AVENTOS

Lift systems

AVENTOS smooth and silent lift systems

Lifting cabinet doors
up and out of the way

AVENTOS lift systems are the new 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.

AVENTOS HF

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Motion and design

Effortless opening . . .

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

Design options

AVENTOS offers numerous design options for wooden doors, five-piece doors and aluminum frame doors.

. . . and closing

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, until you are ready to close them.

Quiet closing

BLUMOTION soft close is integrated into every AVENTOS mechanism for an amazingly quiet close every time.

Easy installation and assembly

With AVENTOS, installation is fast and precise. With the doors removed there are no protruding parts which makes transporting cabinets safe and convenient. 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 and the tension adjustment makes fine tuning the opening and closing power of the doors exact.

Opening and closing lift systems in a new way

AVENTOS lift systems open with just a light touch – and then close again with the press of a button. An inspiring feature that is certain to impress, thanks to SERVO-DRIVE for AVENTOS, the new electrical support for lift systems.

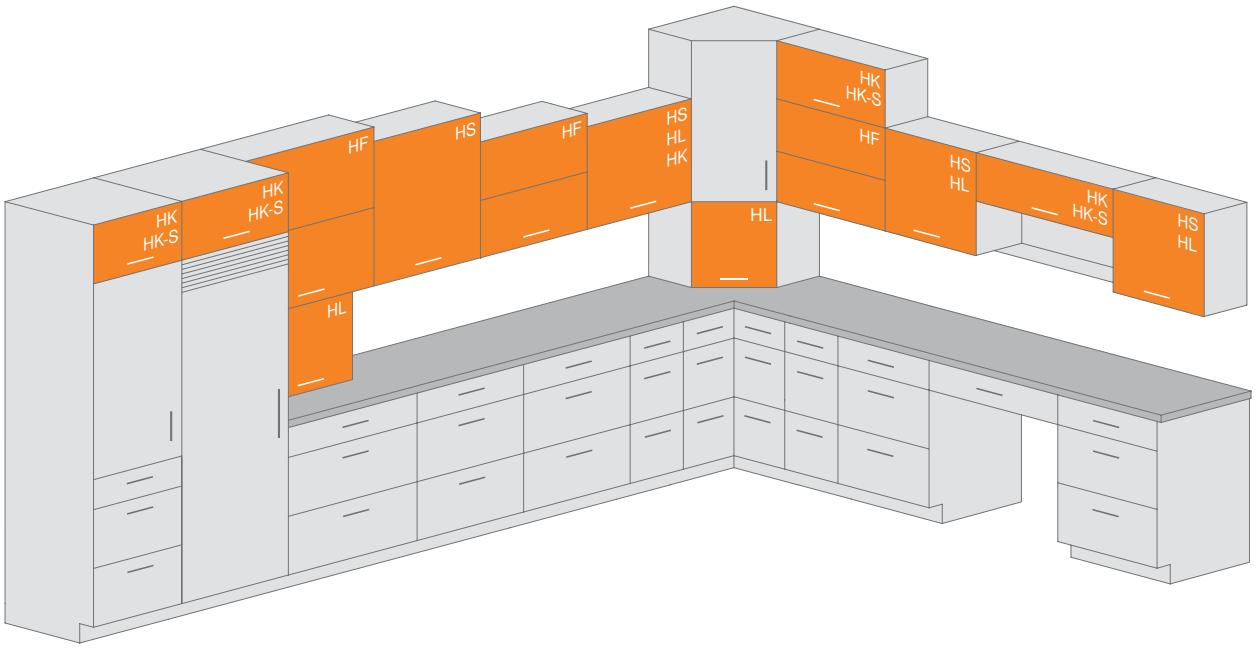
SERVO-DRIVE inside

Doors that open with a simple touch

A unique solution for handle-less lift applications. TIP-ON mechanical support system makes opening doors effortless. The door opens at an angle that is comfortable while giving you a complete view and access to the cabinet interior.

TIP-ON inside

A vast array of options



Solutions
for all applications

There are many good reasons why AVENTOS lift systems are an excellent choice for wall cabinets. Because the cabinet doors open upwards, they provide an excellent view into the cabinet interior enabling comfortable and ergonomic access to storage items. The kitchen user retains freedom of motion, keeping the cabinet door out of the way.

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

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Program overview

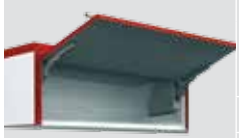
AVENTOS HF		Face frame cabinet	Panel cabinet	
	Bi-fold doors Height range **479** (18-7/8") – **1067** (42") Width range **381** (15") – **1828** (72")	Wood or wide aluminum frame door	Wood or wide aluminum frame door	Narrow aluminum frame door
	Ordering information	page 10	page 14	page 18
	Cabinet preparation	page 12	page 16	page 20

AVENTOS HS		Face frame cabinet	Panel 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	Wood or wide aluminum frame door	Narrow aluminum frame door
	Ordering information	page 24	page 28	page 32
	Cabinet preparation	page 26	page 30	page 34

AVENTOS HL		Face frame cabinet	Panel 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	Wood or wide aluminum frame door	Narrow aluminum frame door
	Ordering information	page 38	page 42	page 46
	Cabinet preparation	page 40	page 44	page 48
	Lift up door – appliance garage Height range **450** (17-11/16") – **580** (22-13/16") Width range **381** (15") – **1828** (72")	Wood or wide aluminum frame door	Wood or wide aluminum frame door	Narrow aluminum frame door
	Ordering information	page 50	page 54	page 58
	Cabinet preparation	page 52	page 56	page 60

NOTE: For face frame corner cabinet appliance garage bracket see page 102

AVENTOS HK		Face frame cabinet	Panel cabinet	
	Stay lift door Height range **300** (11-13/16") – **610** (24") Width range **381** (15") – **1828** (72")	Wood or wide aluminum frame door	Wood or wide aluminum frame door	Narrow aluminum frame door
	Ordering information	page 64	page 68	page 72
	Cabinet preparation	page 66	page 70	page 74

AVENTOS HK-S		Face frame cabinet	Panel cabinet	
	Stay lift door Height range **186** (7-3/8") – **400** (15-3/4") Width range **381** (15") – **991** (39")	Wood or wide aluminum frame door	Wood or wide aluminum frame door	Narrow aluminum frame door
	Ordering information	page 78	page 82	page 86
	Cabinet preparation	page 80	page 84	page 88

NOTE: For all inset applications see pages 100 – 101

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BLUMOTION inside

up and out of the way

Few parts –many applications

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.

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The motion inside

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

AVENTOS planning tools

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

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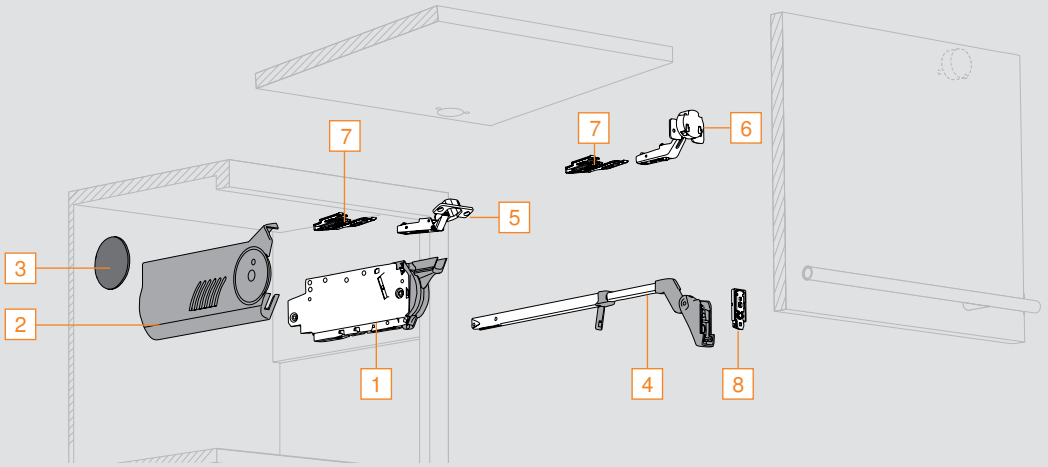
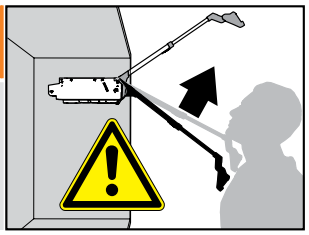
AVENTOS HF – Face frame cabinets

Required components



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

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



Step 1 – Determine the power factor for the application

AVENTOS planning tools available at blum.com/planning

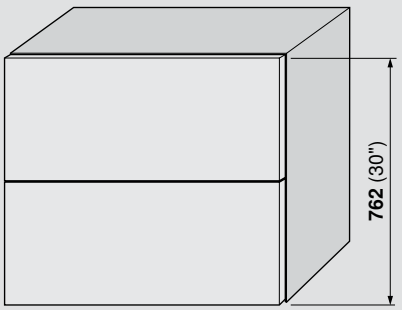
Determine power factor

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 (inch) x combined door weight* (lb)

* Including handle weight

Example:
Cabinet height: 30" (within possible range)
Combined door weight = **23** lb 14 oz (14 oz = **.9** lb see chart below)
Weight converted to decimal is **23.9** lb
Power factor = cabinet height multiplied by combined door weight*
Power factor = 30 x **23.9**
Power factor = 717
A power factor of 717 requires lift mechanism 20F2500.N5



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**

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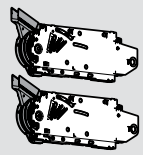
Ordering parts for wood or wide aluminum doors

Step 2 – Select the required components

Lift mechanism set



Set includes:

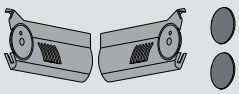
1 Lift mechanism (qty 2)

■ #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 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



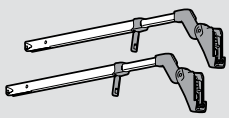
Set includes:

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	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 (qty 2)

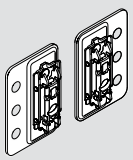
7 175H6000 – Face frame adapter (qty 4)

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

	Part no.
Wood or wide aluminum hardware set	78Z5530TA8
Installation screw for wood doors	606N or 606P
Installation screw for wide aluminum 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

SERVO-DRIVE inside

SERVO-DRIVE for AVENTOS available

Please see SERVO-DRIVE for AVENTOS brochure for part and ordering information at blum.com

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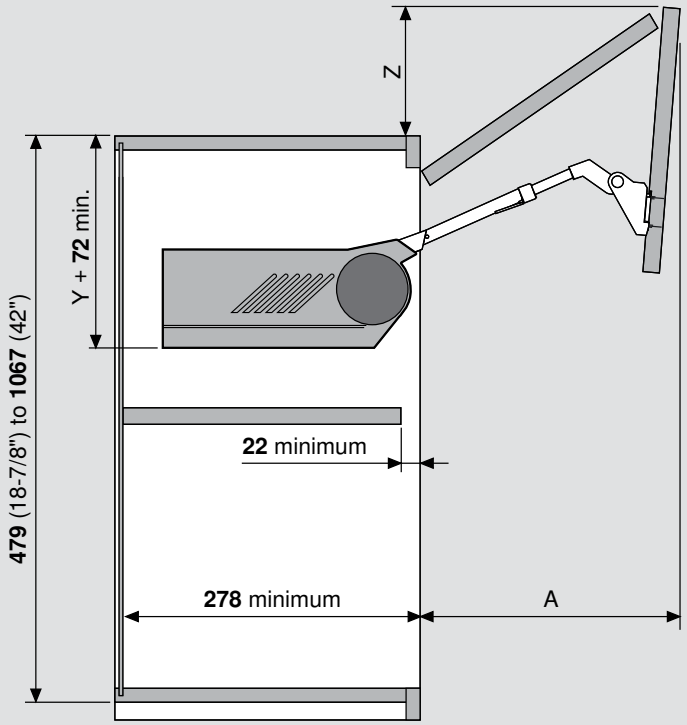
AVENTOS HF – Face frame cabinets

Step 1 – Check clearances

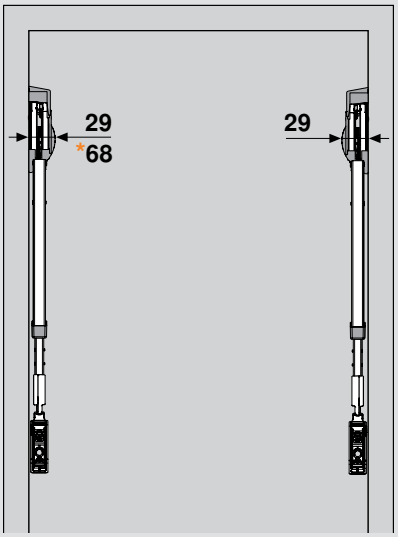
Space requirements

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)

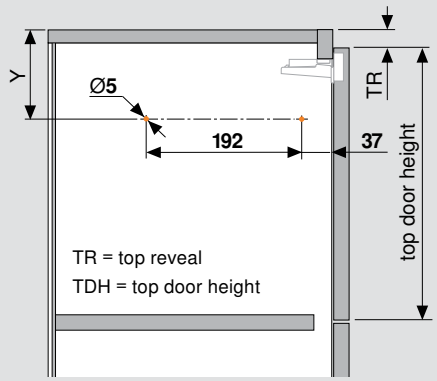
Lift mechanism clearance



*denotes clearance required for SERVO-DRIVE for AVENTOS lift mechanism

Step 2 – Mount the lift mechanisms

Bore for the locating pins

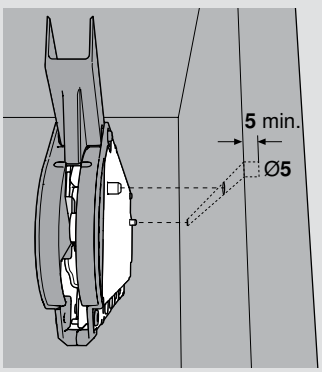


NOTE: Locating pin holes shown in orange

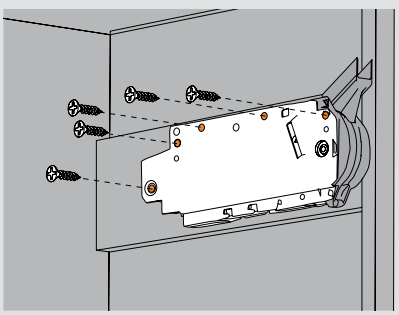
top door height	Y
231 – 271	TDH x .6 minus **28** + TR
272 – 531	TDH x .6 minus **57** + TR

Lift mechanism positioning and attachment

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



The included #7 x 35 mm (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 to mount the AVENTOS lift mechanisms

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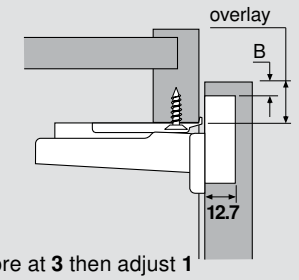
Cabinet preparation for wood or wide aluminum doors

Step 3 – Prepare the cabinet and doors for hinges

CLIP top hinge

Top door hinge – small overlay

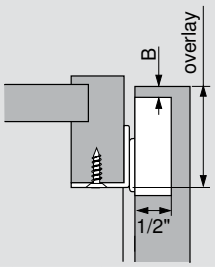


* Bore at **3** then adjust **1**

overlay				
13*	**14**	**15**	**16**	**17**
3	**3**	**4**	**5**	**6**
B = bore distance				

COMPACT hinge

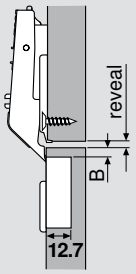
Top door hinge – large overlay



overlay
32 (1-1/4")
3 (1/8")
B = bore distance

CLIP top hinge

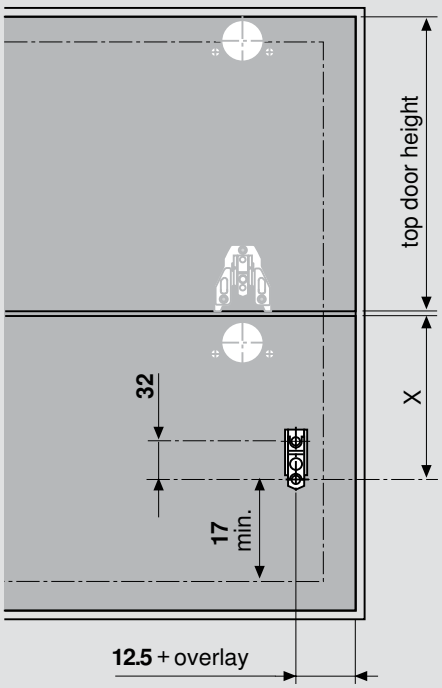
Bottom door hinge



reveal			
6	**5**	**4**	**3**
3	**4**	**5**	**6**
B = bore distance			

Step 4 – Determine telescopic arm mounting plate position and attach to the bottom door

Telescopic arm mounting plate location

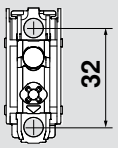


top door height	X
231 – 271	top door height x .5 + **70**
272 – 531	top door height x .5 + **47**

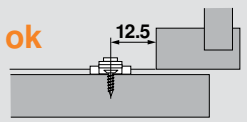
NOTE: Three hinges are required for cabinet widths over **1219** (48") or 26.5 lb combined door weight

Telescopic arm mounting plate choices

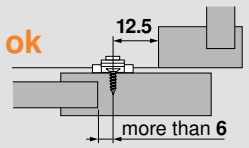
Mounting plate



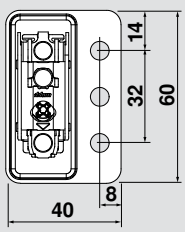
Slab door



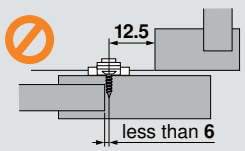
Five-piece door

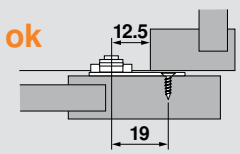


Mounting plate with bracket for large overlay five-piece doors



Five-piece door





Step 5 – Assemble the cabinet

Follow the assembly instructions on page 92

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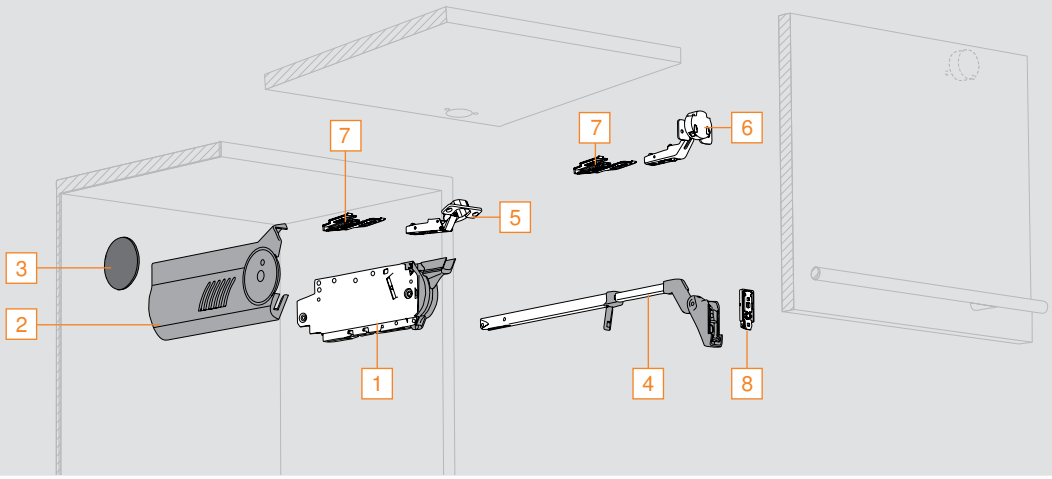
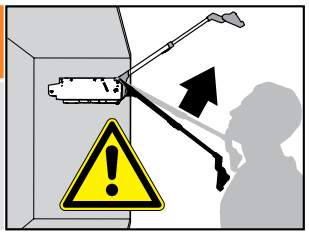
AVENTOS HF – Panel cabinets

Required components



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

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



Step 1 – Determine the power factor for the application

AVENTOS planning tools available at blum.com/planning

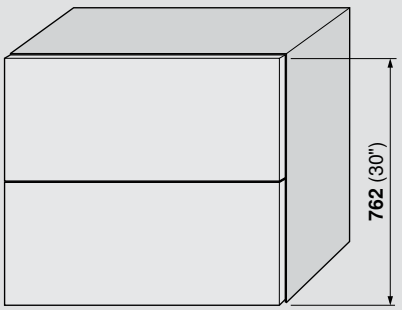
Determine power factor

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 (inch) x combined door weight* (lb)

* Including handle weight

Example:
Cabinet height: 30" (within possible range)
Combined door weight = **23** lb 14 oz (14 oz = **.9** lb see chart below)
Weight converted to decimal is **23.9** lb
Power factor = cabinet height multiplied by combined door weight*
Power factor = 30 x **23.9**
Power factor = 717
A power factor of 717 requires lift mechanism 20F2500.N5



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**

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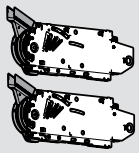
Ordering parts for wood or wide aluminum doors

Step 2 – Select the required components

Lift mechanism set



Set includes:

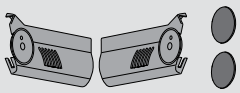
1 Lift mechanism (qty 2)

■ #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 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



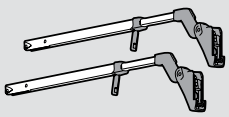
Set includes:

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	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 (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

	Part no.
Wood or wide aluminum hardware set	78Z5530TA8
Installation screw for wood doors	606N or 606P
Installation screw for wide aluminum doors	7072A

SERVO-DRIVE inside

SERVO-DRIVE for AVENTOS available

Please see SERVO-DRIVE for AVENTOS brochure for part and ordering information at blum.com

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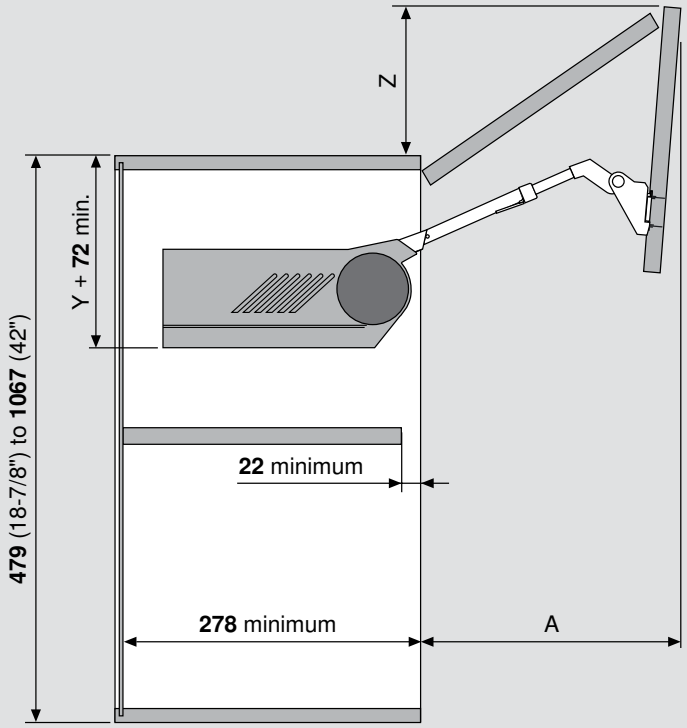
AVENTOS HF – Panel cabinets

Step 1 – Check clearances

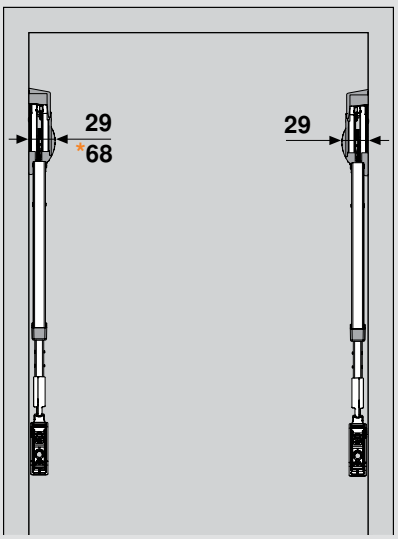
Space requirements

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)

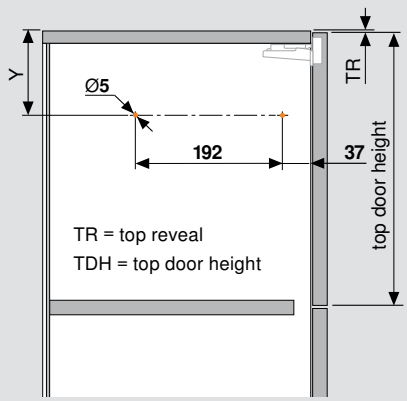
Lift mechanism clearance



*denotes clearance required for SERVO-DRIVE for AVENTOS lift mechanism

Step 2 – Mount the lift mechanisms

Bore for the locating pins

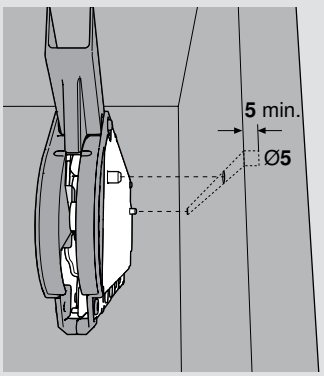


NOTE: Locating pin holes shown in orange

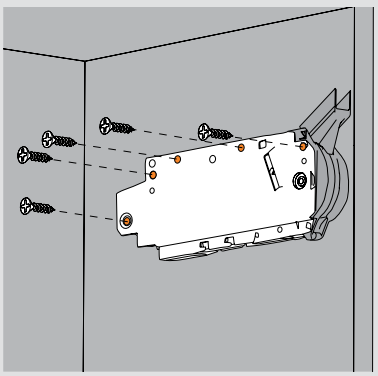
top door height	Y
231 – 271	TDH x .6 minus **28** + TR
272 – 531	TDH x .6 minus **57** + TR

Lift mechanism positioning and attachment

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



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



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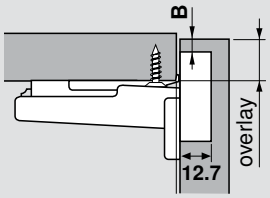
Cabinet preparation for wood or wide aluminum doors

Step 3 – Prepare the cabinet and doors for hinges

CLIP top hinge

Top door hinge

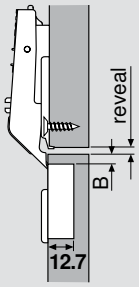


*Bore at **3** then adjust **1**

overlay				
13*	**14**	**15**	**16**	**17**
3	**3**	**4**	**5**	**6**
B = bore distance				

CLIP top hinge

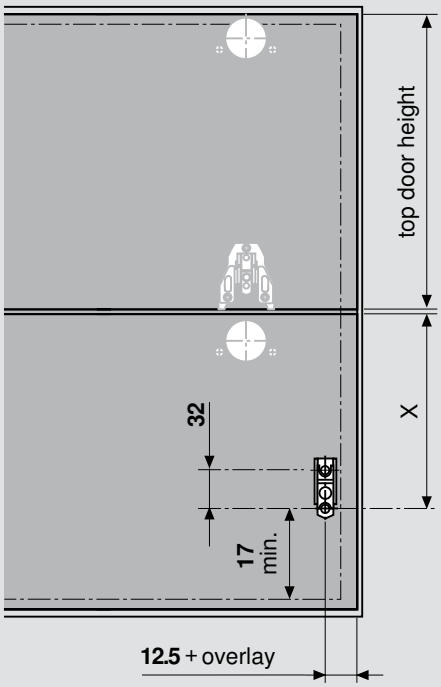
Bottom door hinge



reveal			
6	**5**	**4**	**3**
3	**4**	**5**	**6**
B = bore distance			

Step 4 – Determine telescopic arm mounting plate position and attach to the bottom door

Telescopic arm mounting plate location

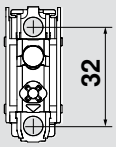


top door height	X
231 – 271	top door height x .5 + **70**
272 – 531	top door height x .5 + **47**

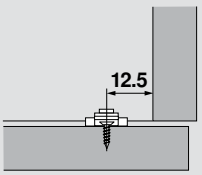
NOTE: Three hinges are required for cabinet widths over **1219** (48") or 26.5 lb combined door weight

Telescopic arm mounting plate choices

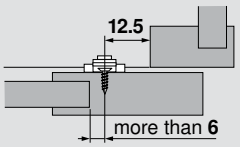
Mounting plate



Slab door



Five-piece door



Step 5 – Assemble the cabinet

Follow the assembly instructions on page 92

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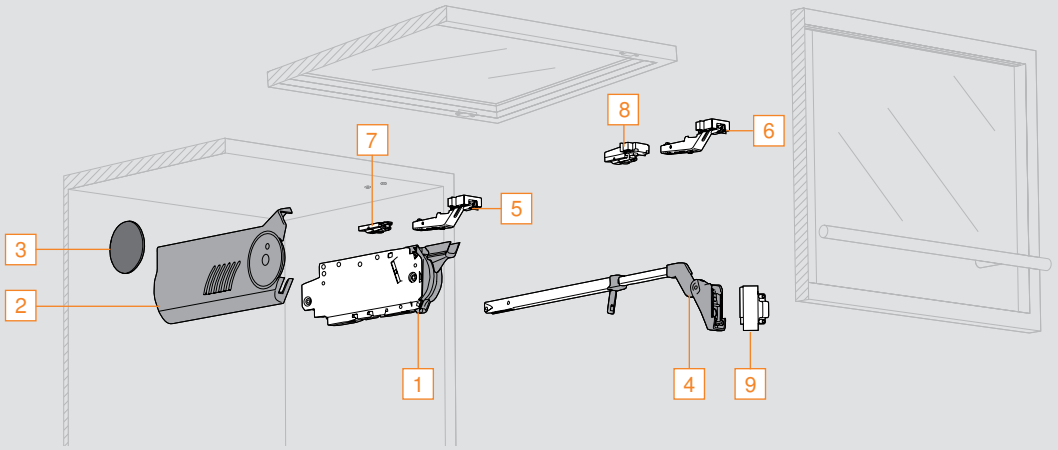
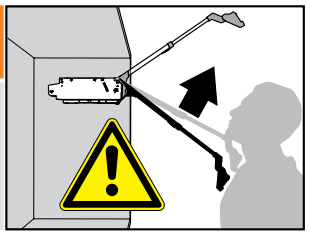
AVENTOS HF – Panel cabinets

Required components



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

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



Step 1 – Determine the power factor for the application

AVENTOS planning tools available at blum.com/planning

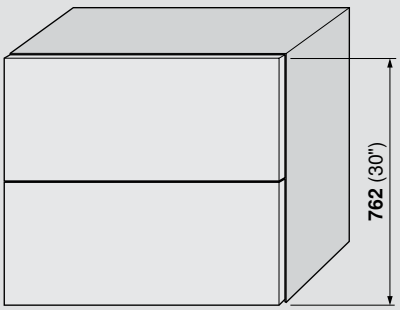
Determine power factor

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 (inch) x combined door weight* (lb)

* Including handle weight

Example:
Cabinet height: 30" (within possible range)
Combined door weight* = **23** lb 14 oz (14 oz = **.9** lb see chart below)
Weight converted to decimal is **23.9** lb
Power factor = cabinet height multiplied by combined door weight*
Power factor = 30 x **23.9**
Power factor = 717
A power factor of 717 requires lift mechanism 20F2500.N5



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**

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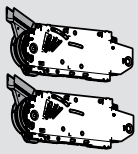
Ordering parts for narrow aluminum doors

Step 2 – Select the required components

Lift mechanism set



Set includes:

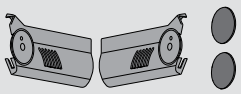
1 Lift mechanism (qty 2)

■ #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 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



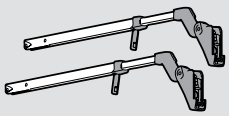
Set includes:

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	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 4)

■ 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 inside

SERVO-DRIVE for AVENTOS available

Please see SERVO-DRIVE for AVENTOS brochure for part and ordering information at blum.com

