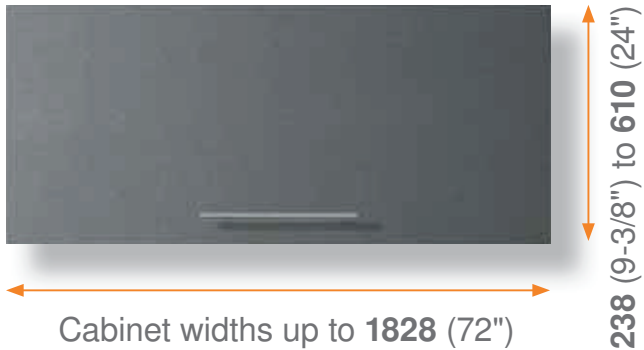


AVENTOS HK-XS

Smaller, cost-effective lift system

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



Numerous design options

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



Versatility

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



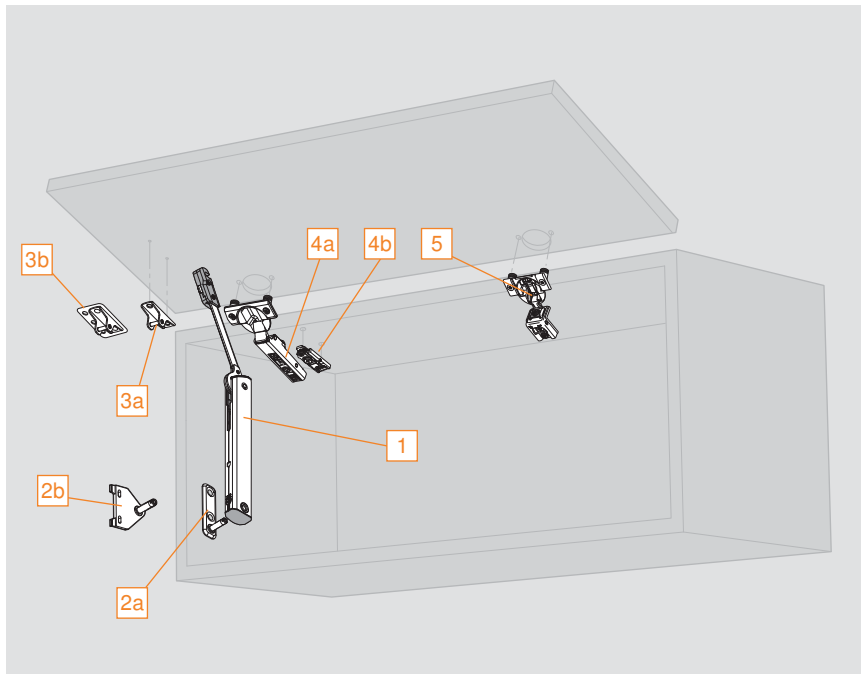
The motion inside

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

AVENTOS HK-XS



Ordering information for panel and face frame



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

*Dependent on power factor

Step 1 – Determine the power factor for the application



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

Determine power factor

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

Power factor = cabinet height multiplied by door weight*

Example:

Cabinet height: 15" (within possible range)

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

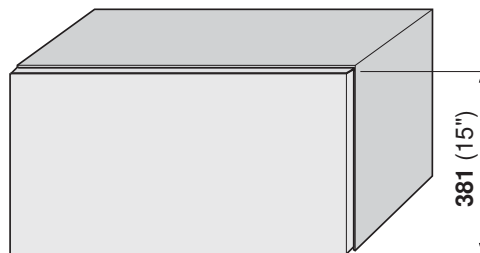
Power factor = 15 x 5.9

Power factor = 148.5

A power factor of 148.5 requires lift mechanism 20K1501

*Including twice the handle weight

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

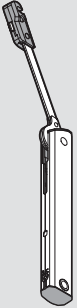


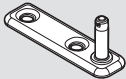
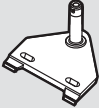
Door weight + twice handle weight = 9 lb 14 oz



Weight conversion chart

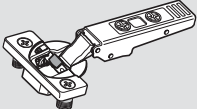

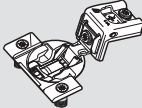
oz	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
lb	.1	.1	.2	.3	.3	.4	.4	.5	.6	.6	.7	.8	.8	.9	.9

