



# ECLIPSE *collection*

Concealed hinges  
for internal doors

**AGB**<sup>®</sup>

Open, Close, Live





# Invisible from outside, improves the door design

AGB introduces the ECLIPSE: the range of concealed hinges for internal doors combines design, technological functionalities and installation simplicity.

Concealed hinges for internal doors	5
High loading capacity concealed hinges	45
High loading capacity concealed hinges with built-in door closer	79
Accessories	99

### A complete supplier



Unique reference for quality and service.



All the accessories for the door with matched finishes.



Reduced time of management.

### Customisation



Customised accessories kit.



Hinges and locks with your logo.



Customised finishes.

## AGB: a partner with an integrated vision of the door system

### The know-how of a specialist



More than 70 years' experience.



Better solutions.



Strict test in AGBLab.

### 100% Made in Italy



4 plants in Italy.



Research, design and creation.



Partnership and collaboration for development.



### Adjustments



The adjustments of the Eclipse range have been created to ensure a long-lasting stability and simplicity of use (just one key for all adjustments), as the cyclic tests demonstrate, according to the regulation EN 1935, and the EAD regulations 020001-01-0405.

### Range



With the same milling, many applications for doors in wood and aluminium, fire resistant, reversible and flush doors to the wall. A complete range of accessories is available for each model.

## Advantages of the Eclipse range for all the internal doors

### Finishes



Eclipse range offers a wide choice of finishes. It is possible to customise the hinges finish without changing the high level of corrosion resistance.

All finishes have been tested in salt spray according to the regulation EN 9227.

### Simplicity of management and installation



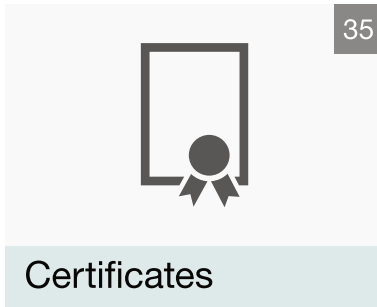
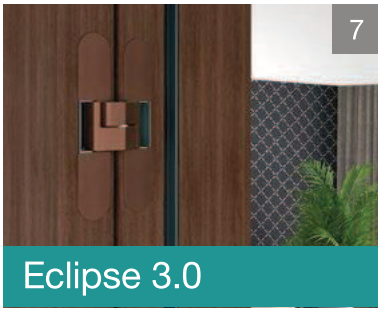
The whole Eclipse range is made up of non-handed hinges. Moreover, sash and frame parts can be installed separately during production and joined on-site.

The management of orders, warehouse and installation become more simple and fast.



Concealed  
hinges for  
internal doors

# Concealed hinges for internal doors



Eclipse	TECHNICAL INFORMATION						APPLICATIONS			CERTIFICATES		
	kg capacity	↕ adjustment	↻ opening	↕ max. extension	⊕ ⊖ covers applications	⊕ ⊖ flush doors with rebate	⊕ ⊖ flush doors without rebate	⊕ ⊖ aluminium flush doors	EN 1634 fire and smoke resistant doors	ift ROSENHEIM EAD 020001-01-0405 EN 1935	UL LISTED UL LISTED	
3.0	⊕ x3 = 60 kg	3	180°	14 mm	●	●	●	●	60 minutes	●	60 minutes	
	⊕ x2 = 40 kg											
3.2	⊕ x3 = 60 kg	3	180°	14 mm	●	●	●	●	60 minutes	●	60 minutes	
	⊕ x2 = 40 kg											
3.3	⊕ x3 = 60 kg	3	180°	14 mm	●	●	●	●	60 minutes	●	60 minutes	
	⊕ x2 = 40 kg											
3.1	⊕ x3 = 60 kg	3	180°	14 mm	●	●	●	●	60 minutes	●	60 minutes	
	⊕ x2 = 40 kg											
3.41	⊕ x3 = 60 kg	3	180°	14 mm	●	●	●	●	60 minutes	●	60 minutes	
	⊕ x2 = 40 kg											
3.4	⊕ x3 = 60 kg	3	180°	14 mm	●	●	●	●	60 minutes	●	60 minutes	
	⊕ x2 = 40 kg											
2.0	⊕ x3 = 60 kg	3	180°	19,5 mm	●	●	●	●	60 minutes	●	60 minutes	
	⊕ x2 = 40 kg											

# Eclipse 3.0

## For internal flush aluminium and wooden doors

Concealed hinge for flush doors with or without rebate.  
Suitable for aluminium frames, thanks to the 4 mm thickness of hinge fastening.  
Completely invisible thanks to its reduced dimensions. Easy installation and covers with coverplate. Suitable for fire doors.



Ideal even for aluminium frames.



Invisible thanks to reduced dimensions.



For wood and aluminium doors.

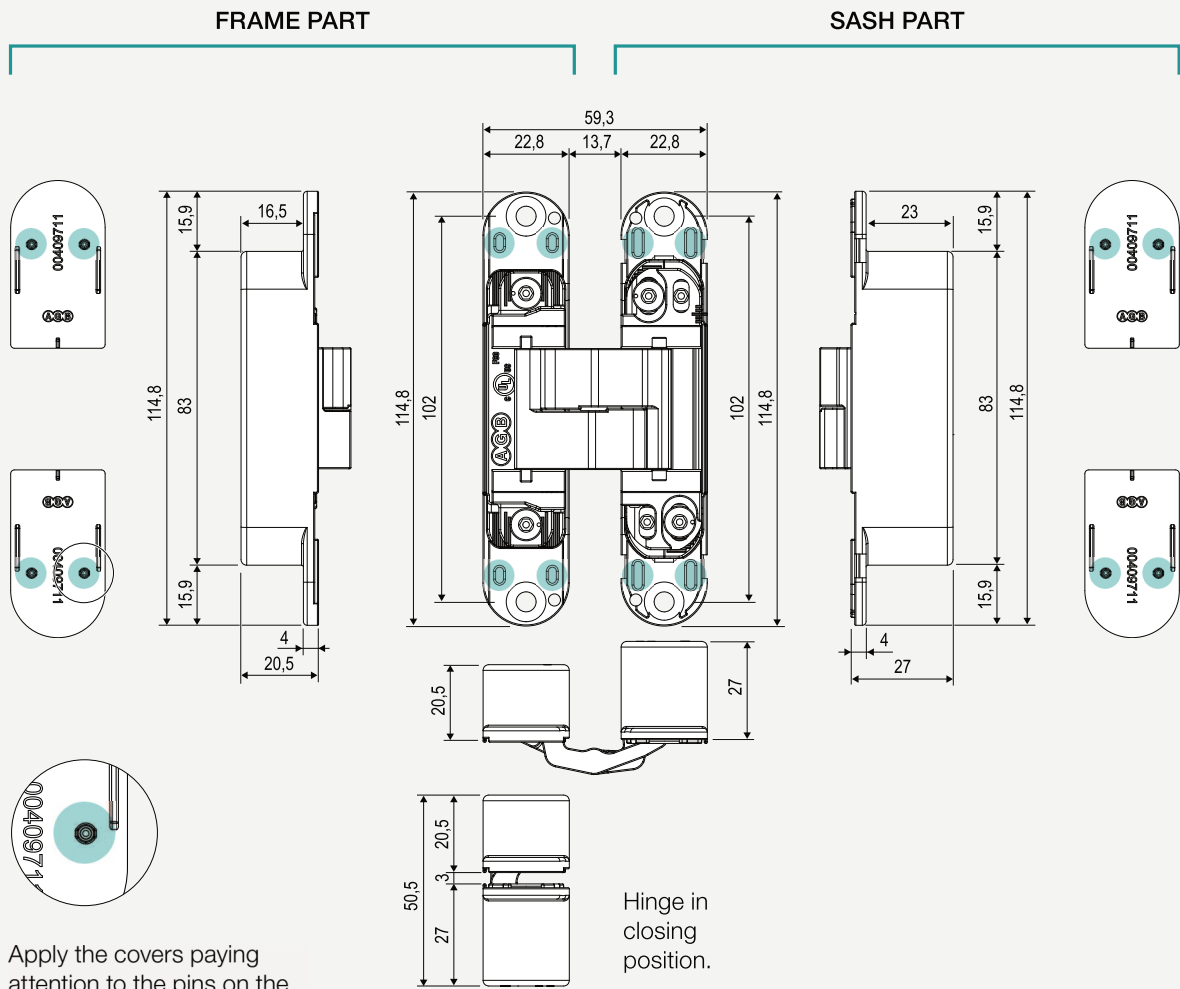


Three adjustments completely independent.

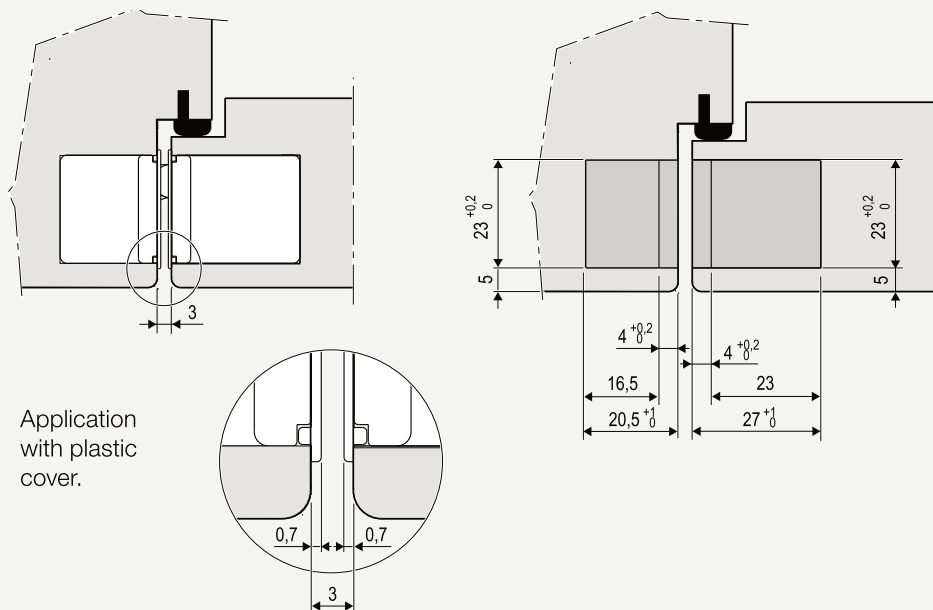


Covers with coverplate.