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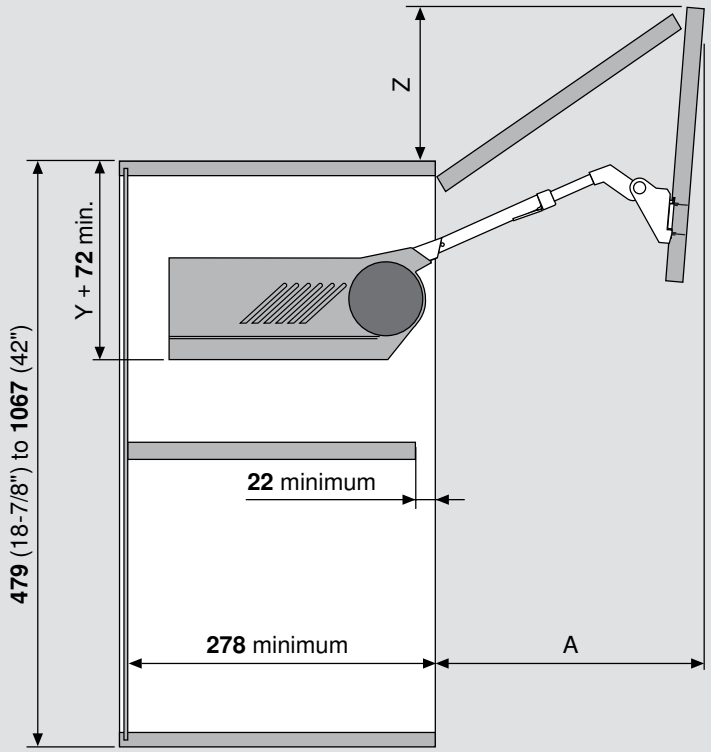
AVENTOS HF – Panel cabinets

Step 1 – Check clearances

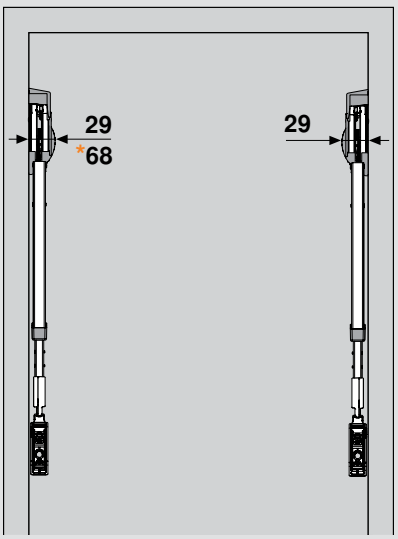
Space requirements

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)

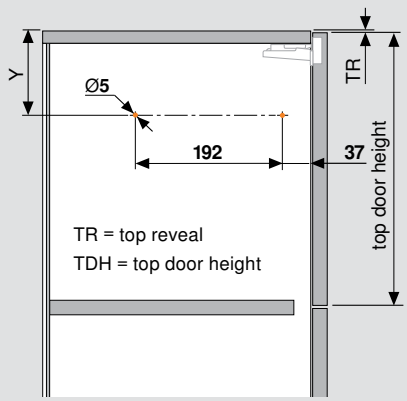
Lift mechanism clearance



*denotes clearance required for SERVO-DRIVE for AVENTOS lift mechanism

Step 2 – Mount the lift mechanisms

Bore for the locating pins

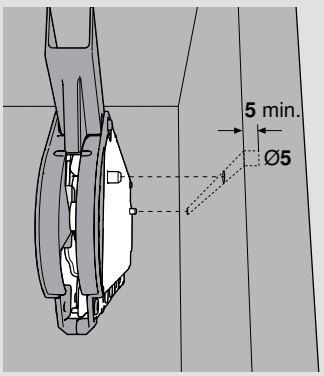


NOTE: Locating pin holes shown in orange

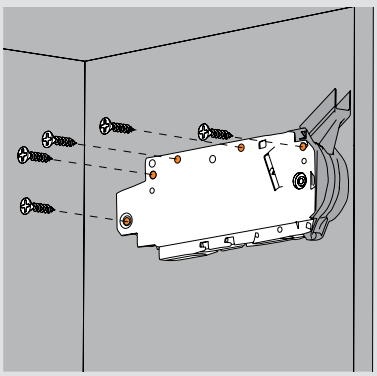
top door height	Y
231 – 271	TDH x .6 minus **28** + TR
272 – 531	TDH x .6 minus **57** + TR

Lift mechanism positioning and attachment

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



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



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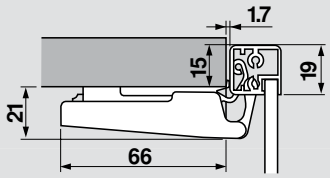
Cabinet preparation for narrow aluminum doors

Step 3 – Prepare the cabinet and doors for hinges

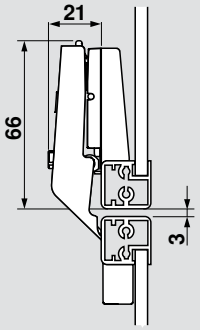
CLIP top aluminum door hinge

Top door hinge



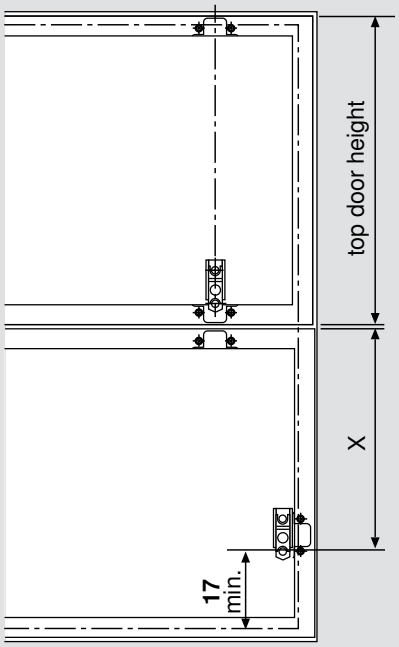
CLIP top hinge

Bottom door hinge



Step 4 – Determine telescopic arm mounting plate position and attach to the bottom door

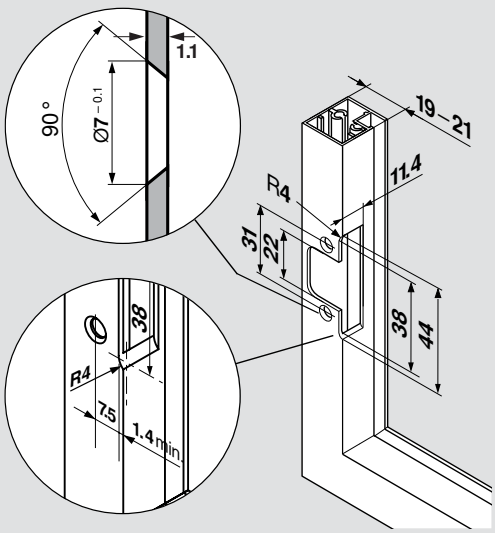
Telescopic arm mounting plate location



top door height	X
231 – 271	top door height x .5 + **70**
272 – 531	top door height x .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



Step 5 – Assemble the cabinet

Follow the assembly instructions on page 92

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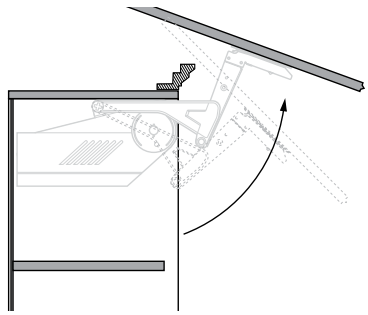
BLUMOTION inside

Up, over and out of the way



Few parts – many applications

AVENTOS HS covers all common door widths and heights with one simple program: nine lift mechanisms and only one arm assembly. This simplifies planning, ordering and warehousing.

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 equipped with decorative molding.

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The motion inside

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

AVENTOS planning tools

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

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AVENTOS HS – Face frame cabinets

Step 1 – Select the required lift mechanism set

AVENTOS planning tools available at blum.com/planning

Using the charts

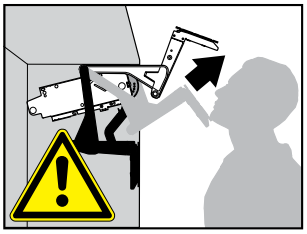
Each chart covers three different lift mechanisms (nine total). To select the required lift mechanism set, find the cabinet height on the left side of the chart, then go across to the range that contains the weight of your door in pounds and ounces. Follow that column to the top orange box to get the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

NOTE: Part numbers in **ORANGE**, pounds 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
	395 – 399	4/6 – 10/5	10/6 – 19/10	19/11 – 25/13
16	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
	415 – 424	5/0 – 9/11	9/12 – 19/2	19/3 – 27/8
17	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
	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
18	450 – 459	5/0 – 9/3	9/4 – 18/8	18/9 – 29/11
	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
	475 – 479	5/8 – 9/0	9/1 – 17/7	17/8 – 30/13
19	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
	495 – 499	5/8 – 9/0	9/1 – 16/15	17/0 – 31/15
20	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
	520 – 525	5/8 – 8/8	8/9 – 16/5	16/6 – 33/0

Warning: Risk of injury by arm assembly!

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



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
25	635 – 639	6/9 – 11/15	12/0 – 24/10	24/11 – 41/3
	640 – 649	6/9 – 11/15	12/0 – 24/0	24/1 – 41/3
26	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
	676 – 684	7/11 – 17/0	17/1 – 29/7	29/8 – 47/5
27	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
	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
28	710 – 714	7/11 – 16/7	16/8 – 28/8	28/9 – 46/11
	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
	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
30	760 – 764	8/4 – 15/8	15/9 – 27/0	27/1 – 44/8
	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
	780 – 784	8/12 – 14/15	15/0 – 26/8	26/9 – 44/8
31	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

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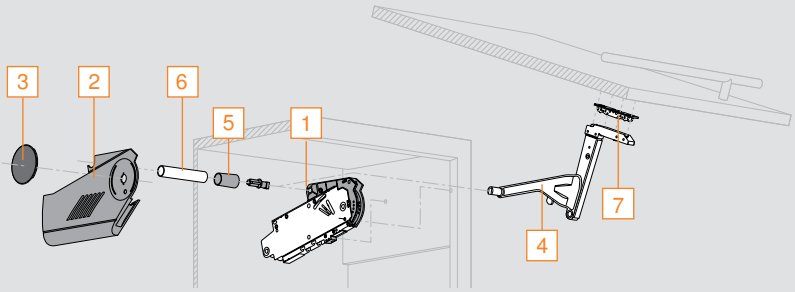
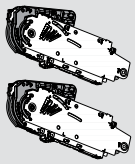
Ordering parts for wood or wide aluminum doors

Required components



Step 2 – Select the required components

Lift mechanism set

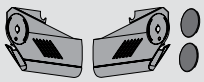


Set includes:
- 1 Lift mechanism (qty 2)
- ■ #7 x 35 mm (1-3/8") wood screw (qty 10)

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**

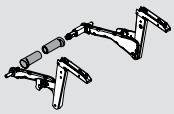
Cover set



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

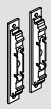
- 6 Round stabilizer rod

NOTE: Cabinets wider than 48" a stabilizer rod connector set is required, see page 105

- ■ Aluminum rod length **1061** (41-3/4"), cut to size
- ■ Length = interior cabinet opening minus **129** (5-1/16")

	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 inside

SERVO-DRIVE for AVENTOS available
Please see SERVO-DRIVE for AVENTOS brochure for part and ordering information at blum.com

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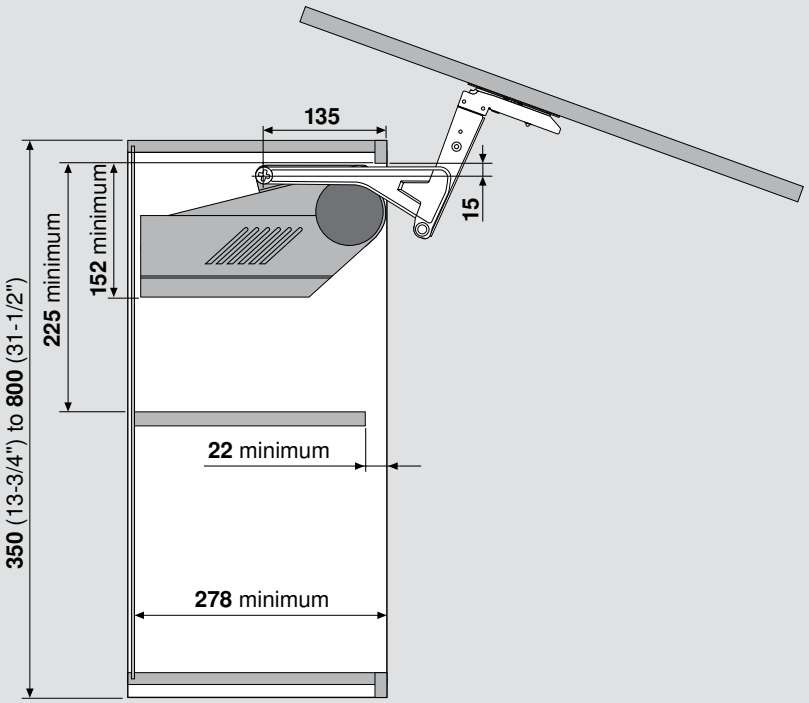
AVENTOS HS – Face frame cabinets

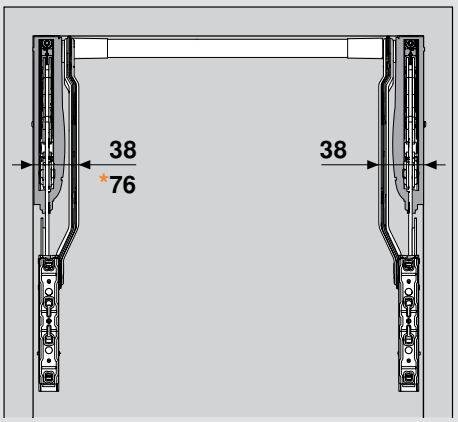
Step 1 – Check clearances

Space requirements

Door and hardware clearance

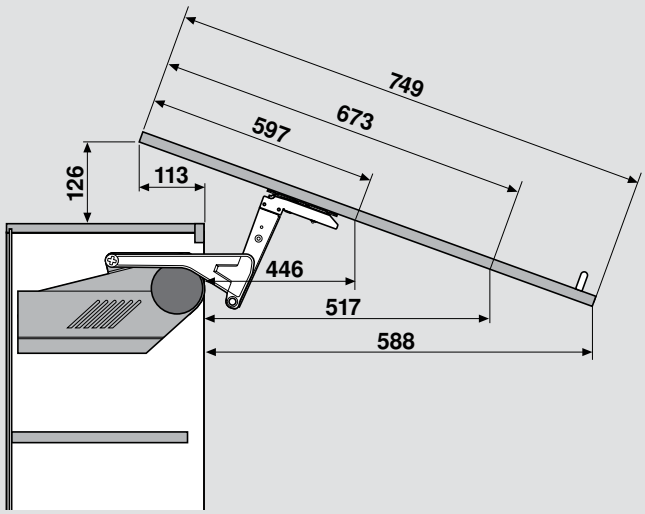


Lift mechanism clearance

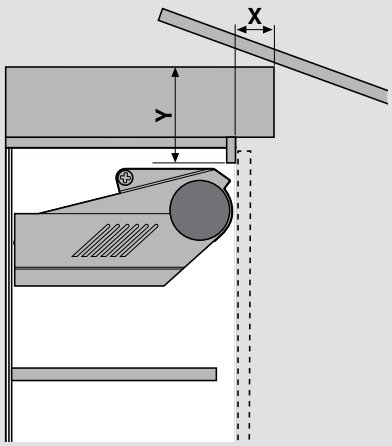


*denotes clearance required for SERVO-DRIVE for AVENTOS lift mechanism

Door protrusion for common cabinet heights



Crown molding clearance



overlay	maximum X	maximum Y
32 (1-1/4")	**44** (1-3/4")	**134** (5-1/4")
12.5 (1/2")	**72** (2-13/16")	**126** (4-15/16")

NOTE: Based on a 1-1/2" face frame width and 1-1/4" overlay

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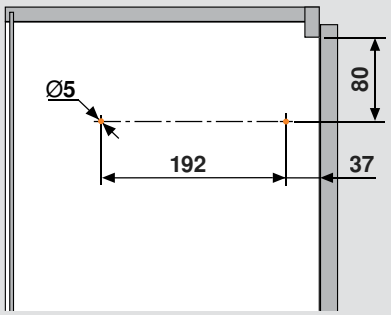
Cabinet preparation for wood or wide aluminum doors

Step 2 – Mount the lift mechanisms

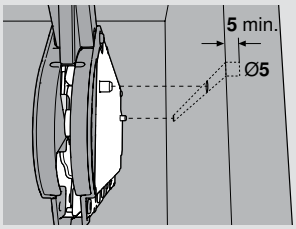
Bore for the locating pins



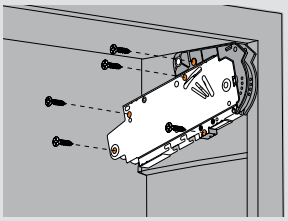
NOTE: Locating pin holes shown in orange

Lift mechanism positioning

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



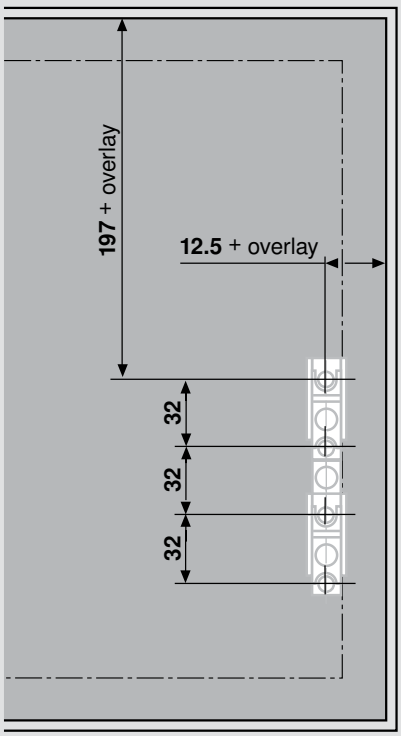
The included #7 x 35 mm (1-3/8") wood screws are required in the five holes marked in orange.



NOTE: Face frame cabinets must be blocked-out on the sides flush with the frame to mount the AVENTOS lift mechanisms

Step 3 – Determine the arm assembly mounting plate location and attach to the door

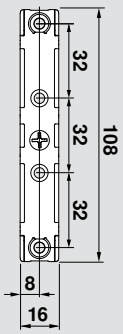
Arm assembly mounting plate location



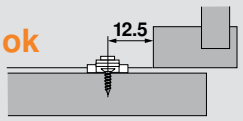
NOTE: Attach mounting plate with four 606N or 606P wood screws for wood doors or 7072A for wide aluminum doors

Arm assembly mounting plate choices

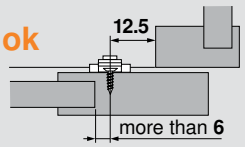
Mounting plate



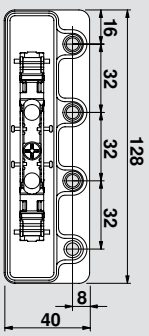
Slab door



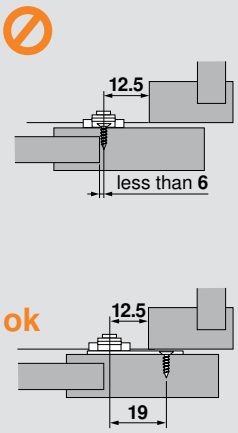
Five-piece door



Mounting plate with bracket for large overlay five-piece doors



Five-piece door



Step 4 – Assemble the cabinet

Follow the assembly instructions on page 94

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AVENTOS HS – Panel cabinets

Step 1 – Select the required lift mechanism set

AVENTOS planning tools available at blum.com/planning

Using the charts

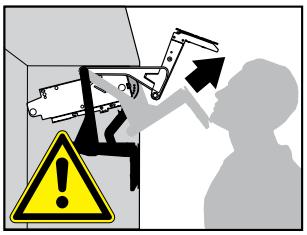
Each chart covers three different lift mechanisms (nine total). To select the required lift mechanism set, find the cabinet height on the left side of the chart, then go across to the range that contains the weight of your door in pounds and ounces. Follow that column to the top orange box to get the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

NOTE: Part numbers in **ORANGE**, pounds 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
	395 – 399	4/6 – 10/5	10/6 – 19/10	19/11 – 25/13
16	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
	415 – 424	5/0 – 9/11	9/12 – 19/2	19/3 – 27/8
17	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
	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
18	450 – 459	5/0 – 9/3	9/4 – 18/8	18/9 – 29/11
	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
	475 – 479	5/8 – 9/0	9/1 – 17/7	17/8 – 30/13
19	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
	495 – 499	5/8 – 9/0	9/1 – 16/15	17/0 – 31/15
20	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
	520 – 525	5/8 – 8/8	8/9 – 16/5	16/6 – 33/0

Warning: Risk of injury by arm assembly!

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



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
25	635 – 639	6/9 – 11/15	12/0 – 24/10	24/11 – 41/3
	640 – 649	6/9 – 11/15	12/0 – 24/0	24/1 – 41/3
26	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
	676 – 684	7/11 – 17/0	17/1 – 29/7	29/8 – 47/5
27	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
	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
28	710 – 714	7/11 – 16/7	16/8 – 28/8	28/9 – 46/11
	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
	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
30	760 – 764	8/4 – 15/8	15/9 – 27/0	27/1 – 44/8
	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
	780 – 784	8/12 – 14/15	15/0 – 26/8	26/9 – 44/8
31	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

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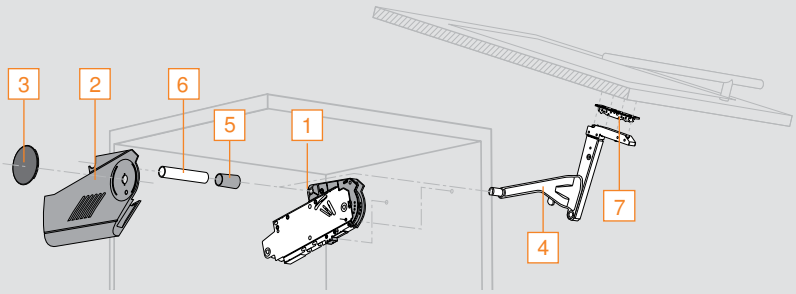
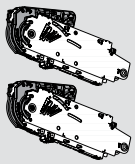
Ordering parts for wood or wide aluminum doors

Required components



Step 2 – Select the required components

Lift mechanism set

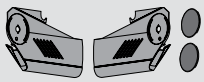


Set includes:
- 1 Lift mechanism (qty 2)
- ■ #7 x 35 mm (1-3/8") wood screw (qty 10)

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

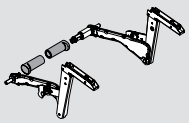
Cover set



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

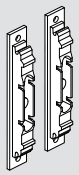
- 6 Round stabilizer rod

NOTE: Cabinets wider than 48" a stabilizer rod connector set is required, see page 105

- ■ Aluminum rod length **1061** (41-3/4"), cut to size
- ■ Length = interior cabinet opening minus **129** (5-1/16")

	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

SERVO-DRIVE inside

SERVO-DRIVE for AVENTOS available
Please see SERVO-DRIVE for AVENTOS brochure for part and ordering information at blum.com

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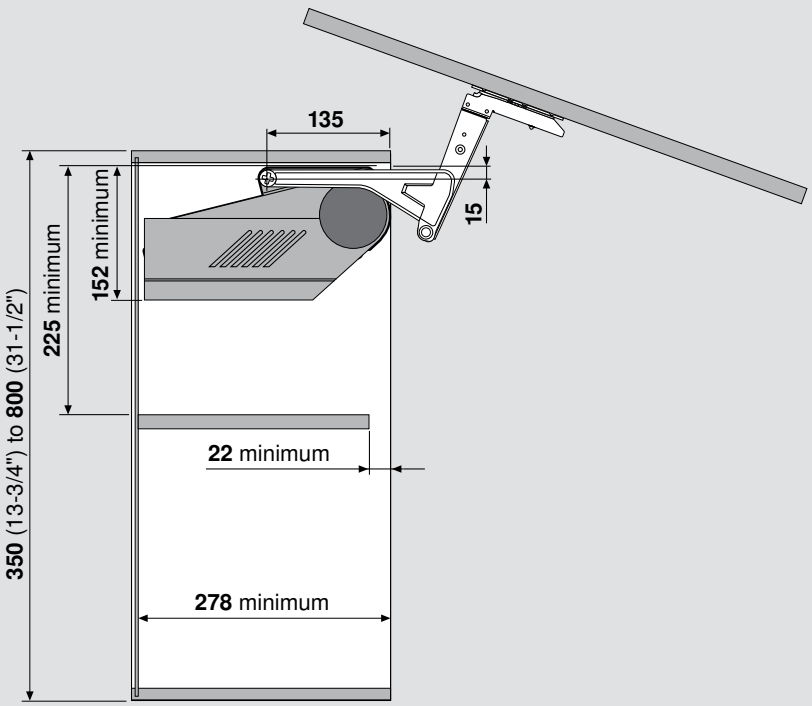
AVENTOS HS – Panel cabinets

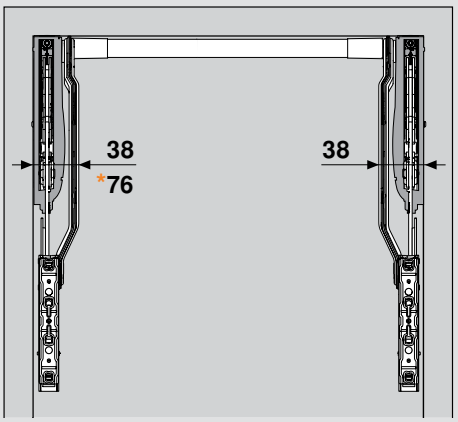
Step 1 – Check clearances

Space requirements

Door and hardware clearance

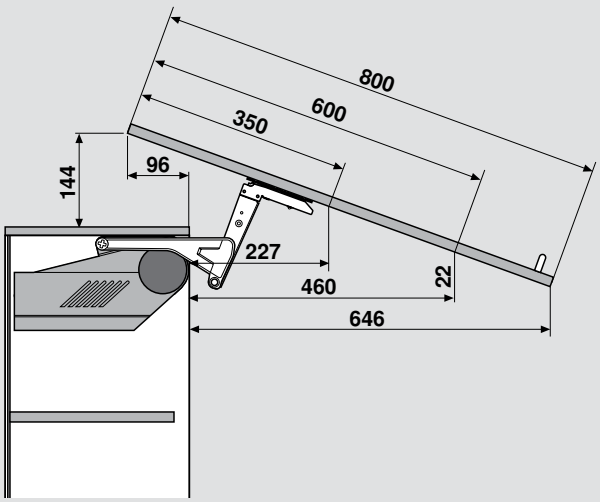


Lift mechanism clearance

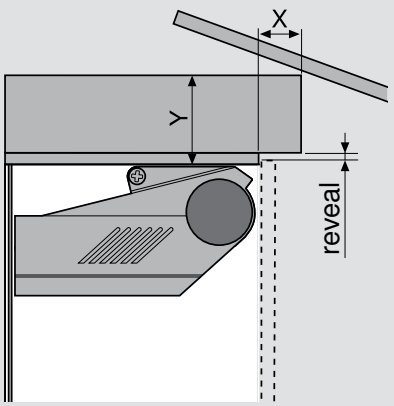


*denotes clearance required for SERVO-DRIVE for AVENTOS lift mechanism

Door protrusion for common cabinet heights



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")

NOTE: Based on 19 mm panel thickness and panel overlay

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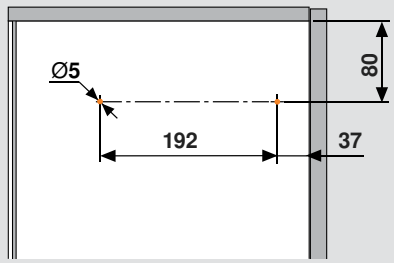
Cabinet preparation for wood or wide aluminum doors

Step 2 – Mount the lift mechanisms

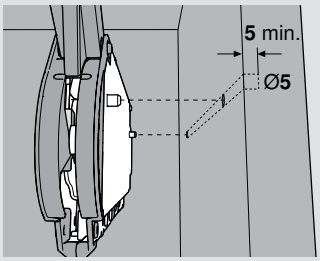
Bore for the locating pins



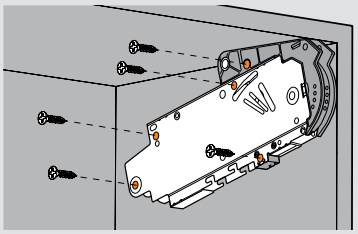
NOTE: Locating pin holes shown in orange

Lift mechanism positioning

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

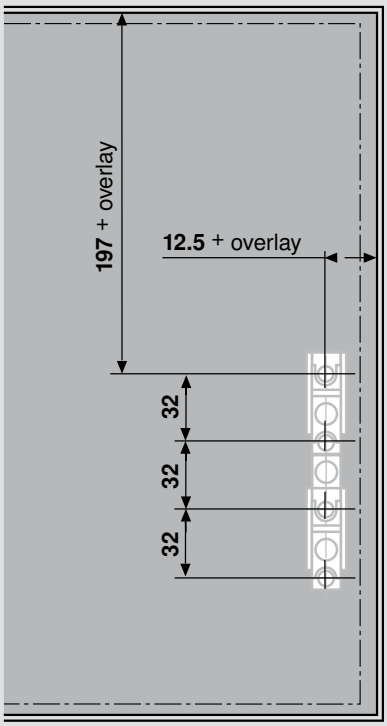


The included #7 x 35 mm (1-3/8") wood screws are required in the five holes marked in orange.



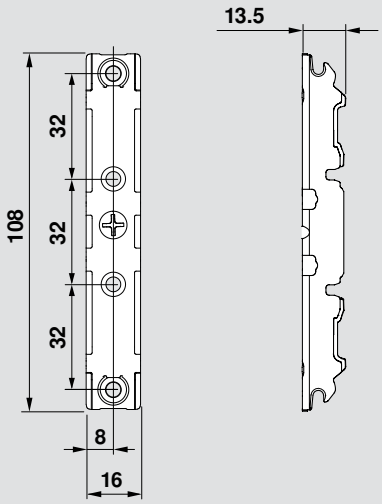
Step 3 – Determine the arm assembly mounting plate location and attach to the door

Arm assembly mounting plate location



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

Arm assembly mounting plate



Step 4 – Assemble the cabinet

Follow the assembly instructions on page 94

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AVENTOS HS – Panel cabinets

Step 1 – Select the required lift mechanism set

AVENTOS planning tools available at blum.com/planning

Using the charts

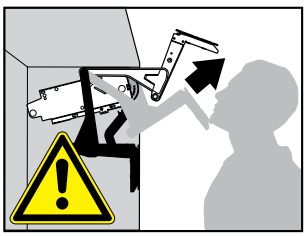
Each chart covers three different lift mechanisms (nine total). To select the required lift mechanism set, find the cabinet height on the left side of the chart, then go across to the range that contains the weight of your door in pounds and ounces. Follow that column to the top orange box to get the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

NOTE: Part numbers in **ORANGE**, pounds 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
	395 – 399	4/6 – 10/5	10/6 – 19/10	19/11 – 25/13
16	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
	415 – 424	5/0 – 9/11	9/12 – 19/2	19/3 – 27/8
17	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
	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
18	450 – 459	5/0 – 9/3	9/4 – 18/8	18/9 – 29/11
	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
	475 – 479	5/8 – 9/0	9/1 – 17/7	17/8 – 30/13
19	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
	495 – 499	5/8 – 9/0	9/1 – 16/15	17/0 – 31/15
20	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
	520 – 525	5/8 – 8/8	8/9 – 16/5	16/6 – 33/0

Warning: Risk of injury by arm assembly!