Step 2 – Select the required components

Lift mechanism				
<div>1</div> 				
	Power factor range (1 lift)		Power factor range (2 lifts)	Part no.
	17 – 60		34 – 120	20K1101
	61 – 112		121 – 224	20K1301
	113 – 156		225 – 312	20K1501

Cabinet mounting plate			
<div>2a</div> 	Panel		Part no.
	Screw-on		20K5101
	EXPANDO		20K51E1
<div>2b</div> 	Face frame		Part no.
	Screw-on		20K5501

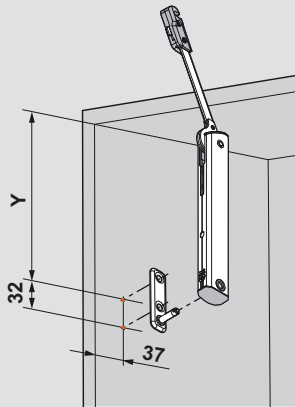
Door mounting plate			
<div>3a</div> 			Part no.
	Screw-on		20K4101
<div>3b</div> 	NOTE: For use with large overlay five-piece doors		Part no.
	Screw-on		20K4501

Hinge recommendations			
<div>4a</div> 	CLIP top BLUMOTION 110°		Part no.
	Press-in		71B3580
	Hinge mounting plate		Part no.
<div>4b</div> 	EXPANDO		177H3100E
<div>5</div> 	COMPACT BLUMOTION 39C		Part no.
	32 (1-1/4") Overlay, Press-in		39C358B.20
	COMPACT BLUMOTION 38N		Part no.
	13 (1/2") Overlay, Press-in		38N358B.08

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

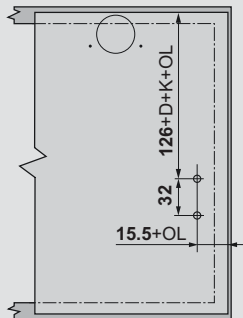
CLIP top panel application

Lift mechanism



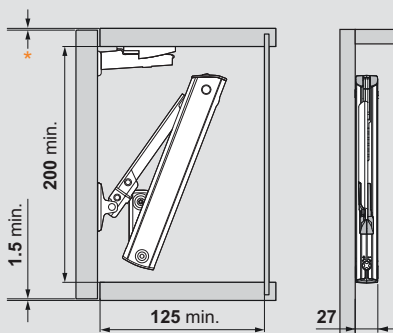
$$Y = 137 + D + K$$

Door mounting plate



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

Space requirements

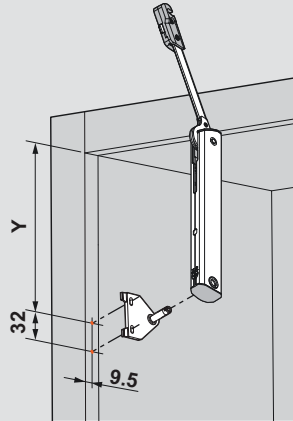


*Minimum top reveal based on hinge used. Please see minimum reveal specs in Concealed hinges brochure