## Hinge dimensions



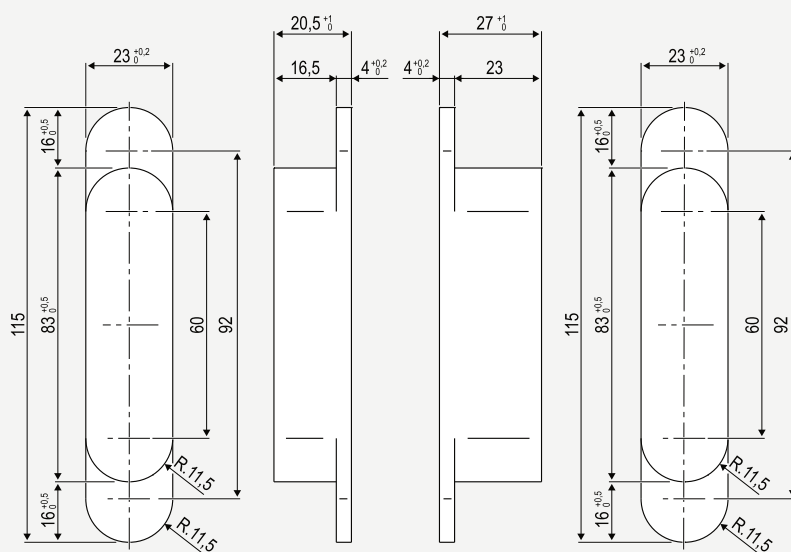
## Hinge application



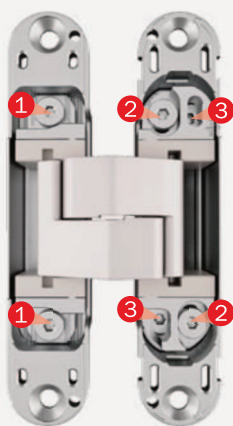
## Drilling diagram

## FRAME PART

## SASH PART



## Hinge adjustments



Please adjust the hinges with a 3 mm Allen key, as indicated here below:

- **±1 mm pressure adjustment:**  
loosen the screws ❶ and move the hinge body.  
After this operation fasten the screws.
- **±2 mm vertical adjustment:**  
loosen the screws ❷ using a screwdriver or a wedge which is suitable for Eclipse hinges, art. E30200.89.01.  
After this operation fasten the screws.
- **±1,5 mm horizontal adjustment:**  
move the screws ❸.

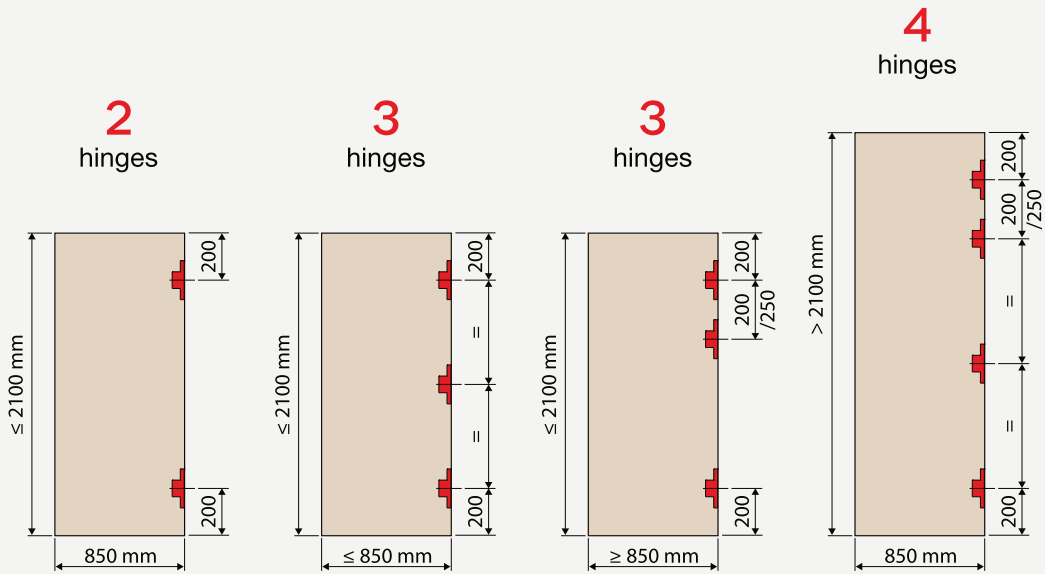
## Finishes



03. Brass plated PVD / 06. Nickel plated PVD / 22. Enamelled bronze plated / 34. Matt chromium plated / 91. White / 93. Matt black



Hinges application fields



**Note.** Two hinges capacity is 40 kg and three hinges capacity is 60 kg, in any case if the door is higher than 1600 mm we suggest you a third hinge in the central position to reduce deformations.

**Tests carried out with softwood and fixing of the hinge with screws as per technical data sheet\***

	300	400	500	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
600	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">2</div> <div style="border: 1px solid black; padding: 5px; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">3</div> </div>															
700																
800																
900																
1000																
1100																
1200																
1300																
1400																
1500																
1600																
1700																
1800																
1900																
2000																
2100																
2200																
2300																
2400																
2500																
2600																
2700																
2800																

\* The technical sheets are available at [www.agb.it](http://www.agb.it).  
Doors with specific gravity of 15 kg/m<sup>2</sup>.



# Eclipse 3.2

## Hinge for flush doors with or without rebate

Concealed hinge for flush door with or without rebate and for aluminium doors, thanks to the 4 mm fastening thickness of hinge.



Ideal even for aluminium frames.



Invisible thanks to reduced dimensions.



For wood and aluminium doors.

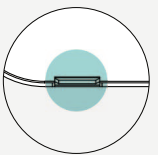
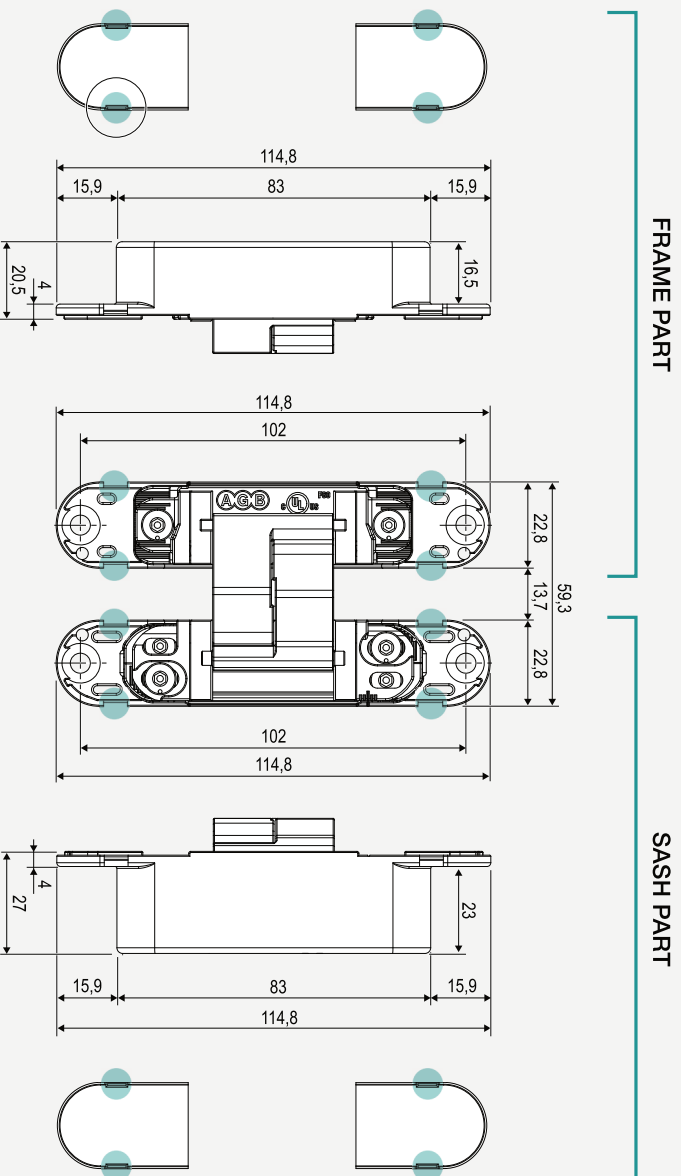


Three adjustments completely independent.

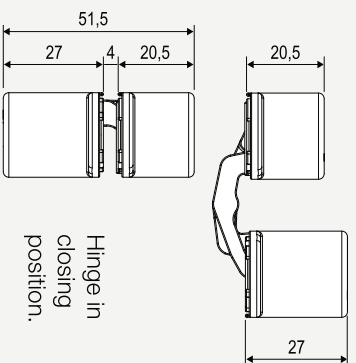


Metal or plastic flush covers.

## Hinge dimensions

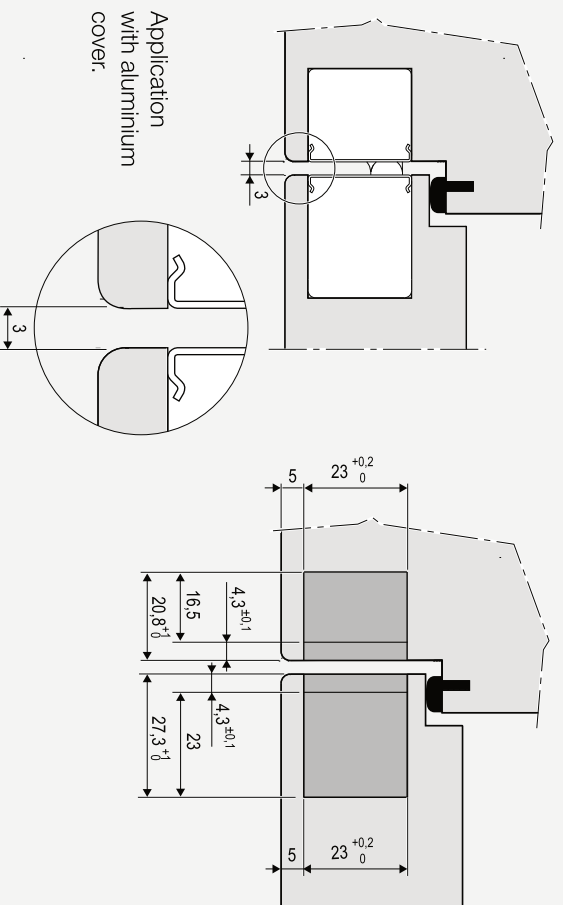


Apply the covers paying attention to the lateral wings. They have to be plugged into the dedicated grooves present in the hinge.



Hinge in closing position.

