantry.



Versatility

AVENTOS HK-XS allows you the design freedom for all areas of the home, whether it's the kitchen, living room or bathroom.



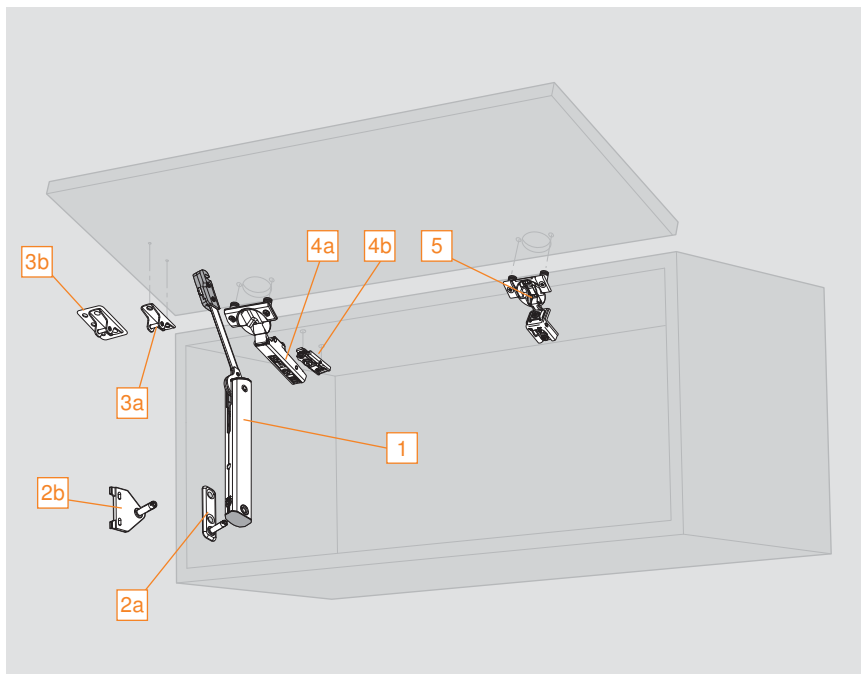
The Motion Inside

The lift mechanism with a robust spring package is the core element of this design. This allows the AVENTOS HK-XS to provide a high level of stability and durability.

AVENTOS HK-XS



Ordering Information for Frameless and Face Frame



- Well suited for small wall cabinets
- Cabinet height from **238** (9-3/8") to **610** (24")
- Cabinet widths up to **1828** (72")*
- Interior depth minimum **127** (5")
- Closes silently and effortlessly with CLIP top BLUMOTION or COMPACT BLUMOTION hinges
- Simple, virtually tool-free assembly and easy adjustment
- Symmetrical lift mechanism – can be used on one or both sides
- Designed for use with BLUMOTION hinges

*Dependent on power factor

Step 1 – Determine The Power Factor For The Application



Power factor = cabinet height (inch) x door weight* (lb)

Determine power factor

To select the correct lift mechanism for a given application, the power factor must first be calculated by using the formula below. Use the table at the bottom of the page to convert ounces into decimal form for easy calculation.

Power factor = cabinet height multiplied by door weight*

Example:

Cabinet height: 15" (within possible range)

Door weight including twice the handle weight = 9 lb 14 oz (14 oz = .9 lb see chart below)

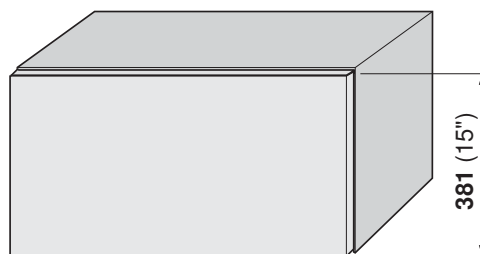
Power factor = 15 x 9.9

Power factor = 148.5

A power factor of 148.5 requires lift mechanism 20K1501

*Including twice the handle weight

NOTE: AVENTOS planning tools available at blum.com/planning



Door weight + twice handle weight = 9 lb 14 oz

Weight conversion chart

oz	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
lb	.1	.1	.2	.3	.3	.4	.4	.5	.6	.6	.7	.8	.8	.9	.9

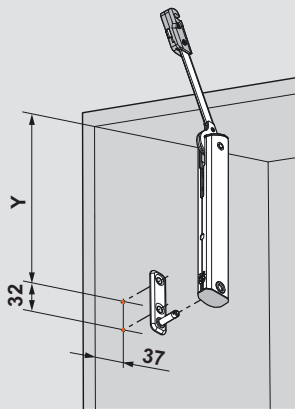
Step 2 – Select The Required Components

Lift mechanism			
1			
	Power factor range (1 lift)	Power factor range (2 lifts)	Part no.
	17 – 60	34 – 120	20K1101
	61 – 112	121 – 224	20K1301
	113 – 156	225 – 312	20K1501
Cabinet mounting plate			
2a	Frameless		Part no.
	Screw-on		20K5101
	EXPANDO (Ø5 dowel)		20K51E1
2b	Face frame		Part no.
	Screw-on		20K5501
Door mounting plate			
3a			Part no.
	Screw-on		20K4101
3b	NOTE: For use with large overlay five-piece doors		Part no.
	Screw-on		20K4501
Hinge recommendations			
4a	CLIP top BLUMOTION 110°		Part no.
	Press-in		71B3580
	Hinge mounting plate		Part no.
	EXPANDO (Ø5 dowel)		177H3100E
4b			
5	COMPACT BLUMOTION 39C		Part no.
	32 (1-1/4") Overlay, Press-in		39C358B.20
	COMPACT BLUMOTION 38N		Part no.
	13 (1/2") Overlay, Press-in		38N358B.08

For other hinges and mounting plate options please refer to the Concealed hinges brochure

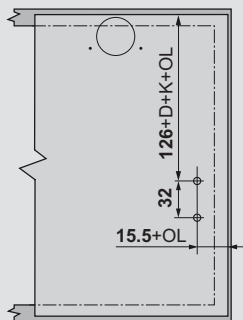
CLIP top Frameless Application

Lift mechanism



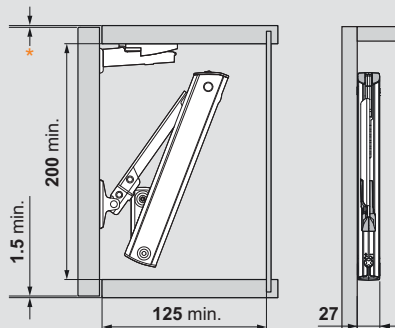
$$Y = 137 + D + K$$

Door mounting plate



Attach using #6 x 5/8" (606N/P) wood screw

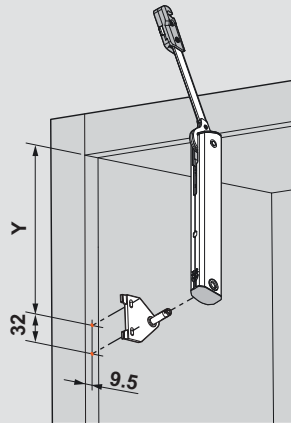
Space requirements



* Minimum top reveal based on hinge used. Please see minimum reveal specs in Concealed hinges brochure

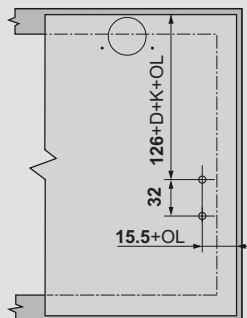
CLIP top Face Frame Application

Lift mechanism



$$Y = 169 + D + K$$

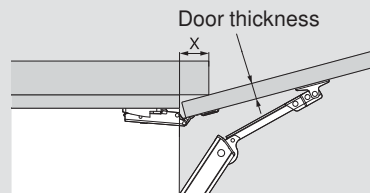
Door mounting plate



When using large overlay mounting plate (20K4501) hole location is offset by 19 (15.5 + OL - 19)

Attach using #6 x 5/8" (606N/P) wood screw

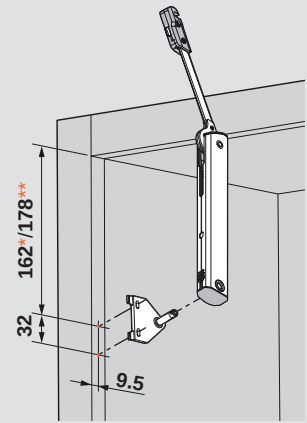
Cornice and crown molding clearance



Door thickness	16	19	22	24
X	45	34	23	15

COMPACT Face Frame Application

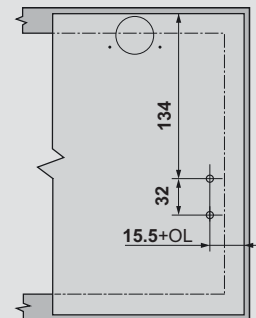
Lift mechanism



*Location when using COMPACT 39/38C

**Location when using COMPACT 38N

Door mounting plate



When using large overlay mounting plate (20K4501) hole location is offset by 19 (15.5 + OL - 19)