Door thickness (mm)	16	19	22	24
X (mm)	45	34	23	15

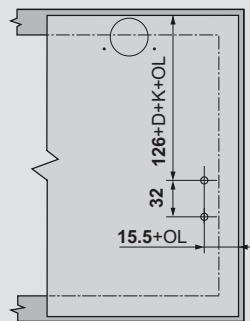
CLIP top face frame application

Lift mechanism



$$Y = 169 + D + K$$

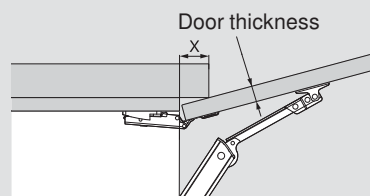
Door mounting plate



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

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

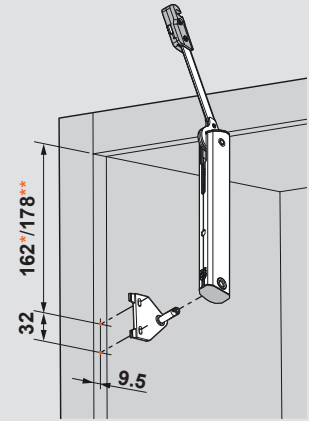
Cornice and crown molding clearance



Door thickness (mm)	16	19	22	24
X (mm)	45	34	23	15

COMPACT face frame application

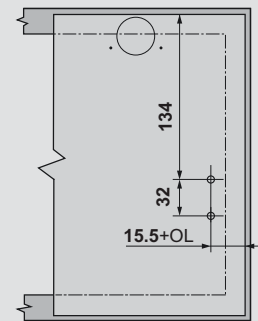
Lift mechanism



*Location when using COMPACT 39/38C

**Location when using COMPACT 38N

Door mounting plate



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

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

K = Hinge arm crank

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

Abbreviations

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

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

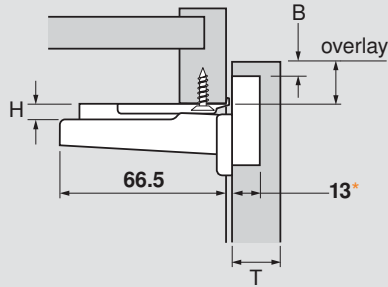
Planning specifications

AVENTOS HK-XS



Face frame applications

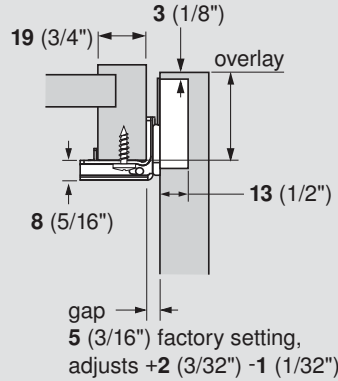
CLIP top BLUMOTION 110°



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

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

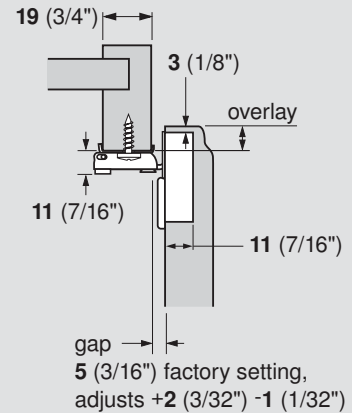
COMPACT BLUMOTION 39C



NOTE: for other overlays see Concealed hinges brochure

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

COMPACT BLUMOTION 38N

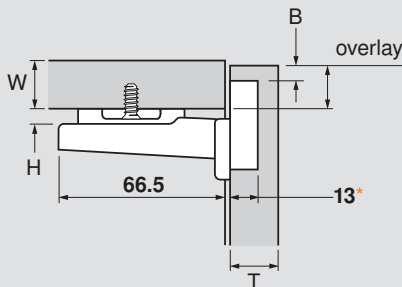


NOTE: for other overlays see Concealed hinges brochure

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

Panel applications

CLIP top BLUMOTION 110°



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

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

Minimum reveal table

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

For thickness greater than 26 trial app. recommended

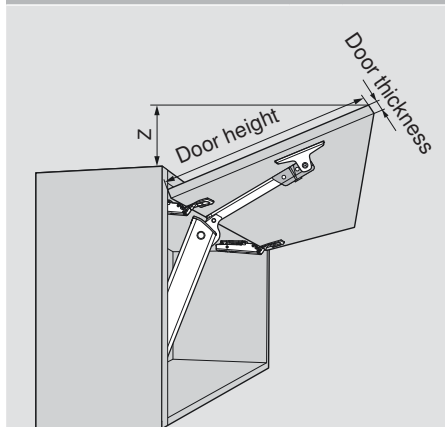
COMPACT BLUMOTION 39C	
3 (1/8")	5.5 (7/32")
B = boring distance	19 (3/4")
T = door thickness	