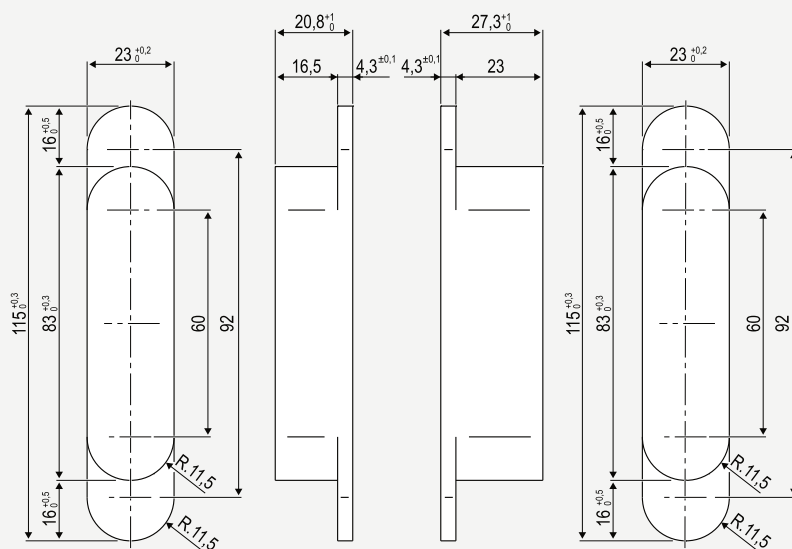
## Hinge application



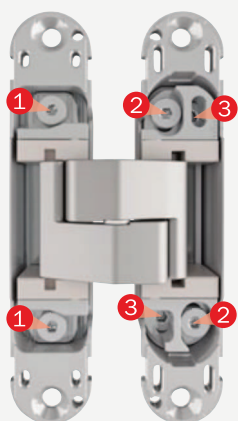
## Drilling diagram

FRAME PART

SASH PART



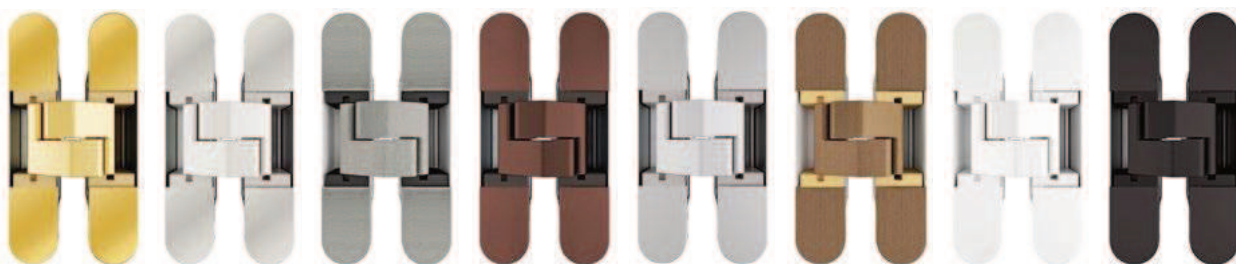
## Hinge adjustments



Please adjust the hinges with a 3 mm Allen key, as indicated here below:

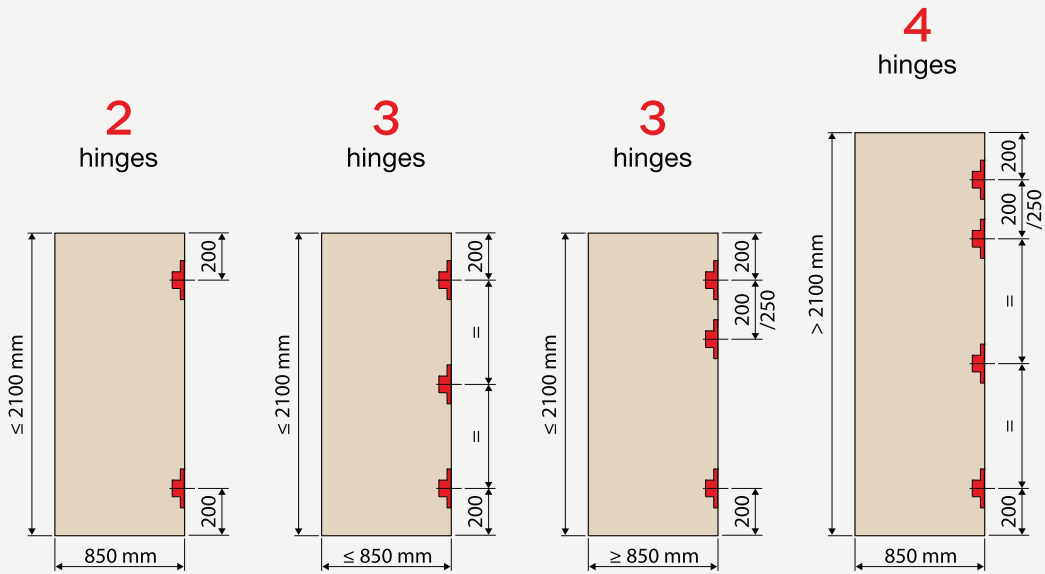
- **±1 mm pressure adjustment:**  
loosen the screws ❶ and move the hinge body.  
After this operation fasten the screws.
- **±2 mm vertical adjustment:**  
loosen the screws ❷ using a screwdriver or a wedge which is suitable for Eclipse hinges, art. E30200.89.01.  
After this operation fasten the screws.
- **±1,5 mm horizontal adjustment:**  
move the screws ❸.

## Finishes



03. Brass plated PVD / 06. Nickel plated PVD/ 13. Satin nickel plated / 22. Enamelled bronze plated /  
34. Matt chromium plated/ 72. Matt antique brass plated / 91. White / 93. Matt black

Hinges application fields



**Note.** Two hinges capacity is 40 kg and three hinges capacity is 60 kg, in any case if the door is higher than 1600 mm we suggest you a third hinge in the central position to reduce deformations.

Tests carried out with softwood and fixing of the hinge with screws as per technical data sheet\*

Door Height (mm)	Door Width (mm)															
	300	400	500	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
600	2															
700																
800																
900																
1000																
1100																
1200																
1300																
1400																
1500																
1600																
1700																
1800																
1900																
2000																
2100																
2200																
2300																
2400																
2500																
2600																
2700																
2800																

\* The technical sheets are available at [www.agb.it](http://www.agb.it).  
Doors with specific gravity of 15 kg/m<sup>2</sup>.

# Eclipse 3.3

## Hinge for flush doors with or without rebate and reduced frame

Eclipse 3.3 is the concealed hinge with a reduced milling depth up to 17,6 mm in order to have doors with minimal design. The hinge is particularly suitable for renovations.



Ideal even for aluminium frames.



Invisible thanks to reduced dimensions.



For wood and aluminium doors.

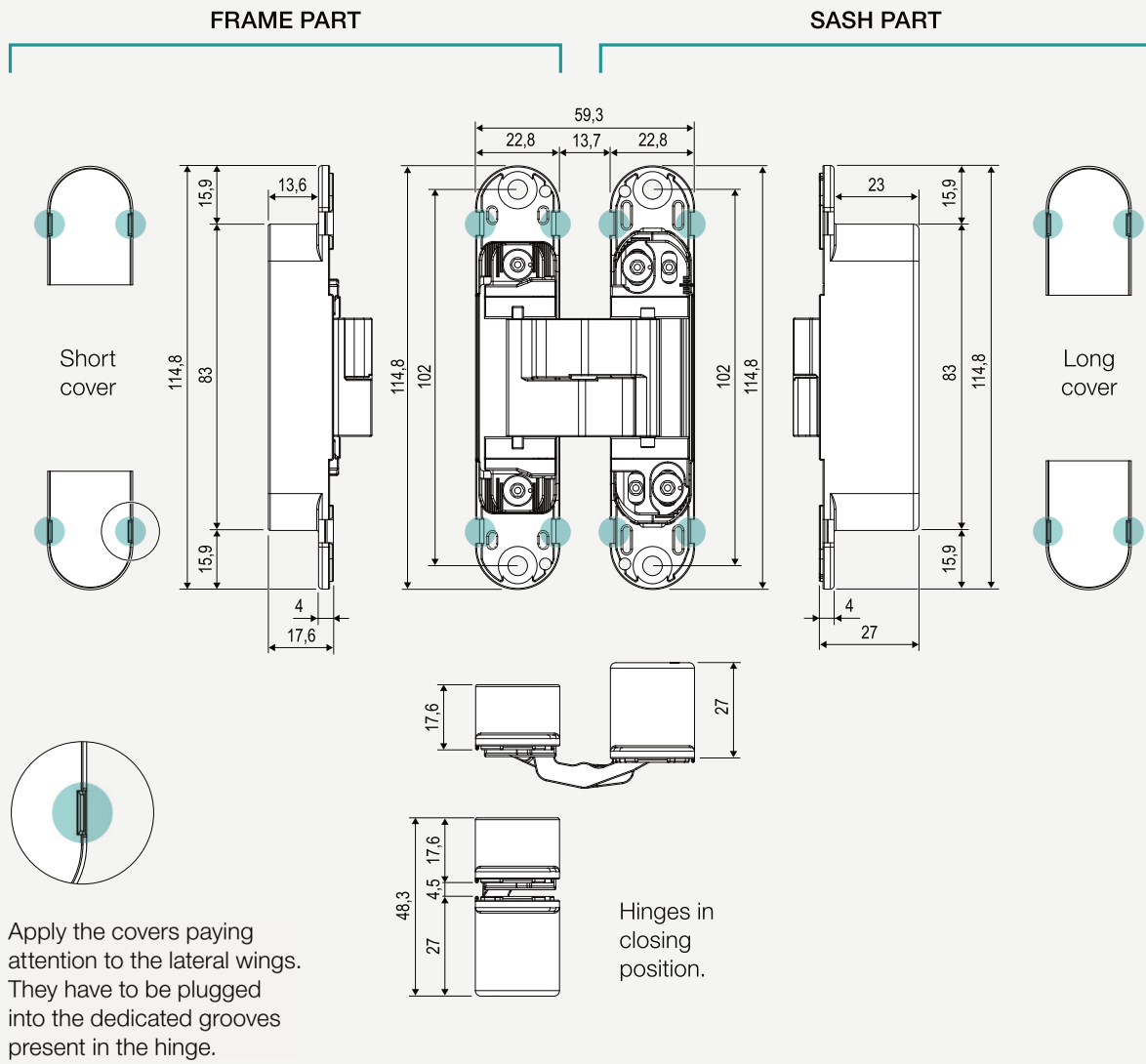


Three adjustments completely independent.

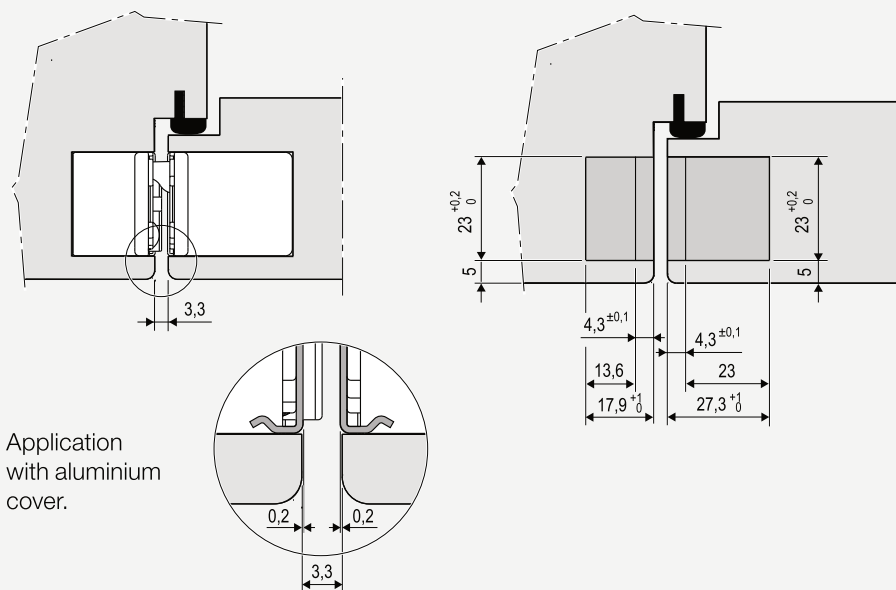


Flush covers.