Attach using #6 x 5/8" (606N/P) wood screw

K = Hinge arm crank

Straight arm crank	=	0
Half-cranked arm	=	9.5
Full-cranked arm	=	18

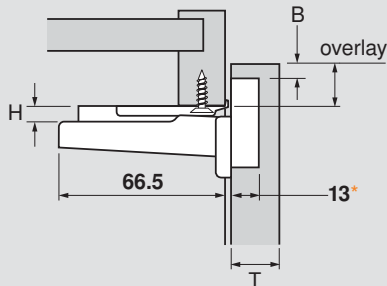
Abbreviations

D	=	Mounting plate height
K	=	Hinge arm crank
OL	=	Overlay

NOTE: Designed to be used in a lift up application only

Face Frame Applications

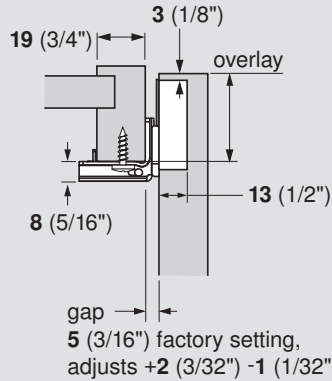
CLIP top BLUMOTION 110°



*All 35 and 8 holes must be a minimum of 13 deep

H	Overlay						P	S
0	14	15	16	17	18	12	21.5	
3	11	12	13	14	15	15	24.5	
4.5	9.5	10.5	11.5	12.5	13.5	16.5	26	
6	8	9	10	11	12	18	27.5	
	3	4	5	6	7	fixed distance = 11		
B = boring distance								

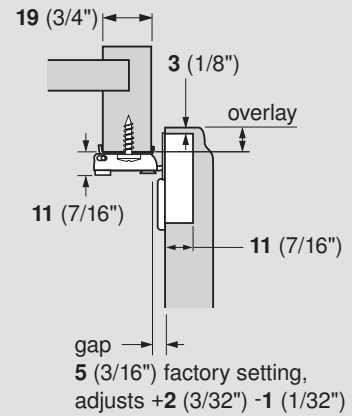
COMPACT BLUMOTION 39C



NOTE: for other overlays see Concealed hinges brochure

Overlay
32 (1-1/4")
3 (1/8")
B = boring distance

COMPACT BLUMOTION 38N

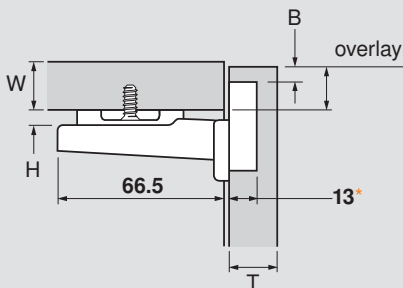


NOTE: for other overlays see Concealed hinges brochure

Overlay
13 (1/2")
3 (1/8")
B = boring distance

Frameless Applications

CLIP top BLUMOTION 110°



*All 35 and 8 holes must be a minimum of 13 deep

H	Overlay						P	S
0	14	15	16	17	18	12	21.5	
3	11	12	13	14	15	15	24.5	
6	8	9	10	11	12	18	27.5	
9	5	6	7	8	9	21	30.5	
	3	4	5	6	7	fixed distance = 11		
	B = boring distance							

Minimum Reveal Table

CLIP top BLUMOTION 110°						
3	0.5	1.0	1.8	2.7	4.3	
4	0.5	1.0	1.7	2.5	3.8	
5	0.5	0.9	1.7	2.4	3.4	
6	0.5	0.9	1.6	2.3	3.2	
7	0.5	0.9	1.6	2.2	3.0	
B = boring distance	16	19	22	24	26	
T = door thickness						

For thickness greater than 26 trial app. recommended

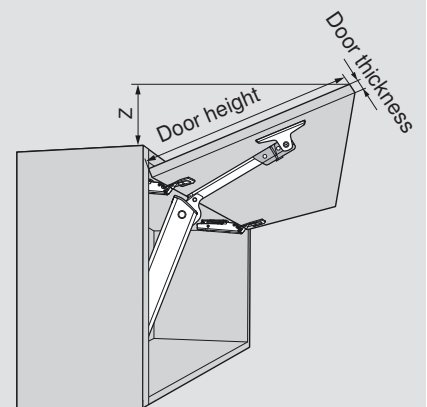
COMPACT BLUMOTION 39C	
3 (1/8")	5.5 (7/32")
B = boring distance	19 (3/4")
T = door thickness	

COMPACT BLUMOTION 38N	
3 (1/8")	7 (9/32")
B = boring distance	19 (3/4")
T = door thickness	

Abbreviations

H	= Plate height
P	= Door protrusion
S	= Side arm protrusion
W	= Side panel width
T	= Door thickness

Door protrusion

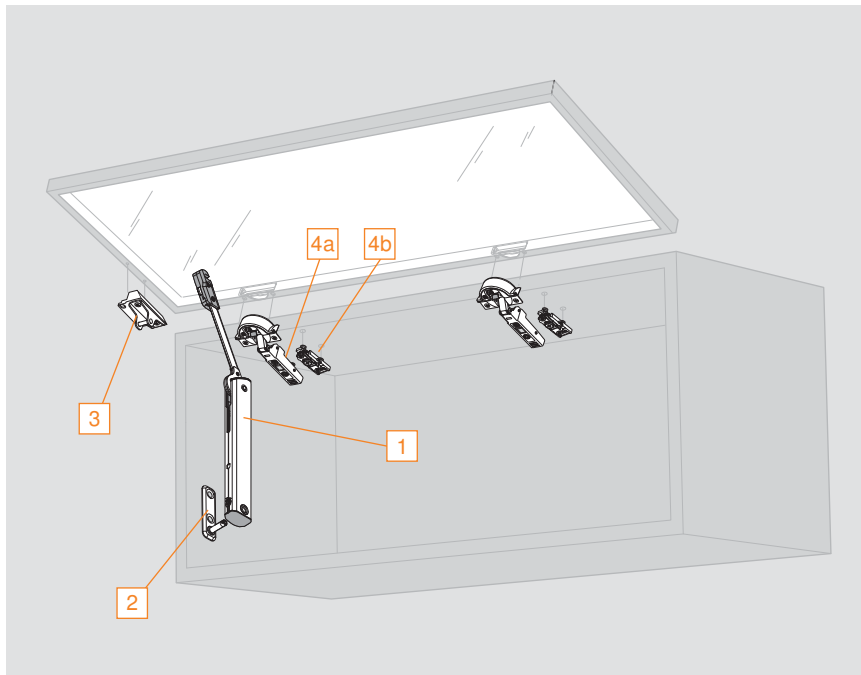


$$Z = (\text{Door height minus } A) \times 0.3$$

Door thickness	16	19	22	24
A	45	34	23	15

NOTE: Use 3 hinges starting at cabinet width 914 (36") and/or power factor 156 and 4 hinges starting at cabinet width 1219 (48") and/or power factor 234

Follow the assembly instructions on **page 84**



- Well suited for small wall cabinets
- Cabinet height from **238** (9-3/8") to **610** (24")
- Cabinet widths up to **1828** (72")*
- Interior depth minimum **127** (5")
- Closes silently and effortlessly with CLIP top BLUMOTION
- Simple, virtually tool-free assembly and easy adjustment
- Symmetrical lift mechanism – can be used on one or both sides
- Designed for use with BLUMOTION hinges

*Dependent on power factor

Step 1 – Determine The Power Factor For The Application



Power factor = cabinet height (inch) x door weight* (lb)

Determine power factor

To select the correct lift mechanism for a given application, the power factor must first be calculated by using the formula below. Use the table at the bottom of the page to convert ounces into decimal form for easy calculation.

Power factor = cabinet height multiplied by door weight*

Example:

Cabinet height: 15" (within possible range)

Door weight including twice the handle weight = 9 lb 14 oz (14 oz = .9 lb see chart below)

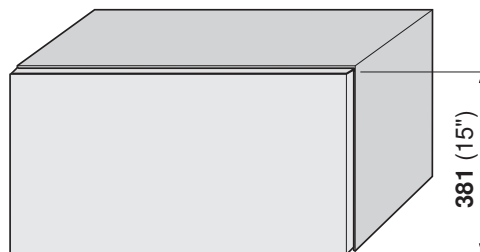
Power factor = 15 x 9.9

Power factor = 148.5

A power factor of 148.5 requires lift mechanism 20K1501

*Including twice the handle weight

NOTE: AVENTOS planning tools available at blum.com/planning



Door weight + twice handle weight = 9 lb 14 oz

Weight conversion chart

oz	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
lb	.1	.1	.2	.3	.3	.4	.4	.5	.6	.6	.7	.8	.8	.9	.9

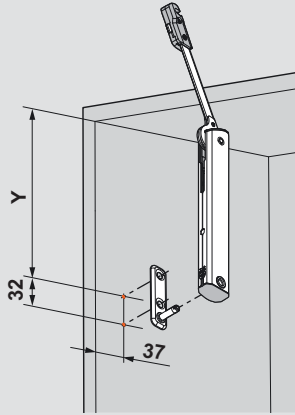
Step 2 – Select The Required Components

Lift mechanism			
1			
	Power factor range (1 lift)	Power factor range (2 lifts)	Part no.
	17 – 60	34 – 120	20K1101
	61 – 112	121 – 224	20K1301
	113 – 156	225 – 312	20K1501
Cabinet mounting plate			
2			Part no.
	Screw-on		20K5101
	EXPANDO (Ø5 dowel)		20K51E1
Door mounting plate			
3			Part no.
	Screw-on		20K4101A
Hinge recommendations			
4a	CLIP top BLUMOTION 95°		Part no.
	Press-in		71B950A
4b	Hinge mounting plate		Part no.
	EXPANDO (Ø5 dowel)		177H3100E