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

Abbreviations

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

Door protrusion



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

Door thickness (mm)	16	19	22	24
A (mm)	45	34	23	15

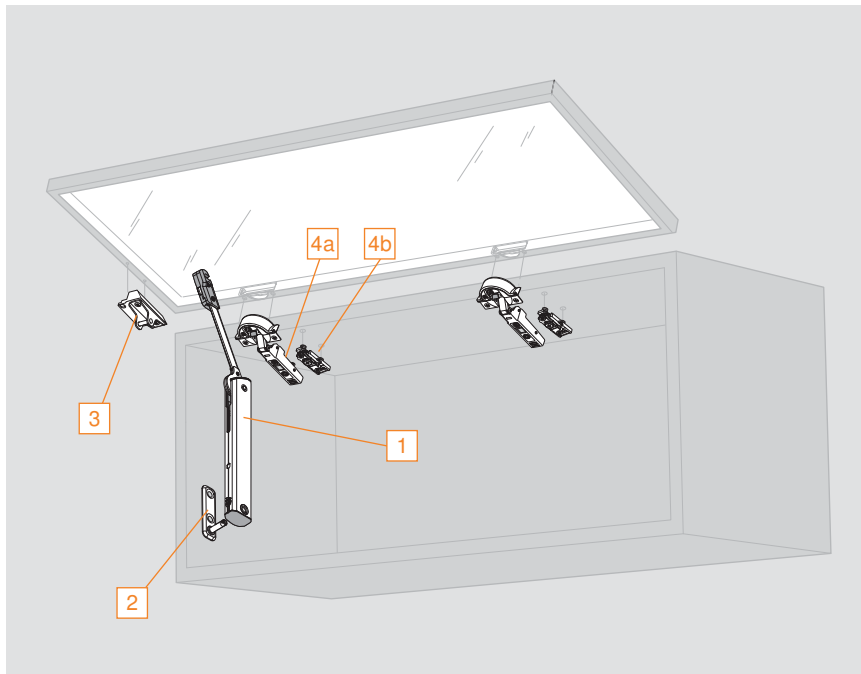
NOTE: Use 3 hinges starting at cabinet width 914 (36") and/or power factor 156 and 4 hinges starting at cabinet width 1219 (48") and/or power factor 234

Follow the assembly instructions on page 78

AVENTOS HK-XS



Ordering information for narrow aluminum



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

*Dependent on power factor

Step 1 – Determine the power factor for the application



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

Determine power factor

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

Power factor = cabinet height multiplied by door weight*

Example:

Cabinet height: 15" (within possible range)

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

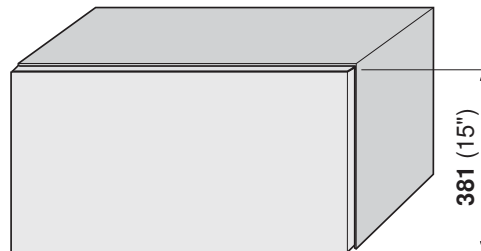
Power factor = 15 x 5.9

Power factor = 148.5

A power factor of 148.5 requires lift mechanism 20K1501

*Including twice the handle weight

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


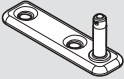
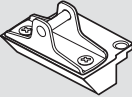
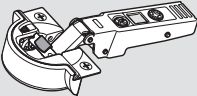



Door weight + twice handle weight = 9 lb 14 oz

Weight conversion chart

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

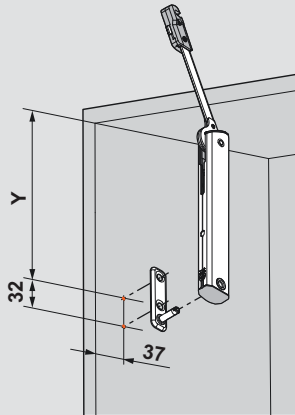
Step 2 – Select the required components

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

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

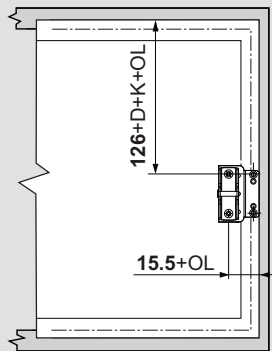
Cabinet and door mounting plate locations for panel applications