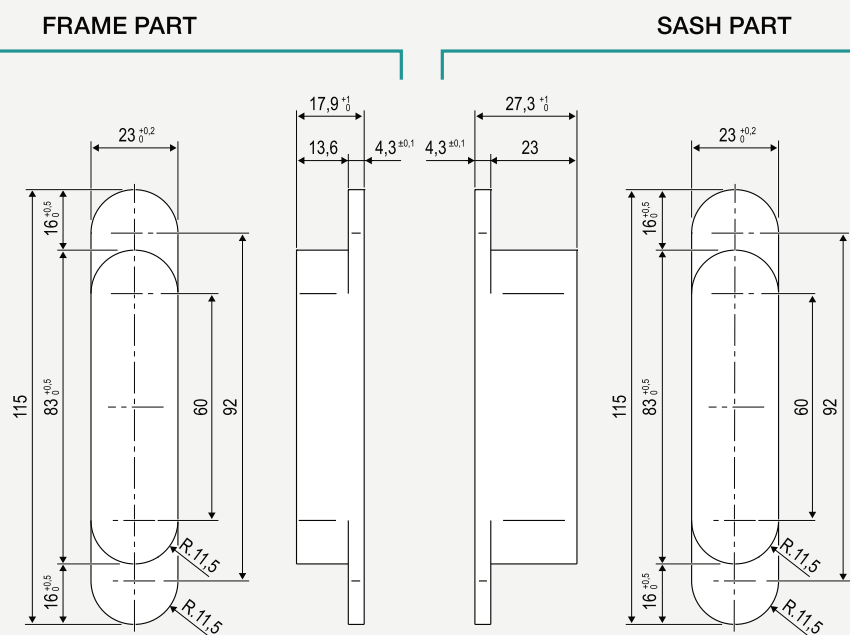
## Hinge dimensions



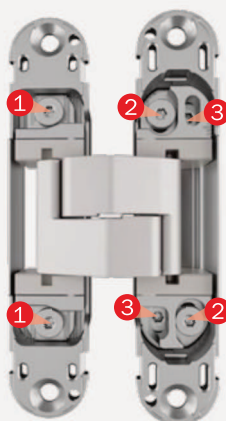
## Hinge application



## Drilling diagram



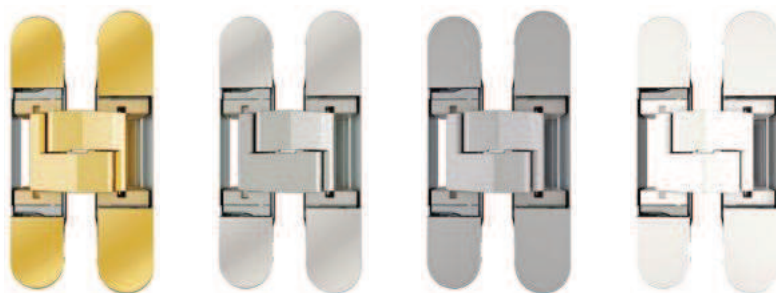
## Hinge adjustments



Please adjust the hinges with a 3 mm Allen key, as indicated here below:

- **±1 mm pressure adjustment:**  
loosen the screws ① and move the hinge body.  
After this operation fasten the screws.
- **±2 mm vertical adjustment:**  
loosen the screws ② using a screwdriver or a wedge which is suitable for Eclipse hinges, art. E30200.89.01.  
After this operation fasten the screws.
- **+2/-1 mm horizontal adjustment:**  
move the screws ③.

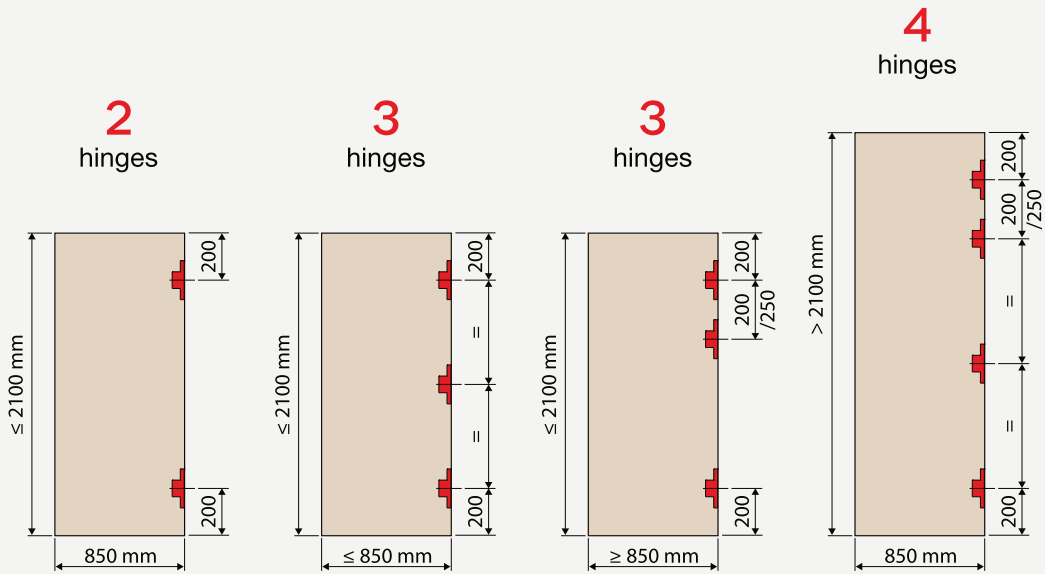
## Finishes



03. Brass plated PVD / 06. Nickel plated PVD / 34. Matt chromium plated / 91. White



Hinges application fields



**Note.** Two hinges capacity is 40 kg and three hinges capacity is 60 kg, in any case if the door is higher than 1600 mm we suggest you a third hinge in the central position to reduce deformations.

Tests carried out with softwood and fixing of the hinge with screws as per technical data sheet\*

	300	400	500	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
600	2															
700																
800																
900																
1000																
1100																
1200																
1300																
1400																
1500																
1600																
1700																
1800																
1900																
2000																
2100																
2200																
2300																
2400																
2500																
2600																
2700																
2800																

\* The technical sheets are available at [www.agb.it](http://www.agb.it).  
Doors with specific gravity of 15 kg/m<sup>2</sup>.



# Eclipse 3.1

## Hinge for flush doors with 38-40 mm thickness

Suitable for flush doors with 38-40 mm thickness, Eclipse 3.1 allows to keep the handle height unchanged, even turning the sash. Three adjustments completely independent using a unique 3 mm allen key.



Unchanged handle height even turning the sash on vertical axis.



With the same milling of the frame, it allows to realise flush doors.



For wood and aluminium doors.

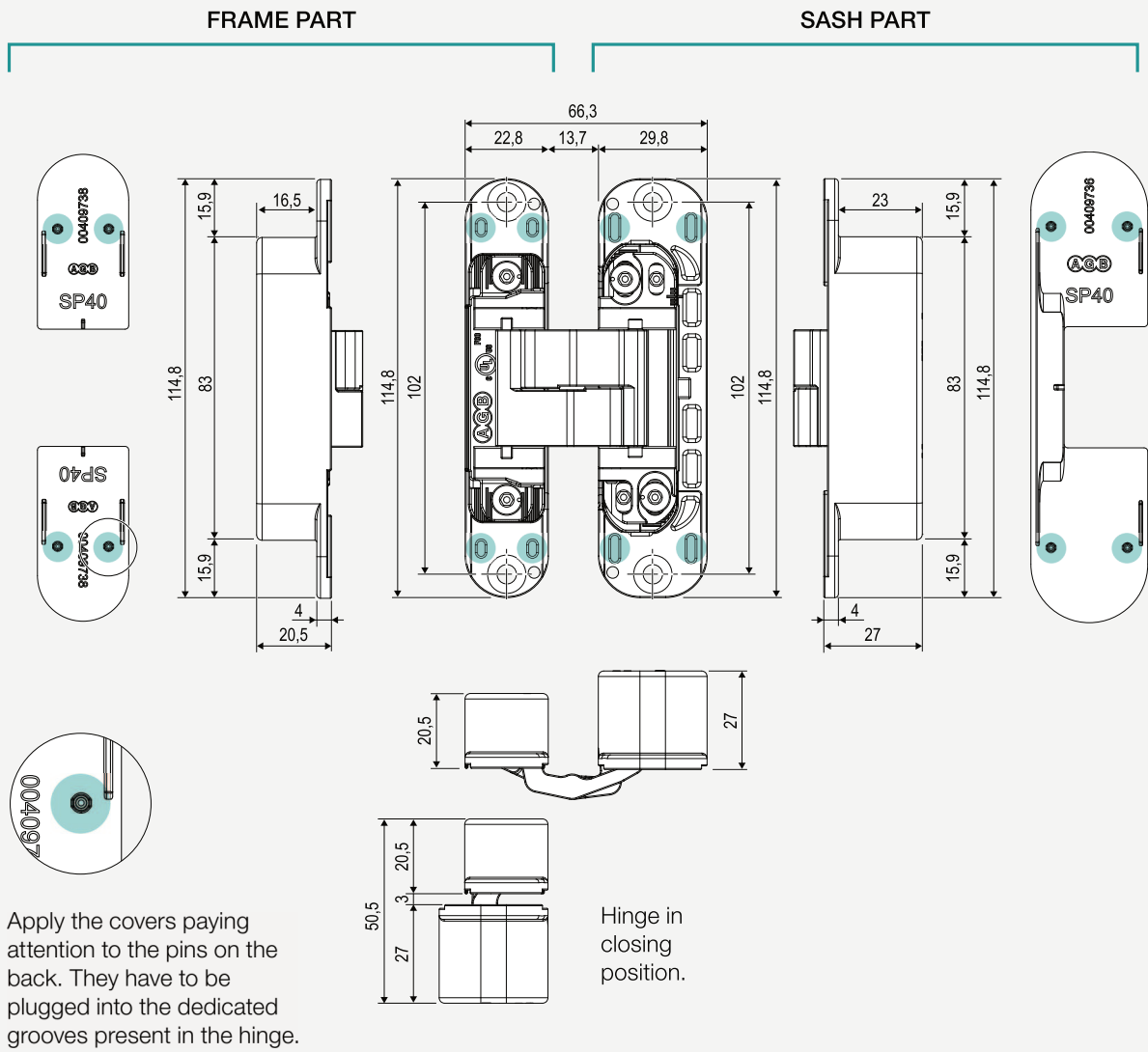


Three adjustments completely independent.

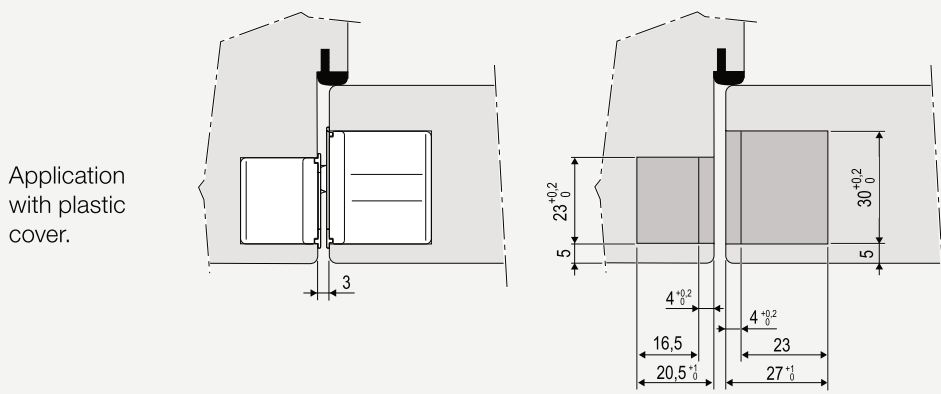


Flush covers with coverplate.