NOTE: For other hinges and mounting plate options please refer to the Concealed hinges brochure

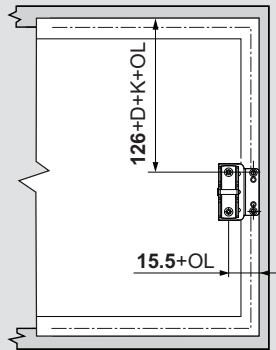
Cabinet and Door Mounting Plate Locations For Frameless Applications

Lift mechanism



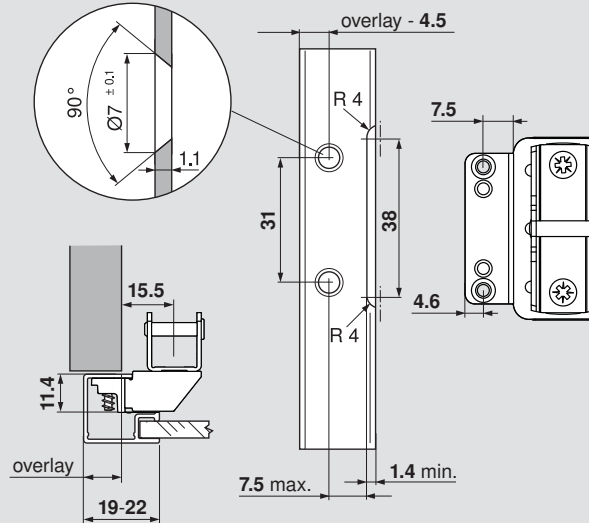
$$Y = 137 + D + K$$

Door mounting plate

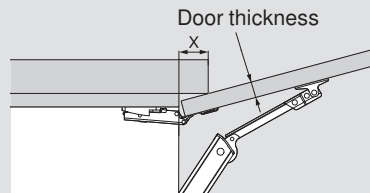


Attach using #6 x 11 (699.110)
aluminum screw

Arm assembly mounting plate



Cornice and crown molding clearance



Door thickness	16	19	22	24
X	45	34	23	15

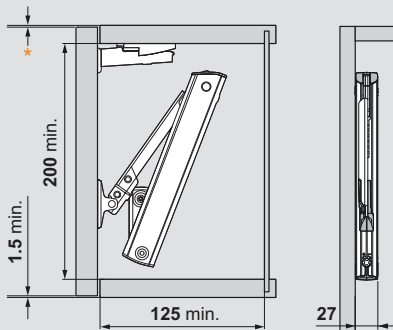
K = Hinge arm crank

Straight arm crank	= 0
Half-cranked arm	= 9.5
Full-cranked arm	= 18

Abbreviations

D	= Mounting plate height
K	= Hinge arm crank
OL	= Overlay

Space requirements



*Minimum top reveal based on hinge
used. Please see minimum reveal specs
in Concealed hinges brochure

NOTE: Designed to be used in a lift up application only

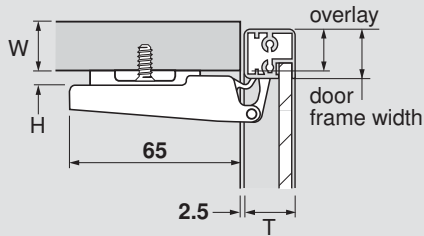
Planning Specifications

AVENTOS HK-XS



Frameless Applications

CLIP top BLUMOTION 95°



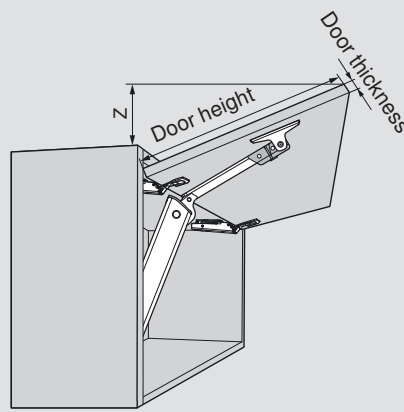
H	Overlay	P	S
0	16	13.5	22
3	13	16.5	25
6	10	19.5	28
9	7	22.5	31
B = fixed			

NOTE: Use 3 hinges starting at cabinet width **914** (36") and/or power factor 156 and 4 hinges starting at cabinet width **1219** (48") and/or power factor 234

Abbreviations

H	=	Plate height
P	=	Door protrusion
S	=	Side arm protrusion
W	=	Side panel width
T	=	Door thickness

Door protrusion



$$Z = (\text{Door height minus } A) \times 0.3$$

Door thickness	16	19	22	24
A	45	34	23	15

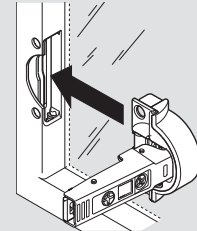
Minimum Reveal Table

CLIP top BLUMOTION 95°					
18	0.2	0.3	0.4	0.6	0.7
19	0.2	0.3	0.4	0.6	0.7
20	0.2	0.3	0.4	0.5	0.7
21	0.2	0.3	0.4	0.5	0.7
22	0.2	0.3	0.4	0.5	0.7
door frame width	18	19	20	21	22
T = door thickness					

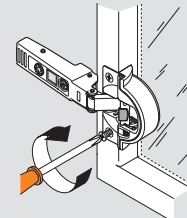
Thickness greater than **22** trial recommended

Installation

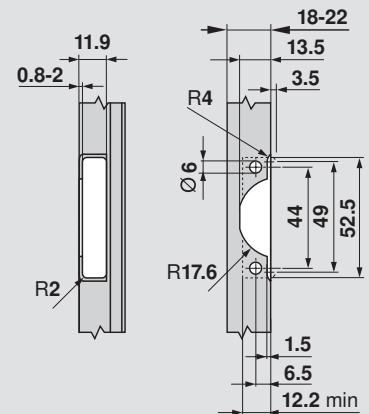
Attach cup adapter to the hinge and insert into machined openings



Attach using aluminum screws provided with hinges (699.110)



Aluminum door preparation



NOTE: For TIP-ON application, free swing hinge door drilling pattern is different. Please reference **page 36** of the **Concealed Hinge brochure**.

Follow the assembly instructions on **page 84**

AVENTOS HK-XS



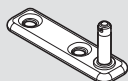
Ordering Information for TIP-ON

Lift mechanism



Power factor range (1 lift)	Power factor range (2 lifts)	Part no.
17 – 60	34 – 120	20K1101T
61 – 112	121 – 224	20K1301T
113 – 156	225 – 312	20K1501T

Cabinet mounting plate

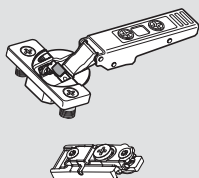


	Part no.
Screw-on	20K5101
EXPANDO	20K51E1

Wood and wide aluminum door hardware



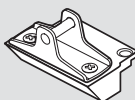
	Part no.
Door mounting plate	20K4101



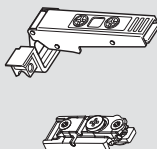
CLIP top 110°, free swing	Part no.
Press-in	70T3580.TL
Hinge mounting plate	Part no.
EXPANDO	177H3100E

NOTE: Refer to **pages 76–77** for installation specifications

Narrow aluminum door hardware



	Part no.
Door mounting plate	20K4101A



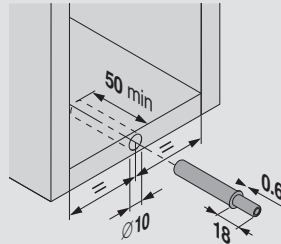
CLIP top 120°, free swing	Part no.
Press-in	72T550A.TL
Hinge mounting plate	Part no.
EXPANDO	177H3100E

NOTE: Refer to **pages 80–81** for installation specifications

TIP-ON set for standard doors



Use of Screw-on catch plate required for all applications



- Nylon gray unit with magnet tip
- Adjustment range +4 mm to -1 mm
- For door heights up to **400** (15-3/4")
- Works for overlay and inset applications
- Can be bored into the panel or used with an adapter plate

Set includes:

- TIP-ON unit
- Self-adhesive catch plate
- Screw-on catch plate
- Wood screw

Part no.

NOTE: Due to various door weights and sizes, trial application recommended

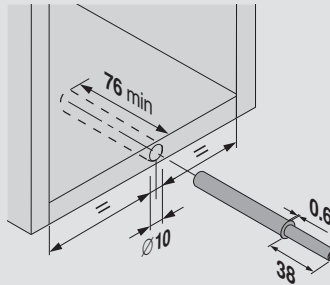
Standard door set

956.1004

TIP-ON set for large doors



Use of Screw-on catch plate required for all applications



- Nylon gray unit with magnet tip
- Adjustment range +4 mm to -1 mm
- For door heights greater than **400** (15-3/4")
- Works for overlay and inset applications
- Can be bored into the panel or used with an adapter plate

Set includes:

- TIP-ON unit
- Self-adhesive catch plate
- Screw-on catch plate
- Wood screw

Part no.