Lift mechanism



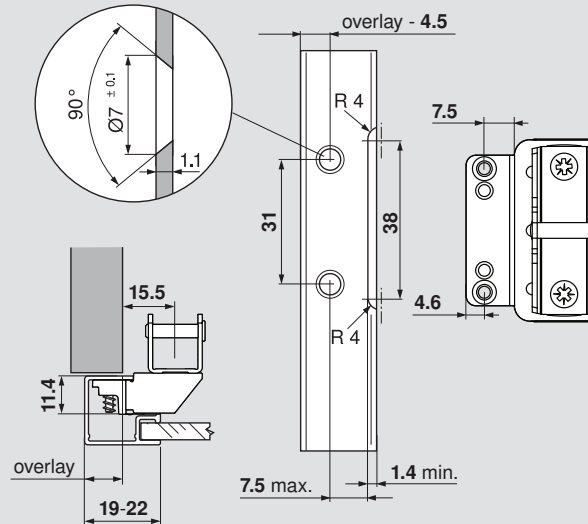
$$Y = 137 + D + K$$

Door mounting plate

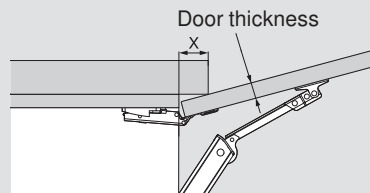


Attach using #6 x 11 mm (699.110) aluminum screw

Arm assembly mounting plate



Cornice and crown molding clearance



Door thickness (mm)	16	19	22	24
X (mm)	45	34	23	15

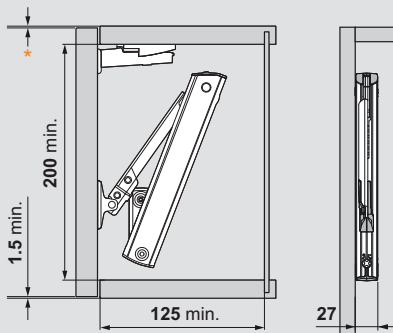
K = Hinge arm crank

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

Abbreviations

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

Space requirements



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

Door thickness (mm)	16	19	22	24
X (mm)	45	34	23	15

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

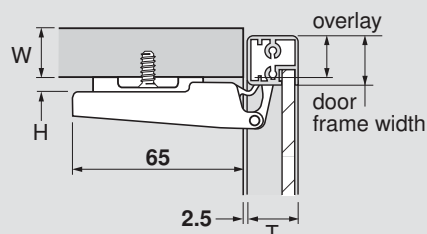
Planning specifications

AVENTOS HK-XS



Panel applications

CLIP top BLUMOTION 95°



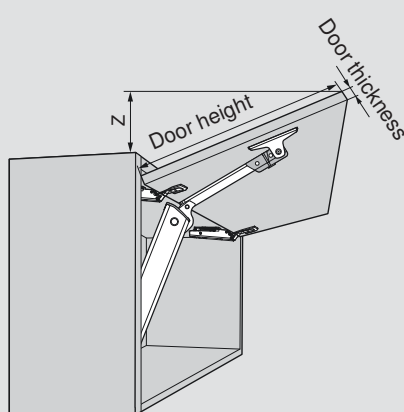
H	Overlay	P	S
0	16	13.5	22
3	13	16.5	25
6	10	19.5	28
9	7	22.5	31
B = fixed			

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

Abbreviations

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

Door protrusion



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

Door thickness (mm)	16	19	22	24
A (mm)	45	34	23	15

Minimum reveal table

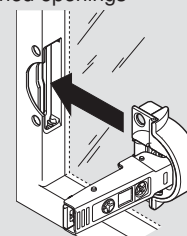
CLIP top BLUMOTION 95°

	18	0.2	0.3	0.4	0.6	0.7
18	0.2	0.3	0.4	0.6	0.7	
19	0.2	0.3	0.4	0.5	0.7	
20	0.2	0.3	0.4	0.5	0.7	
21	0.2	0.3	0.4	0.5	0.7	
22	0.2	0.3	0.4	0.5	0.7	
door frame width	18	19	20	21	22	
T = door thickness						

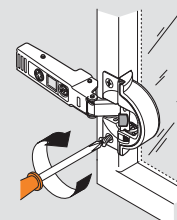
Thickness greater than **22** trial recommended

Installation

Attach cup adapter to the hinge and insert into machined openings



Attach using aluminum screws provided with hinges (699.110)



Aluminum door preparation