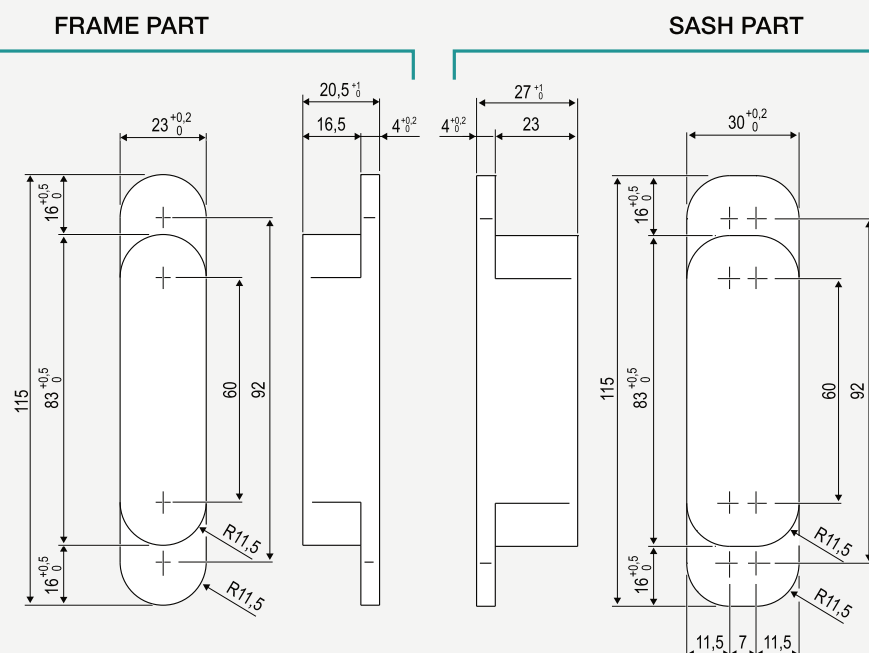
## Hinge dimensions



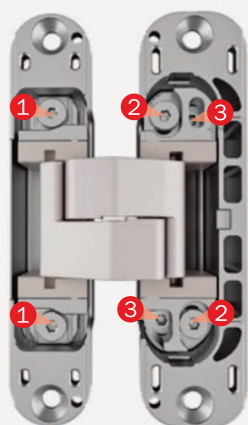
## Hinge application



## Drilling diagram



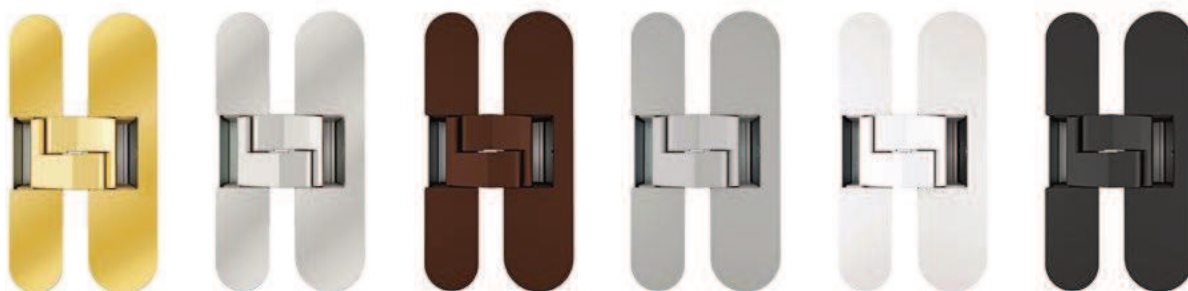
## Hinge adjustments



Please adjust the hinges with a 3 mm Allen key, as indicated here below:

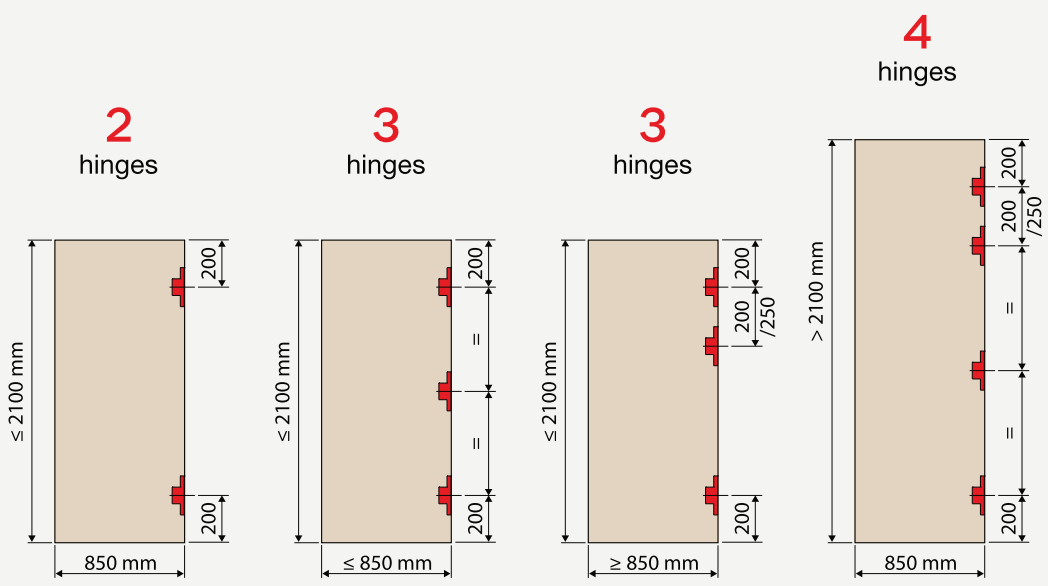
- **±1 mm pressure adjustment:**  
loosen the screws ❶ and move the hinge body.  
After this operation fasten the screws.
- **±2 mm vertical adjustment:**  
loosen the screws ❷ using a screwdriver or a wedge which is suitable for Eclipse hinges, art. E30200.89.01.  
After this operation fasten the screws.
- **±1,5 mm horizontal adjustment:**  
move the screws ❸.

## Finishes



03. Brass plated PVD / 06. Nickel plated PVD / 22. Enamelled bronze plated / 34. Matt chromium plated / 91. White / 93. Matt black

Hinges application fields



**Note.** Two hinges capacity is 40 kg and three hinges capacity is 60 kg, in any case if the door is higher than 1600 mm we suggest you a third hinge in the central position to reduce deformations.

Tests carried out with softwood and fixing of the hinge with screws as per technical data sheet\*

	300	400	500	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
600	2															
700																
800																
900																
1000																
1100																
1200																
1300																
1400																
1500																
1600																
1700																
1800																
1900																
2000																
2100																
2200																
2300																
2400																
2500																
2600																
2700																
2800																

\* The technical sheets are available at [www.agb.it](http://www.agb.it).  
Doors with specific gravity of 15 kg/m<sup>2</sup>.



# Eclipse 3.41

## Hinge for flush doors with 38-40 mm thickness

Eclipse 3.41 is the minimal concealed hinge that allows to keep unchanged the handle height, even turning the sash. The frame cover is made in one piece, ensuring easier installation. Three adjustments completely independent with a unique allen key. Even suitable for aluminium frames, thanks to the 4 mm of hinge fastening.



Up to 40 kg with two hinges,  
60 kg with three hinges.



For wood  
and aluminium  
doors.

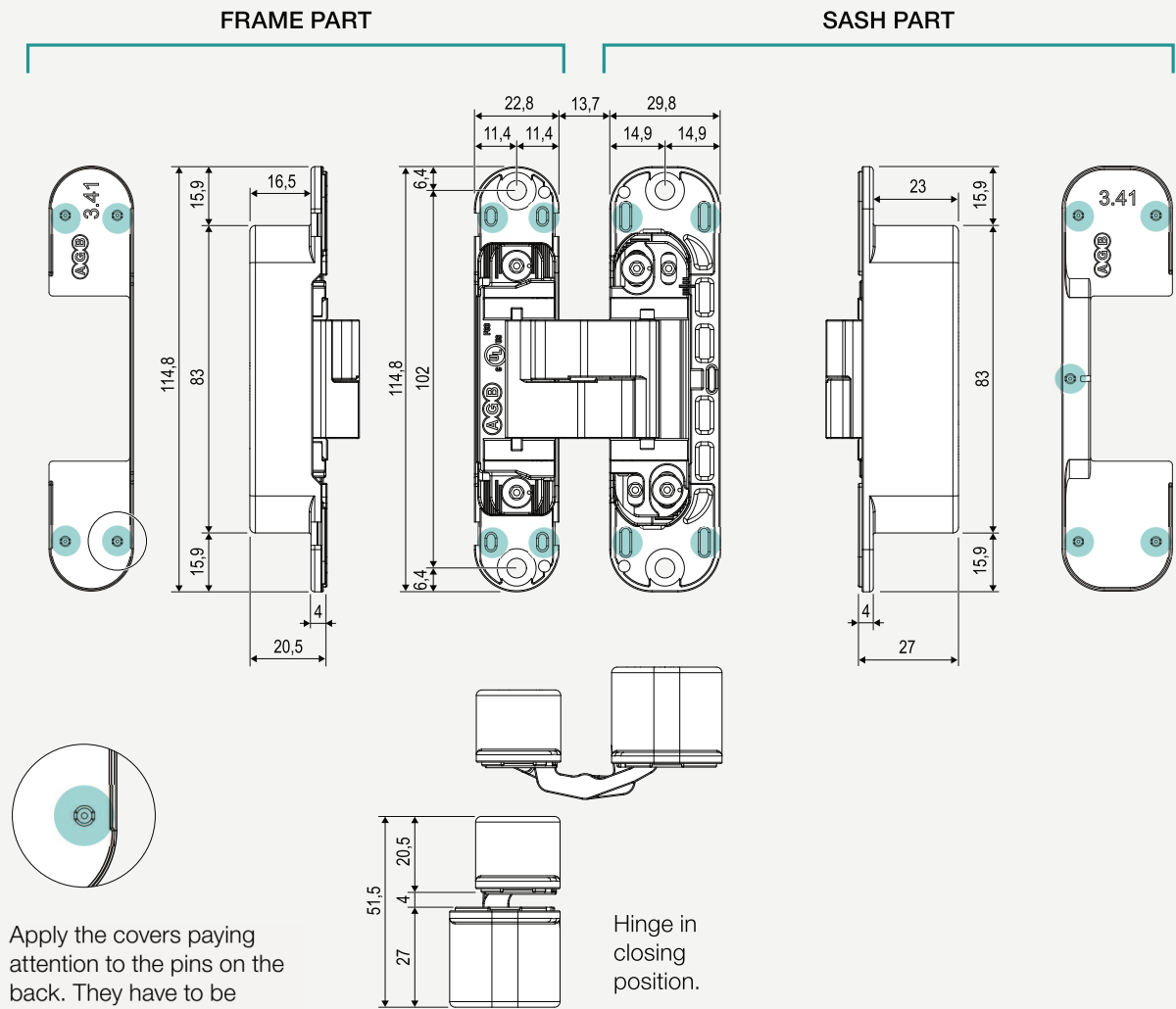


Three adjustments  
completely  
independent.