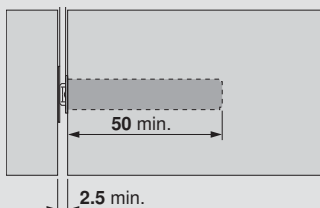
NOTE: Due to various door weights and sizes, trial application recommended

Large door set

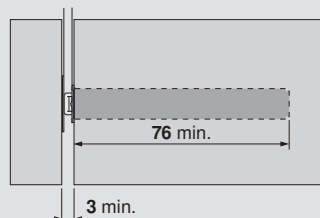
956A1004

TIP-ON for AVENTOS specifications

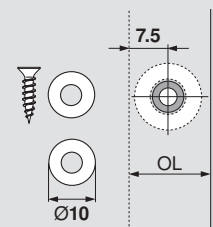
Standard doors



Large doors



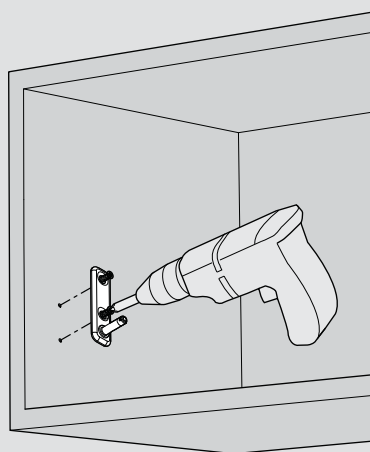
Screw-on catch plate specifications



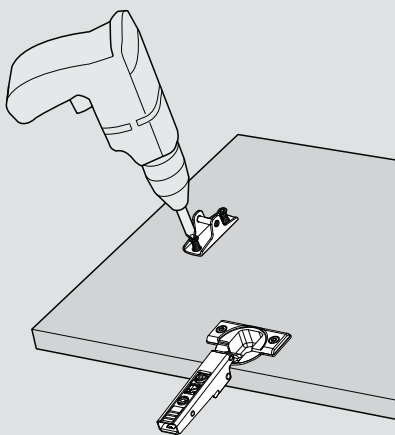
Pre-boring $\varnothing 2.5$ countersunk pilot holes are required

Attaching AVENTOS HK-XS cabinet and door mounting plate

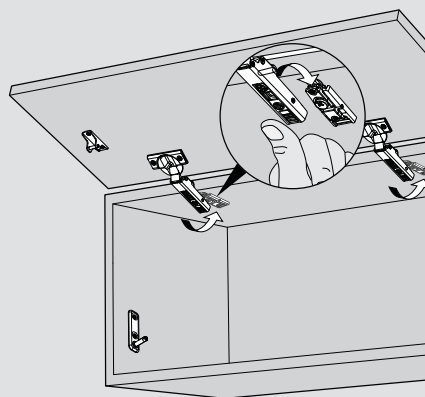
1 Attach cabinet mounting plate



2 Attach door mounting plate. Insert hinge.

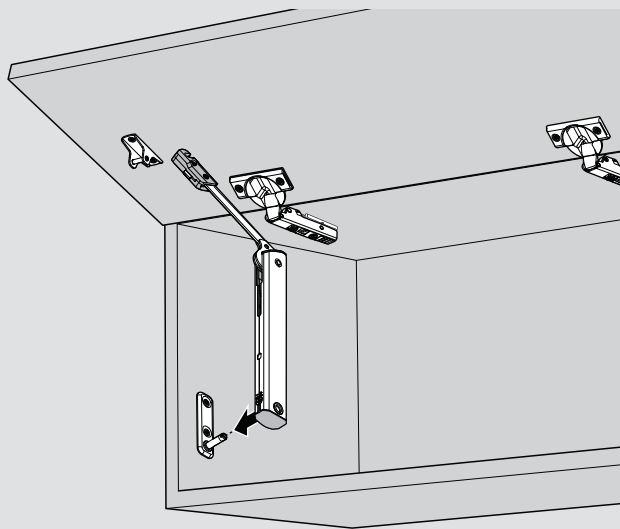


3 Attach door to the cabinet

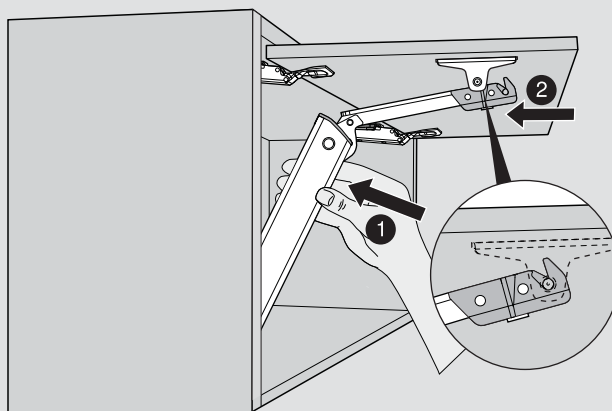


Attaching AVENTOS HK-XS lift mechanism to cabinet

4 Attach the lift mechanism to cabinet mounting plate

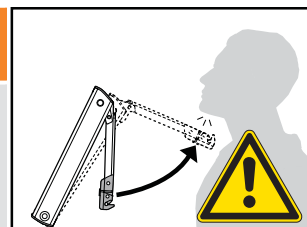


5 Attach lift mechanism to door

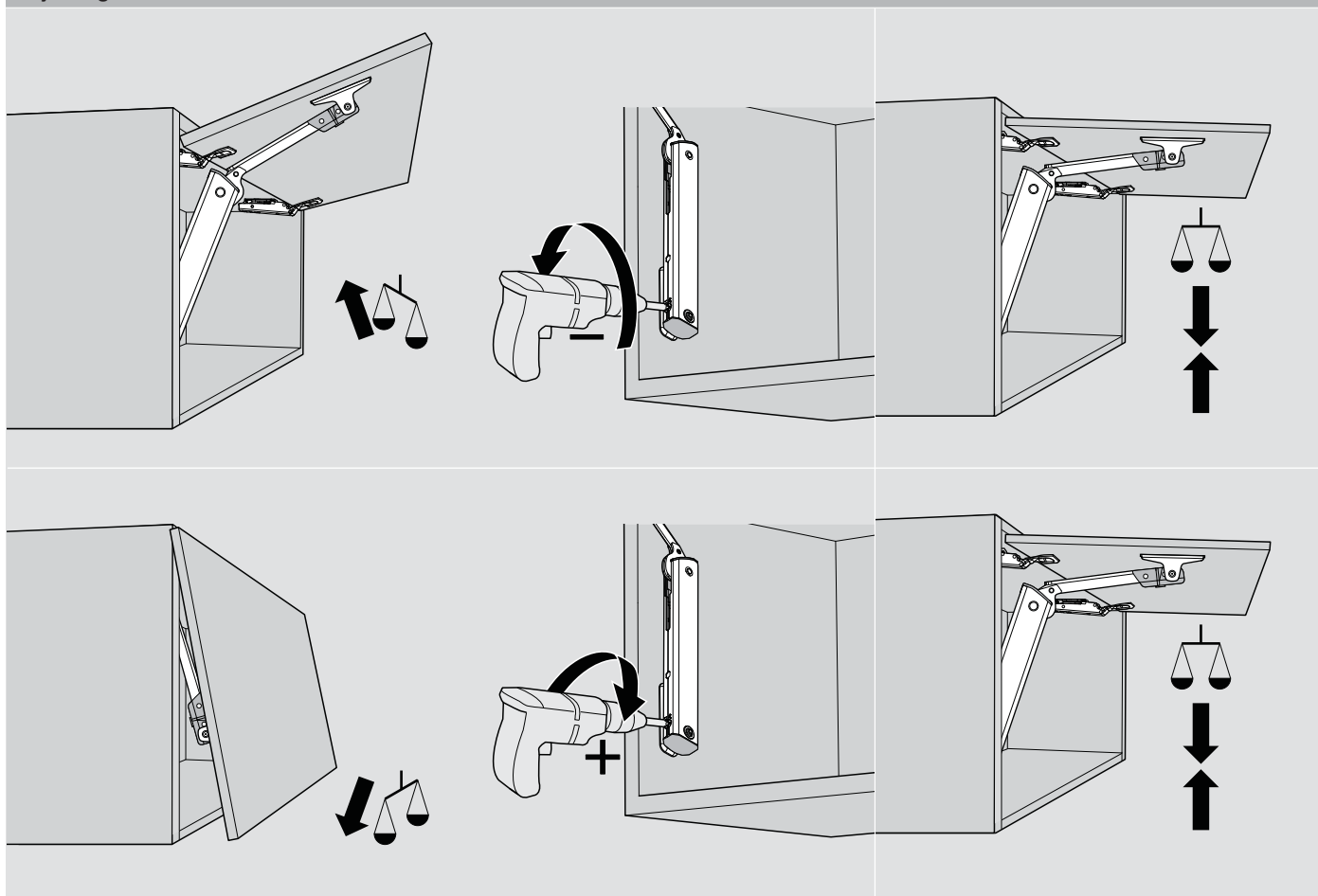


Warning: Risk of injury by spring-loaded lever arm!