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



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
25	635 – 639	6/9 – 11/15	12/0 – 24/10	24/11 – 41/3
	640 – 649	6/9 – 11/15	12/0 – 24/0	24/1 – 41/3
26	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
	676 – 684	7/11 – 17/0	17/1 – 29/7	29/8 – 47/5
27	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
	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
28	710 – 714	7/11 – 16/7	16/8 – 28/8	28/9 – 46/11
	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
	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
30	760 – 764	8/4 – 15/8	15/9 – 27/0	27/1 – 44/8
	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
	780 – 784	8/12 – 14/15	15/0 – 26/8	26/9 – 44/8
31	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

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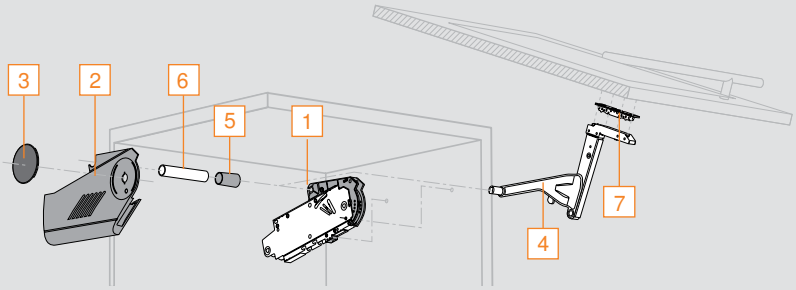
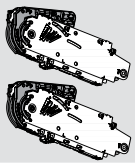
Ordering parts for narrow aluminum doors

Required components



Step 2 – Select the required components

Lift mechanism set



Set includes:

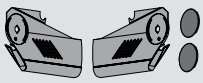
1 Lift mechanism (qty 2)

- #7 x 35 mm (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



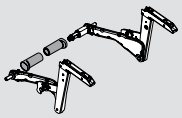
Set includes:

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

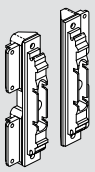
6 Round stabilizer rod

NOTE: Cabinets wider than 48" a stabilizer rod connector set is required, see page 105

- Aluminum rod length **1061** (41-3/4"), cut to size
- Length = interior cabinet opening minus **129** (5-1/16")

	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 inside

SERVO-DRIVE for AVENTOS available

Please see SERVO-DRIVE for AVENTOS brochure for part and ordering information at blum.com

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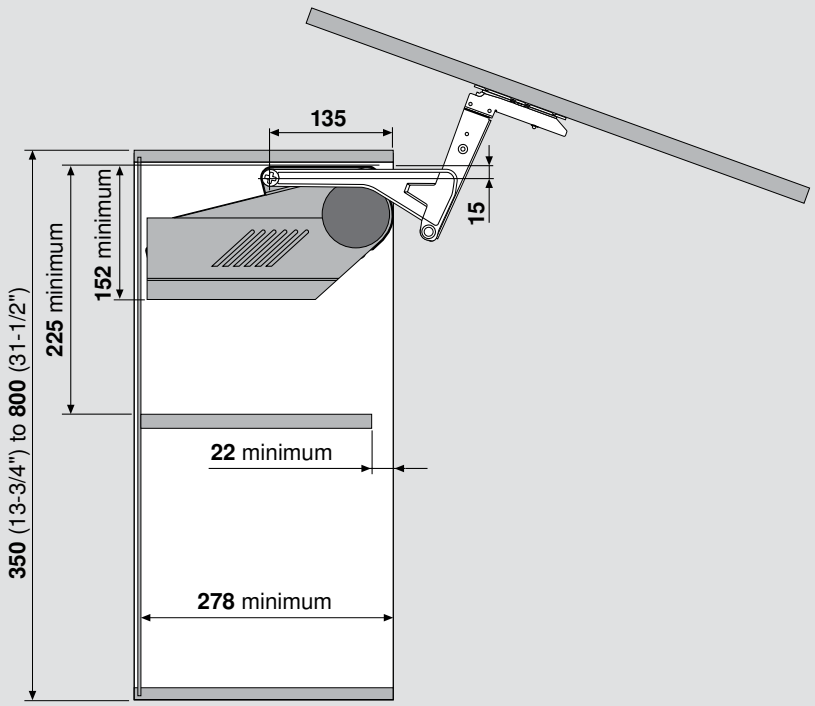
AVENTOS HS – Panel cabinets

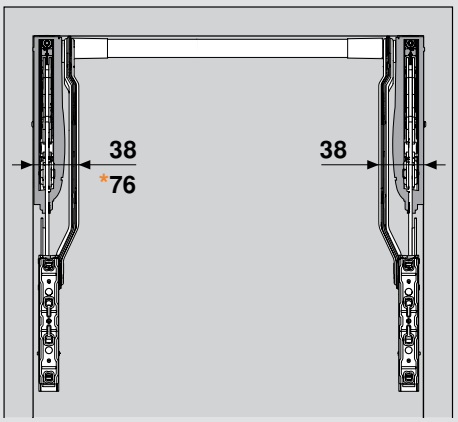
Step 1 – Check clearances

Space requirements

Door and hardware clearance

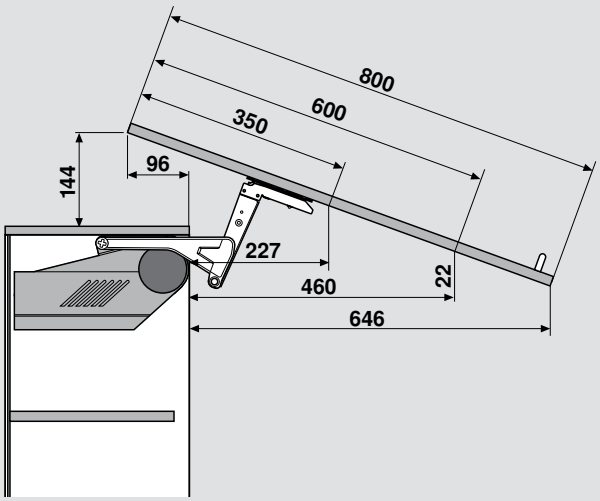


Lift mechanism clearance

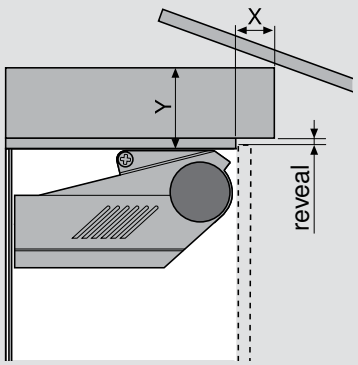


*denotes clearance required for SERVO-DRIVE for AVENTOS lift mechanism

Door protrusion for common cabinet heights



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")

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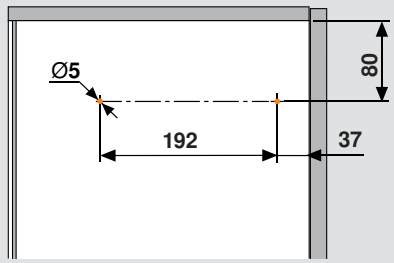
Cabinet preparation for narrow aluminum doors

Step 2 – Mount the lift mechanisms

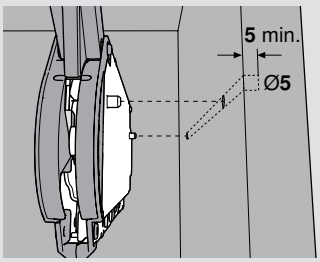
Bore for the locating pins



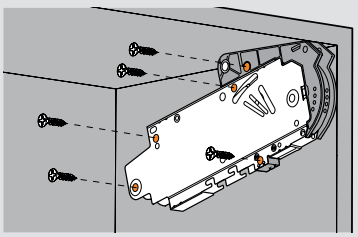
NOTE: Locating pin holes shown in orange

Lift mechanism positioning

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

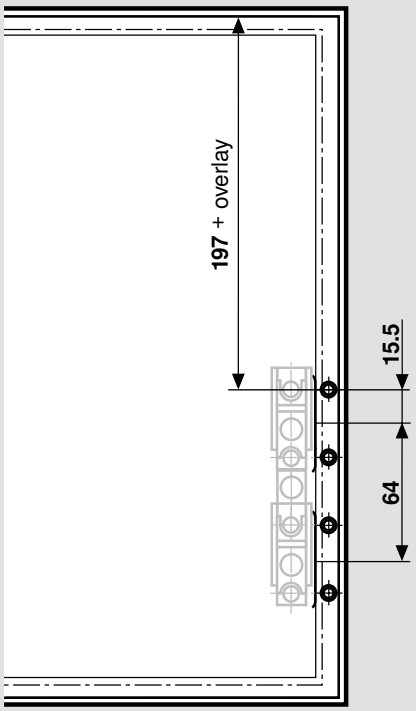


The included #7 x 35 mm (1-3/8") wood screws are required in the five holes marked in orange.



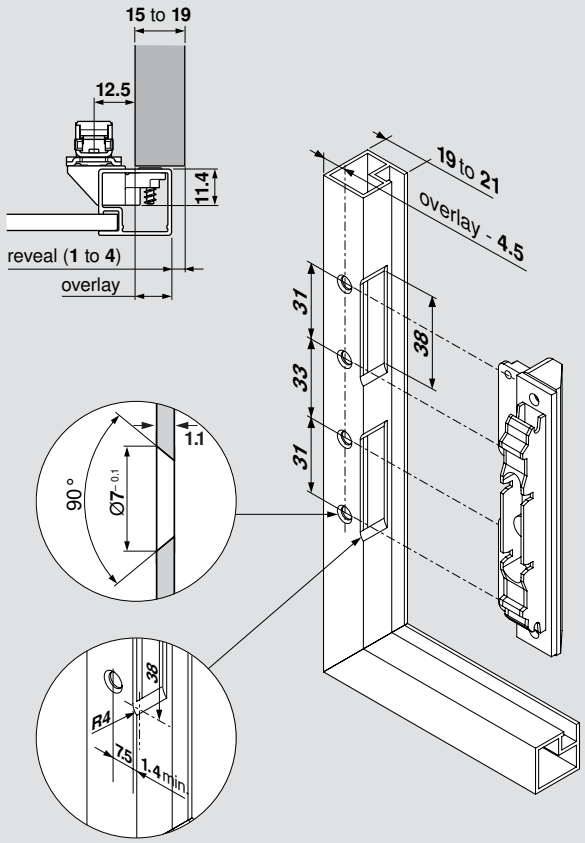
Step 3 – Determine the arm assembly mounting plate location and attach to the door

Arm assembly mounting plate location



NOTE: Attach mounting plate with four 669.110 screws provided

Arm assembly mounting plate



NOTE: When changing material thickness, adjust assembly dimensions accordingly

Step 4 – Assemble the cabinet

Follow the assembly instructions on page 94

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AVENTOS HL

BLUMOTION inside

up and out of the way

Few parts – many applications

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.

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The motion inside

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

AVENTOS planning tools

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

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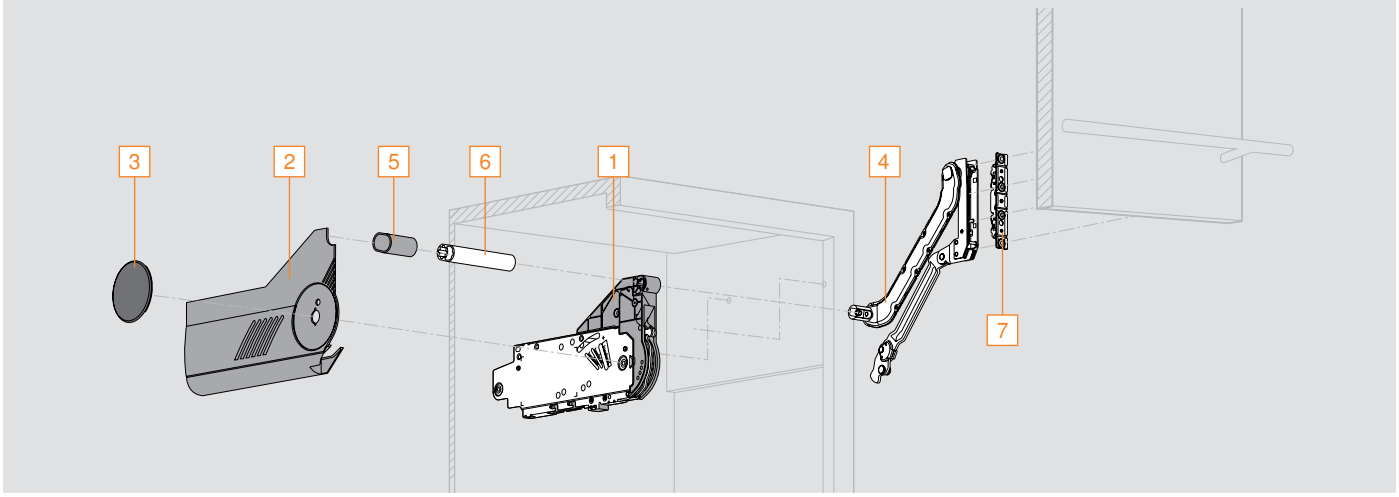
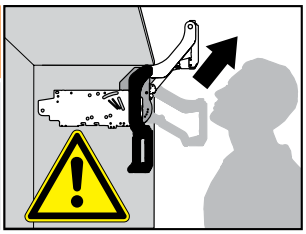
AVENTOS HL – Face frame cabinets

Required components



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

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



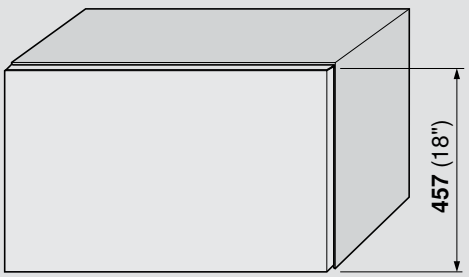
Step 1 – Select the required lift mechanism and arm assembly

AVENTOS planning tools available at blum.com/planning

Determining 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

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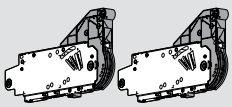
Ordering parts for wood or wide aluminum doors

Step 2 – Select the required components

Lift mechanism set



Set includes:

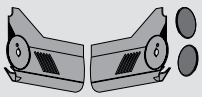
1 Lift mechanism (qty 2)

- #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

	Part no.
	20L2100.N5
	20L2300.N5
	20L2500.N5
	20L2700.N5
	20L2900.N5

Cover set



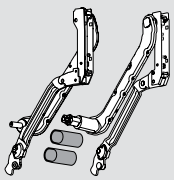
Set includes:

2 Right and left cover plate

3 Non-handed cover cap (qty 2)

	Part no.
Cover set	**20L8000.N1**

Arm assembly set



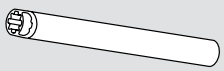
Set includes:

4 Right and left arm assembly

5 Stabilizer rod cover cap (qty 2)

Cabinet height	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



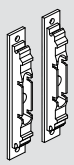
6 Oval stabilizer rod

NOTE: Cabinets wider than 48" a stabilizer rod connector set is required, see page 105

- Aluminum rod length **1061** (41-3/4"), cut to size
- Length = interior cabinet opening minus **129** (5-1/16")

	Part no.
Oval stabilizer rod	**20Q1061UA**

Wood or wide aluminum door hardware set

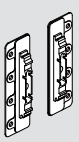


Set includes:

7 Arm assembly mounting plate (qty 2)

	Part no.
Wood or wide aluminum hardware set	**20S4200**
Installation screw for wood doors	**606N or 606P**
Installation screw for wide aluminum 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	**20S4F01**

SERVO-DRIVE inside

SERVO-DRIVE for AVENTOS available

Please see SERVO-DRIVE for AVENTOS brochure for part and ordering information at blum.com

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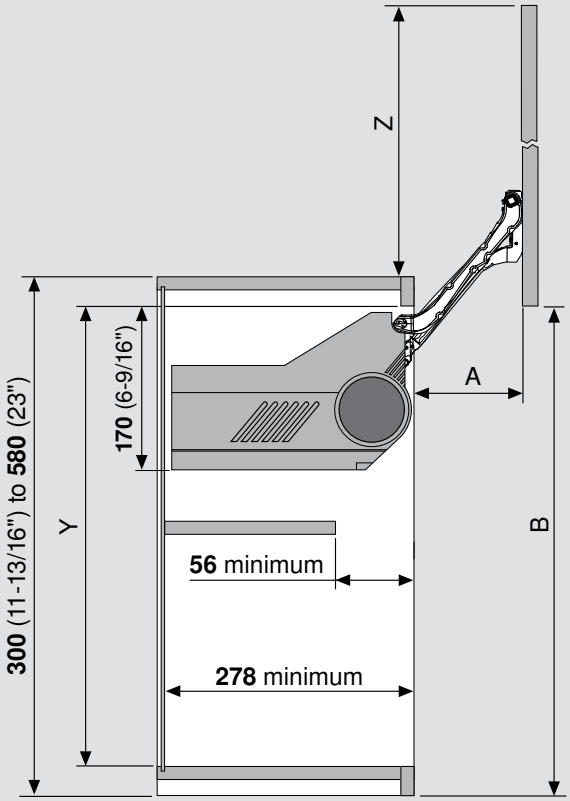
AVENTOS HL – Face frame cabinets

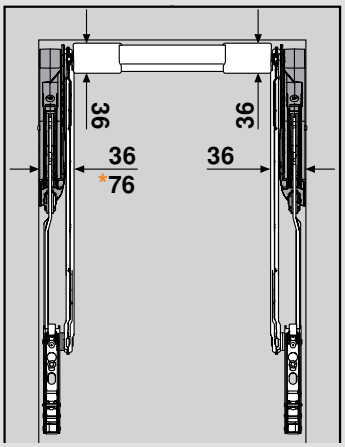
Step 1 – Check clearances

Space requirements

Door and hardware clearance

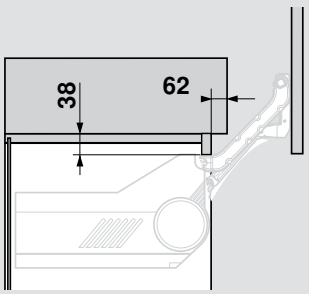


Lift mechanism clearance



*denotes clearance required for SERVO-DRIVE for AVENTOS lift mechanism

Decorative moulding clearance

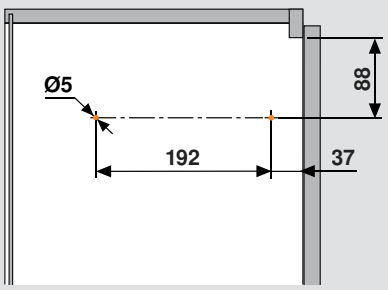


arm assembly	cabinet height range	minimum Y	A	B	Z
20L3200.06	**300** (11-13/16") – **349** (13-3/4")	**262**	**114**	**257***	**257***
20L3500.06	**350** (13-13/16") – **399** (15-13/16")	**312**	**146.5**	**345***	**345***
20L3800.06	**400** (15-3/4") – **550** (21-5/8")	**362**	**178.5**	**433***	**433***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

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

Step 2 – Mount the lift mechanisms

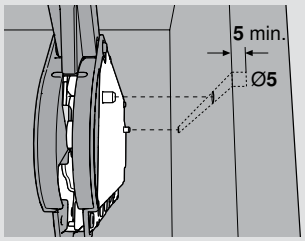
Bore for the locating pins



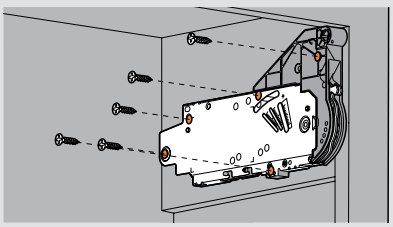
NOTE: Locating pin holes shown in orange

Lift mechanism positioning

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



The included #7 x 35 mm (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 to mount the AVENTOS lift mechanisms

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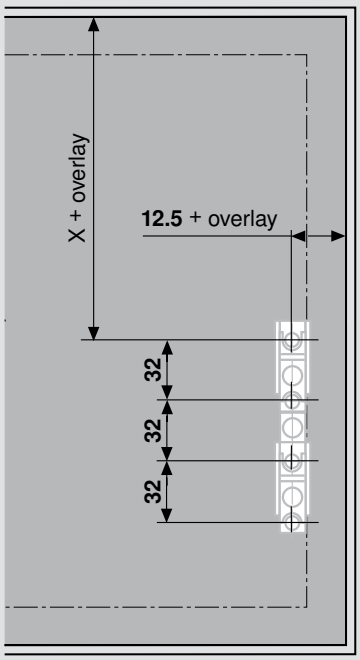
Cabinet preparation for wood or wide aluminum doors

Step 3 – Determine the arm assembly mounting plate position and attach to the door

Arm assembly mounting plate location

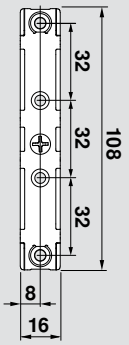


NOTE: Attach mounting plate with four 606N or 606P wood screws for wood doors or 7072A for wide aluminum doors

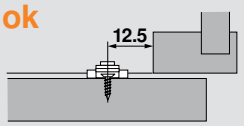
arm assembly	X
20L3200.06	**153**
20L3500.06	**203**
20L3800.06	**253**
20L3900.06	**303**

Arm assembly mounting plate choices

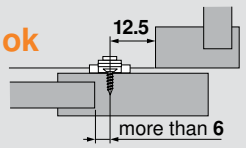
Mounting plate



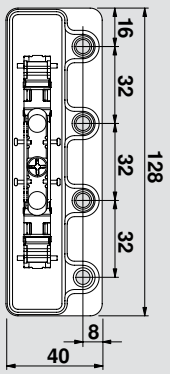
Slab door



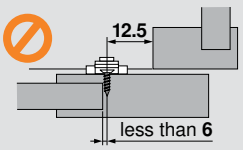
Five-piece door

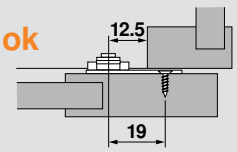


Mounting plate with bracket for large overlay five-piece doors



Five-piece door





Step 4 – Assemble the cabinet

Follow the assembly instructions on page 96

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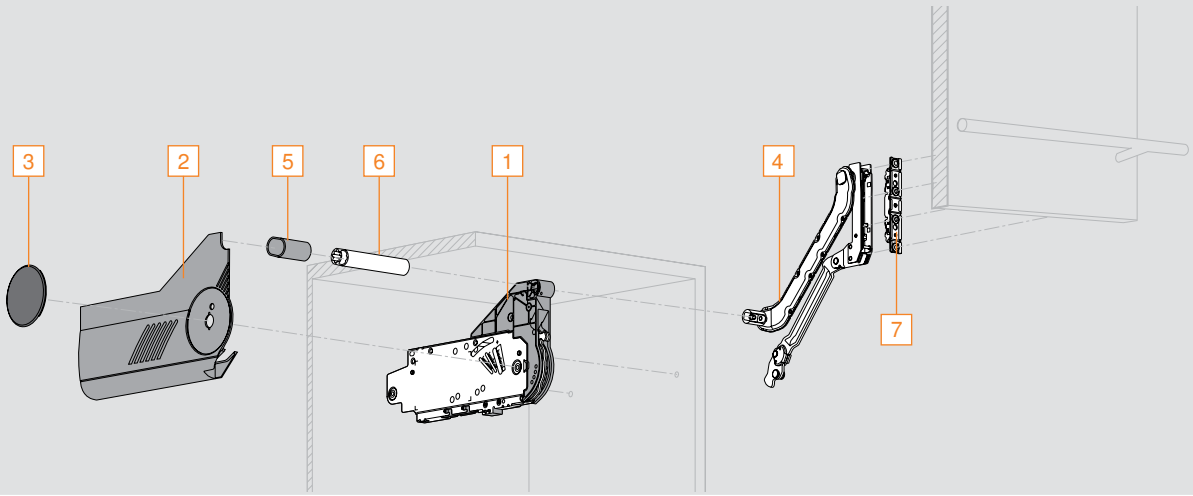
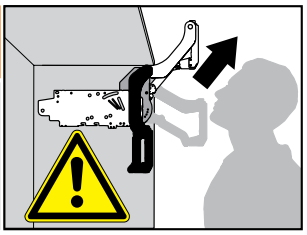
AVENTOS HL – Panel cabinets

Required components



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

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



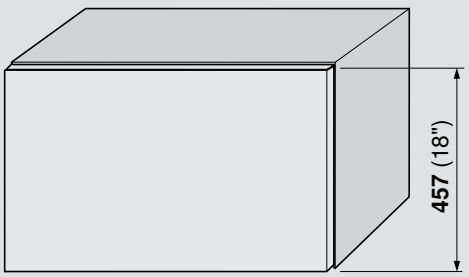
Step 1 – Select the required lift mechanism and arm assembly

AVENTOS planning tools available at blum.com/planning

Determining 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

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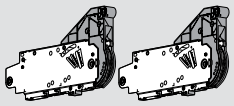
Ordering parts for wood or wide aluminum doors

Step 2 – Select the required components

Lift mechanism set



Set includes:

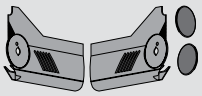
1 Lift mechanism (qty 2)

■ #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

	Part no.
	20L2100.N5
	20L2300.N5
	20L2500.N5
	20L2700.N5
	20L2900.N5

Cover set



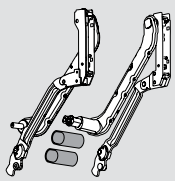
Set includes:

2 Right and left cover plate

3 Non-handed cover cap (qty 2)

	Part no.
Cover set	**20L8000.N1**

Arm assembly set



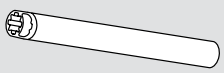
Set includes:

4 Right and left arm assembly

5 Stabilizer rod cover cap (qty 2)

Cabinet height	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

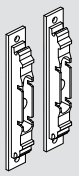
■ Aluminum rod length **1061** (41-3/4"), cut to size

■ Length = interior cabinet opening minus **129** (5-1/16")

NOTE: Cabinets wider than 48" a stabilizer rod connector set is required, see page 105

	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	**20S4200**
Installation screw for wood doors	**606N or 606P**
Installation screw for wide aluminum doors	**7072A**

SERVO-DRIVE inside

SERVO-DRIVE for AVENTOS available

Please see SERVO-DRIVE for AVENTOS brochure for part and ordering information at blum.com

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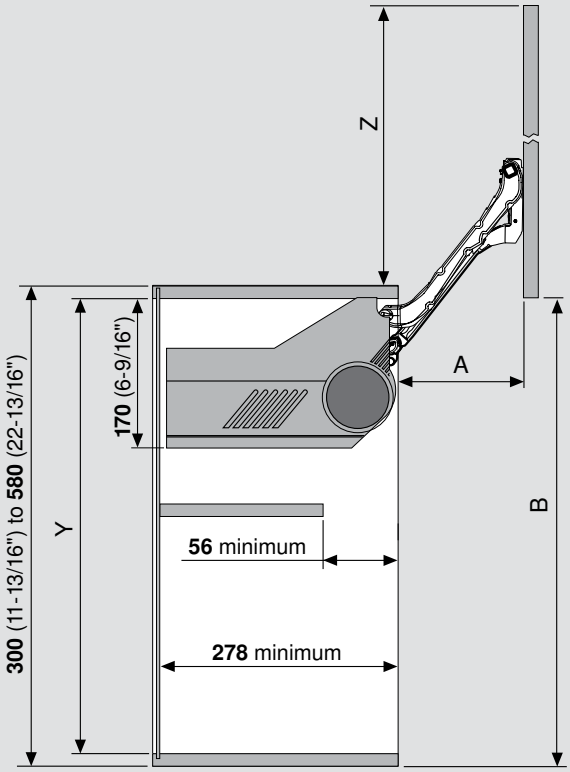
AVENTOS HL – Panel cabinets

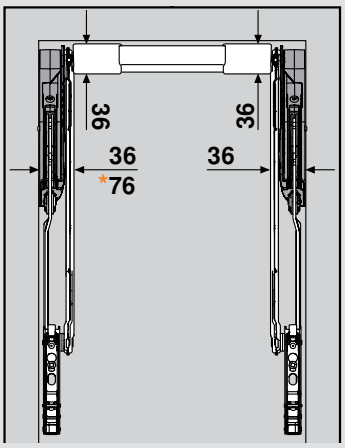
Step 1 – Check clearances

Space requirements

Door and hardware clearance

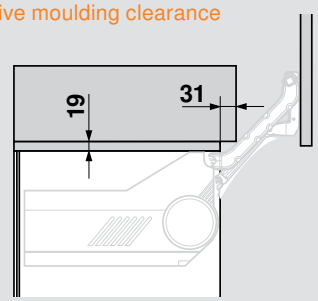


Lift mechanism clearance



*denotes clearance required for SERVO-DRIVE for AVENTOS lift mechanism

Decorative moulding clearance

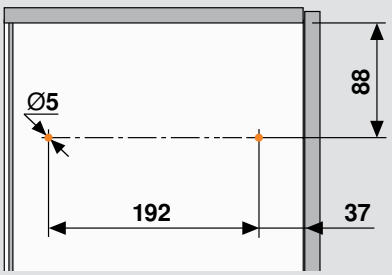


arm assembly	cabinet height range	minimum Y	A	B	Z
20L3200.06	**300** (11-13/16") – **349** (13-3/4")	**262**	**114**	**257***	**257***
20L3500.06	**350** (13-13/16") – **399** (15-13/16")	**312**	**146.5**	**345***	**345***
20L3800.06	**400** (15-3/4") – **550** (21-5/8")	**362**	**178.5**	**433***	**433***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

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

Step 2 – Mount the lift mechanisms

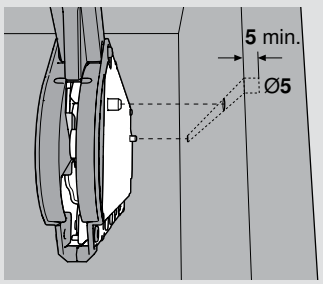
Bore for the locating pins



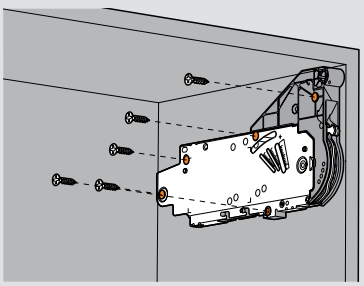
NOTE: Locating pin holes shown in orange

Lift mechanism positioning

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



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



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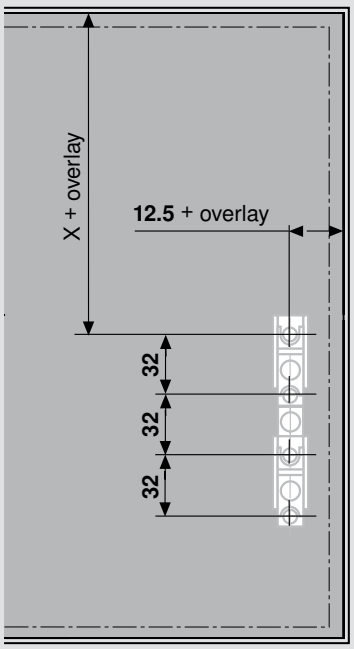
Cabinet preparation for wood or wide aluminum doors

Step 3 – Determine the arm assembly mounting plate position and attach to the door

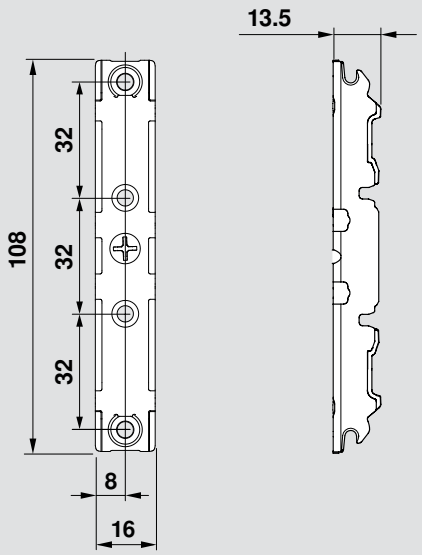
Arm assembly mounting plate location



NOTE: Attach mounting plate with four 606N or 606P wood screws 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



Step 4 – Assemble the cabinet

Follow the assembly instructions on page 96

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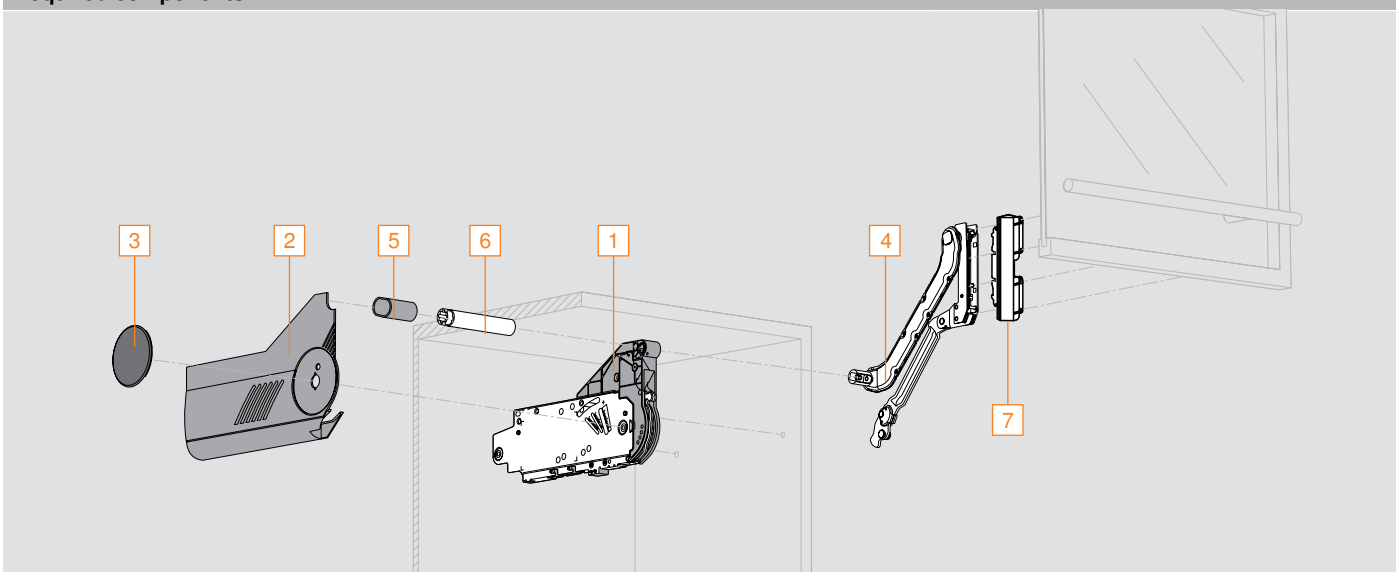
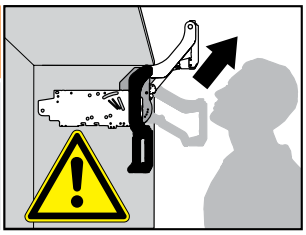
AVENTOS HL – Panel cabinets