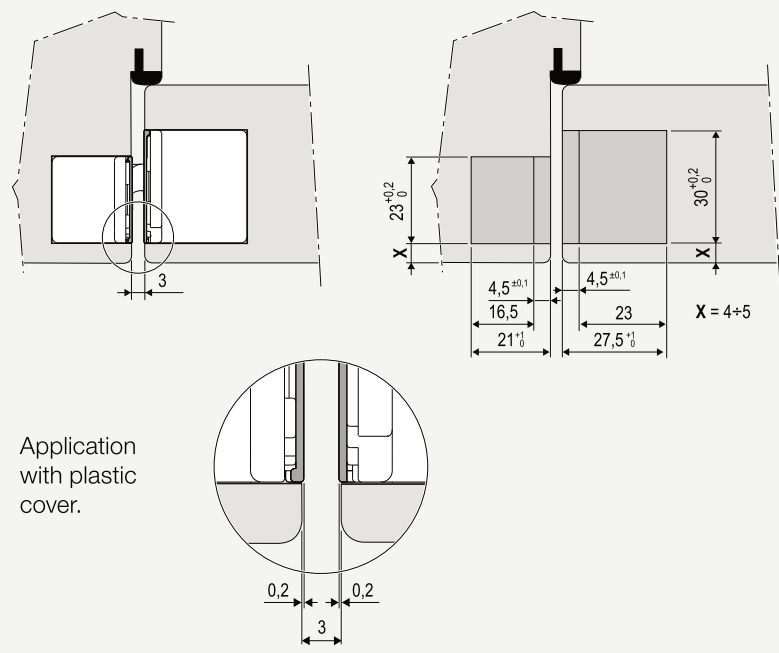


Flush  
covers.

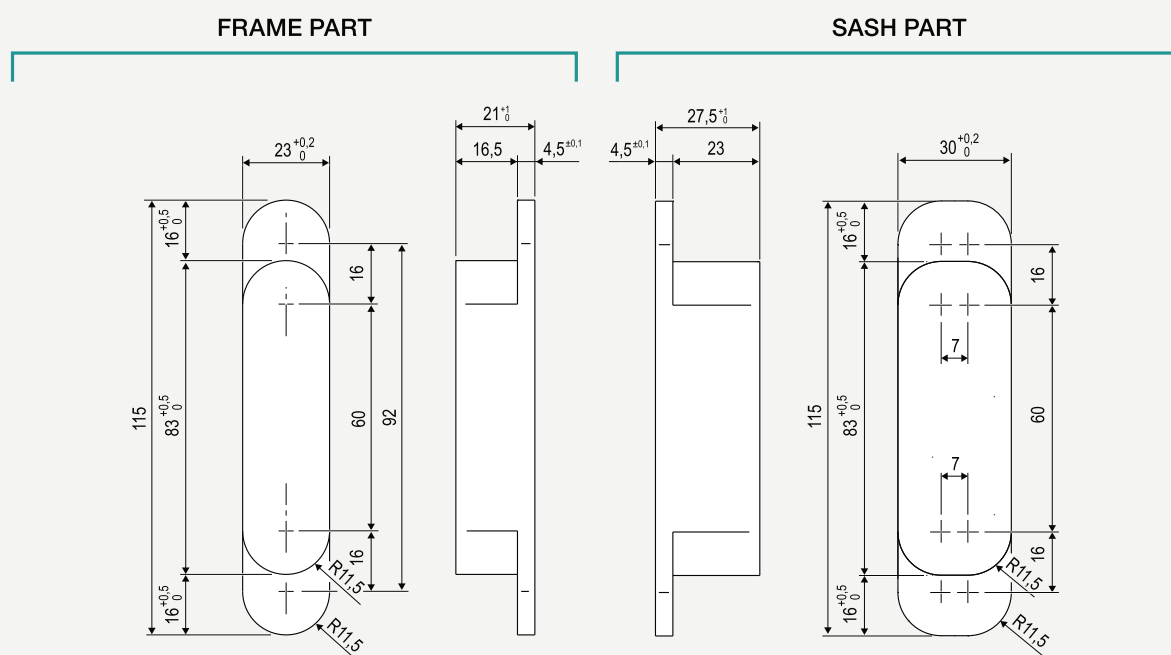
## Hinge dimensions



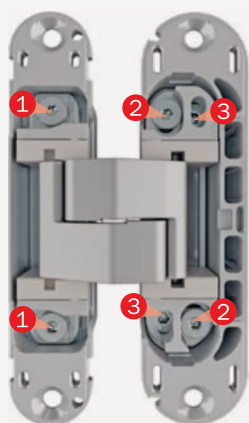
## Hinge application



## Drilling diagram



## Hinge adjustments



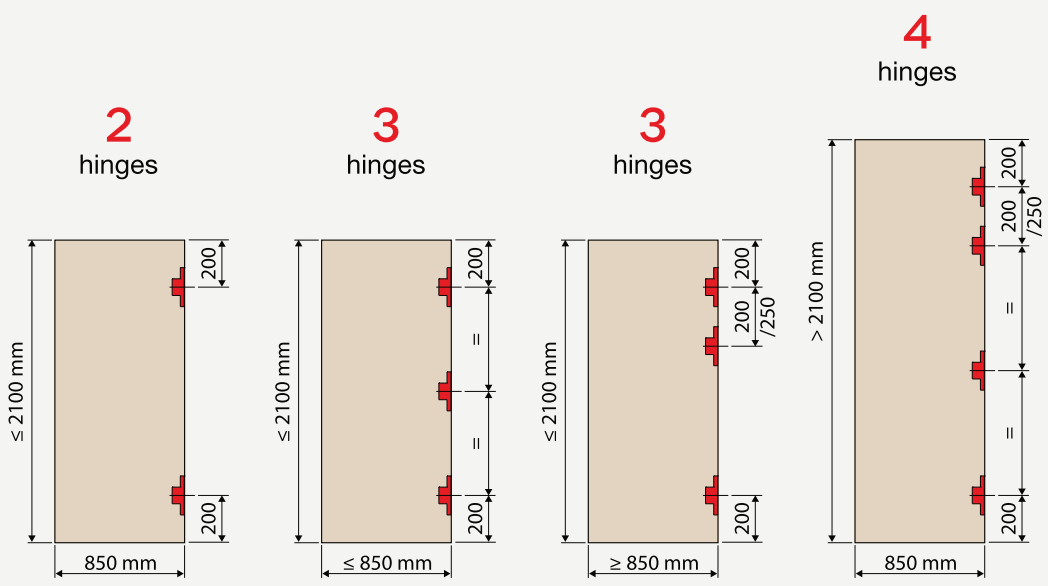
Please adjust the hinges with a 3 mm Allen key, as indicated here below:

- **±1 mm pressure adjustment:**  
loosen the screws ① and move the hinge body.  
After this operation fasten the screws.
- **±2 mm vertical adjustment:**  
loosen the screws ② using a screwdriver or a wedge which is suitable for Eclipse hinges, art. E30200.89.01.  
After this operation fasten the screws.
- **±1,5 mm horizontal adjustment:**  
move the screws ③.

## Finishes



Hinges application fields



**Note.** Two hinges capacity is 40 kg and three hinges capacity is 60 kg, in any case if the door is higher than 1600 mm we suggest you a third hinge in the central position to reduce deformations.

**Tests carried out with softwood and fixing of the hinge with screws as per technical data sheet\***

	300	400	500	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
600	2															
700																
800																
900																
1000																
1100																
1200																
1300																
1400																
1500																
1600																
1700																
1800																
1900																
2000																
2100																
2200																
2300																
2400																
2500																
2600																
2700																
2800																
2800																

\* The technical sheets are available at [www.agb.it](http://www.agb.it).  
Doors with specific gravity of 15 kg/m<sup>2</sup>.



# Eclipse 3.4

## Hinge for flush doors with 38-40 mm thickness

Eclipse 3.4 is the minimal concealed hinge that allows to keep unchanged the handle height, even turning the sash. Three adjustments completely independent with a unique allen key. Even suitable for aluminium frames, thanks to the 4 mm of hinge fastening.



Unchanged handle height even turning the sash on vertical axis for 38-40 mm thickness.



With the same milling of the frame, it allows to realise flush doors.



For wood and aluminium doors.

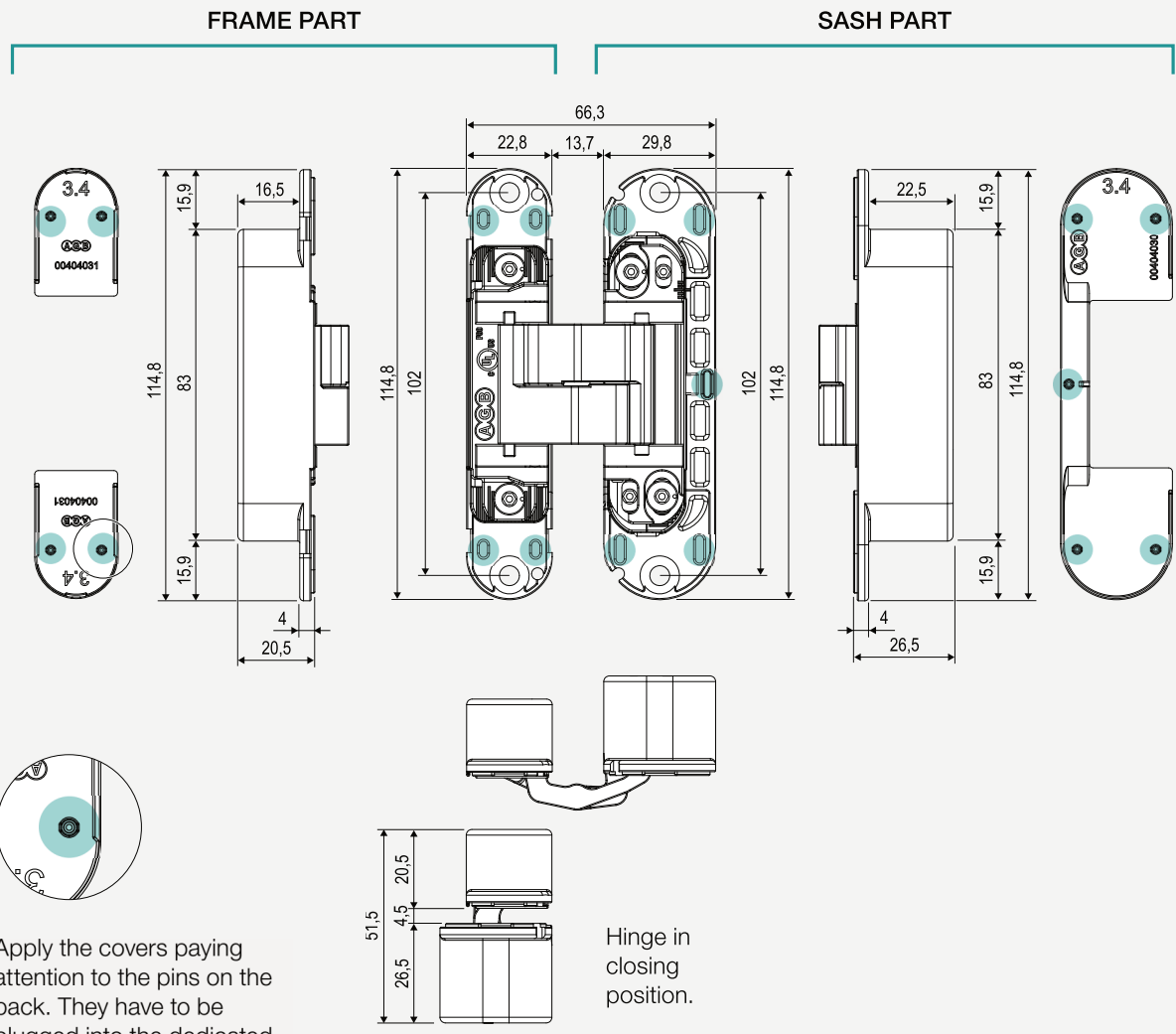


Three adjustments completely independent.