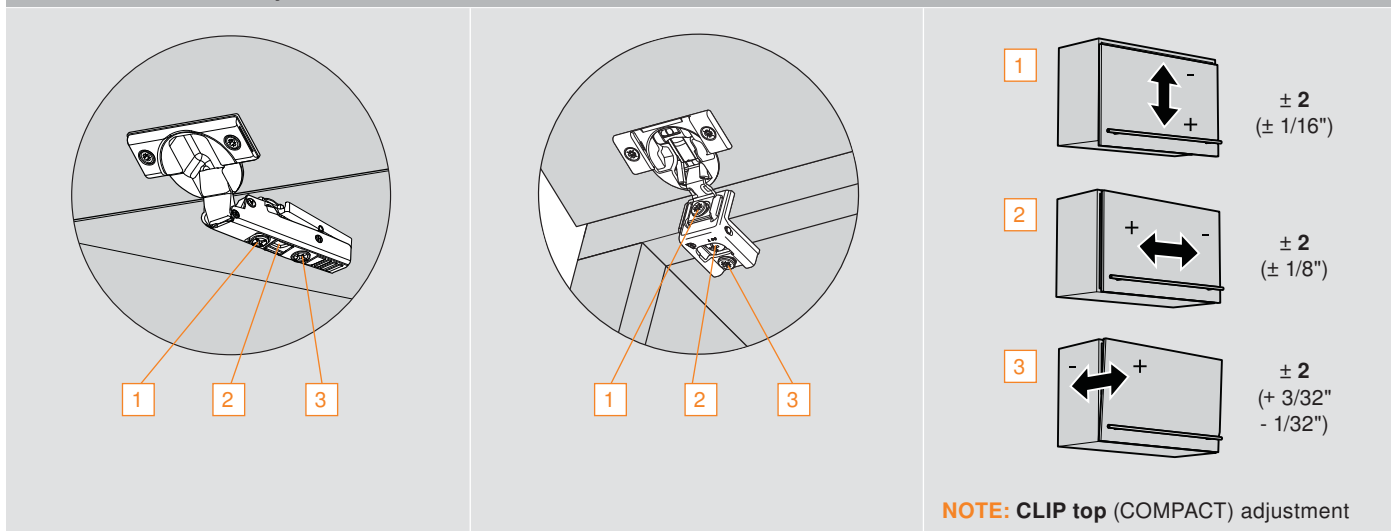
- Do not push lever arm down
- Secure lever arm before installing cabinet



Adjusting the lift mechanism



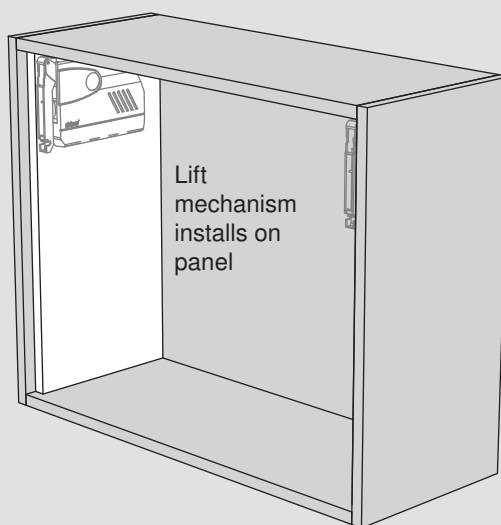
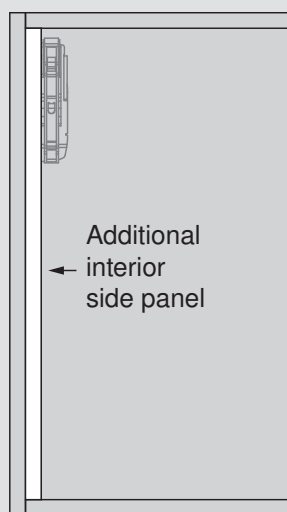
AVENTOS HK-XS door adjustment



When it comes to inset cabinets and AVENTOS there are many ways to accomplish this application. Below is an option that can be used for both face frame and frameless cabinets alike. The illustrations below show the concept of adding an additional side panel to the interior of the cabinet. This additional panel allows the lift mechanism to be installed to the interior of the cabinet while providing an integrated stopping point for the door at close. The panel is set back the thickness of the front plus the thickness of any bumper used. The lift mechanism is then installed in the cabinet. Mounting location specifications will need to be adjusted to accommodate for the increased set back, top reveal, and interior side panel thickness/side overlay of this panel.

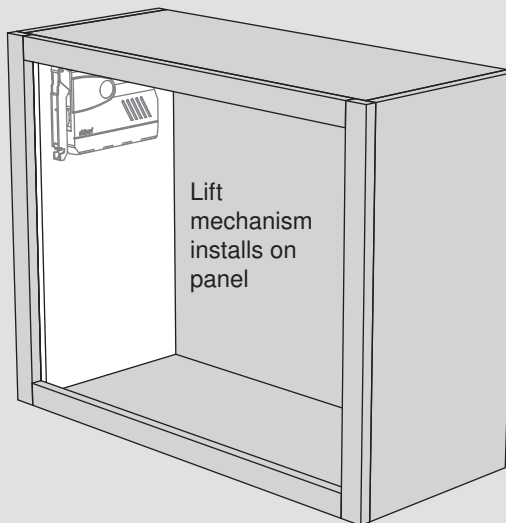
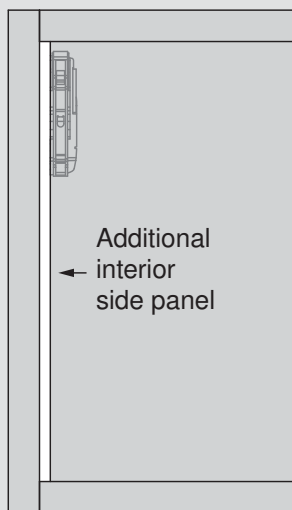
Frameless application

Interior cabinet panel installed



Face frame application

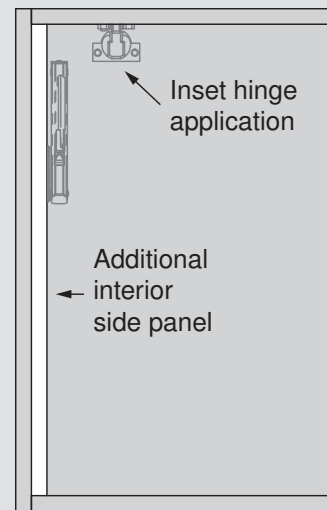
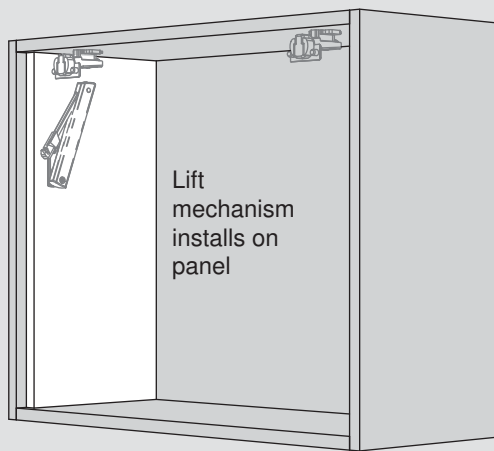
Interior cabinet panel installed



When it comes to inset cabinets and AVENTOS HK-XS there are many ways to accomplish this application. Below is an option that can be used for both face frame and frameless cabinets alike. The illustrations below show the concept of adding an additional side panel to the interior of the cabinet. This additional panel allows the lift mechanism to be installed to the interior of the cabinet while providing an integrated stopping point for the door at close. The panel is set back the thickness of the front plus the thickness of any bumper used. The choice of how to install CLIP top BLUMOTION for an inset application is up to the installer. This can be accomplished in a variety of ways. The lift mechanism is then installed in the cabinet. Mounting location specifications will need to be adjusted to accommodate for the increased set back, top reveal, and interior side panel thickness/side overlay of this panel.

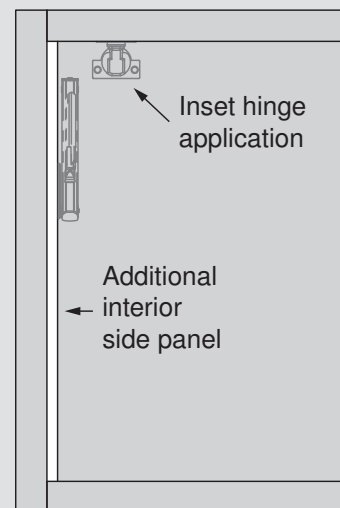
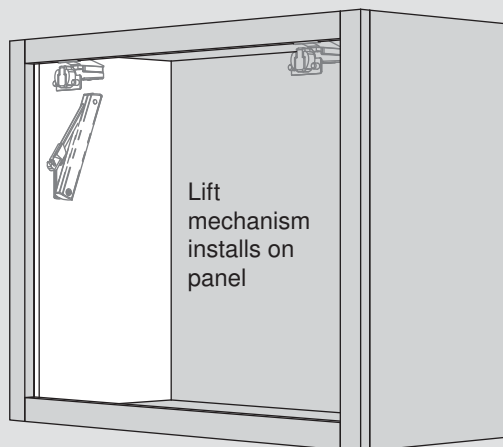
Frameless application

Interior cabinet panel installed



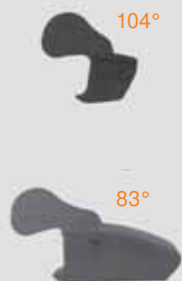
Face frame application

Interior cabinet panel installed



AVENTOS HF angle restriction clips

- Restricts opening angle of the door
- Prevents the door from hitting an object above or keeps the handle within reach on very high cabinets
- One required per lift mechanism

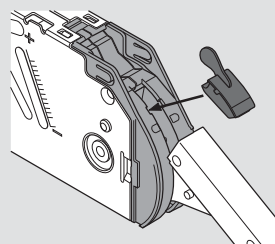


Part no.