Required components



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

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



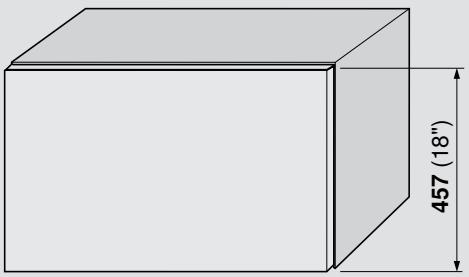
Step 1 – Select the required lift mechanism and arm assembly

AVENTOS planning tools available at blum.com/planning

Determining 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

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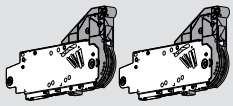
Ordering parts for narrow aluminum doors

Step 2 – Select the required components

Lift mechanism set



Set includes:

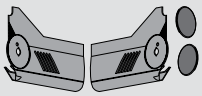
1 Lift mechanism (qty 2)

- #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

	Part no.
	20L2100.N5
	20L2300.N5
	20L2500.N5
	20L2700.N5
	20L2900.N5

Cover set



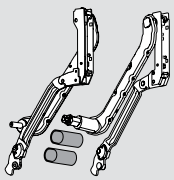
Set includes:

2 Right and left cover plate

3 Non-handed cover cap (qty 2)

	Part no.
Cover set	**20L8000.N1**

Arm assembly set



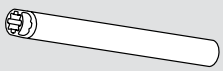
Set includes:

4 Right and left arm assembly

5 Stabilizer rod cover cap (qty 2)

Cabinet height	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



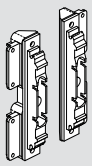
6 Oval stabilizer rod

- Aluminum rod length **1061** (41-3/4"), cut to size
- Length = interior cabinet opening minus **129** (5-1/16")

NOTE: Cabinets wider than 48" a stabilizer rod connector set is required, see page 105

	Part no.
Oval stabilizer rod	**20Q1061UA**

Narrow aluminum door hardware set



Set includes:

7 Narrow aluminum arm 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 inside

SERVO-DRIVE for AVENTOS available

Please see SERVO-DRIVE for AVENTOS brochure for part and ordering information at blum.com

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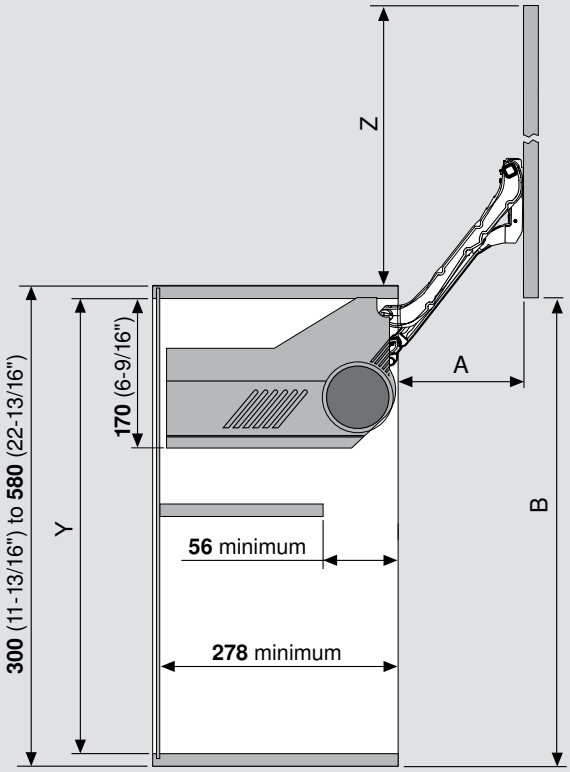
AVENTOS HL – Panel cabinets

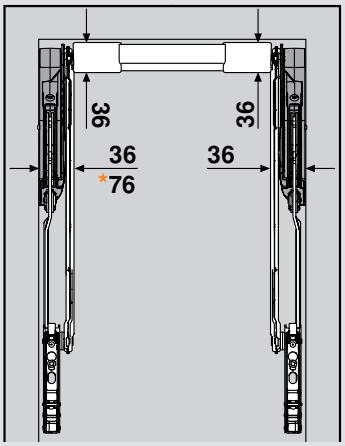
Step 1 – Check clearances

Space requirements

Door and hardware clearance

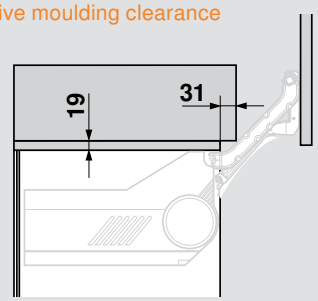


Lift mechanism clearance



*denotes clearance required for SERVO-DRIVE for AVENTOS lift mechanism

Decorative moulding clearance

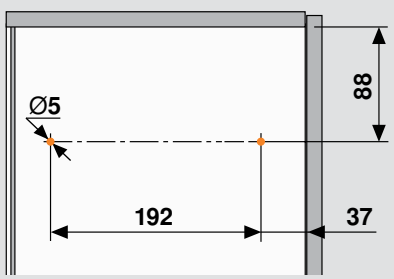


arm assembly	cabinet height range	minimum Y	A	B	Z
20L3200.06	**300** (11-13/16") – **349** (13-3/4")	**262**	**114**	**257***	**257***
20L3500.06	**350** (13-13/16") – **399** (15-13/16")	**312**	**146.5**	**345***	**345***
20L3800.06	**400** (15-3/4") – **550** (21-5/8")	**362**	**178.5**	**433***	**433***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

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

Step 2 – Mount the lift mechanisms

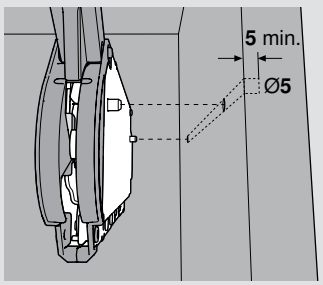
Bore for the locating pins



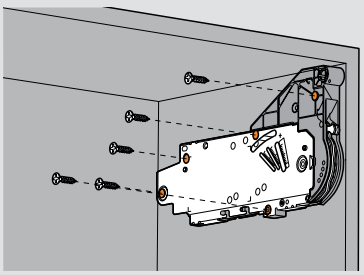
NOTE: Locating pin holes shown in orange

Lift mechanism positioning

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



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



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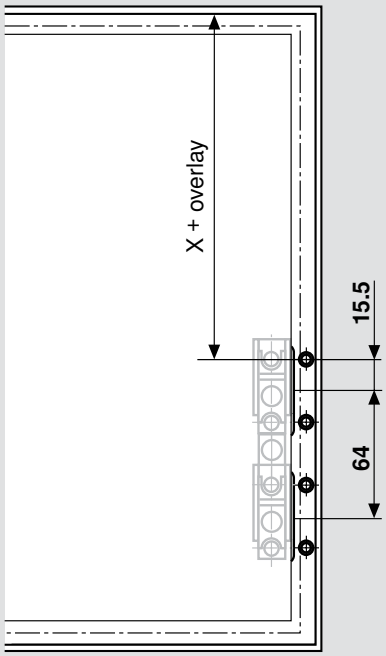
Cabinet preparation for narrow aluminum doors

Step 3 – Determine the arm assembly mounting plate position and attach to the door

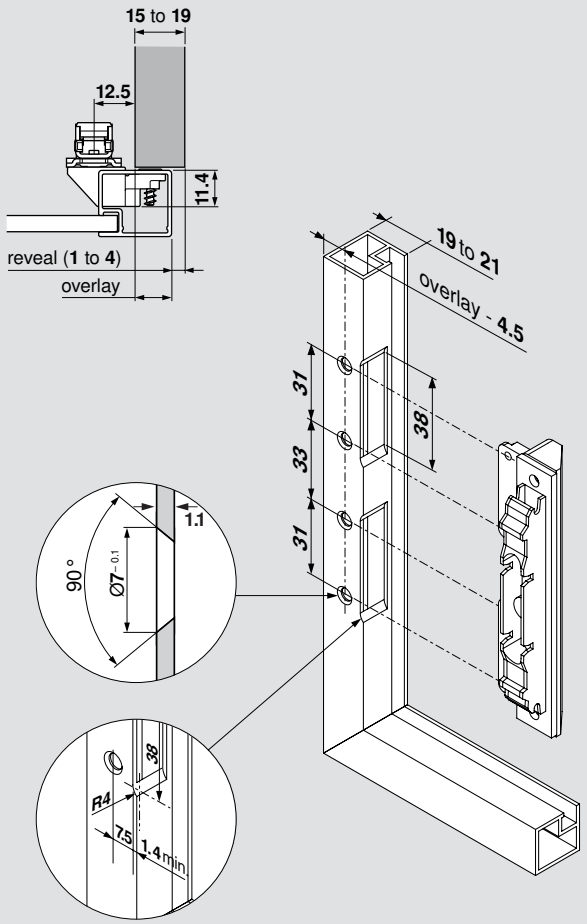
Arm assembly mounting plate location



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**

Arm assembly mounting plate



NOTE: When changing frame thickness, adjust assembly dimensions accordingly

Step 4 – Assemble the cabinet

Follow the assembly instructions on page 96

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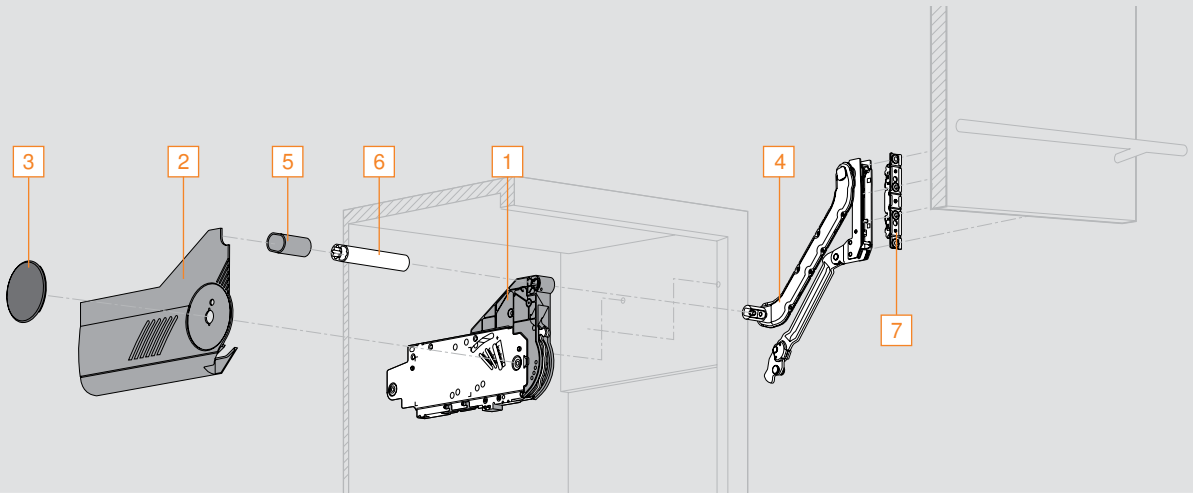
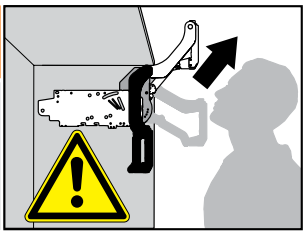
AVENTOS HL – Face frame appliance garage

Required components



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

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



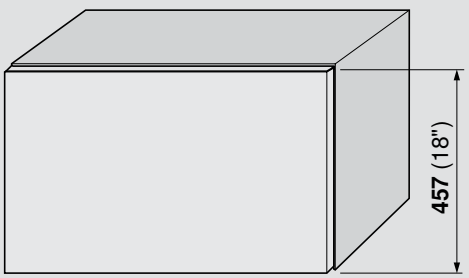
Step 1 – Select the required lift mechanism and arm assembly

AVENTOS planning tools available at blum.com/planning

Determining 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 20L3900.06
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
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

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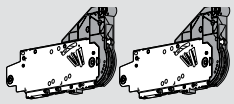
Ordering parts for wood or wide aluminum doors

Step 2 – Select the required components

Lift mechanism set



Set includes:

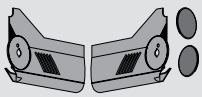
1 Lift mechanism (qty 2)

- #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

	Part no.
	20L2100.N5
	20L2300.N5
	20L2500.N5
	20L2700.N5
	20L2900.N5

Cover set



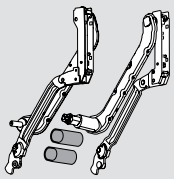
Set includes:

2 Right and left cover plate

3 Non-handed cover cap (qty 2)

	Part no.
Cover set	**20L8000.N1**

Arm assembly set



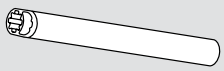
Set includes:

4 Right and left arm assembly

5 Stabilizer rod cover cap (qty 2)

Cabinet height	Part no.
450 (17-11/16") – **580** (22-13/16")	**20L3900.06**

Oval stabilizer rod



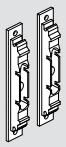
6 Oval stabilizer rod

NOTE: Cabinets wider than 48" a stabilizer rod connector set is required, see page 105

- Aluminum rod length **1061** (41-3/4"), cut to size
- Length = interior cabinet opening minus **129** (5-1/16")

	Part no.
Oval stabilizer rod	**20Q1061UA**

Wood or wide aluminum door hardware set

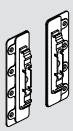


Set includes:

7 Arm assembly mounting plate (qty 2)

	Part no.
Wood or wide aluminum hardware set	**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 inside

SERVO-DRIVE for AVENTOS available

Please see SERVO-DRIVE for AVENTOS brochure for part and ordering information at blum.com

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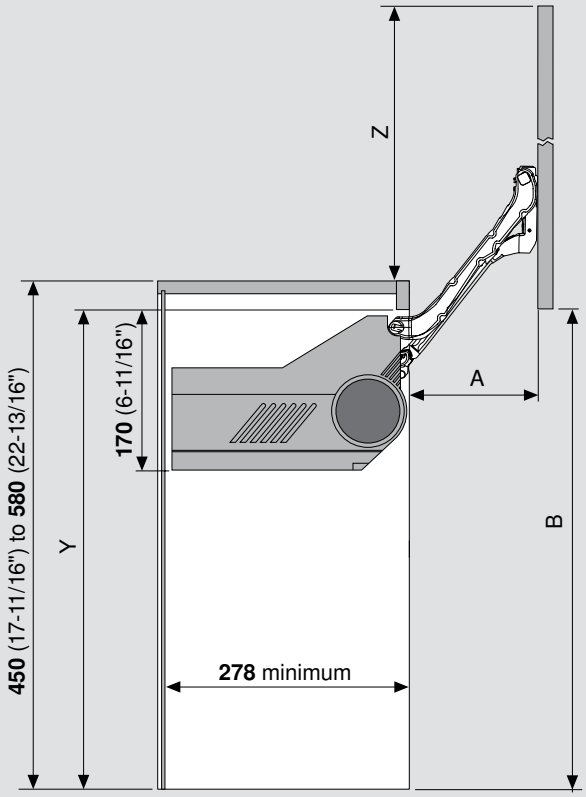
AVENTOS HL – Face frame appliance garage

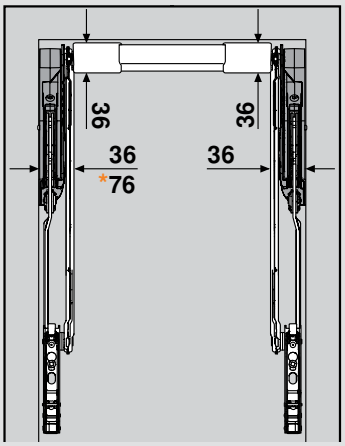
Step 1 – Check clearances

Space requirements

Door and hardware clearance

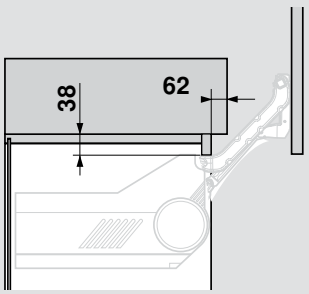


Lift mechanism clearance



*denotes clearance required for SERVO-DRIVE for AVENTOS lift mechanism

Decorative moulding clearance

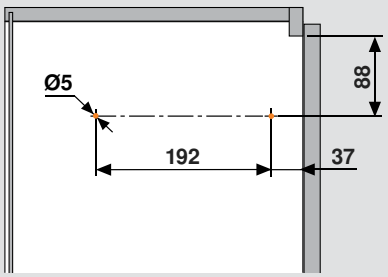


arm assembly	cabinet height range	minimum Y	A	B	Z
20L3900.06	**450** (17-11/16") – **580** (22-13/16")	**412**	**211**	**522***	**522***

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

Step 2 – Mount the lift mechanisms

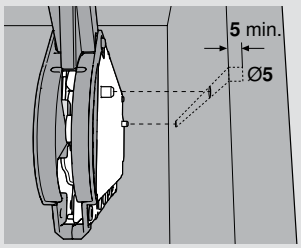
Bore for the locating pins



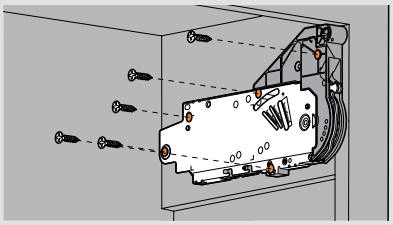
NOTE: Locating pin holes shown in orange

Lift mechanism positioning

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



The included #7 x 35 mm (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 to mount the AVENTOS lift mechanisms

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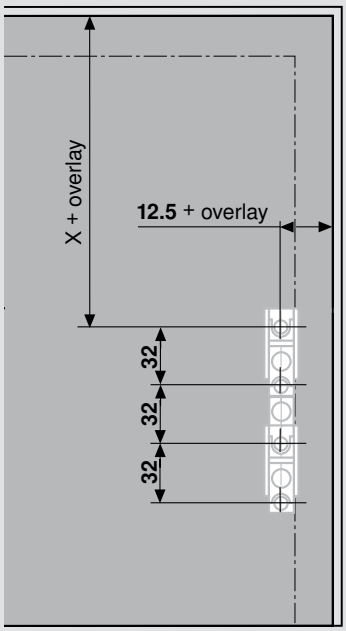
Cabinet preparation for wood or wide aluminum doors

Step 3 – Determine the arm assembly mounting plate position and attach to the door

Arm assembly mounting plate location

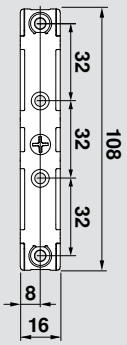


NOTE: Attach mounting plate with four 606N or 606P wood screws for wood doors or 7072A for wide aluminum doors

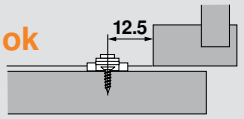
arm assembly	X
20L3900.06	**303**

Arm assembly mounting plate choices

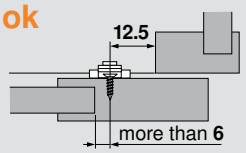
Mounting plate



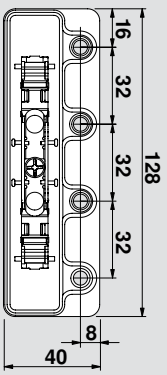
Slab door



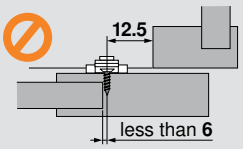
Five-piece door

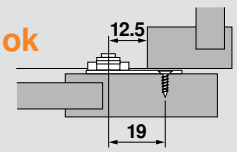


Mounting plate with bracket for large overlay five-piece doors



Five-piece door





Step 4 – Assemble the cabinet

Follow the assembly instructions on page 96

For face frame corner cabinet appliance garage application see page 102

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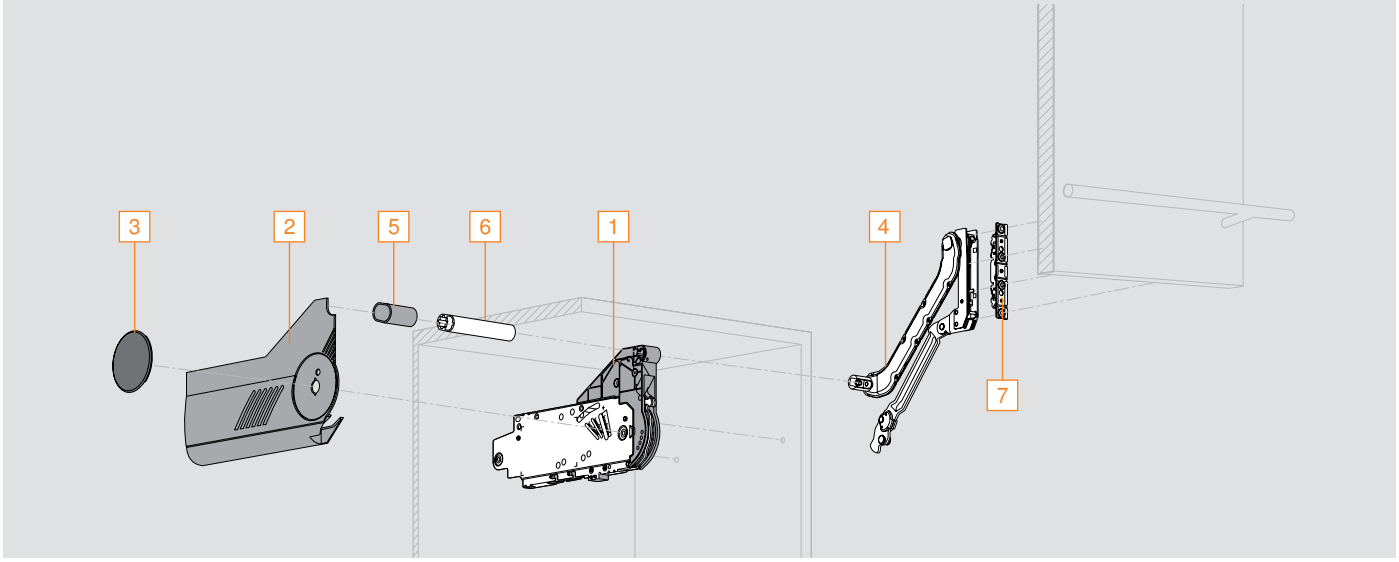
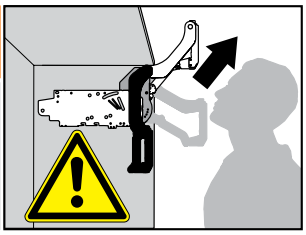
AVENTOS HL – Panel appliance garage

Required components



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

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



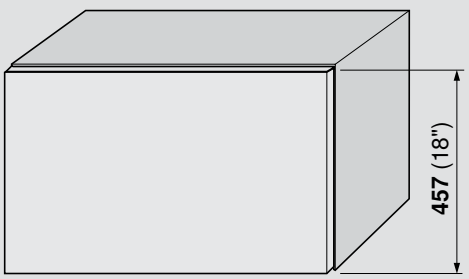
Step 1 – Select the required lift mechanism and arm assembly

AVENTOS planning tools available at blum.com/planning

Determining 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 20L3900.06
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
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

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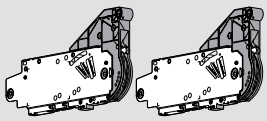
Ordering parts for wood or wide aluminum doors

Step 2 – Select the required components

Lift mechanism set



Set includes:

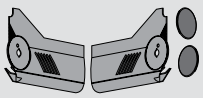
1 Lift mechanism (qty 2)

- #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

	Part no.
	20L2100.N5
	20L2300.N5
	20L2500.N5
	20L2700.N5
	20L2900.N5

Cover set



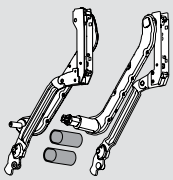
Set includes:

2 Right and left cover plate

3 Non-handed cover cap (qty 2)

	Part no.
Cover set	**20L8000.N1**

Arm assembly set



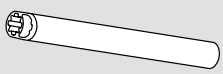
Set includes:

4 Right and left arm assembly

5 Stabilizer rod cover cap (qty 2)

Cabinet height	Part no.
450 (17-11/16") – **580** (22-13/16")	**20L3900.06**

Oval stabilizer rod



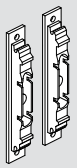
6 Oval stabilizer rod

- Aluminum rod length **1061** (41-3/4"), cut to size
- Length = interior cabinet opening minus **129** (5-1/16")

NOTE: Cabinets wider than 48" a stabilizer rod connector set is required, see page 105

	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	**20S4200**
Installation screw for wood doors	**606N or 606P**
Installation screw for wide aluminum doors	**7072A**

SERVO-DRIVE inside

SERVO-DRIVE for AVENTOS available

Please see SERVO-DRIVE for AVENTOS brochure for part and ordering information at blum.com

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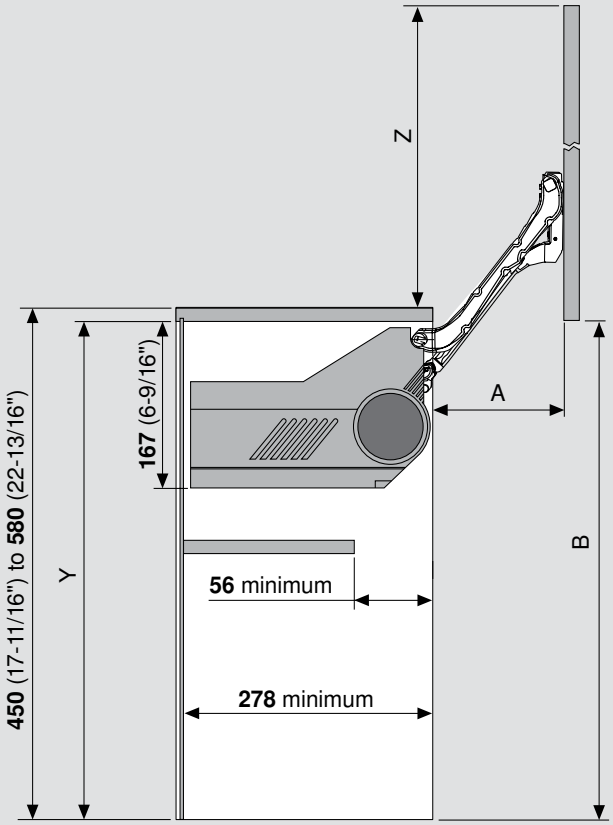
AVENTOS HL – Panel appliance garage

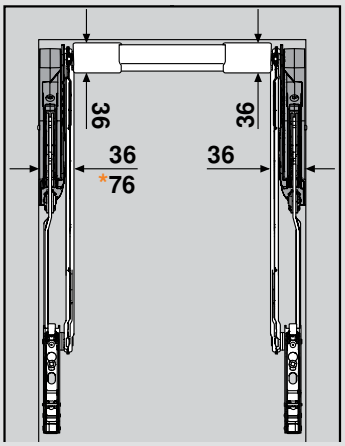
Step 1 – Check clearances

Space requirements

Door and hardware clearance

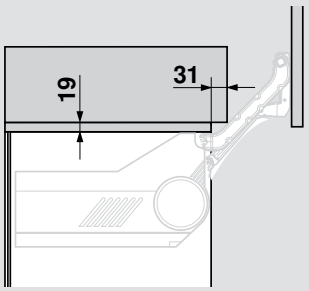


Lift mechanism clearance



*denotes clearance required for SERVO-DRIVE for AVENTOS lift mechanism

Decorative moulding clearance

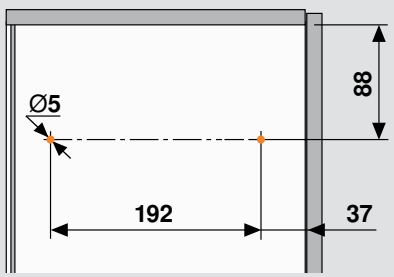


arm assembly	cabinet height range	minimum Y	A	B	Z
20L3900.06	**450** (17-11/16") – **580** (22-13/16")	**412**	**211**	**522***	**522***

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

Step 2 – Mount the lift mechanisms

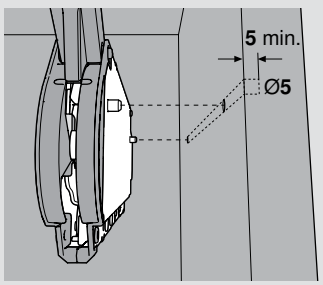
Bore for the locating pins



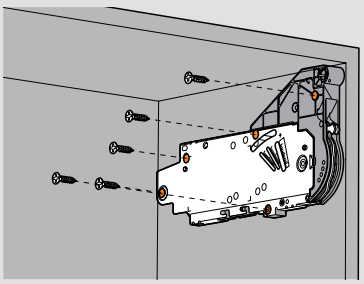
NOTE: Locating pin holes shown in orange

Lift mechanism positioning

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



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



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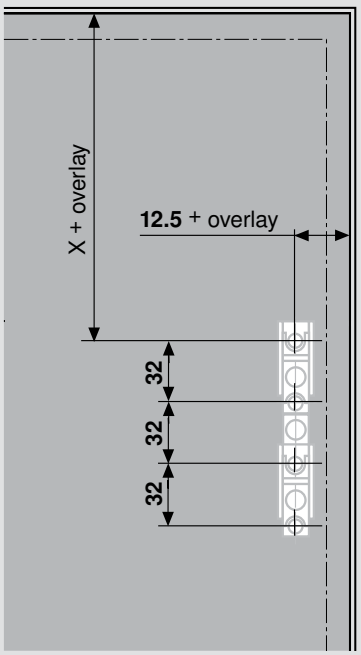
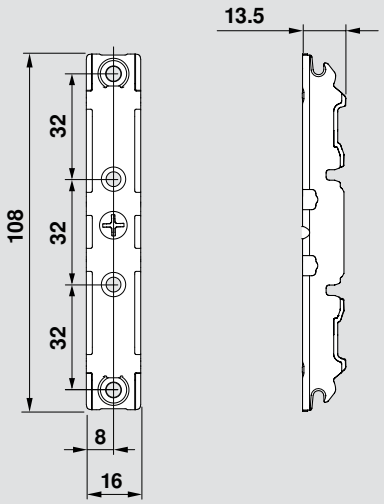
Cabinet preparation for wood or wide aluminum doors

Step 3 – Determine the arm assembly mounting plate position and attach to the door