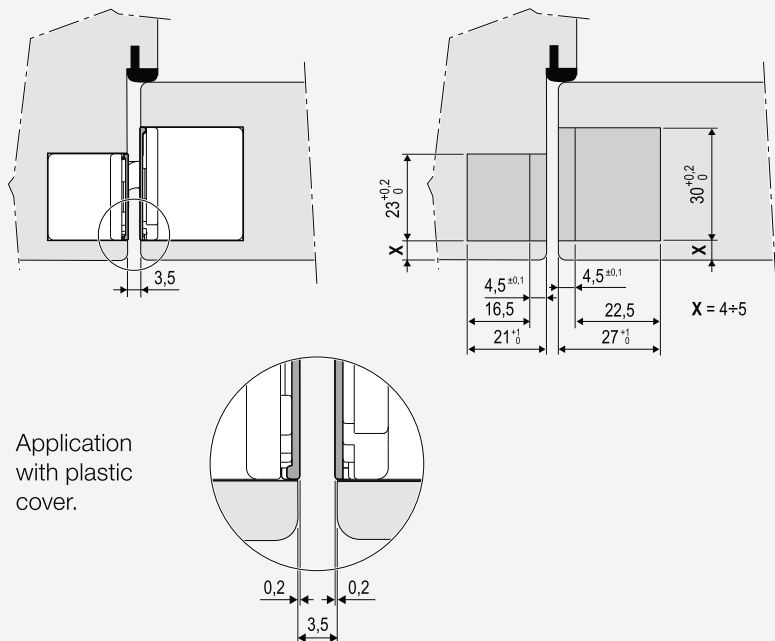


Flush covers.

## Hinge dimensions

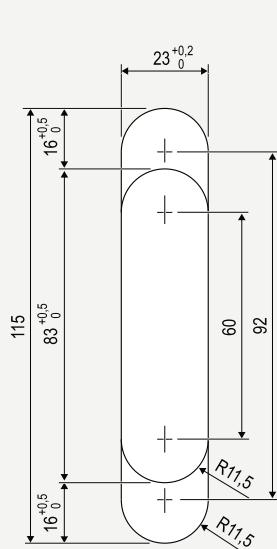


## Hinge application

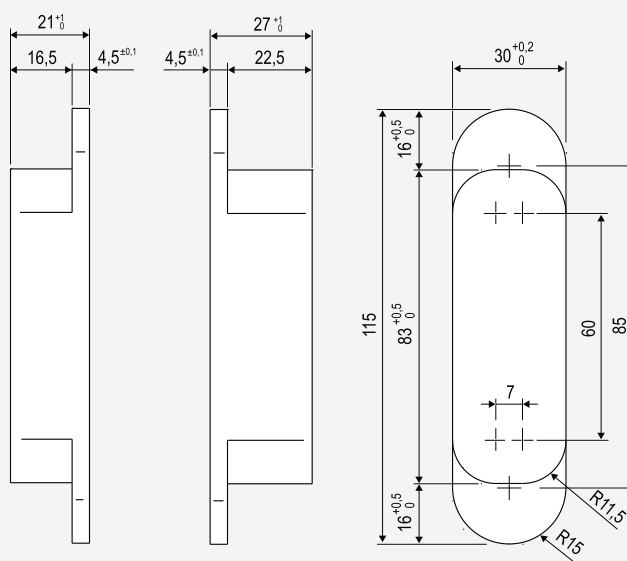


## Drilling diagram

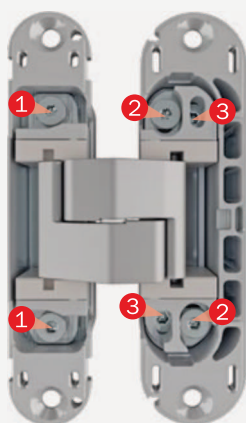
FRAME PART



SASH PART



## Hinge adjustments



Please adjust the hinges with a 3 mm Allen key, as indicated here below:

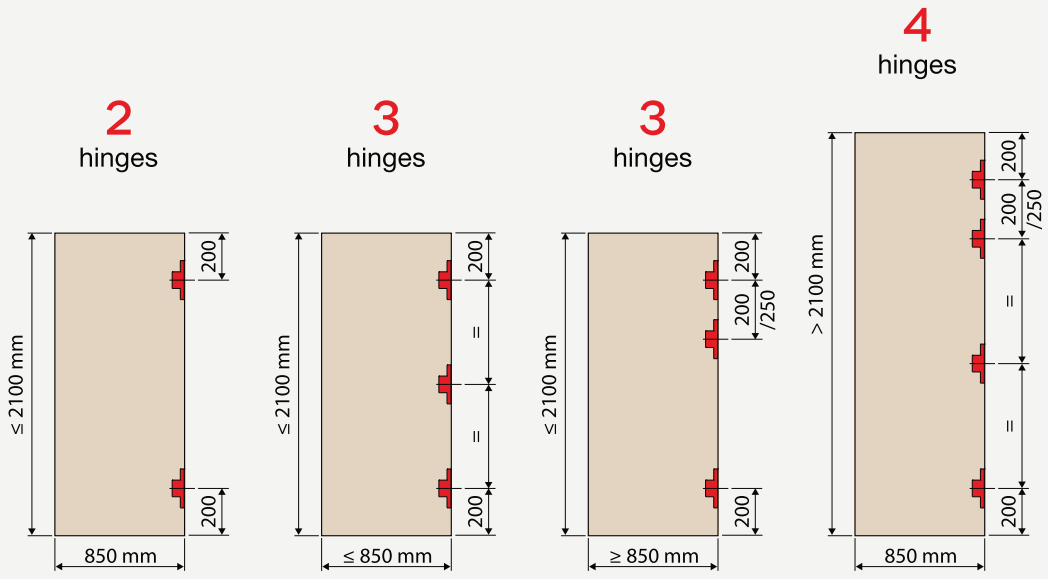
- **±1 mm pressure adjustment:**  
loosen the screws ① and move the hinge body.  
After this operation fasten the screws.
- **±2 mm vertical adjustment:**  
loosen the screws ② using a screwdriver or a wedge which is suitable for Eclipse hinges, art. E30200.89.01.  
After this operation fasten the screws.
- **±1,5 mm horizontal adjustment:**  
move the screws ③.

## Finishes



03. Brass plated PVD / 06. Nickel plated PVD / 22. Enamelled bronze plated / 34. Matt chromium plated / 91. White / 93. Matt black

Hinges application fields



**Note.** Two hinges capacity is 40 kg and three hinges capacity is 60 kg, in any case if the door is higher than 1600 mm we suggest you a third hinge in the central position to reduce deformations.

**Tests carried out with softwood and fixing of the hinge with screws as per technical data sheet\***

Door Height (mm)	Door Width (mm)															
	300	400	500	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
600	2															
700																
800																
900																
1000																
1100																
1200																
1300																
1400																
1500																
1600																
1700																
1800																
1900																
2000																
2100																
2200																
2300																
2400																
2500																
2600																
2700																
2800	3															

\* The technical sheets are available at [www.agb.it](http://www.agb.it).  
Doors with specific gravity of 15 kg/m<sup>2</sup>.



# Eclipse 2.0

## For flush doors

Adjustable concealed hinge for flush doors. Eclipse 2.0 offers wide settings on three axes. The sash movement is fluid and precise until 180°. The cover conceal the adjustment screws, for elegance also when the sash is open.



60 minutes



Up to 40 kg with two hinges,  
60 kg with three hinges.



19,5 mm  
max. extension.



Three adjustments  
completely  
independent.

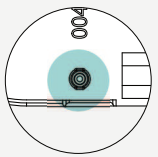
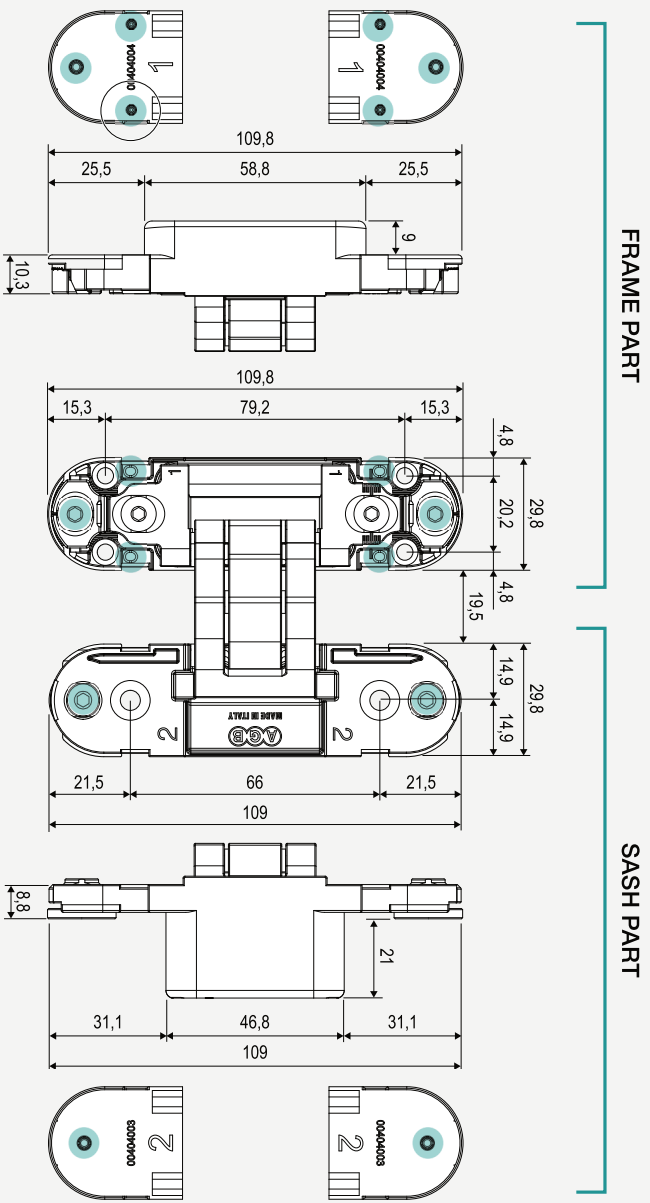


For wood  
doors.

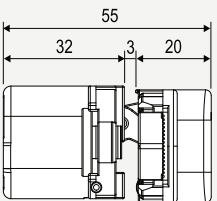


Flush  
covers.