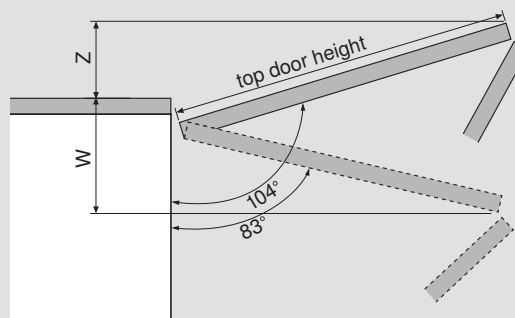
104° restriction clip **20F7051**

83° restriction clip **20F7011**

Attachment



Clearance above the cabinet



Using 104° clip $Z = \text{top door height} \times .24 + 19$

Using 83° clip $W = \text{top door height} \times .12 - 25$

AVENTOS HK angle restriction clips

- Restricts opening angle of the door
- Prevents the door from hitting an object above or keeps the handle within reach on very high cabinets
- One required per lift mechanism

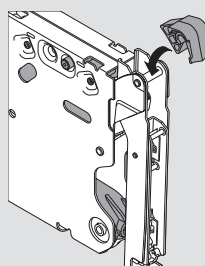


Part no.

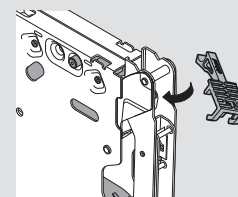
100° restriction clip **20K7041**

75° restriction clip **20K7011**

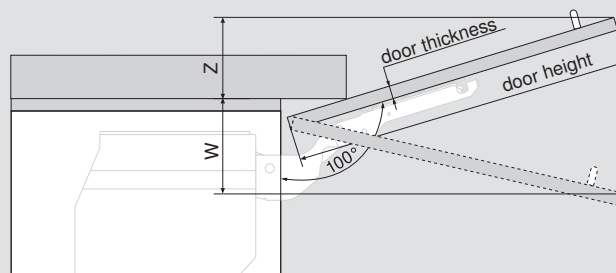
HK attachment



HK-S attachment



Clearance above the cabinet



Using 100° clip $Z = \text{door height} \times .17 \text{ minus } 15 + \text{door thickness}$

Using 75° clip $W = \text{door height} \times .26 + 15$

AVENTOS HK-S angle restriction clips

- Restricts opening angle of the door
- Prevents the door from hitting an object above or keeps the handle within reach on very high cabinets
- One required per lift mechanism



Part no.

100° restriction clip **20K7A41**

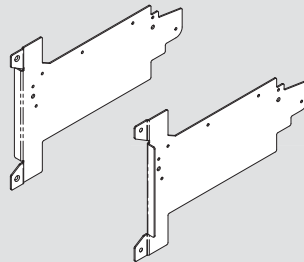
75° restriction clip **20K7A11**

AVENTOS face frame mounting brackets provide a fast and easy way to install AVENTOS in face frame cabinets. The brackets provide an accurate mounting location in the cabinet for the lift mechanism to simply mount to the bracket with the supplied mounting screws.



AVENTOS HF face frame mounting bracket set

- Brackets for mounting AVENTOS HF in face frame cabinet
- Minimum recess of **12.5** (1/2")
- Provides accurate mounting position for lift mechanism



Set includes:

- Right and left brackets
- M4 x 30 lift mounting screws (qty 12)

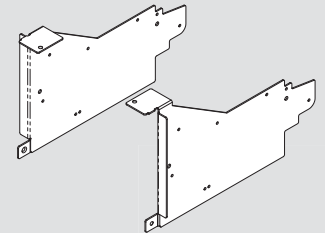
Part no.

HF frame mounting bracket set

20F6001

AVENTOS HL face frame mounting bracket set

- Brackets for mounting AVENTOS HL in face frame cabinet
- Minimum recess of **15.5** (9/16")
- Provides accurate mounting position for lift mechanism



Set includes:

- Right and left brackets
- M4 x 30 lift mounting screws (qty 12)

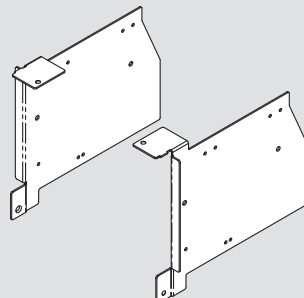
Part no.

HL frame mounting bracket set

20L6001

AVENTOS HK face frame mounting bracket set

- Brackets for mounting AVENTOS HK in face frame cabinet
- Minimum recess of **12.5** (1/2")
- Provides accurate mounting position for lift mechanism



Set includes:

- Right and left brackets
- M4 x 30 lift mounting screws (qty 12)

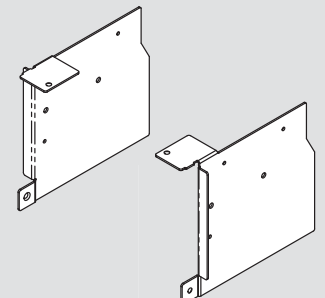
Part no.

HK frame mounting bracket set

20K6001

AVENTOS HK-S face frame mounting bracket set

- Brackets for mounting AVENTOS HK-S in face frame cabinet
- Minimum recess of **12.5** (1/2")
- Provides accurate mounting position for lift mechanism



Set includes:

- Right and left brackets
- M4 x 30 lift mounting screws (qty 12)

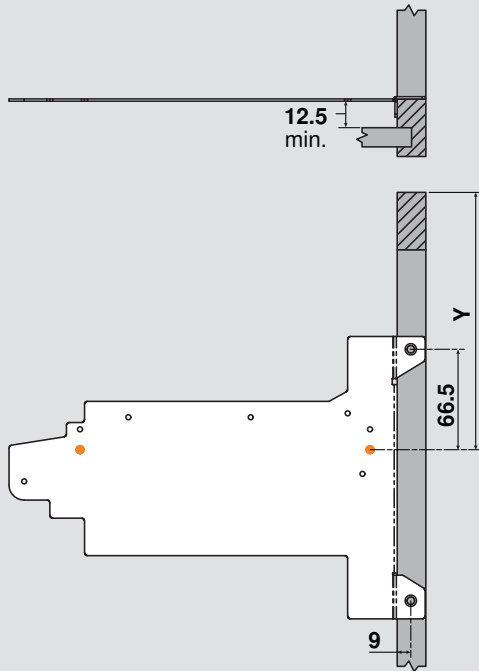
Part no.

HK-S frame mounting bracket set

20K6A01

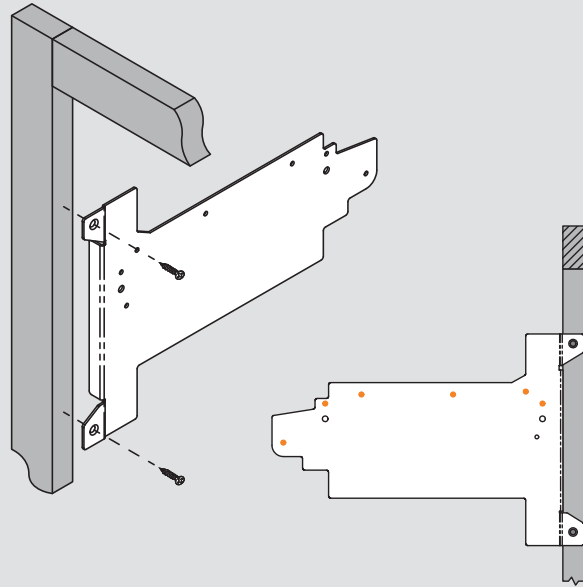
AVENTOS HF face frame bracket mounting locations

The locating pin position (Y) still needs to be calculated to determine proper bracket mounting location. Please see AVENTOS brochure.



NOTE: Locating pin location marked in orange

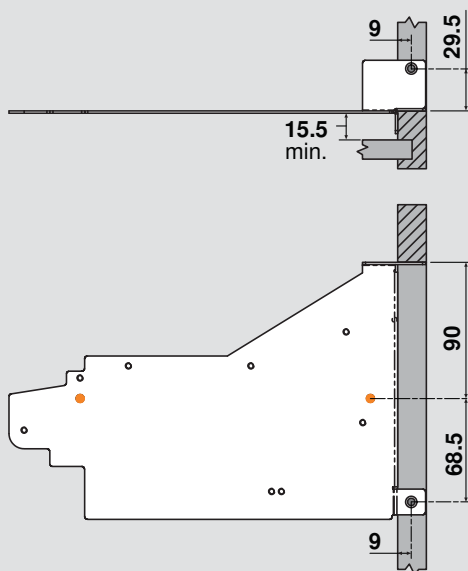
Attach bracket to face frame with two #7 x 3/4" (7074N) wood screws. Attach lift mechanism to bracket with six M4 x 30 machine screws (included).