Arm assembly mounting plate location



Arm assembly mounting plate



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

arm assembly	X
20L3900.06	**303**

Step 4 – Assemble the cabinet

Follow the assembly instructions on page 96

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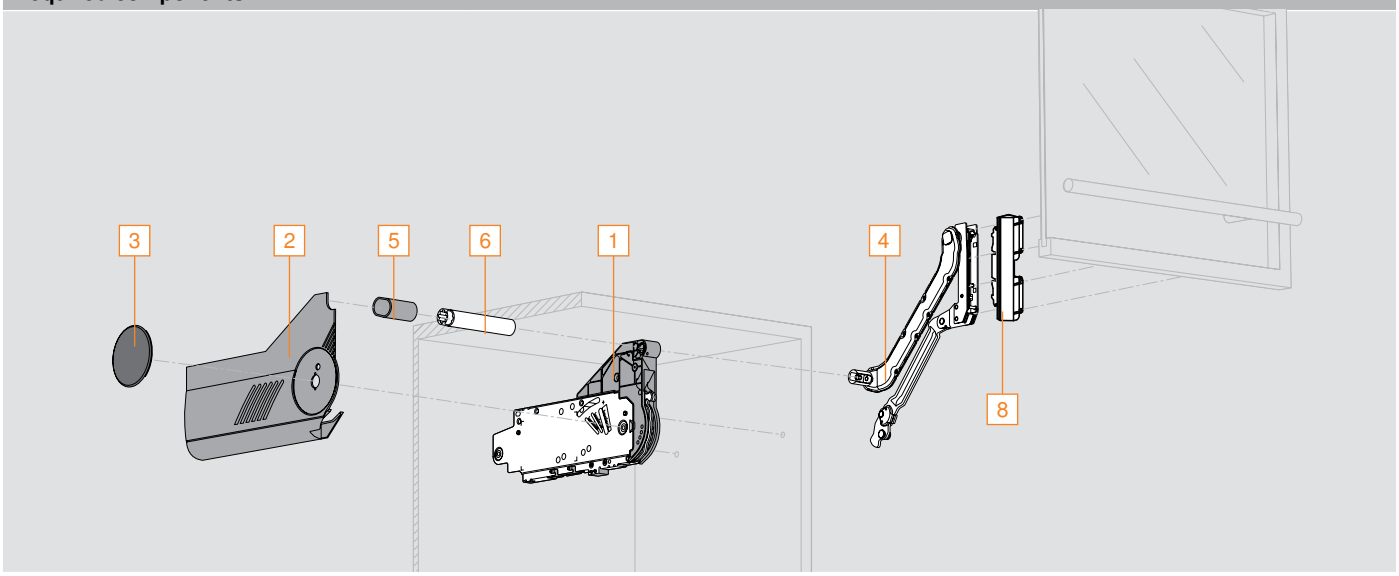
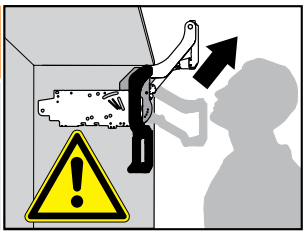
AVENTOS HL – Panel appliance garage

Required components



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

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



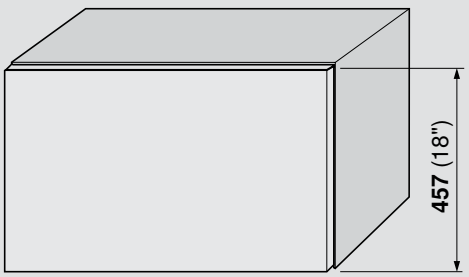
Step 1 – Select the required lift mechanism and arm assembly

AVENTOS planning tools available at blum.com/planning

Determining 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 20L3900.06
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
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

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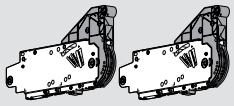
Ordering parts for narrow aluminum doors

Step 2 – Select the required components

Lift mechanism set



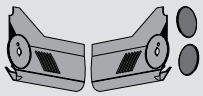
Set includes:

1 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

	Part no.
	20L2100.N5
	20L2300.N5
	20L2500.N5
	20L2700.N5
	20L2900.N5

Cover set



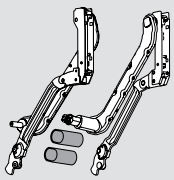
Set includes:

2 Right and left cover plate

3 Non-handed cover cap (qty 2)

	Part no.
Cover set	**20L8000.N1**

Arm assembly set



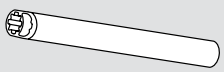
Set includes:

4 Right and left arm assembly

5 Stabilizer rod cover cap (qty 2)

Cabinet height	Part no.
450 (17-11/16") – **580** (22-13/16")	**20L3900.06**

Oval stabilizer rod



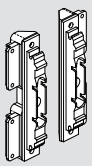
7 Oval stabilizer rod

NOTE: Cabinets wider than 48" a stabilizer rod connector set is required, see page 105

- Aluminum rod length **1061** (41-3/4"), cut to size
- Length = interior cabinet opening minus **129** (5-1/16")

	Part no.
Oval stabilizer rod	**20Q1061UA**

Narrow aluminum door hardware set



Set includes:

8 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 door hardware set	**20S4200A**

SERVO-DRIVE inside

SERVO-DRIVE for AVENTOS available

Please see SERVO-DRIVE for AVENTOS brochure for part and ordering information at blum.com

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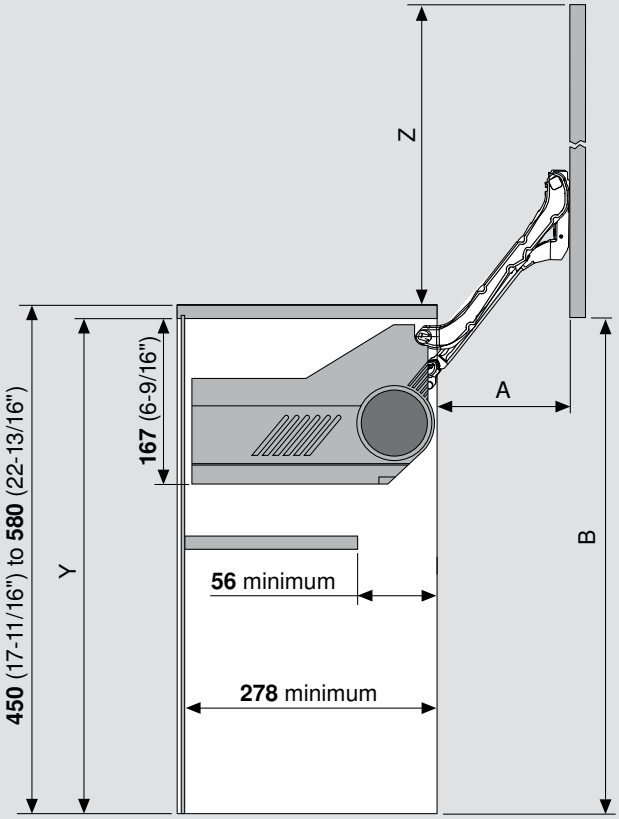
AVENTOS HL – Panel appliance garage

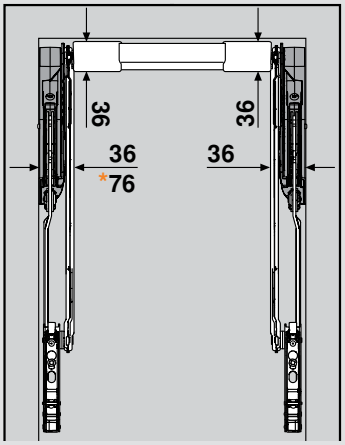
Step 1 – Check clearances

Space requirements

Door and hardware clearance

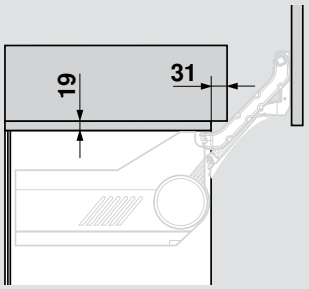


Lift mechanism clearance



*denotes clearance required for SERVO-DRIVE for AVENTOS lift mechanism

Decorative moulding clearance

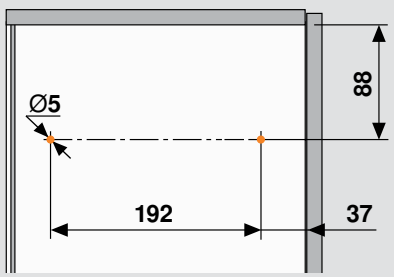


arm assembly	cabinet height range	minimum Y	A	B	Z
20L3900.06	**450** (17-11/16") – **580** (22-13/16")	**412**	**211**	**522***	**522***

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

Step 2 – Mount the lift mechanisms

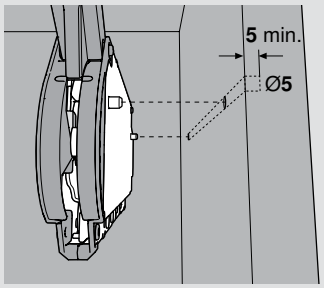
Bore for the locating pins



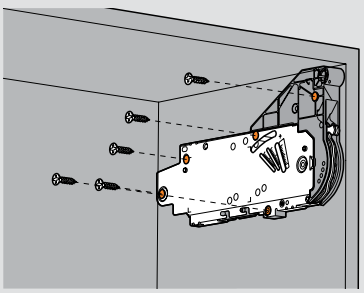
NOTE: Locating pin holes shown in orange

Lift mechanism positioning

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



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



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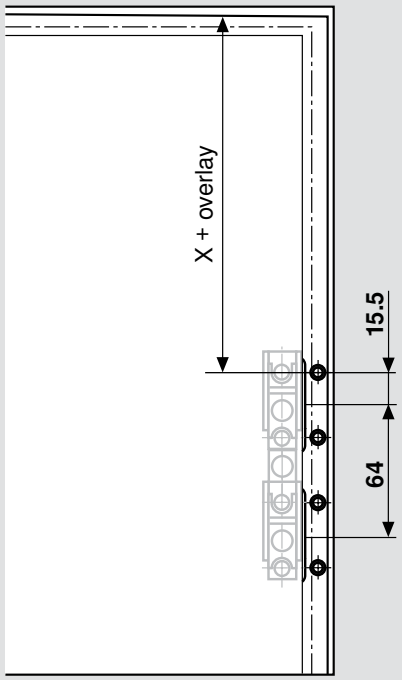
Cabinet preparation for narrow aluminum doors

Step 3 – Determine the arm assembly mounting plate position and attach to the door

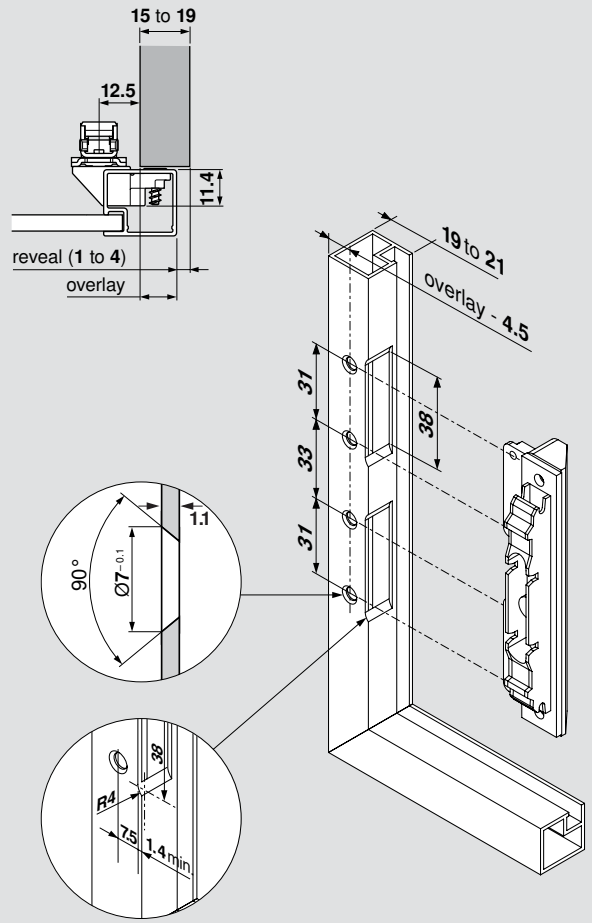
Arm assembly mounting plate location



NOTE: Attach mounting plate with four 699.110 screws provided

arm assembly	X
20L3900.06	**303**

Arm assembly mounting plate



NOTE: When changing frame thickness, adjust assembly dimensions accordingly

Step 4 – Assemble the cabinet

Follow the assembly instructions on page 96

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BLUMOTION inside

A complete view of the cabinet interior

Few parts – many applications

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

NOTE: For ergonomic reasons, we recommend a maximum cabinet height of **610** (24").

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.

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The motion inside

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

AVENTOS planning tools

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

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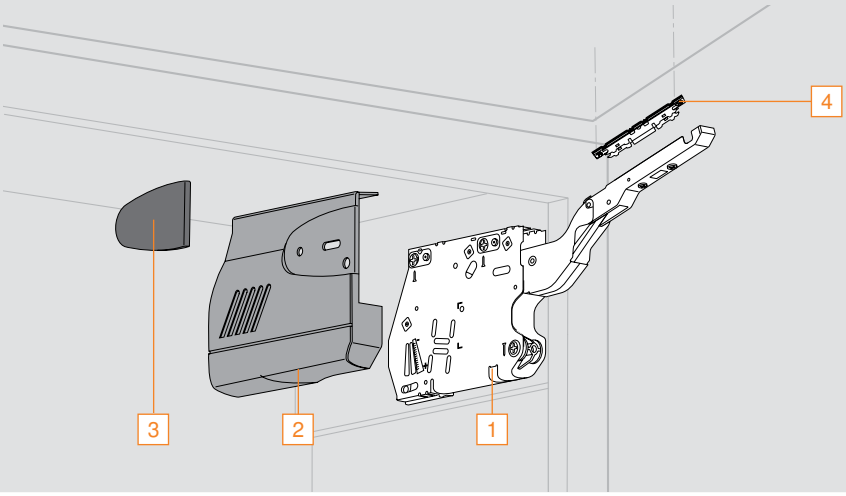
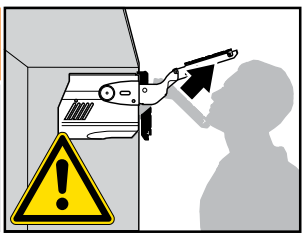
AVENTOS HK – Face frame cabinets

Required components



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

AVENTOS planning tools availableat blum.com/planning

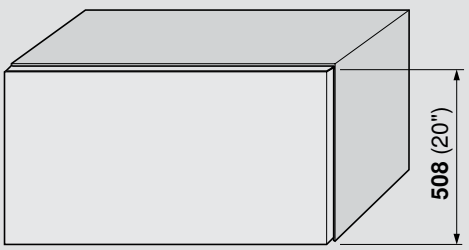
Determine power factor

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 (inch) x door weight* (lb)

* Including twice the handle weight

Example:
Cabinet height: 20 inches (within possible range)
Door weight including twice the handle weight: **13** lb 14 oz (14 oz = **.9** lb see chart below)
Total weight converted to decimal is **13.9** lb
Power factor = cabinet height multiplied by door weight including twice the handle weight
Power factor = 20 x **13.9**
Power factor = 278
A power factor of 278 requires lift mechanism 20K2700.N5



door weight + twice handle weight = **13** 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

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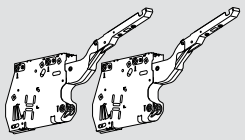
Ordering parts for wood or wide aluminum doors

Step 2 – Select the required components

Lift mechanism set



Set includes:

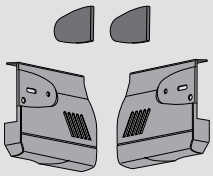
1 Lift mechanism (qty 2)

■ #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°	20K2300.N5
100 – 174	107°	20K2500.N5
175 – 349	107°	20K2700.N5
350 – 792	100°	20K2900.N5

Cover set



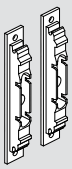
Set includes:

2 Right and left cover plate

3 Non-handed cover cap (qty 2)

	Part no.
Cover set	20K8000.NA

Wood or wide aluminum door hardware set

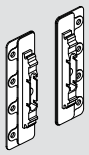


Set includes:

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)

For use with large overlay five-piece doors

	Part no.
Mounting plate with bracket set	20S4F01

SERVO-DRIVE inside

SERVO-DRIVE for AVENTOS available

Please see SERVO-DRIVE for AVENTOS brochure for part and ordering information at blum.com

TIP-ON inside

TIP-ON for AVENTOS HK available

Please see TIP-ON for AVENTOS brochure for part and ordering information at blum.com

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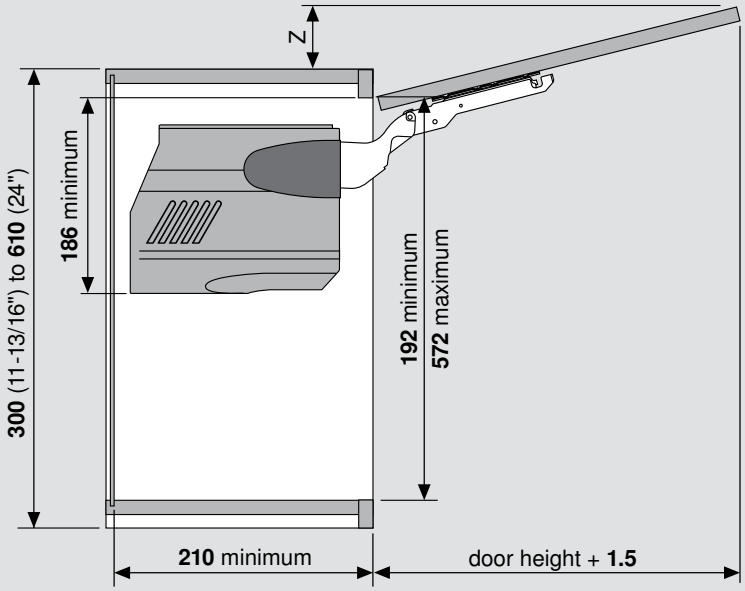
AVENTOS HK – Face frame cabinets

Step 1 – Check clearances

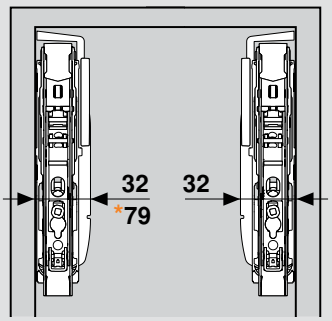
Space requirements

Door and hardware clearance



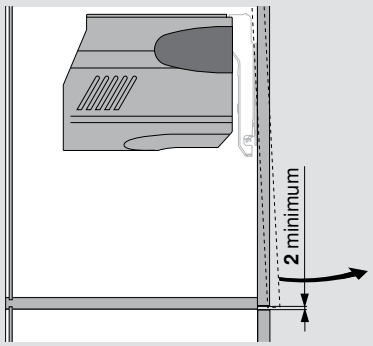
Z = door height x .29 minus **14.5** + door thickness

Lift mechanism clearance

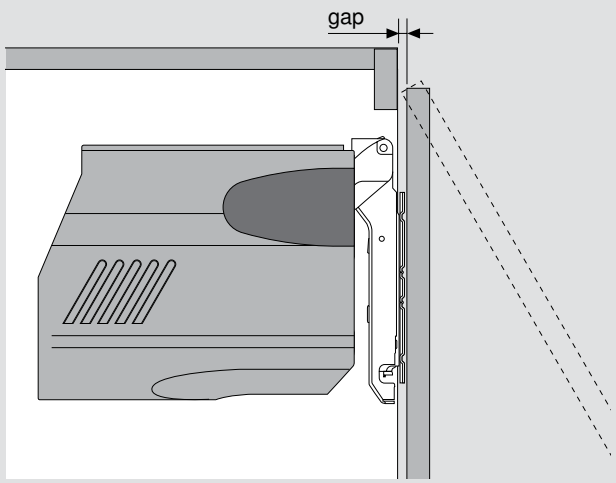


*denotes clearance required for SERVO-DRIVE for AVENTOS lift mechanism

Minimum bottom reveal



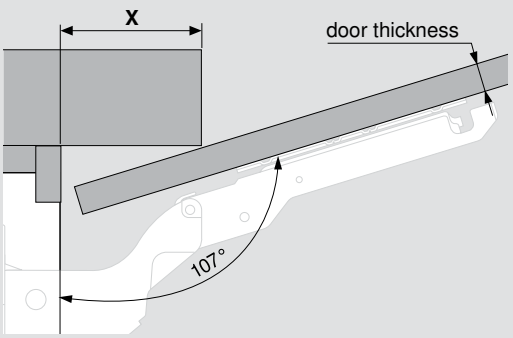
Minimum gap



NOTE: Minimum gap assumes door radius of 1 mm

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**

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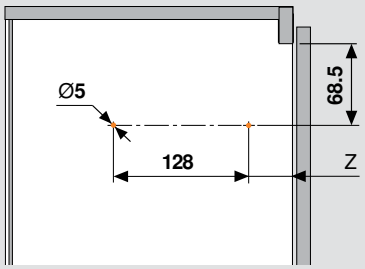
Cabinet preparation for wood or wide aluminum doors

Step 2 – Mount the lift mechanisms

Boring for the locating pins

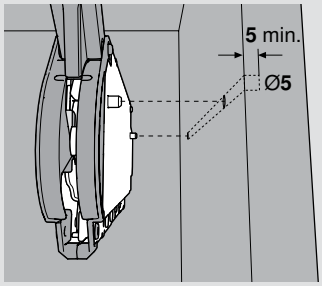


NOTE: Locating pin holes shown in orange

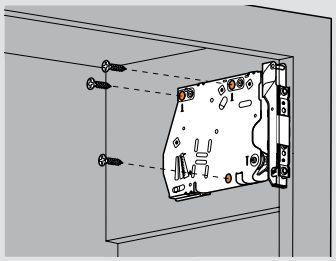
overlay	up to 28	32	35
Z	37	35	33

Lift mechanism positioning

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



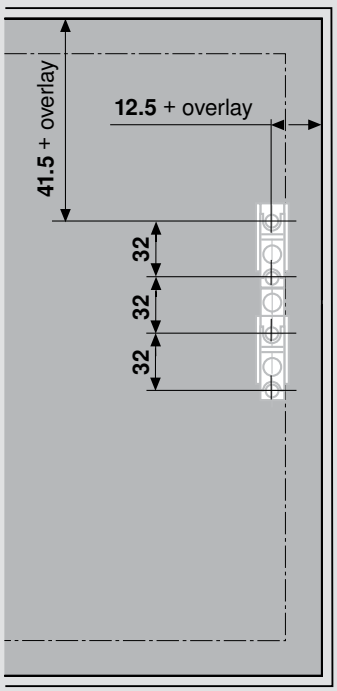
The included #7 x 35 mm (1-3/8") wood screws are required in the three holes marked in orange.



NOTE: Face frame cabinets must be blocked-out on the sides flush with the frame to mount the AVENTOS lift mechanisms

Step 3 – Determine the lever arm mounting plate position and attach to the door

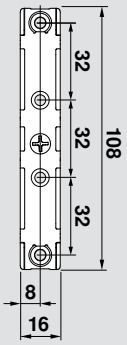
Arm assembly mounting plate location



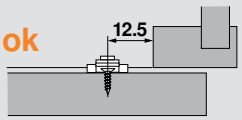
NOTE: Attach mounting plate with four 606N or 606P wood screws for wood doors or 7072A for wide aluminum doors

Arm assembly mounting plate choices

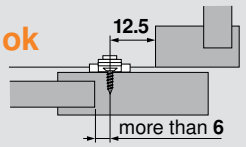
Mounting plate



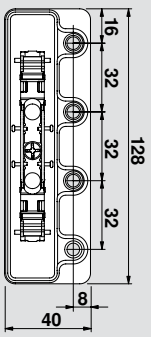
Slab door



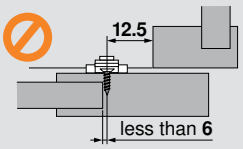
Five-piece door

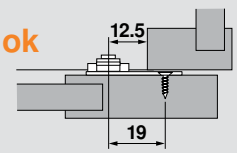


Mounting plate with bracket for large overlay five-piece doors



Five-piece door





Step 4 – Assemble the cabinet

Follow the assembly instructions on page 98

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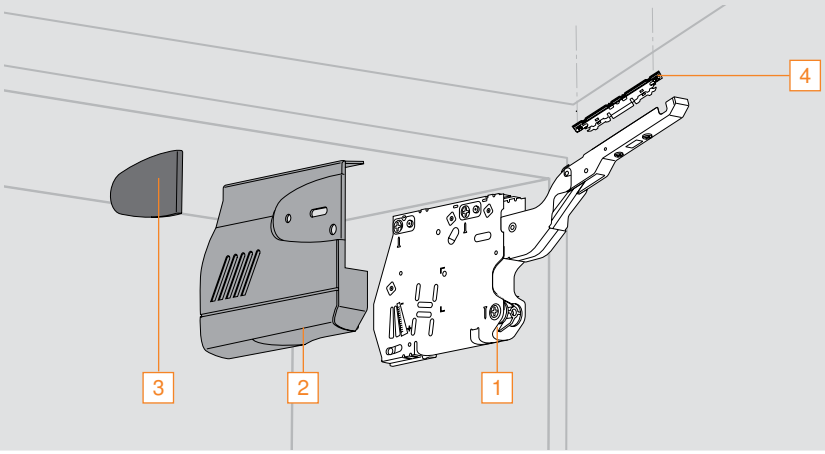
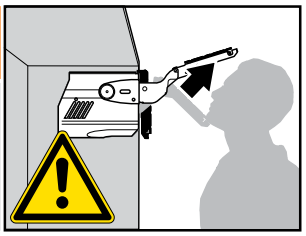
AVENTOS HK – Panel cabinets

Required components



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

AVENTOS planning tools available at blum.com/planning

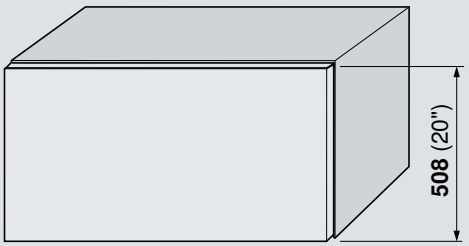
Determine power factor

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 (inch) x door weight* (lb)

* including twice the handle weight

Example:
Cabinet height: 20 inches (within possible range)
Door weight including twice the handle weight: **13** lb 14 oz (14 oz = **.9** lb see chart below)
Total weight converted to decimal is **13.9** lb
Power factor = cabinet height multiplied by door weight including twice the handle weight
Power factor = 20 x **13.9**
Power factor = 278
A power factor of 278 requires lift mechanism 20K2700.N5



door weight + twice handle weight = **13** 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

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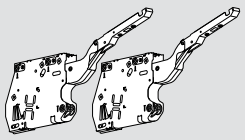
Ordering parts for wood or wide aluminum doors

Step 2 – Select the required components

Lift mechanism set



Set includes:

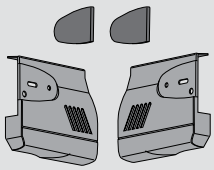
1 Lift mechanism (qty 2)

■ #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°	20K2300.N5
100 – 174	107°	20K2500.N5
175 – 349	107°	20K2700.N5
350 – 792	100°	20K2900.N5

Cover set



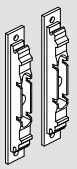
Set includes:

2 Right and left cover plate

3 Non-handed cover cap (qty 2)

	Part no.
Cover set	20K8000.NA

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

SERVO-DRIVE inside

SERVO-DRIVE for AVENTOS available

Please see SERVO-DRIVE for AVENTOS brochure for part and ordering information at blum.com

TIP-ON inside

TIP-ON for AVENTOS HK available

Please see TIP-ON for AVENTOS brochure for part and ordering information at blum.com

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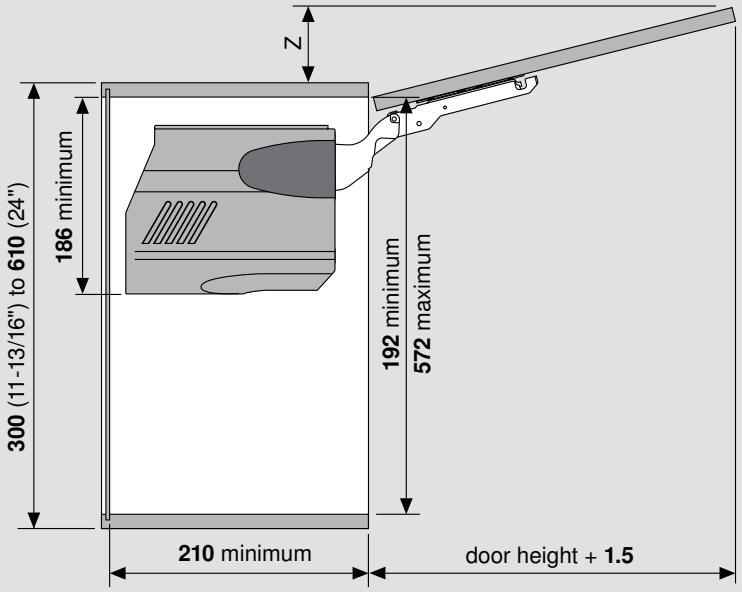
AVENTOS HK – Panel cabinets

Step 1 – Check clearances

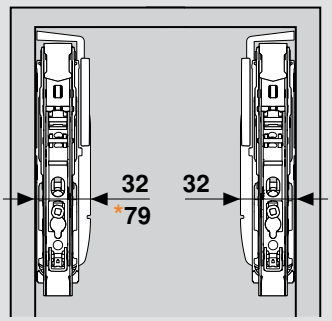
Space requirements

Door and hardware clearance



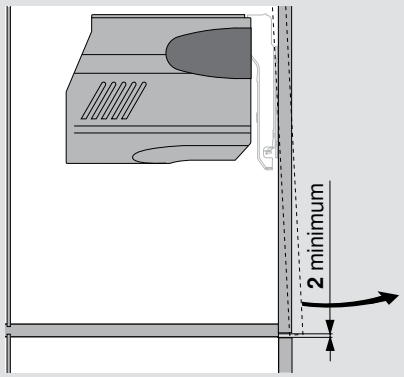
Z = door height x .29 minus **23** + door thickness

Lift mechanism clearance

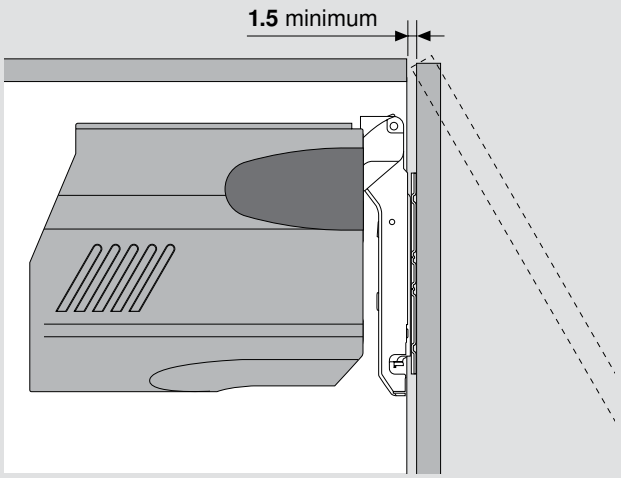


*denotes clearance required for SERVO-DRIVE for AVENTOS lift mechanism

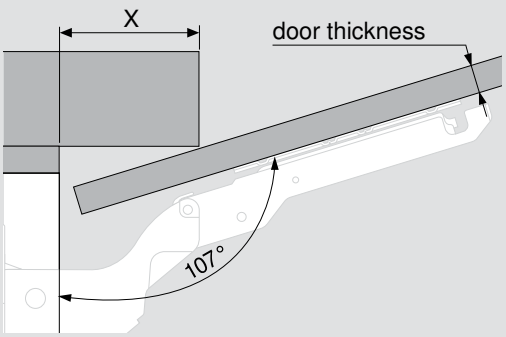
Minimum bottom reveal



Minimum gap



Decorative molding clearance



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

NOTE: Minimum gap assumes door radius of 1 mm

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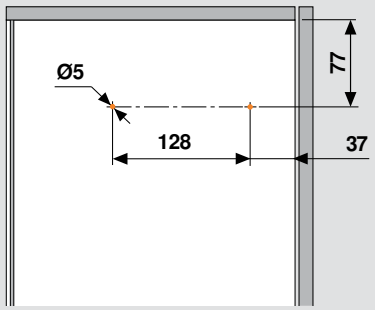
Cabinet preparation for wood or wide aluminum doors

Step 2 – Mount the lift mechanisms

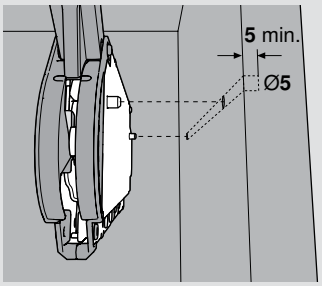
Boring for the locating pins



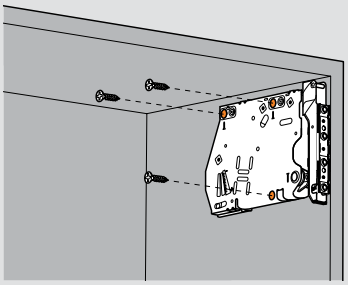
NOTE: Locating pin holes shown in orange

Lift mechanism positioning

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

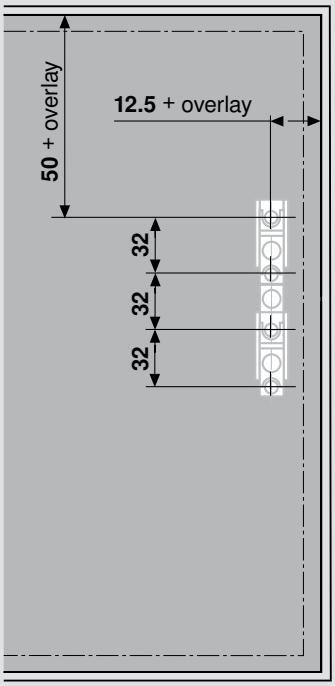


The included #7 x 35 mm (1-3/8") wood screws are required in the three holes marked in orange.



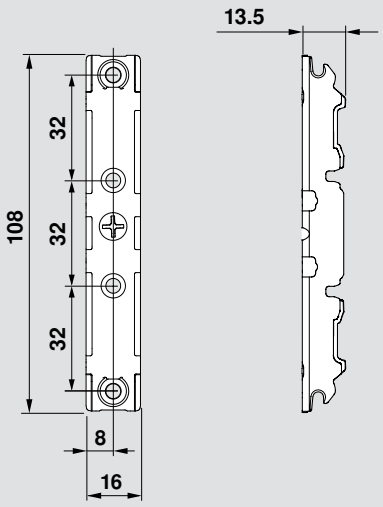
Step 3 – Determine the lever arm mounting plate position and attach to the door

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



Step 4 – Assemble the cabinet

Follow the assembly instructions on page 98

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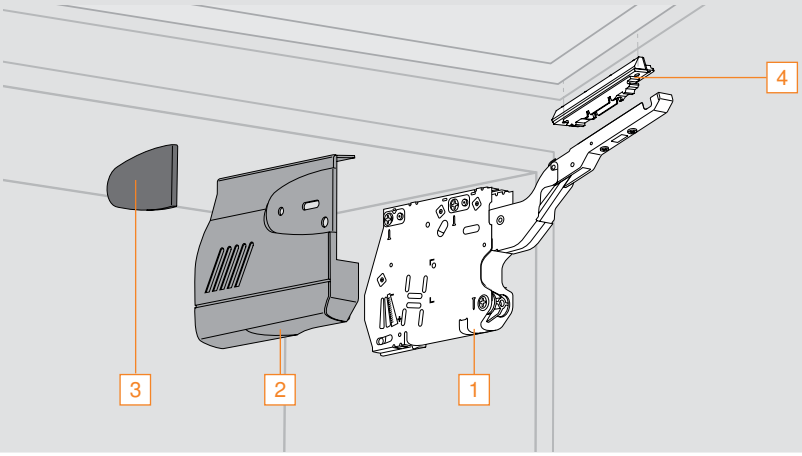
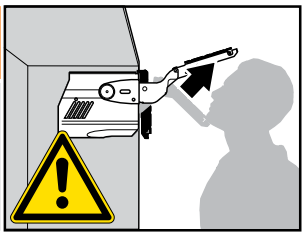
AVENTOS HK – Panel cabinets

Required components



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

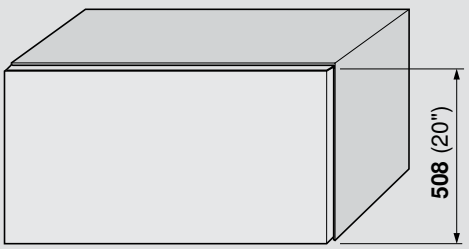
AVENTOS planning tools available at blum.com/planning

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 (inch) x door weight* (lb)

* including twice the handle weight



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

Example:
Cabinet height: 20 inches (within possible range)
Door weight including twice the handle weight: **13** lb 14 oz (14 oz = **.9** lb see chart below)
Total weight converted to decimal is **13.9** lb
Power factor = cabinet height multiplied by door weight including twice the handle weight
Power factor = 20 x **13.9**
Power factor = 278
A power factor of 278 requires lift mechanism 20K2700.N5

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

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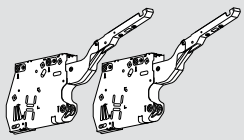
Ordering parts for narrow aluminum doors

Step 2 – Select the required components

Lift mechanism set



Set includes:

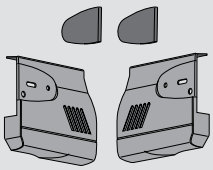
1 Lift mechanism (qty 2)

■ #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°	**20K2300.N5**
100 – 174	107°	**20K2500.N5**
175 – 349	107°	**20K2700.N5**
350 – 792	100°	**20K2900.N5**

Cover set



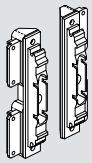
Set includes:

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 inside

SERVO-DRIVE for AVENTOS available

Please see SERVO-DRIVE for AVENTOS brochure for part and ordering information at blum.com

TIP-ON inside

TIP-ON for AVENTOS HK available

Please see TIP-ON for AVENTOS brochure for part and ordering information at blum.com

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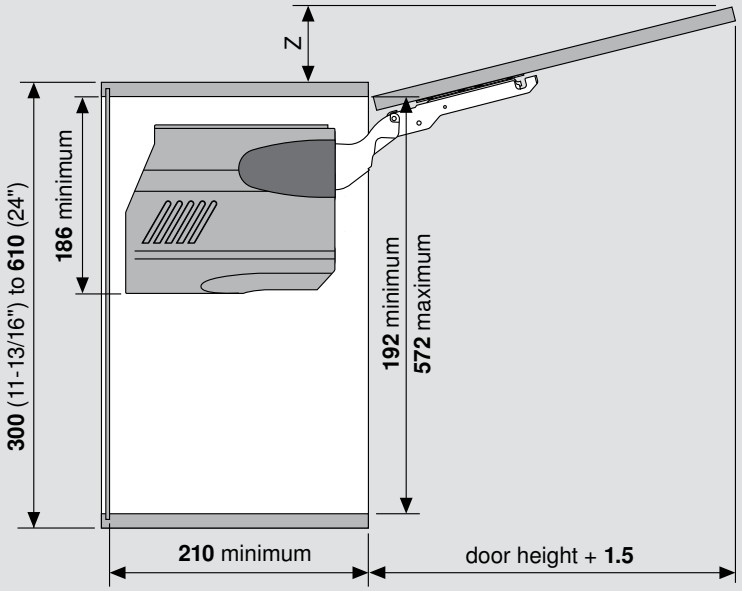
AVENTOS HK – Panel cabinets

Step 1 – Check clearances

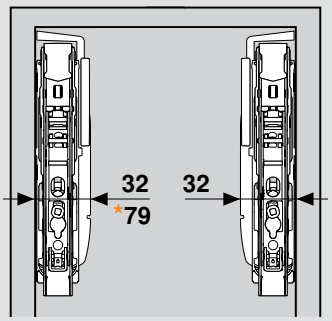
Space requirements

Door and hardware clearance



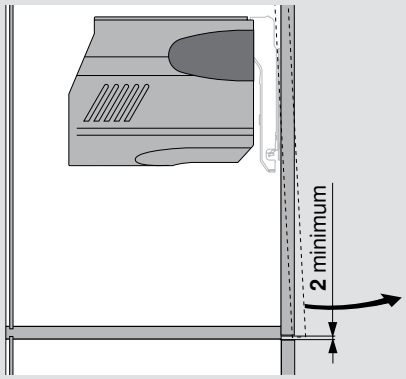
Z = door height x .29 minus **23** + door thickness

Lift mechanism clearance

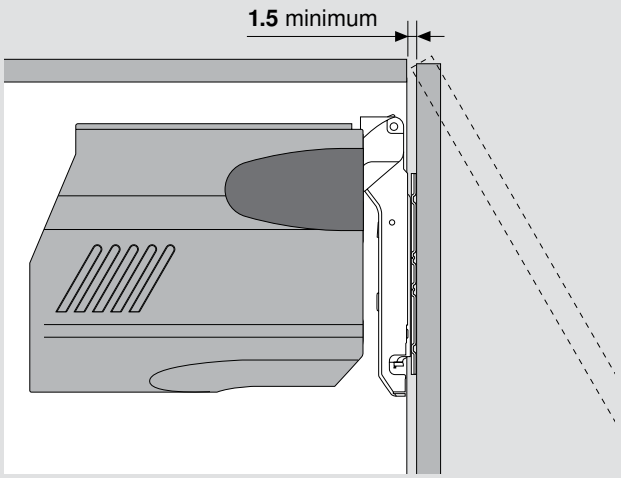


*denotes clearance required for SERVO-DRIVE for AVENTOS lift mechanism

Minimum bottom reveal

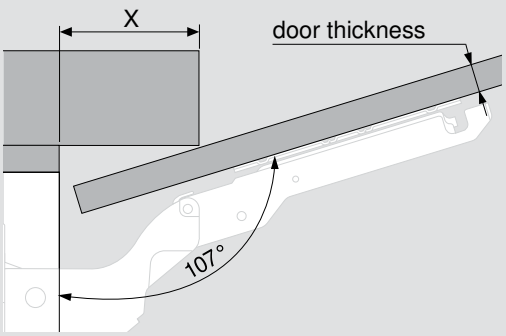


Minimum gap



NOTE: Minimum gap assumes door radius of 1 mm

Decorative molding clearance



door thickness	m16	19	22	26
maximum X	70	59	49	35

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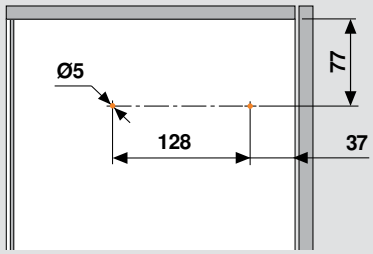
Cabinet preparation for narrow aluminum door

Step 2 – Mount the lift mechanisms

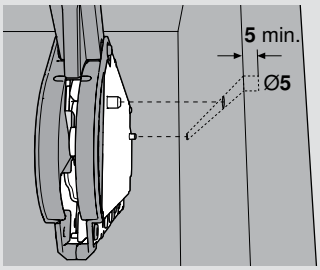
Boring for the locating pins



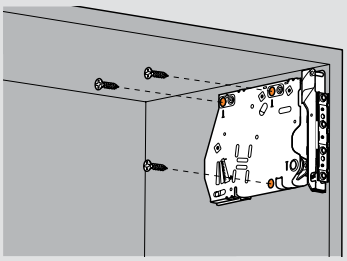
NOTE: Locating pin holes shown in orange

Lift mechanism positioning

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

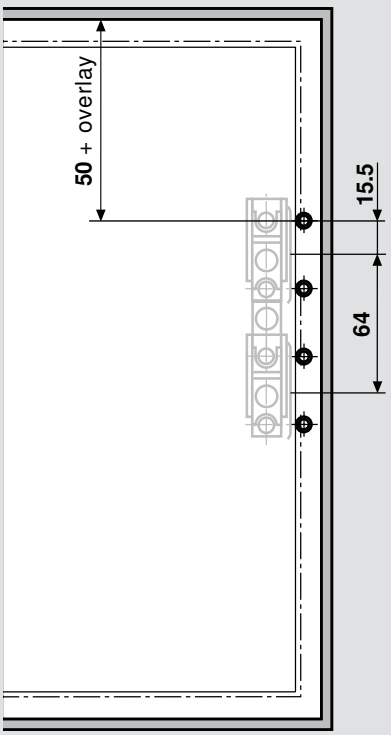


The included #7 x 35 mm (1-3/8") wood screws are required in the three holes marked in orange.



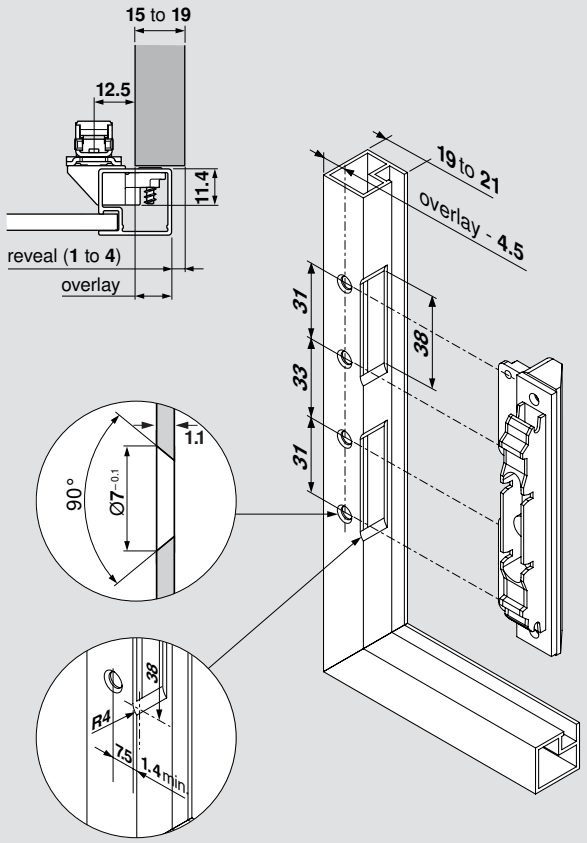
Step 3 – Determine the Lever arm mounting plate position and attach to the door

Arm assembly mounting plate location



NOTE: Attach mounting plate with four 669.110 screws provided

Arm assembly mounting plate



NOTE: When changing material thickness, adjust assembly dimensions accordingly

Step 4 – Assemble the cabinet

Follow the assembly instructions on page 98

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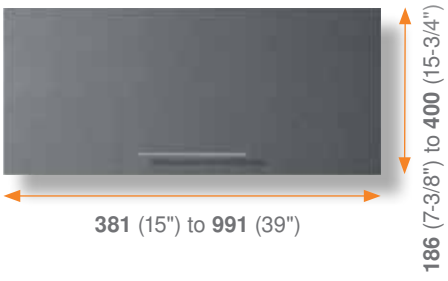
AVENTOS HK-S

BLUMOTION inside

Stay lift for the smallest of cabinets



Few parts – many applications

The AVENTOS HK-S program has only three lift mechanisms and covers smaller door 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.

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The motion inside

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

AVENTOS planning tools

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

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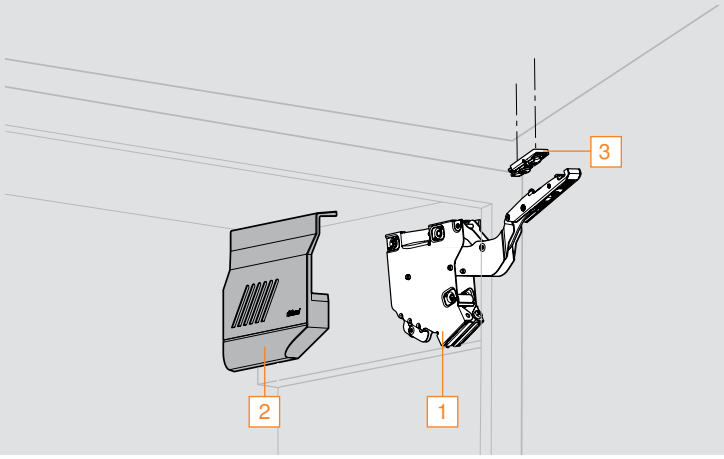
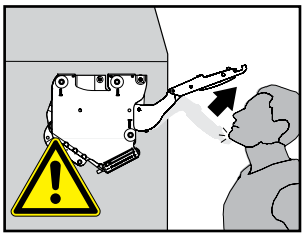
AVENTOS HK-S – Face frame cabinets

Required components



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

AVENTOS planning tools available at blum.com/planning

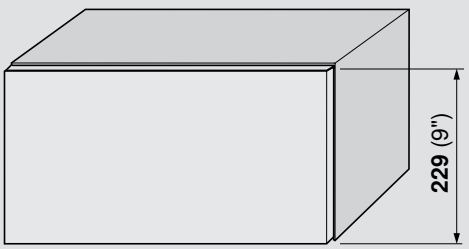
Determine power factor

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 (inch) x door weight* (lb)

* Including twice the handle weight

Example:
Cabinet height: 9 inches (within possible range)
Door weight including twice the handle weight: **5** lb 14 oz (14 oz = **.9** lb see chart below)
Total weight converted to decimal is **5.9** lb
Power factor = cabinet height multiplied by door weight including twice the handle weight
Power factor = 9 x **5.9**
Power factor = 53.1
A power factor of 53.1 requires lift mechanism 20K2C00.N1



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

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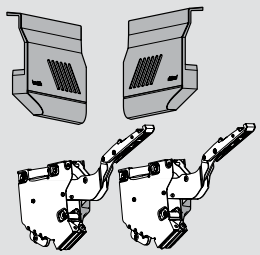
Ordering parts for wood or wide aluminum doors

Step 2 – Select the required components

Lift mechanism set



Set includes:

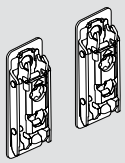
1 Lift mechanism (qty 2)

2 Cover plate (left and right)

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

Power factor	Opening angle	Part no.
19 – 39	107°	20K2B00.N1
40 – 85	107°	20K2C00.N1
86 – 177	107°	20K2E00.N1

Wood or wide aluminum door mounting plate set

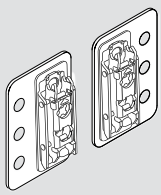


Set includes:

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

TIP-ON inside

TIP-ON for AVENTOS HK-S available

Please see TIP-ON for AVENTOS brochure for part and ordering information at blum.com

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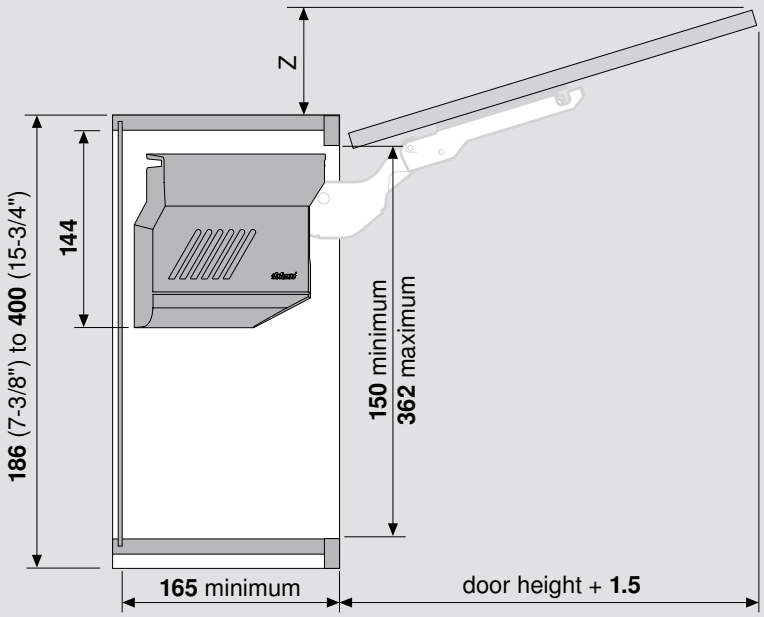
AVENTOS HK-S – Face frame cabinets

Step 1 – Check clearances

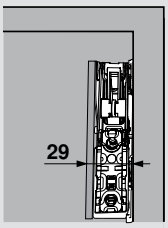
Space requirements

Door and hardware clearance

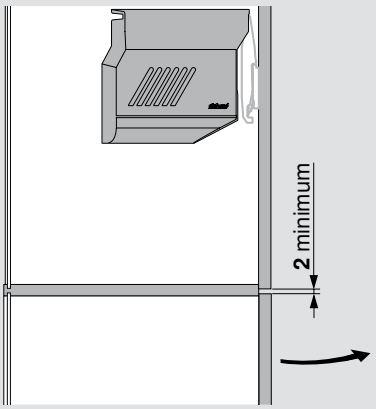


Z = door height x .29 minus **15** + door thickness

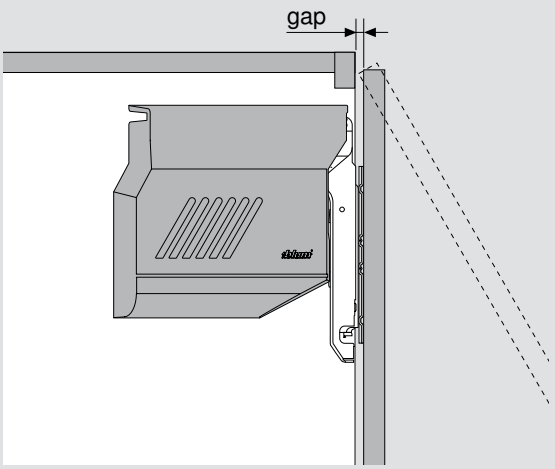
Lift mechanism clearance



Minimum reveals



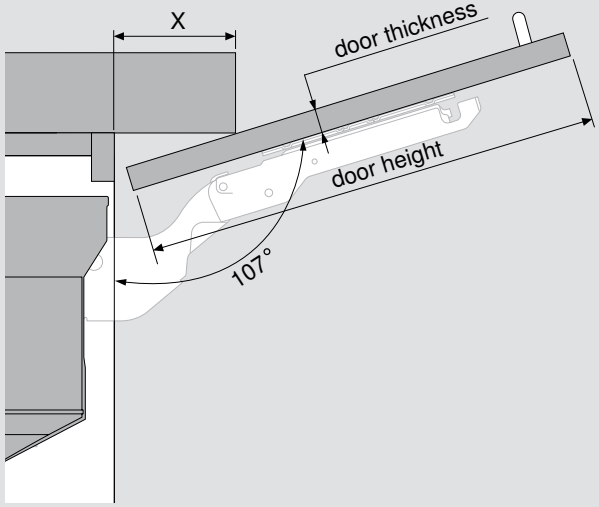
Minimum gap



overlay	up to **20**	**24**	**26**
gap	**1.5**	**2.5**	**4**

NOTE: Minimum gap assumes door radius of 1 mm

Decorative molding clearance



door thickness	**16**	**19**	**22**	**26**
maximum X	**70**	**59**	**49**	**35**

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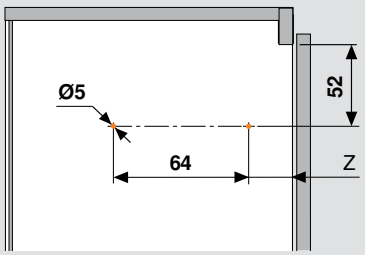
Cabinet preparation for wood or wide aluminum doors

Step 2 – Mount the lift mechanisms

Boring for the locating pins

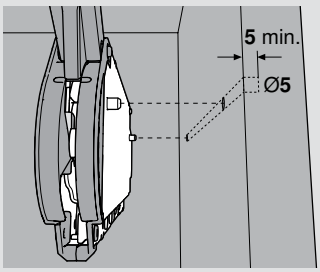


overlay	up to **20**	**24**	**26**
Z	**37**	**35.5**	**34.5**

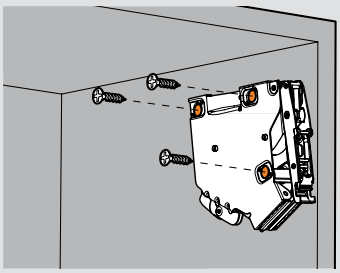
NOTE: Locating pin holes shown in orange

Lift mechanism positioning

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

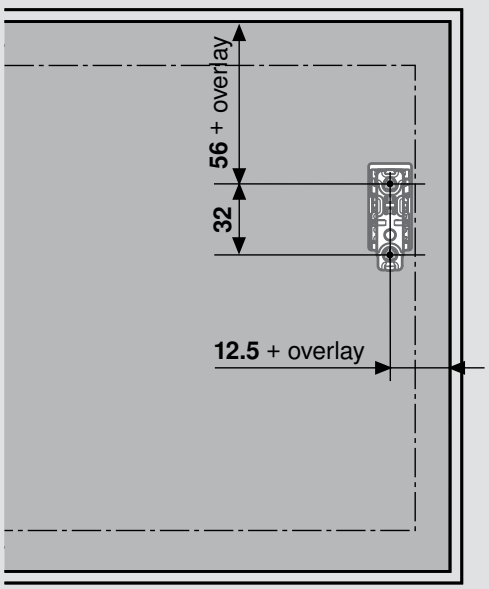


The included #7 x 35 mm (1-3/8") wood screws are required in the three holes marked in orange.



Step 3 – Determine the Lever arm mounting plate position and attach to the door

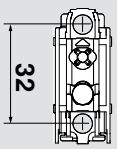
Arm assembly mounting plate location



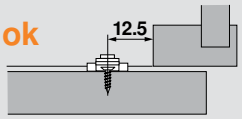
NOTE: Attach mounting plate with two 606N or 606P wood screws for wood doors or 7072A for wide aluminum doors

Mounting plate choices

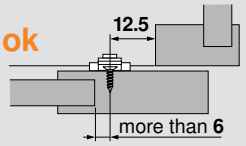
Mounting plate



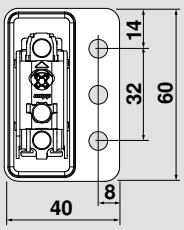
Slab door



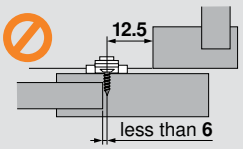
Five-piece door

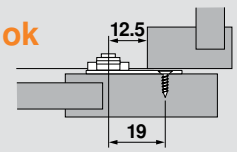


Mounting plate with bracket for large overlay five-piece doors



Five-piece door





Step 4 – Assemble the cabinet

Follow the assembly instructions on page 98

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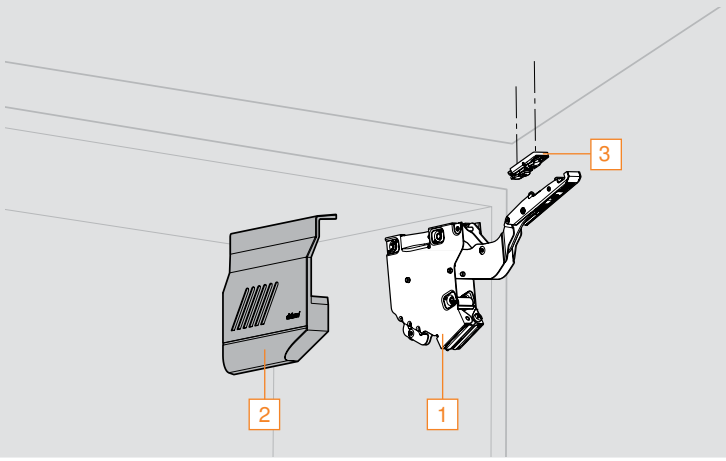
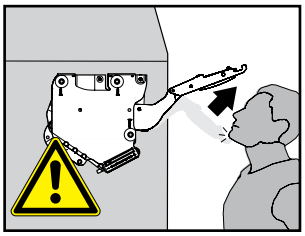
AVENTOS HK-S – Panel cabinets

Required components



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

AVENTOS planning tools available at blum.com/planning

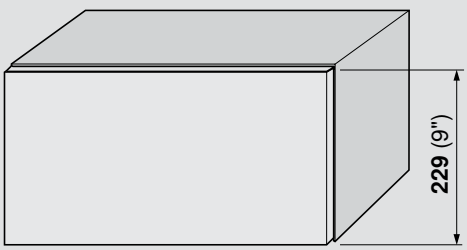
Determine power factor

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 (inch) x door weight* (lb)

* Including twice the handle weight

Example:
Cabinet height: 9 inches (within possible range)
Door weight including twice the handle weight: **5** lb 14 oz (14 oz = **.9** lb see chart below)
Total weight converted to decimal is **5.9** lb
Power factor = cabinet height multiplied by door weight including twice the handle weight
Power factor = 9 x **5.9**
Power factor = 53.1
A power factor of 53.1 requires lift mechanism 20K2C00.N1



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

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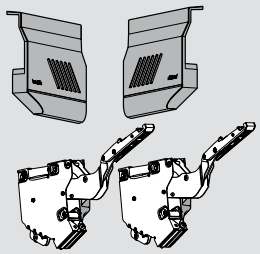
Ordering parts for wood or wide aluminum doors

Step 2 – Select the required components

Lift mechanism set



Set includes:

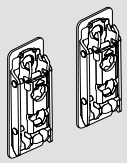
1 Lift mechanism (qty 2)

2 Right and left cover plate

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

power factor	opening angle	Part no.
19 – 39	107°	**20K2B00.N1**
40 – 85	107°	**20K2C00.N1**
86 – 177	107°	**20K2E00.N1**

Wood or wide aluminum door mounting plate set



Set includes:

3 Wood or wide aluminum arm assembly mounting plate (qty 2)

Mounting plate for use with AVENTOS HK-S only

	Part no.
Wood or wide aluminum mounting plate	**175H3100**
Installation screw for wood doors	**606N or 606P**
Installation screw for wide alum doors	**7072A**

TIP-ON inside

TIP-ON for AVENTOS HK-S available

Please see TIP-ON for AVENTOS brochure for part and ordering information at blum.com

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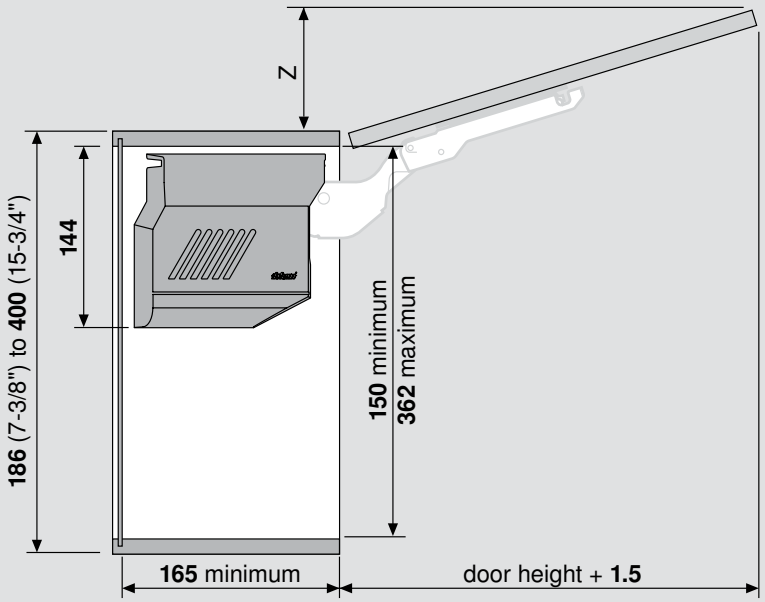
AVENTOS HK-S – Panel cabinets

Step 1 – Check clearances

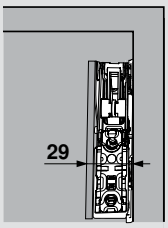
Space requirements

Door and hardware clearance

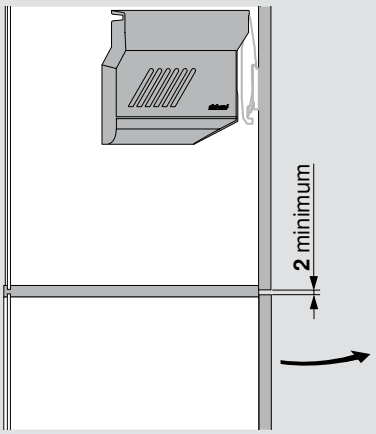


Z = door height x .29 minus **23** + door thickness

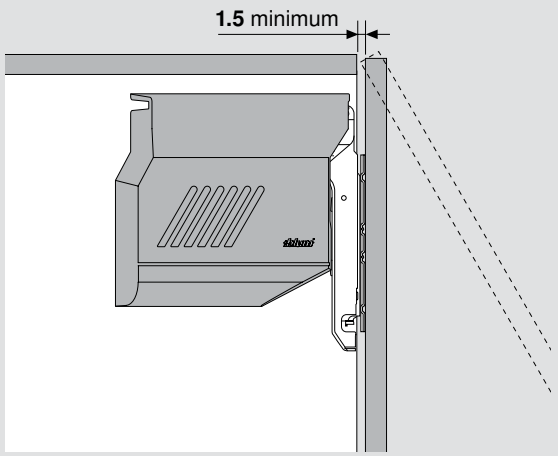
Lift mechanism clearance



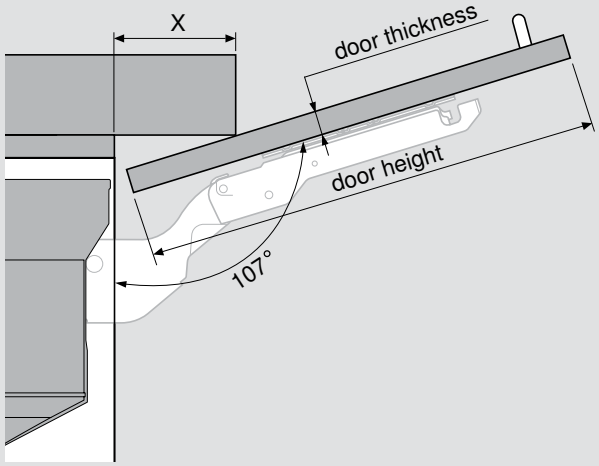
Minimum reveals



Minimum gap



Decorative molding clearance



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

NOTE: Minimum gap assumes door radius of 1 mm

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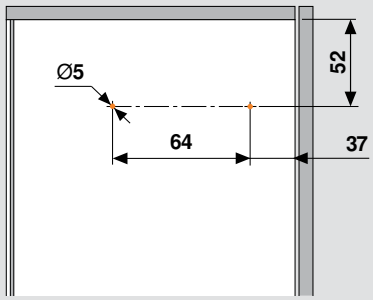
Cabinet preparation for wood or wide aluminum doors

Step 2 – Mount the lift mechanisms

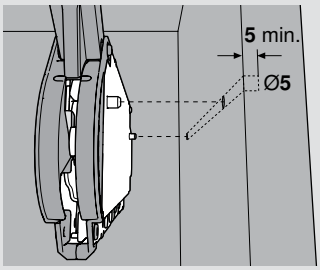
Boring for the locating pins



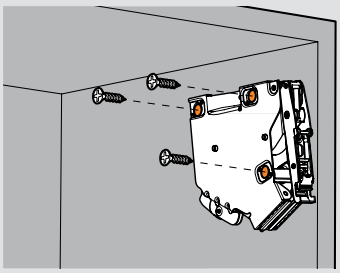
NOTE: Locating pin holes shown in orange

Lift mechanism positioning

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

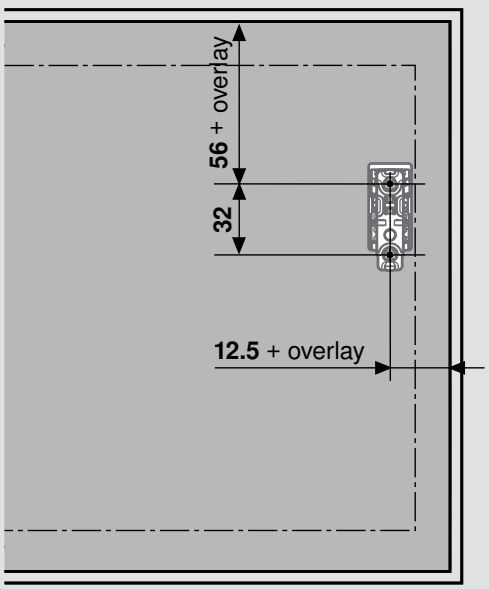


The included #7 x 35 mm (1-3/8") wood screws are required in the three holes marked in orange.