NOTE: Machine screw mounting locations marked in orange

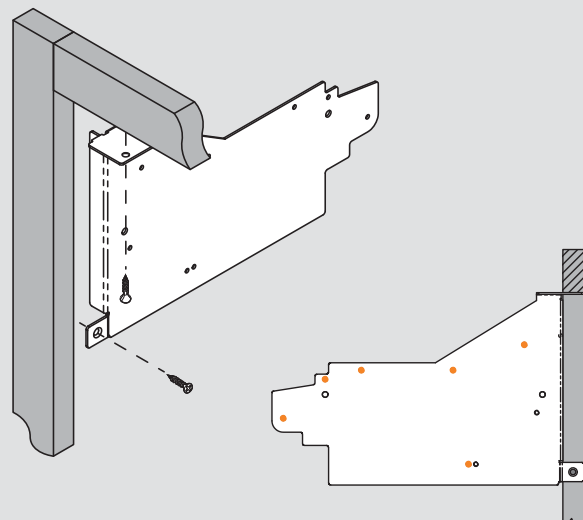
AVENTOS HL face frame bracket mounting locations

Due to mounting bracket position, the door mounting plate will need to be moved 2 lower on the door to maintain proper mounting position.



NOTE: Locating pin location marked in orange

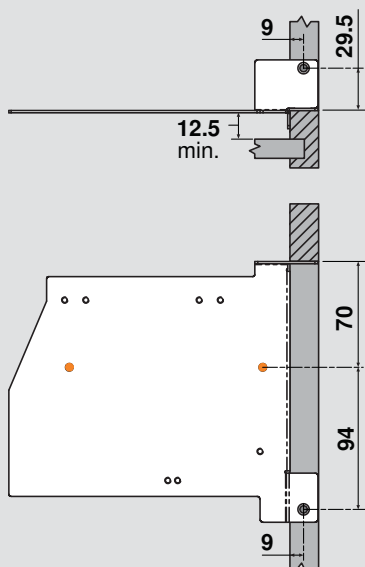
Attach bracket to face frame with two #7 x 3/4" (7074N) wood screws. Attach lift mechanism to bracket with six M4 x 30 machine screws (included).



NOTE: Machine screw mounting locations marked in orange

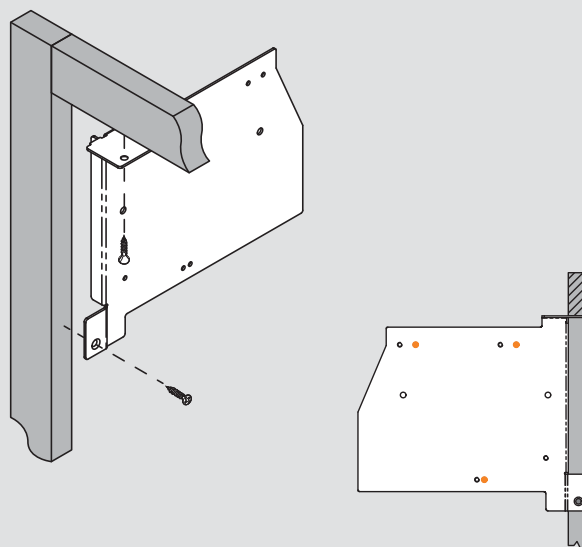
AVENTOS HK face frame bracket mounting locations

Due to mounting bracket position, the door mounting plate will need to be moved **1.5** lower on the door to maintain proper mounting position. Locating pin position is set at **37** setback allowing for up to **28** top overlay.



NOTE: Locating pin location marked in orange

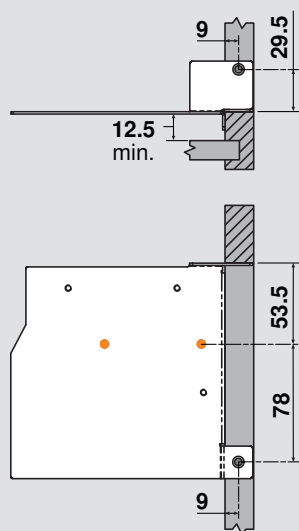
Attach bracket to face frame with two #7 x 3/4" (7074N) wood screws. Attach lift mechanism to bracket with three M4 x **30** machine screws (included).



NOTE: Machine screw mounting locations marked in orange

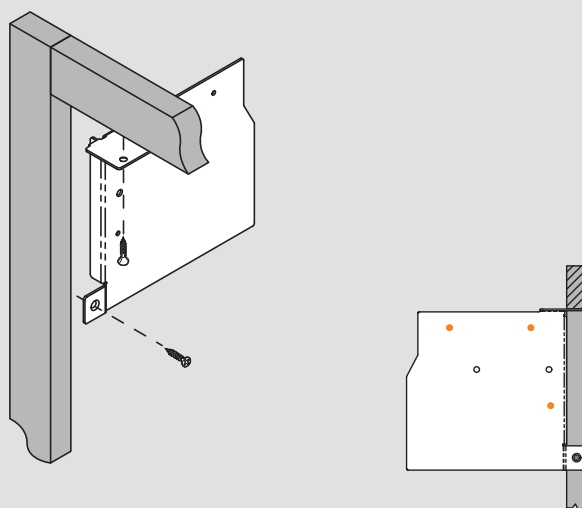
AVENTOS HK-S face frame bracket mounting locations

Due to mounting bracket position, the door mounting plate will need to be moved **1.5** lower on the door to maintain proper mounting position. Locating pin position is set at **37** setback allowing for up to **20** top overlay.



NOTE: Locating pin location marked in orange

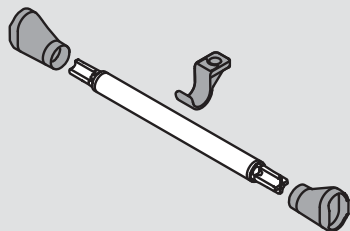
Attach bracket to face frame with two #7 x 3/4" (7074N) wood screws. Attach lift mechanism to bracket with three M4 x **30** machine screws (included).



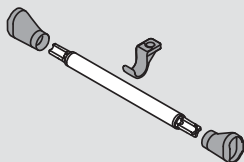
NOTE: Machine screw mounting locations marked in orange

Stabilizer rod connector sets

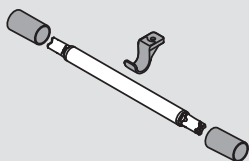
Components



AVENTOS HL set



AVENTOS HS set



Set includes:

- Connector rod
- Oval cover cap (qty 2)
- Top mounting hook

Cut rods to:

Inside cabinet width divided by 2 minus **147** (5-13/16") for SERVO-DRIVE minus **165** (6-1/2")

Part no.

HL rod connector set **20Q153ZA**

HS rod connector set **20Q153ZN**

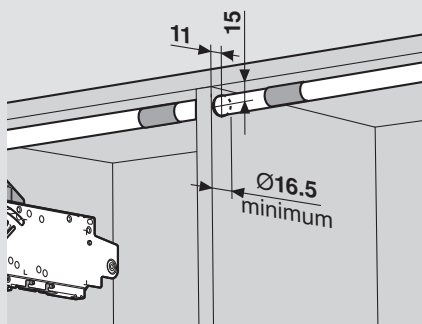
Installation screw **606N or 606P**

NOTE: HL set shown

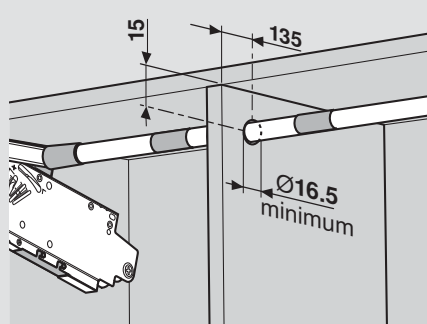
Mounting through a center panel



AVENTOS HL



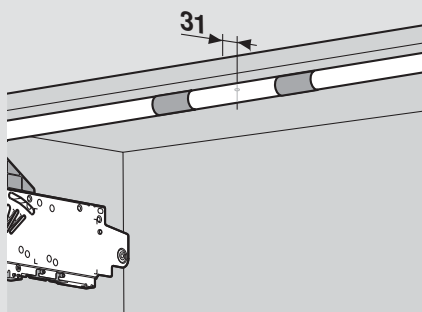
AVENTOS HS



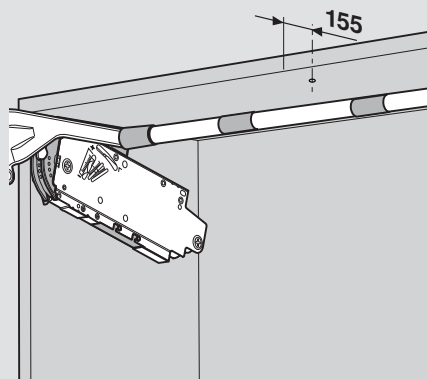
Mounting without a center panel



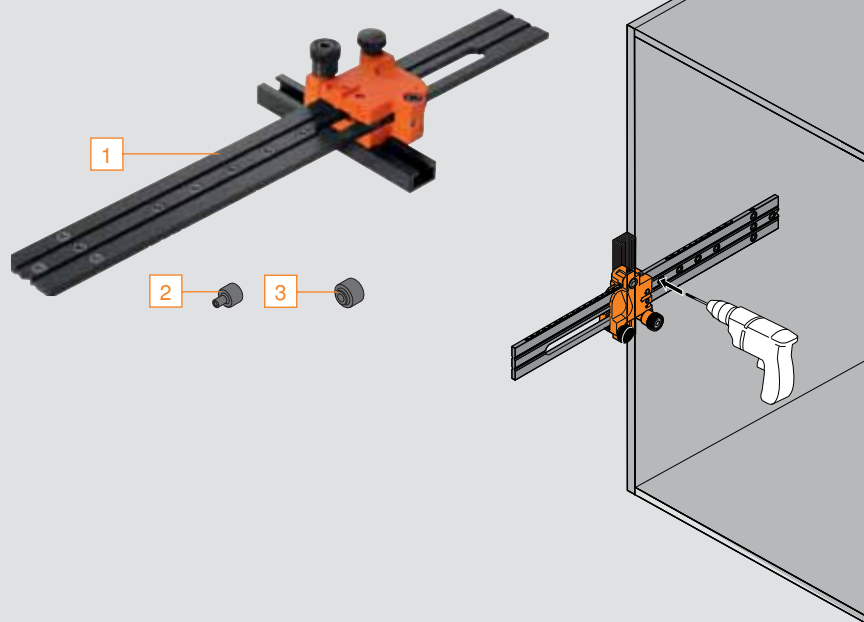
AVENTOS HL



AVENTOS HS



Universal individual template



- Used to pre-bore for AVENTOS lift mechanism locating pins
- Also used for pre-boring for cabinet profiles and BLUMOTION for doors and TIP-ON for doors adapter plates
- Calibrated scale for accurate setting

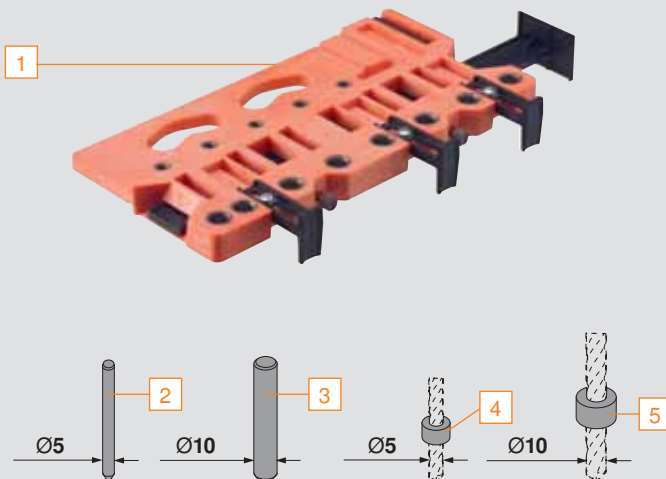
Set includes:

- 1 Universal individual template
- 2 Ø2.5 stop collar
- 3 Ø5 stop collar

Part no.

Template	65.1051.02
Ø2.5 drill bit	DB-2.5mm R
Ø5 drill bit	DB-5mm R

Universal boring template



- Used to pre-bore AVENTOS telescopic arm and arm assembly mounting plates
- Can also be use to pre-bore for drawer fronts, bottoms and backs for METABOX and TANDEMBOX drawer systems

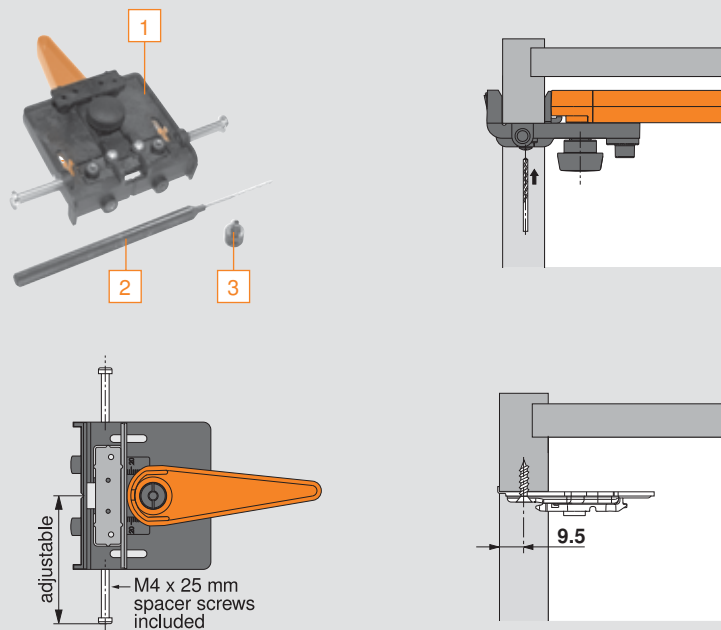
Set includes:

- 1 Template
- 2 Ø5 marking pin
- 3 Ø10 marking pin
- 4 Ø5 stop collar
- 5 Ø10 stop collar

Part no.

Universal template	ZML.0040.01
Ø5 drill bit	DB-5mm R

Platemate



- Boring template for all Blum face frame adapter plates
- Clamps to the frame with cam lever
- Adjustment knob accommodates face frame thickness of 5/8" to 1"
- Spacer screws allow quick use without measuring

Set includes:

- 1 Platemate template
- 2 Ø2.5 pilot bit and extension
- 3 Ø5 stop collar

Also includes:

- Reversible bushing insert for 32 hole spacing for 175L6xxx
- Reversible bushing insert for 40 hole spacing for 175H6xxx

Part no.

Platemate	65.5030.01
Ø2.5 drill bit	DB-2.5mm R

POZI DRIVER and bits



A POZI screwdriver (different from Phillips) is the most crucial tool you can use to assure that full torque is applied to all Blum mounting screws. POZI screws can be identified by the distinctive "tick" marks located in the center of the screw head recess.

Part no.

#2 POZI DRIVER	POZI DRIVER
1/4" Magnetic bit holder	BIT HOLDER
#2 x 1" POZI bit insert	POZI BIT #2x1
#2 x 2" POZI bit insert	POZI BIT #2x2

Vix piloting bit

For use in handheld drills

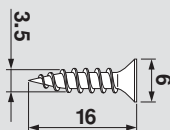


Part no.

Ø2.8 piloting bit	VPB-5
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Deep thread wood screw

Use to attach mounting plates to doors

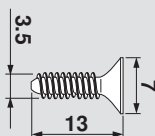


Part no.

#6 x 16, Phillips	606N
#6 x 16, Pozi	606P

Fine thread aluminum screw

Use to attach mounting plates to wide frame aluminum doors

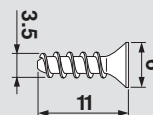


Part no.

#7 x 13 fine thread	7072A
---------------------	-------

Deep thread aluminum screw

Use to attach mounting plates to narrow frame aluminum doors



Part no.

#6x11 deep thread	699.110
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175H3F00	11, 61	20L3900.06	34, 35, 36, 37, 38, 39, 40, 41
177H3100E	75, 79, 82	20L8000.N1	35, 39
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20F2500.N5	11, 15	20Q153ZN	92
20F2800.N5	11, 15	20Q1061UN	23, 27
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20K2500.N5	47, 51	20S4200A	27, 39, 51, 54, 68
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20K2900.N5	47, 51	20S8000.NA	23, 27
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20K2C00.N1	61, 65	39C358B.20	75
20K2E00.N1	61, 65	606N	94
20K4A00A02	65	606P	94
20K4101	75, 82	65.1051.02	93
20K4101A	79, 82	65.5030.01	94
20K4501	75	699.110	94
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20L2100.N5	34, 35, 38 39	POZI DRIVER	94
20L2300.N5	34, 35, 38 39	VPB-5	94
20L2500.N5	34, 35, 38 39	ZML.0040.01	93
20L2700.N5	34, 35, 38 39		
20L2900.N5	34, 35, 38 39		
20L3200.06	34, 35, 36, 37, 38, 39, 40, 41		
20L3500.06	34, 35, 36, 37, 38, 39, 40, 41		

SERVO-DRIVE

by Blum



Effortless opening

With the SERVO-DRIVE electrical motion technology, cabinets open with a single touch of the front.



Comfortable and easy closing

With a press of a button on the side of the cabinet, the doors close easily and ergonomically when combined with BLUMOTION.



Completely under control

Even though lift systems open and close automatically, the motion can be interrupted at any time.



Access the SERVO-DRIVE section of our website to download the SERVO-DRIVE for AVENTOS brochure

> www.blum.com/us/en/01/60/20/



Blum has downloadable Excel® planning tools that provide the required parts and calculate the mounting locations for your application. They are available at blum.com/planning.





Blum, Inc. Headquarters, Stanley, NC



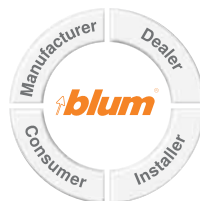
Why Choose Blum



Blum, Inc. is a leading manufacturer of functional hardware for the kitchen cabinet and commercial casework industries specializing in lift systems, concealed hinges and drawer runner systems. Virtually all of the hardware needed to assemble and make cabinets functional is available within the wide range of quality Blum products. Blum supports the U.S. market with a network of more than 150 dependable distributors, 40+ knowledgeable Blum sales representatives and an experienced customer service department.

Commitment to manufacturing in the U.S.

Blum manufactures many of its products in our 450,000 sq ft manufacturing, logistics and warehouse facility located in Stanley, North Carolina. Manufacturing closer to the customer allows Blum to react quickly to changing customer needs including unexpected surges in demand. Customer pickups and deliveries can be timed to better match their production schedules. Blum is committed to manufacturing in the U.S. for the U.S. market.



Product development at Blum considers all of the various customers who will come in contact with our products. With this “Global Customer Benefits” philosophy we strive to create advantages for all users.



Blum, Inc. is ISO 9001 certified which means that you are assured of consistent quality in every Blum product. They exceed the requirements of ANSI/BHMA standards for cycle life, static load and self-closing performance.



Please visit blum.com for information on other Blum products
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