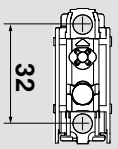
Step 3 – Determine the Lever arm mounting plate position and attach to the door

Arm assembly mounting plate location



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

Arm assembly mounting plate



Step 4 – Assemble the cabinet

Follow the assembly instructions on page 98

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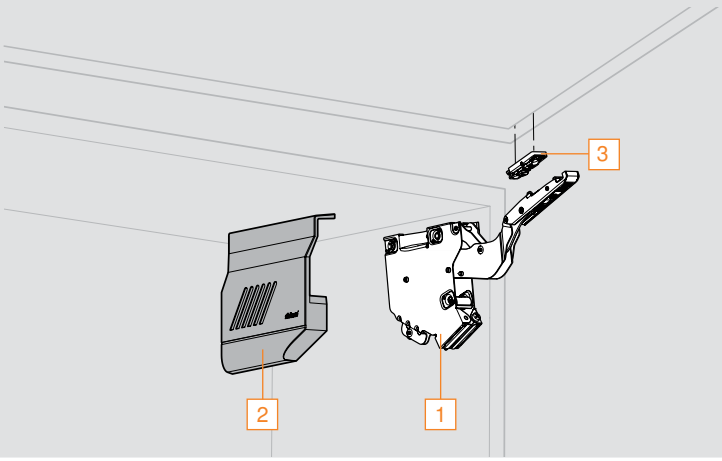
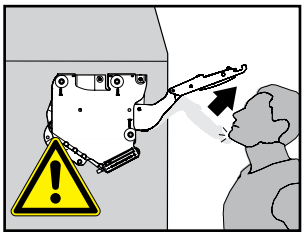
AVENTOS HK-S – Panel cabinets

Required components



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

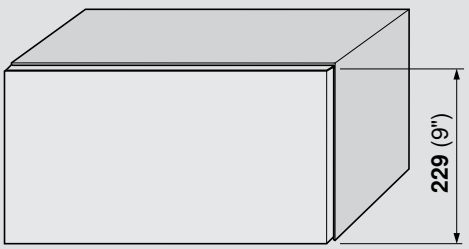
AVENTOS planning tools available at blum.com/planning

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 (inch) x door weight* (lb)

* Including twice the handle weight



door weight + twice handle weight = **5** lb 14 oz

Example:
Cabinet height: 9 inches (within possible range)
Door weight including twice the handle weight: **5** lb 14 oz (14 oz = **.9** lb see chart below)
Total weight converted to decimal is **5.9** lb
Power factor = cabinet height multiplied by door weight including twice the handle weight
Power factor = 9 x **5.9**
Power factor = 53.1
A power factor of 53.1 requires lift mechanism 20K2C00.N1

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

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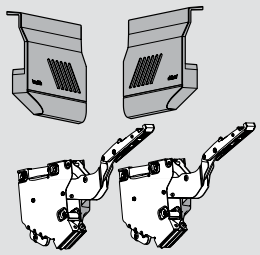
Ordering information for narrow aluminum doors

Step 2 – Select the required components

Lift mechanism set



Set includes:

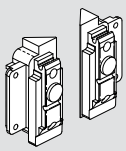
1 Lift mechanism (qty 2)

2 Right and left cover plate

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

Power factor	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)

Mounting plate for use with AVENTOS HK-S only

	Part no.
Narrow aluminum door mounting plate	**20K4A00A01**

TIP-ON inside

TIP-ON for AVENTOS HK-S available

Please see TIP-ON for AVENTOS brochure for part and ordering information at blum.com

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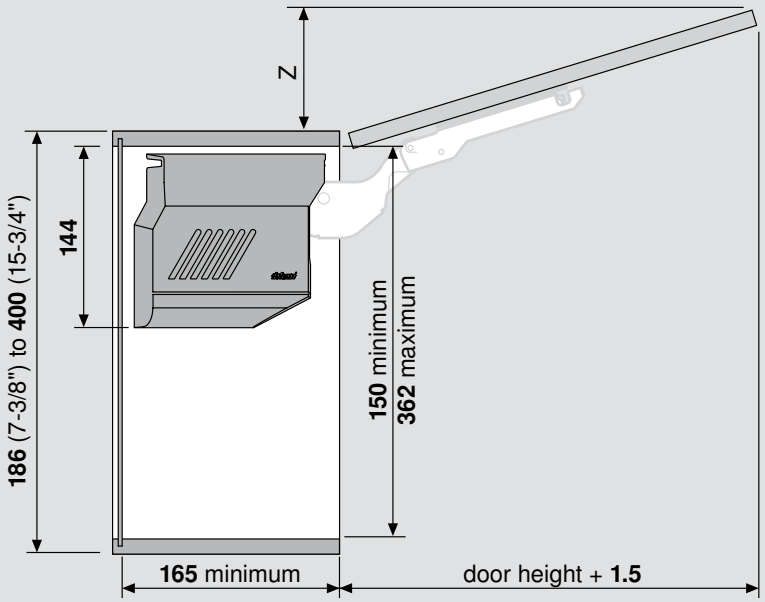
AVENTOS HK-S – Panel cabinets

Step 1 – Check clearances

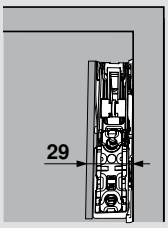
Space requirements

Door and hardware clearance

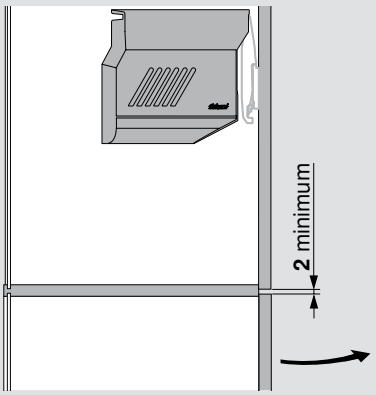


Z = door height x .29 minus **23** + door thickness

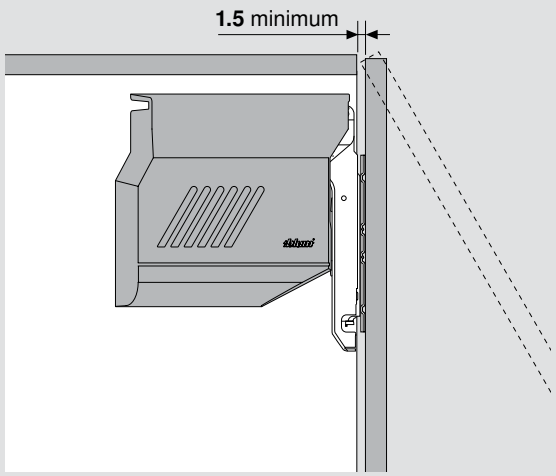
Lift mechanism clearance



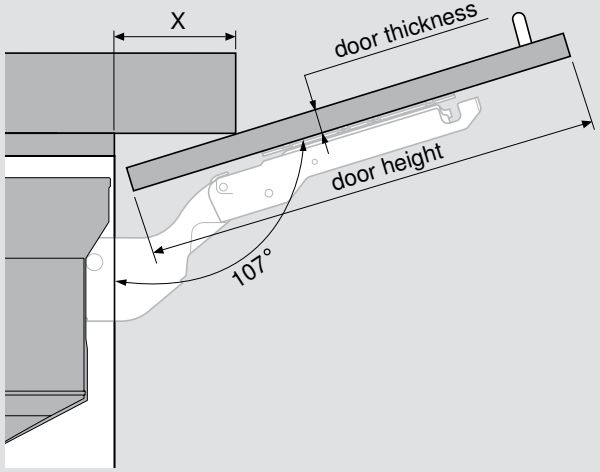
Minimum reveals



Minimum gap



Decorative molding clearance



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

NOTE: Minimum gap assumes door radius of 1 mm

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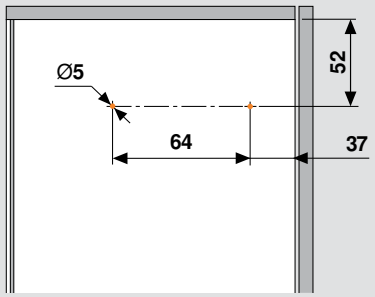
Cabinet preparation for narrow aluminum doors

Step 2 – Mount the lift mechanisms

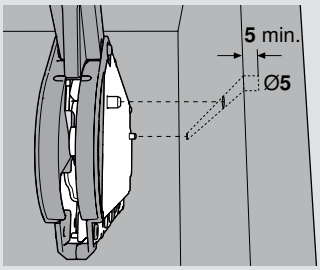
Boring for the locating pins



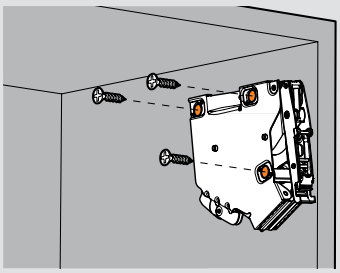
NOTE: Locating pin holes shown in orange

Lift mechanism positioning

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

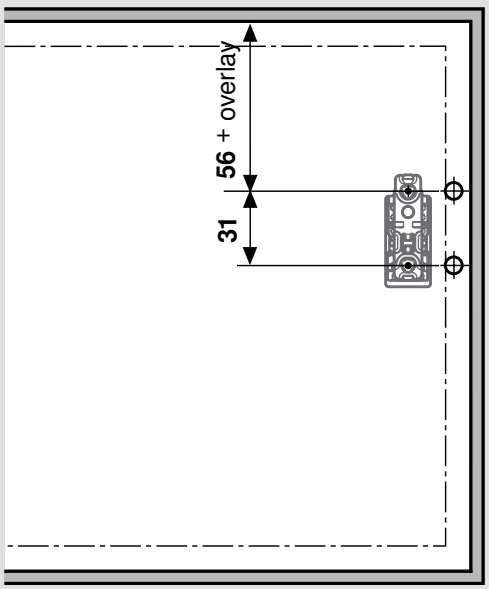


The included #7 x 35 mm (1-3/8") wood screws are required in the three holes marked in orange.



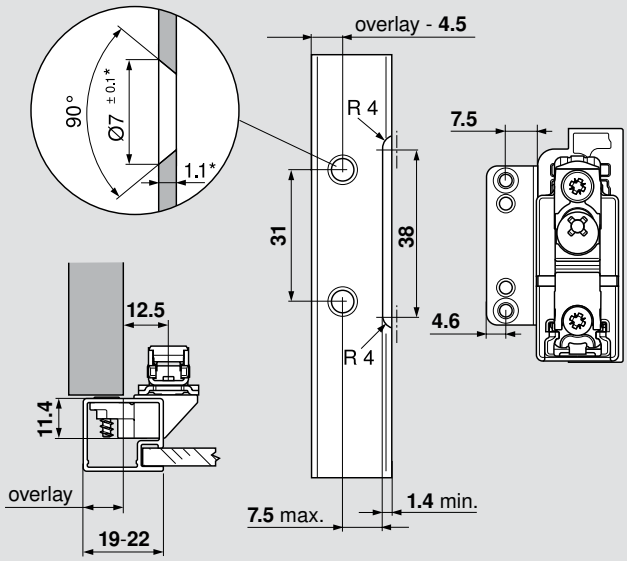
Step 3 – Determine the Lever arm mounting plate position and attach to the door

Arm assembly mounting plate location



NOTE: Attach mounting plate with two 699.110 aluminum screws

Arm assembly mounting plate



NOTE: When changing material thickness, adjust assembly dimensions accordingly

Step 4 – Assemble the cabinet

Follow the assembly instructions on page 98

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easy installation, and adjustment

AVENTOS can be assembled with ease and the proven CLIP technology makes the process almost entirely tool-free.

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The only tool required is a hand held drill for adjusting the lift mechanism in precise accordance with the front weight. The fact that the cross stabilizer rods for AVENTOS HS and HL are attached without tools significantly reduces the amount of effort required for assembly.

Fronts can be conveniently adjusted three-dimensions to ensure proper door alignment.

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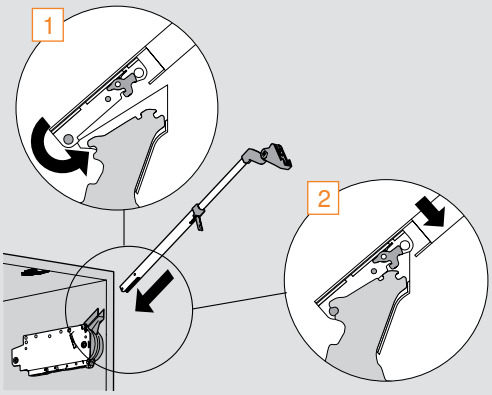
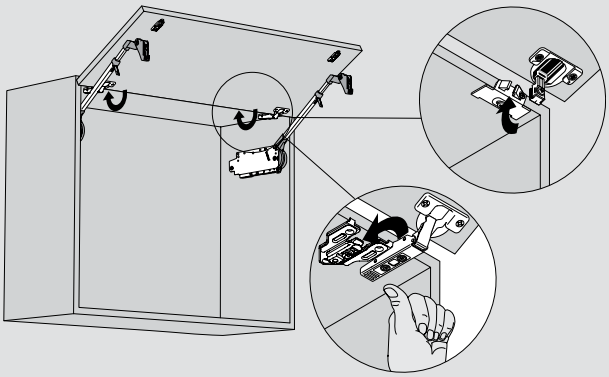
AVENTOS HF – Assembly

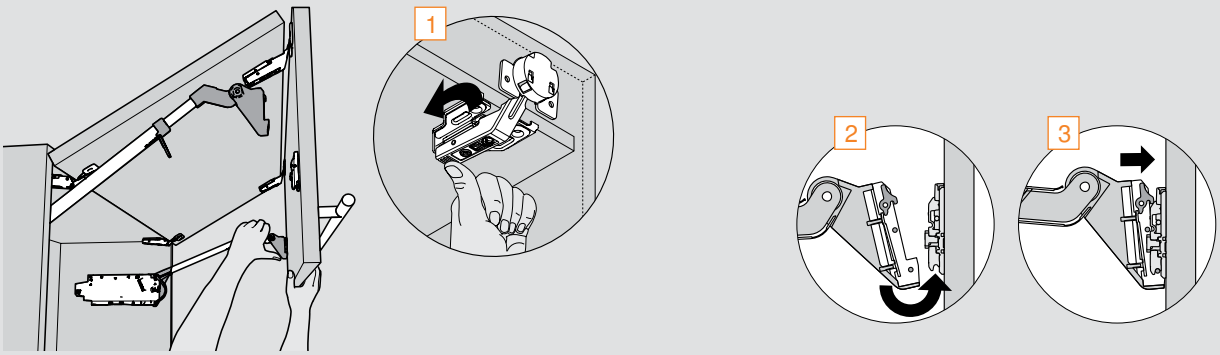
Attaching the telescopic arms



Attaching the top door to the cabinet

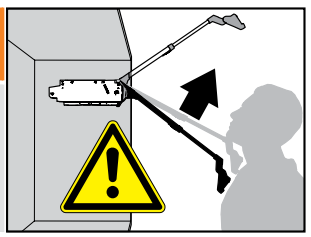


Attaching the bottom door to the cabinet



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

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



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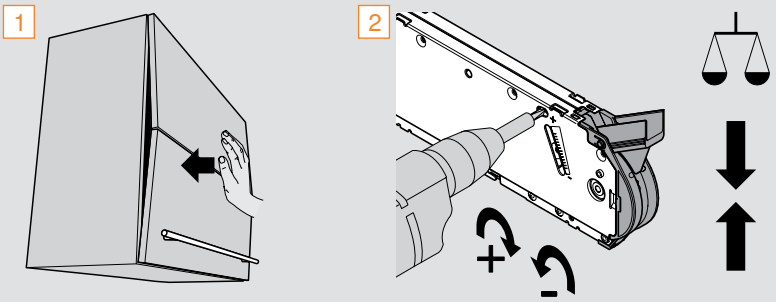
AVENTOS HF – Adjustments

Lift mechanism tension adjustment

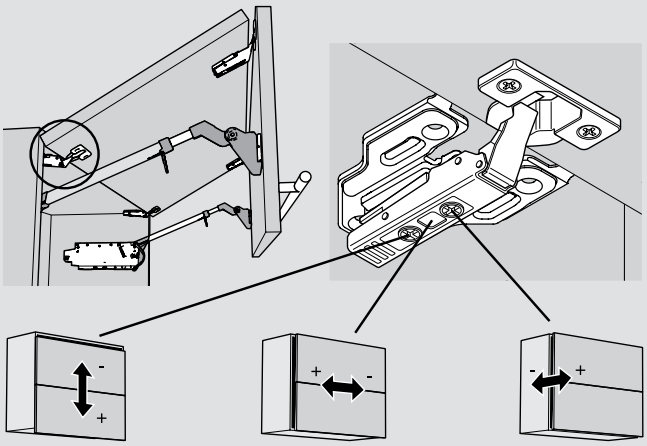
1 Close and flush doors to cabinet. Open and close door to test closing force.

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.



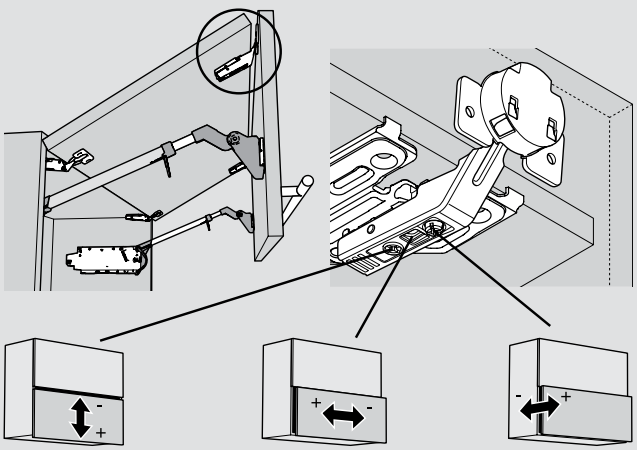
AVENTOS HF door adjustments

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



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

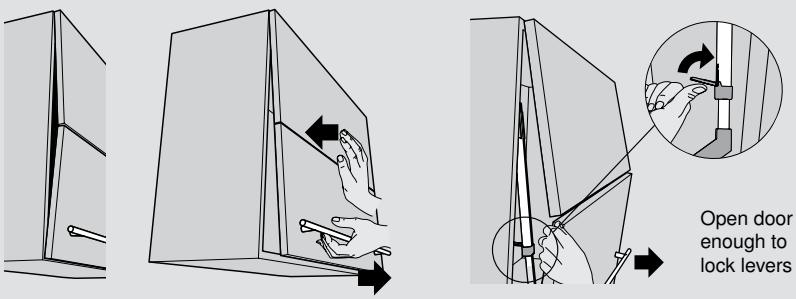
2 Adjust each bottom door hinge and mounting plate to properly align doors to the cabinet and to the top door.



Adjust and lock telescopic arms

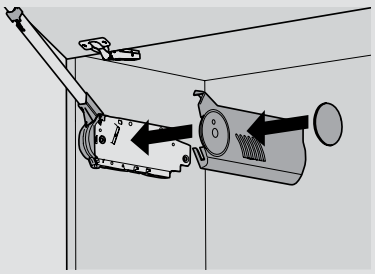
1 Close and flush doors to cabinet. While pressing on the top door, pull the bottom door open approximately one inch.

2 Slightly open door and lock the telescopic arms into position using the levers as shown.



Attaching cover caps

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



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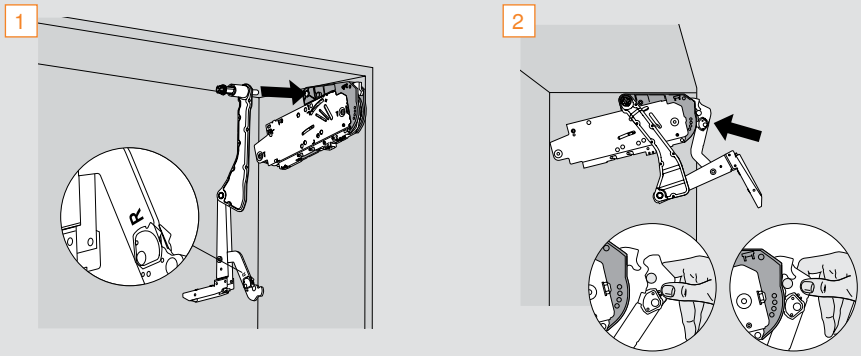
AVENTOS HS – Assembly

Attaching the arm assembly

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

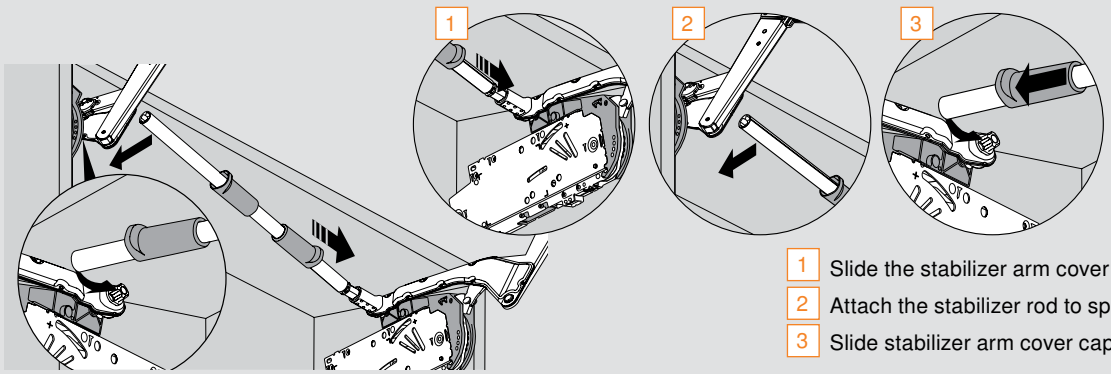
1 Attach the arm assembly to the lift mechanism as shown

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 opening minus **129** (5-1/16')
After cutting the rod to size follow steps 1, 2, and 3 below.



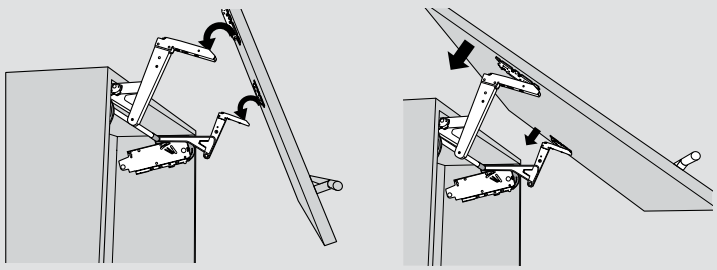
1 Slide the stabilizer arm cover caps onto the rod

2 Attach the stabilizer rod to spring loaded arm assembly

3 Slide stabilizer arm cover caps over rod on each end

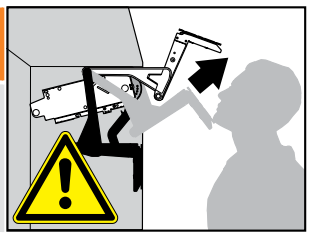
Attaching the doors

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



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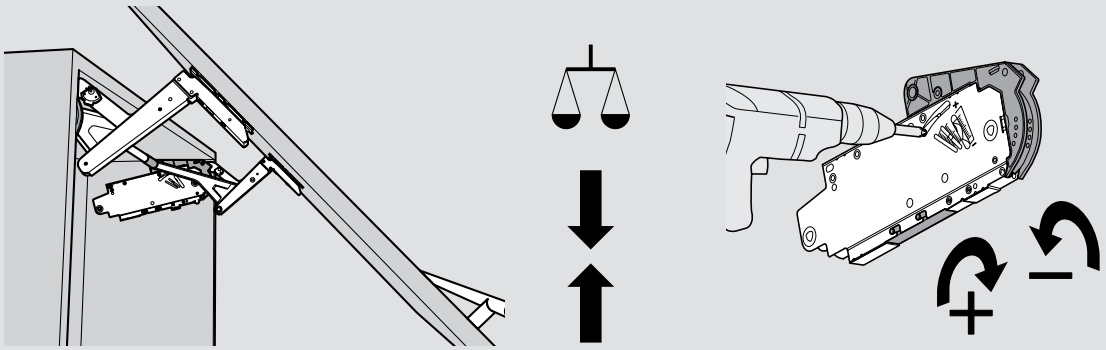
AVENTOS HS – Adjustment

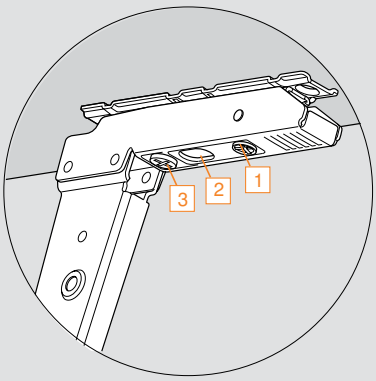
Adjusting the lift mechanism

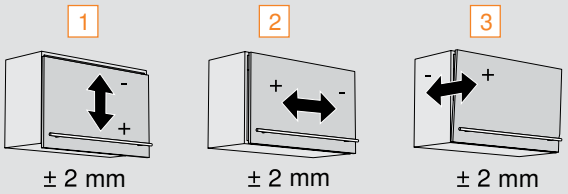
Use a screw gun and a #2 x 2 POZI driver bit to adjust the lift mechanism to the desired tension (door weight balanced).



AVENTOS HS door adjustments

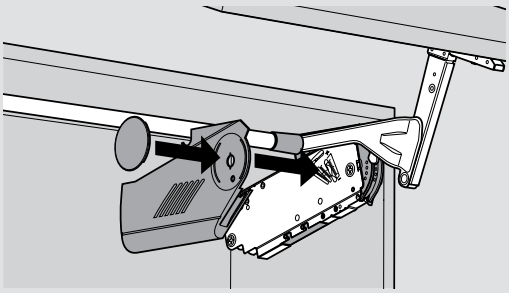
Use a POZI screwdriver to adjust cam adjustments for each of the three-dimensional door adjustments.





Attaching cover caps

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



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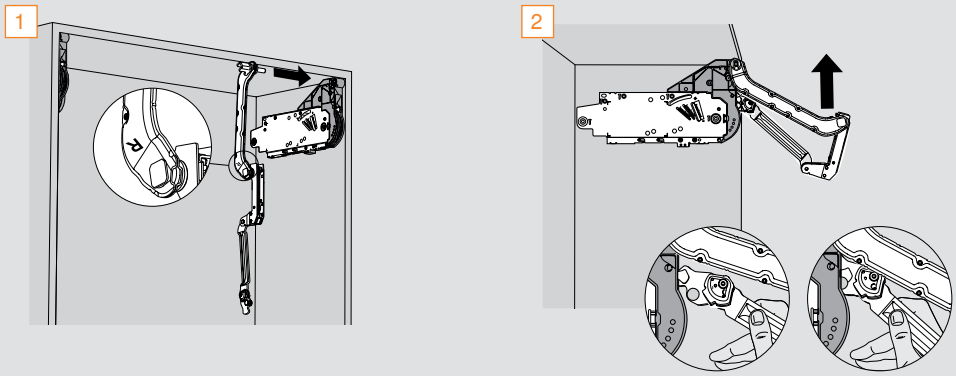
AVENTOS HL – Assembly

Attaching the arm assembly

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

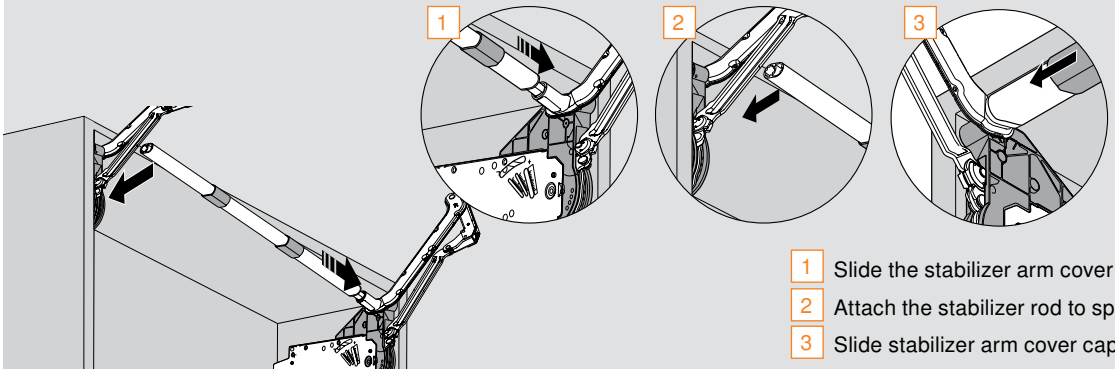
1 Attach the arm assembly to the lift mecahnism as shown

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 opening minus **129** (5-1/16").
After cutting the rod to size follow steps 1, 2, and 3 below.



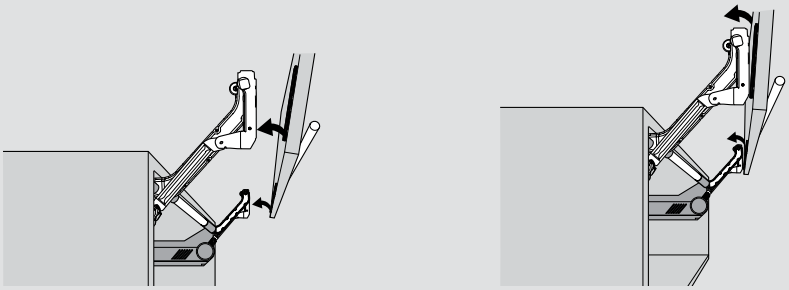
1 Slide the stabilizer arm cover caps onto the rod

2 Attach the stabilizer rod to spring loaded arm assembly

3 Slide stabilizer arm cover caps over rod on each end

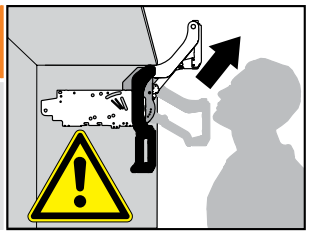
Attaching AVENTOS HL doors

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



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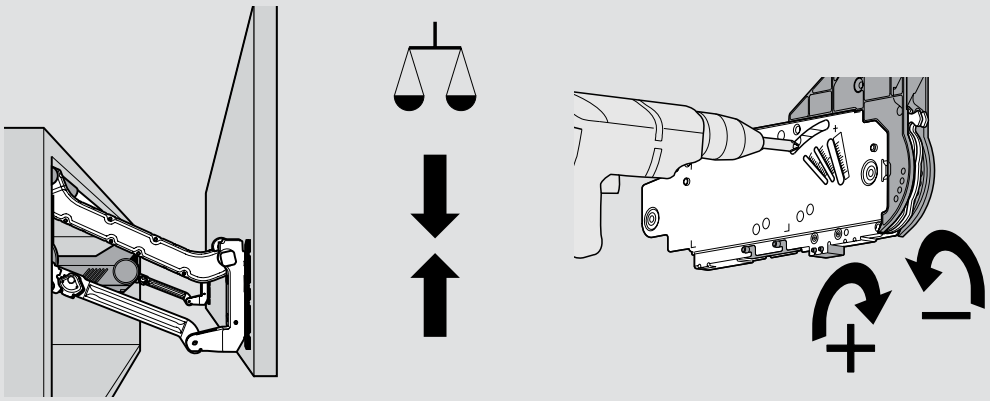
AVENTOS HL – Adjustments

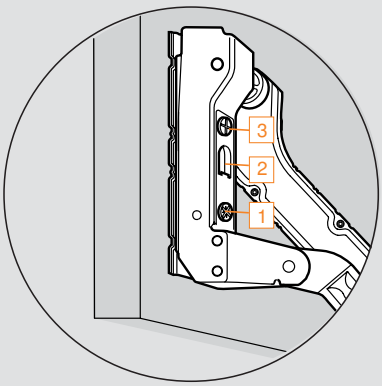
Adjusting the lift mechanism

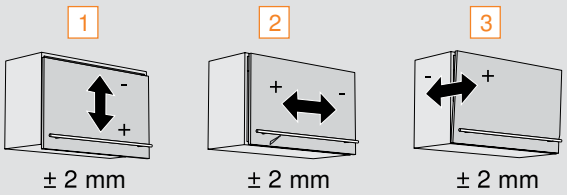
Use a screw gun and a #2 x 2 POZI driver bit to adjust the lift mechanism to the desired tension (door weight balanced).



AVENTOS HL door adjustments

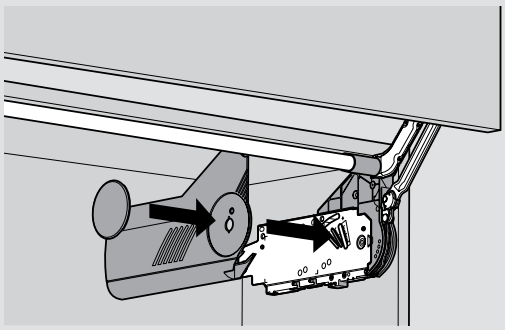
Use a POZI screwdriver to adjust cam adjustments for each of the three-dimensional door adjustments.





Attaching cover caps

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



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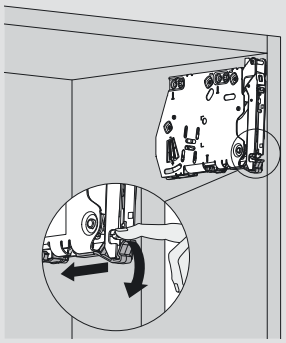
AVENTOS HK and HK-S – Assembly

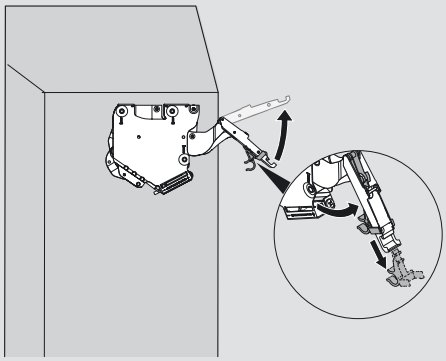
Remove transport tab

1 Carefully remove the transport tab

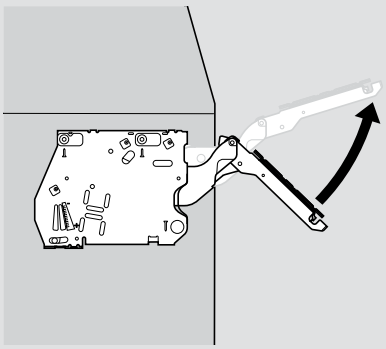
AVENTOS HK



AVENTOS HK-S



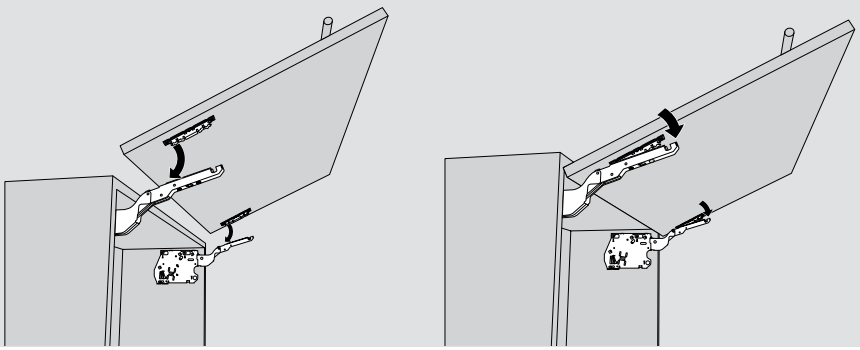
2 Raise the arm to the upright position



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

Attaching AVENTOS HK/HK-S doors

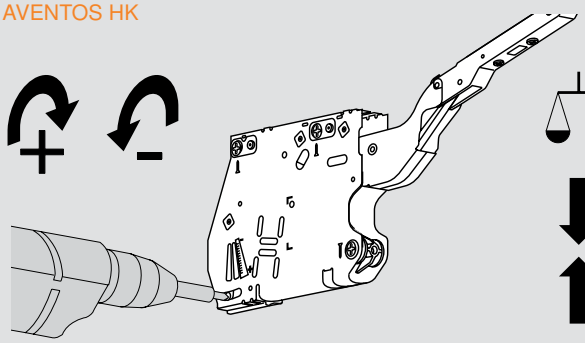
Attach the door using the CLIP mechanism to the arm assembly.



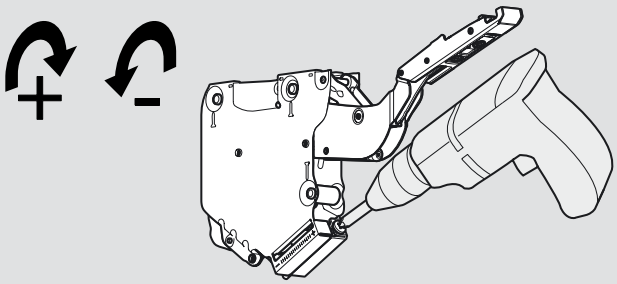
Adjust the lift mechanism

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

AVENTOS HK

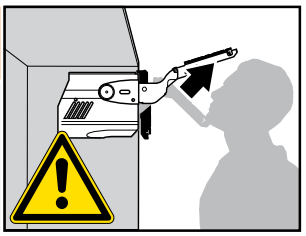


AVENTOS HK-S



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

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



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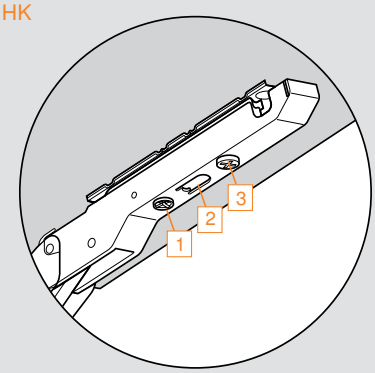
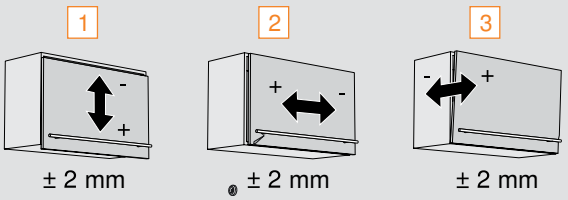
AVENTOS HK and HK-S – Adjustments

AVENTOS HK/HK-S door adjustments

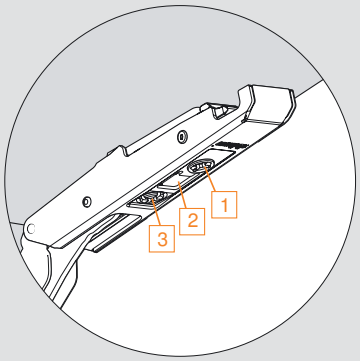
Use a POZI screwdriver to adjust cam adjustments for each of the three-dimensional door adjustments.

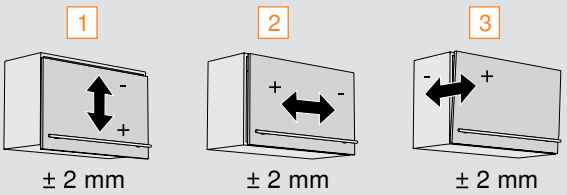
AVENTOS HK





AVENTOS HK-S

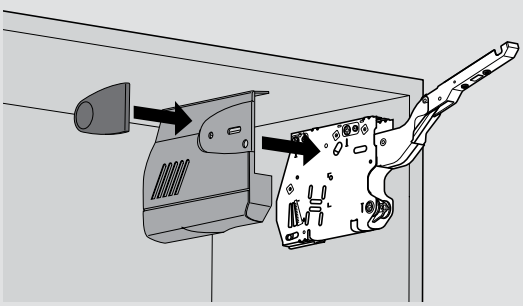




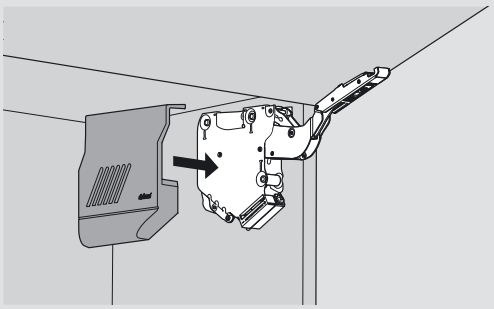
Attaching cover caps

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

AVENTOS HK



AVENTOS HK-S



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AVENTOS inset application – Face frame

Face frame inset application

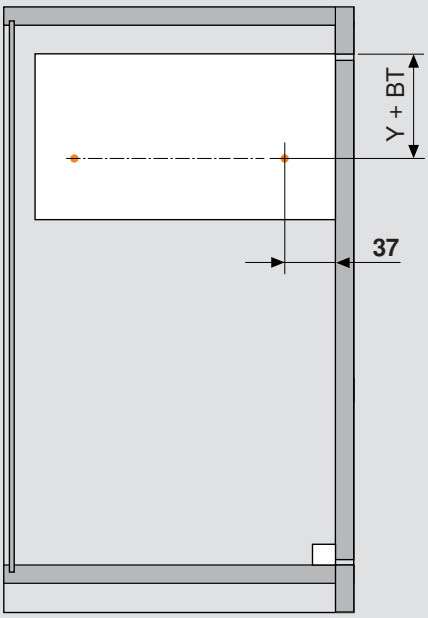
When it comes to inset cabinets and AVENTOS there are many ways to accomplish this application. Below is an option that can be used for both face frame and panel cabinets alike.

Face frame cabinets

The illustrations below show the idea of blocking-out the interior of a face frame cabinet to obtain the needed space required for AVENTOS. By blocking-out the interior of the cabinet to protrude into the cabinet opening, we have moved the AVENTOS lift mechanism far enough into the opening for the arm assembly to clear the frame of the cabinet.

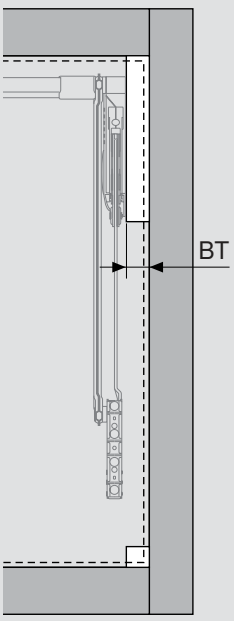
Planning information for blocking-out

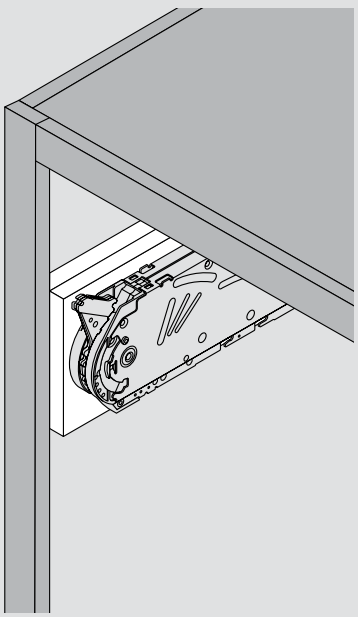
In this illustration the **37** setback for the Ø**5** x **5** locating pin holes is measured from the back of the door (or back edge of face frame). The Y dimension is the locating pin position of the selected lift mechanism.



NOTE: Mounting plate position varies based on block-out thickness used at top of cabinet

This illustration shows how the block-out provides the needed clearance for the lift mechanism and also provides a stopping point for the door.





BT = block-out thickness

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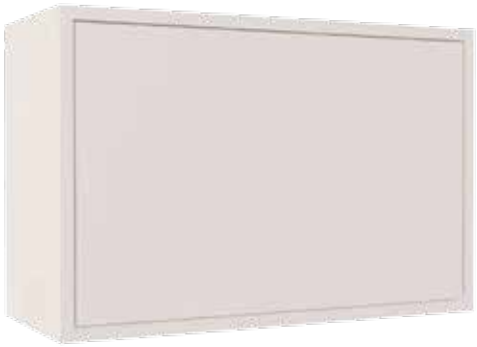
AVENTOS inset application – Panel



Panel inset application

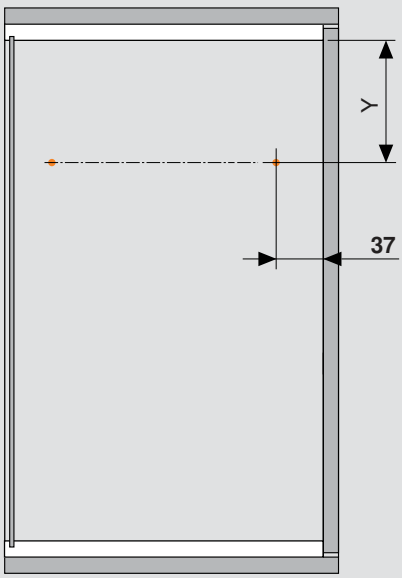
When it comes to inset cabinets and AVENTOS there are many ways to accomplish this application. Below is an option that can be used for both face frame and panel cabinets alike.

Panel cabinets

The illustrations below show the idea of building a cabinet within a cabinet to obtain the needed space required for AVENTOS. By either building a smaller cabinet within or adding panels to the outside of a cabinet, you have made it possible to simulate the look of an inset cabinet.

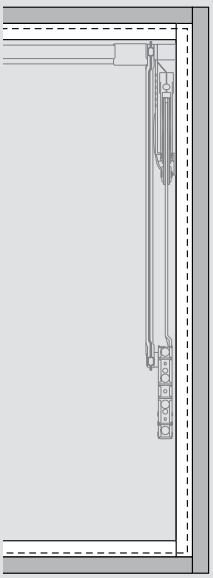
Planning information for cabinet-within-cabinet

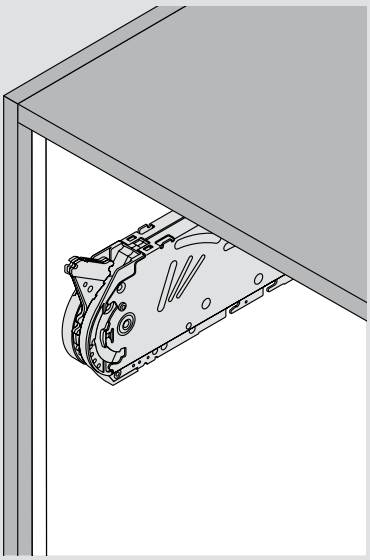
In this illustration the **37** setback for the Ø**5** x **5** locating pin holes is measured from the back of the door (or front edge of the interior cabinet). The Y dimension is determined by the selected AVENTOS lift system.



NOTE: Mounting plate position varies based on block-out thickness used at top of cabinet

This illustration shows how the interior cabinet is simply an overlay cabinet that is set back the thickness of the door front and bumper. This also provides a stopping point for the door.





NOTE: The top and bottom panels of the inner cabinet are optional but their intended thickness are needed for calculating the Y dimension for the lift mechanism.

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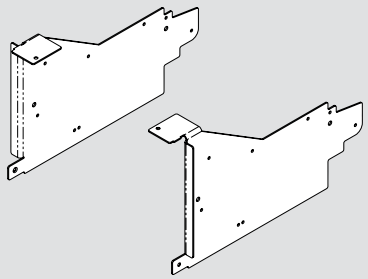
AVENTOS HL – Face frame corner cabinet

HL bracket set



- Brackets for mounting AVENTOS HL in a face frame corner appliance garage application
- Minimum frame offset **12.5** (1/2")
- Provides accurate positioning of AVENTOS HL lift system in cabinet

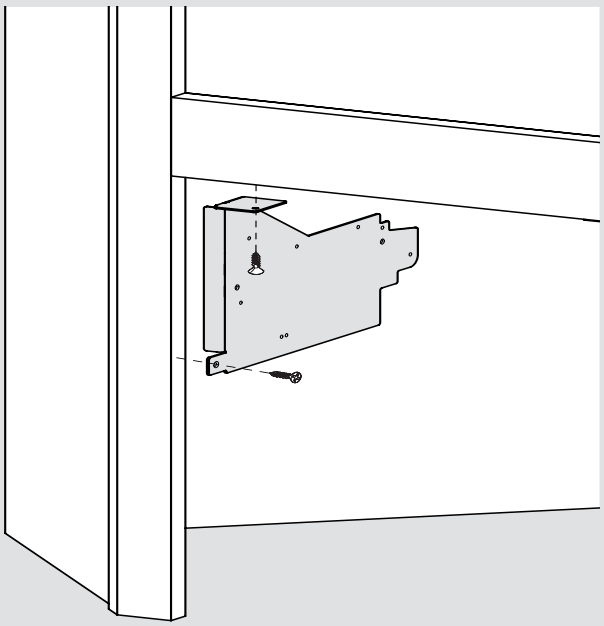
Set includes:

- Right and left brackets
- M4 x 30 mm lift mechanism machine screws (qty 12)

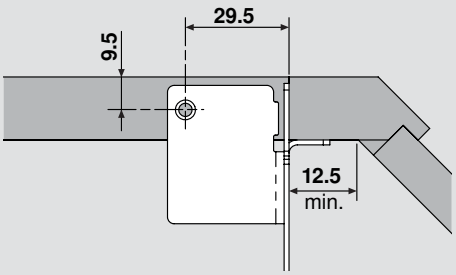
	Part no.
Bracket set	**20L7001**
Installation screw	**7074N**

Bracket installation

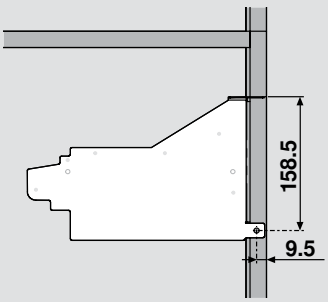
Attach each bracket to the top and side of the face frame opening with two #7 x 3/4" (7074N) wood screws.



Top mounting screw position



Side mounting screw position



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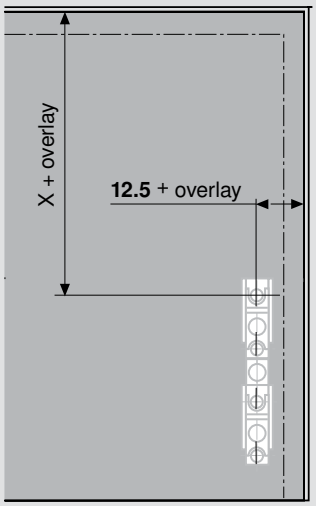
Appliance garage bracket

Arm assembly mounting plate location

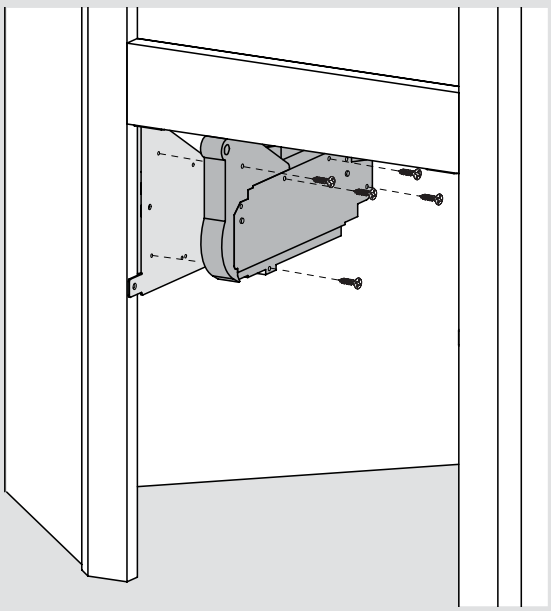
Attach mounting plate with four screws provided



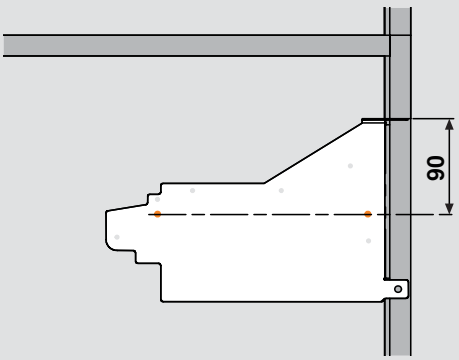
arm assembly	X	NOTE: Position is 2 mm lower than a standard 20L3900.06 application
20L3900.06	**305**	

Lift mechanism attachment

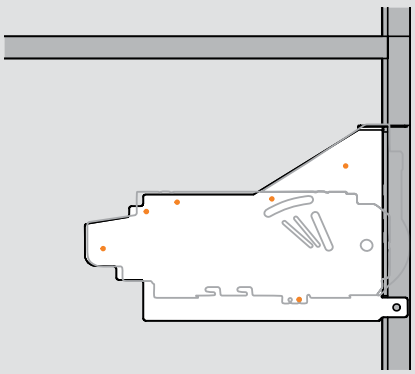
Attach each lift mechanism to the brackets with six M4 x 30 mm machine screws (included)



Locating pin locations



Machine screw locations



NOTE: Locations marked in orange

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Accessories

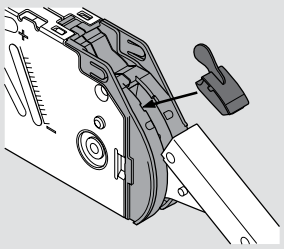
Angle restriction clips

AVENTOS HF angle restriction clips

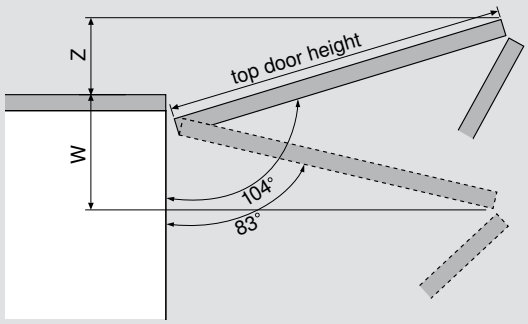
- Restricts opening angle of the door
- Prevents the door from hitting an object above or keeps the handle within reach on very high cabinets
- One required per lift mechanism

	Part no.
104° restriction clip	**20F7051**
83° restriction clip	**20F7011**

Attachment



Clearance above the cabinet



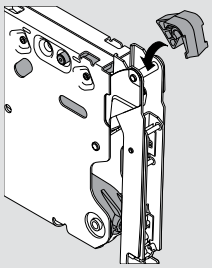
Using 104° clip	Z = top door height x .24 + **19**
Using 83° clip	W = top door height x .12 - **25**

AVENTOS HK angle restriction clips

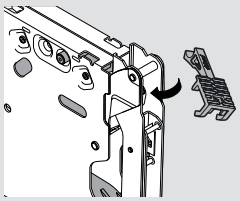
- Restricts opening angle of the door
- Prevents the door from hitting an object above or keeps the handle within reach on very high cabinets
- One required per lift mechanism

	Part no.
100° restriction clip	**20K7041**
75° restriction clip	**20K7011**

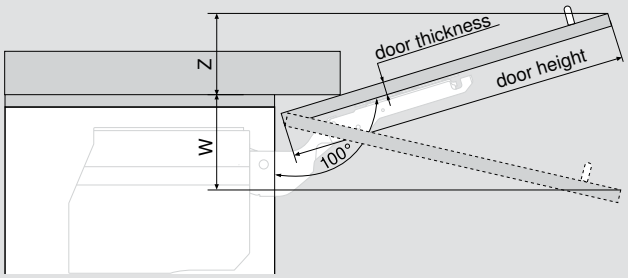
HK attachment



HK-S attachment



Clearance above the cabinet



Using 100° clip	Z = door height x .17 minus **15** + door thickness
Using 75° clip	W = door height x .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**

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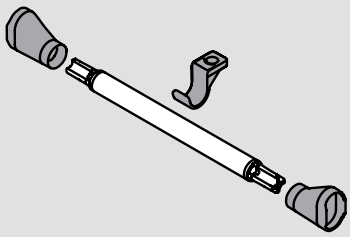
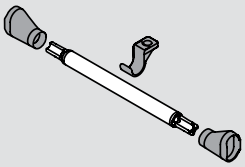
Stabilizer rod connector sets

Components

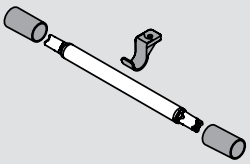


NOTE: HL set shown

AVENTOS HL set



AVENTOS HS set



Set includes:

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

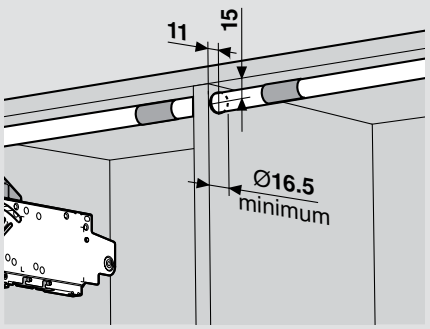
Cut rods to:

(Interior cabinet opening width divided by 2) minus **147** (5-13/16")

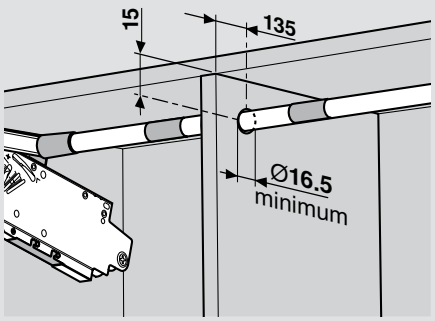
	Part no.
HL rod connector set	20Q153ZA
HS rod connector set	20Q153ZN
Installation screw	606N or 606P

Mounting through a center panel

AVENTOS HL

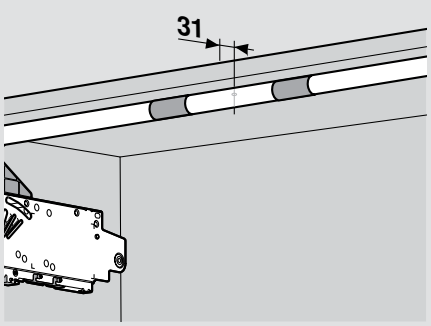


AVENTOS HS

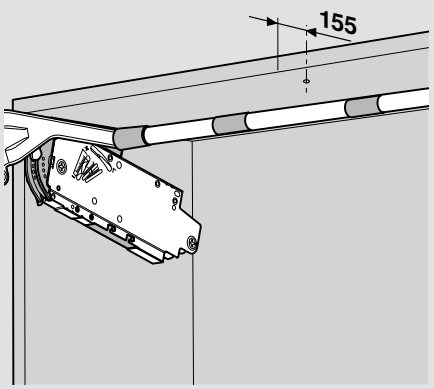


Mounting without a center panel

AVENTOS HL



AVENTOS HS



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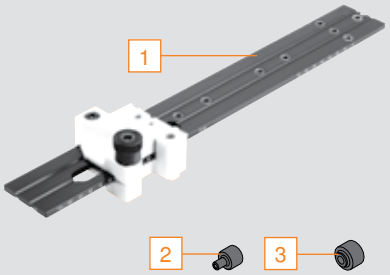
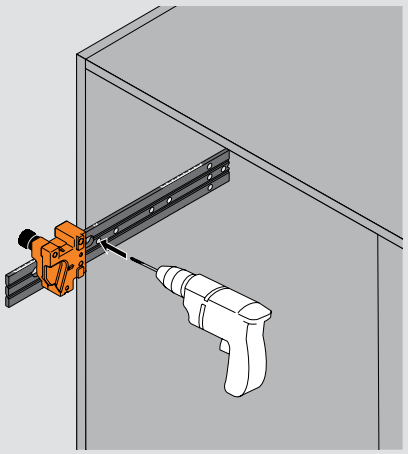
Assembly aids

Templates

Universal individual template





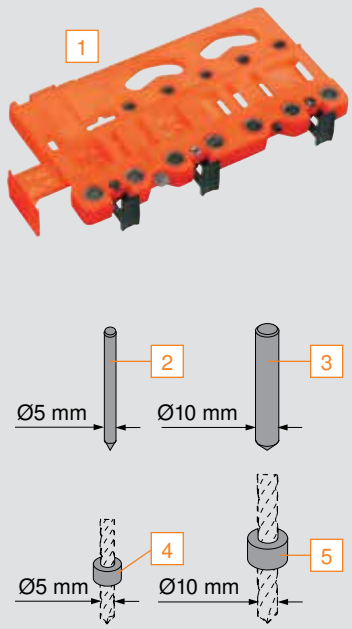
- Used to pre-bore for AVENTOS lift mechanism locating pins
- Also used for pre-boring for cabinet profiles and BLUMOTION for doors and TIP-ON for doors adapter plates
- Calibrated scale for accurate setting

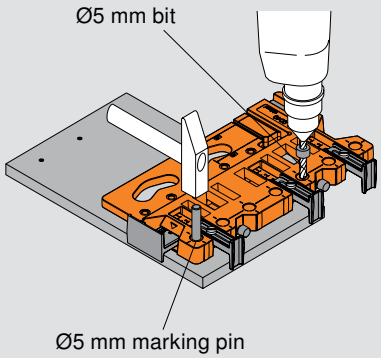
Set includes:

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

	Part no.
Template	65.1051.01
Ø2.5 mm drill bit	DB-2.5mm R
Ø5 mm 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 mm marking pin
3 Ø10 mm marking pin
4 Ø5 mm stop collar
5 Ø10 mm stop collar

	Part no.
Universal template	ZML.0040.01
Ø5 mm drill bit	DB-5mm R

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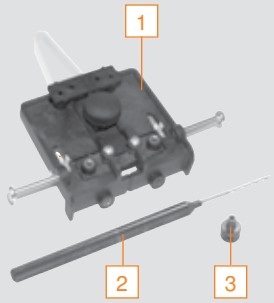
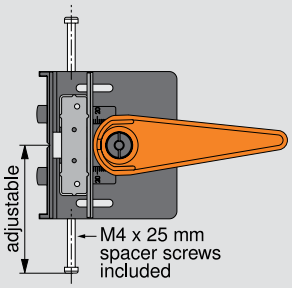
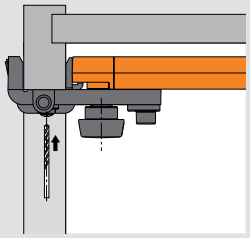
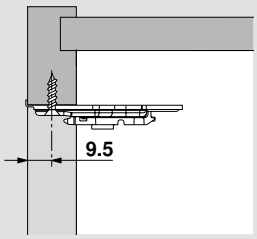
Platemate









- 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 mm pilot bit and extension
3 Ø5 mm stop collar

Also includes:

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

	Part no.
Platemate	65.5030.01
Ø2.5 mm 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

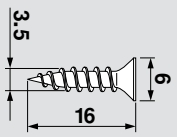
Vix piloting bit

For use in handheld drills

	Part no.
Ø2.8 mm piloting bit	VPB-5

Deep thread wood screw

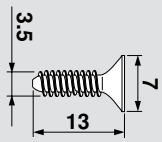
Use to attach mounting plates to doors



	Part no.
#6 x 16 mm, Phillips	606N
#6 x 16 mm, Pozi	606P

Fine thread aluminum screw

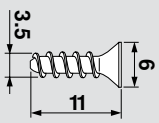
Use to attach mounting plates to wide frame aluminum doors



	Part no.
#7 x13 mm fine thread	7072A

Deep thread aluminum screw

Use to attach mounting plates to narrow frame aluminum doors



	Part no.
#6x11 mm deep thread	699.110

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Notes

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.

ISO 9001
Certified Quality System

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

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