## Hinge dimensions



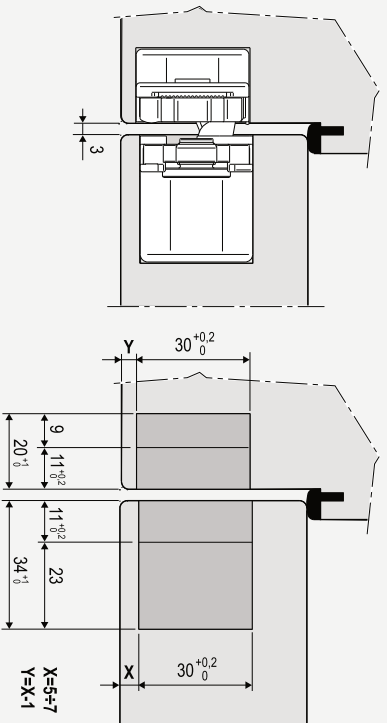
Apply the covers paying attention to the pins on the back. They have to be plugged into the dedicated grooves present in the hinge.



Hinge in closing position.

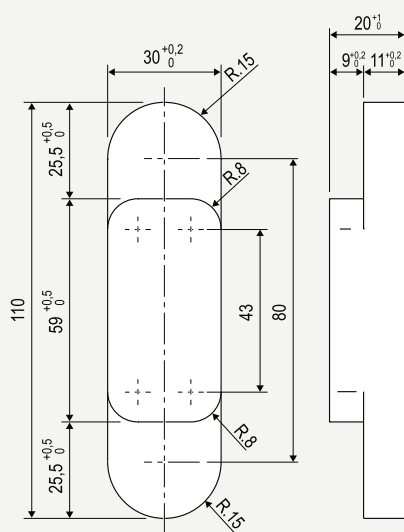
## Hinge application

Application with plastic cover.

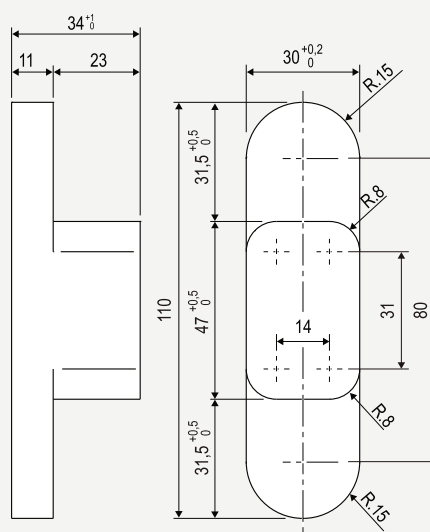


## Drilling diagram

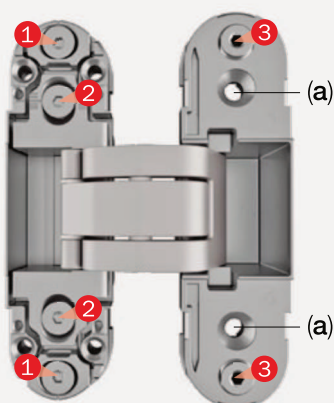
### FRAME PART



### SASH PART



## Hinge adjustments



Please adjust the hinges with a 3 mm Allen key, as indicated here below:

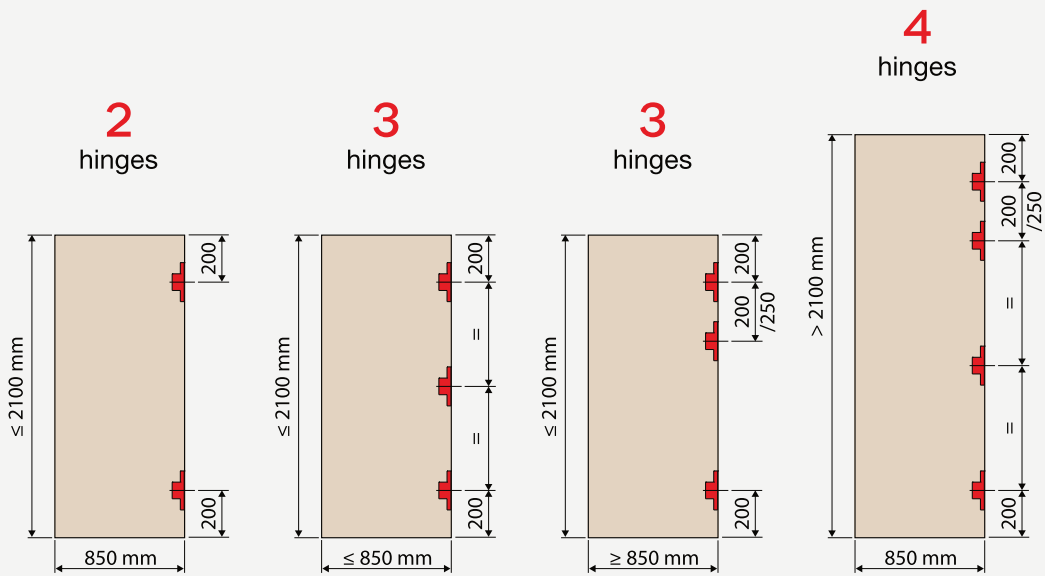
- **±1 mm pressure adjustment:**  
loosen the screws ❶ and move the hinge body.  
After this operation fasten the screws.
- **±2 mm vertical adjustment:**  
loosen the screws ❷ using a screwdriver or a wedge which is suitable for Eclipse hinges, art. E30200.89.01.  
After this operation fasten the screws.
- **±1,5 mm horizontal adjustment:**  
once loosened screws (a) move the screws ❸.

## Finishes



03. Brass plated PVD / 06. Nickel plated PVD / 22. Enamelled bronze plated / 34. Matt chromium plated / 91. White / 93. Matt black

Hinges application fields



**Note.** Two hinges capacity is 40 kg and three hinges capacity is 60 kg, in any case if the door is higher than 1600 mm we suggest you a third hinge in the central position to reduce deformations.

**Tests carried out with softwood and fixing of the hinge with screws as per technical data sheet\***

Door Height (mm)	Door Width (mm)															
	300	400	500	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
600	2															
700																
800																
900																
1000																
1100																
1200																
1300																
1400																
1500																
1600																
1700																
1800																
1900																
2000																
2100																
2200																
2300																
2400																
2500																
2600																
2700																
2800	3															

\* The technical sheets are available at [www.agb.it](http://www.agb.it).  
Doors with specific gravity of 15 kg/m<sup>2</sup>.



# Certificates

## Eclipse 3.0

### Evidence of performance

Multi-axis hinges and window hinges  
according to EAD 020001-01-0405 : 2017

#### Test report

N° 16-001926-PR01  
(PB-G02-03-en-03)



**Client** ALBAN GIACOMO spa  
Via De Gasperi 75  
36060 Romano D'Ezzellino VI  
Italy

**Product** Multi-axis concealed hinge

**Designation** ECLIPSE 3

**Performance-relevant product details**

Hinge height:	114.8 mm
Hinge material:	Aluminium
Opening angle:	180°
max. door leaf weight:	40 kg
Range of application:	unrebated doors

**Maintenance and installation** According to maintenance and installation instruction from hardware manufacturer.

**Special features** -/-

#### Basis

EAD 020001-01-0405 : 2017

Testing standards:  
EAD 020001-01-0405 : 2017  
EN 1935 : 2002

Correspond/s to the national standard/s (e.g. DIN EN)

#### Representation



#### Instructions for use

This test report serves to demonstrate the specifications of hinges according to EAD 020001-01-0405 : 2017. This test report does **not** replace the EC Certificate of Conformity.

The conditions and requirements set out in EAD 020001-01-0405 : 2017 for identification and evaluation of conformity of construction products shall be observed.

#### Validity

The data and results given relate solely to the tested/described specimen. The classification will be valid as long as the product remains unchanged and the above bases have not changed. The result can be extrapolated in accordance with the specifications given in the product standard under the manufacturer's responsibility. This test/evaluation does not allow any statement to be made on further characteristics of the present structure regarding performance and quality, in particular the effects of weathering and ageing.

#### Notes on publication

The ift-Guidance Sheet "Advertising with ift test documents" applies. The cover sheet can be used as an abstract.

The report contains a total of 11 pages.

#### Result

Classification according to EAD 020001-01-0405 : 2017

Category of use	Durability	Test door mass	Fire resistance	Safety	Corrosion resistance	Protection	Hinge grade
2	7	2	0	1	4	0	7

ift Rosenheim

28.03.2018

Translation dated 11.02.2022

signed  
Florian Luge  
Deputy Head of Testing Department  
Security/Safety Testing

signed  
Erwin Heimbuchner  
Operating Testing Officer  
Security/Safety Testing

This document is valid without a signature. The original document n° 16-001926-PR01 (PB-G02-03-de-03) dated 28.03.2018 remains legally binding.



60  
minutes



ift Rosenheim GmbH  
Notifizierte Produktzertifizierungsstelle  
Gutenstetter Str. 2 • 90449 Nürnberg

Alban Giacomo spa  
Via A. De Gasperi 75  
36060 Romano d'Ezzelino (VI)  
Italien

Your ref.	6026531
Your letter dated	
Our ref.	mue
Phone	+49 (8031) 261-2463
E-Mail	muders@ift-rosenheim.de
Nuremberg	16 12 2019

## Confirmation Letter for "Eclipse 3.0"

Dear Sirs,

on 25.06.2019 a fire resistance test was conducted on the doorset "X 544"; the exposed face was the opening face. Test duration was 60 minutes.  
The thermal insulation criteria were fulfilled for 60 minutes, integrity was maintained for 60 minutes.

"X 544" is a hinged doorset made from timber and derived timber products, classified EI<sub>2</sub>60. The dimensions of the door leaves were (W x H) 952 mm x 2421 mm with an overall thickness of the door leaf of 70 mm.

For further details refer to the test report 19-002399-PR01 issued by ift Rosenheim.

The suitability of "Eclipse 3.0" (E302000234), produced by the company Alban Giacomo spa for installation in this door construction has been successfully verified by the fire resistance test as per EN 1634-1 for a test duration of 60 minutes.

Use of the "Eclipse 3.0" in door constructions other than those tested must be verified separately.

Best regards  
ift Rosenheim

pp Erich Muders, M. Sc  
Project Engineer  
Certification & Surveillance Body



60  
minutes



ift Rosenheim GmbH  
Notifizierte Produktzertifizierungsstelle  
Gutenstetter Str. 2 ♦ 90449 Nürnberg

Alban Giacomo spa  
Via A. De Gasperi 75  
36060 Romano d'Ezzelino (VI)  
Italien

Your ref. 6026531  
Your letter dated  
Our ref. mue  
Phone +49 (8031) 261-2463  
E-Mail muders@ift-rosenheim.de  
Nuremberg 17 12 2019

### Confirmation Letter for "Eclipse 3.2"

Dear Sirs,

on 25.06.2019 a fire resistance test was conducted on the doorset "X 546"; the exposed face was the opening face. Test duration was 60 minutes.  
The thermal insulation criteria were fulfilled for 60 minutes, integrity was maintained for 60 minutes.

"X 546" is a hinged doorset made from timber and derived timber products, classified EI<sub>2</sub>60. The dimensions of the door leaves were (W x H) 952 mm x 2421 mm with an overall thickness of the door leaf of 70 mm.

For further details refer to the test report 19-002399-PR03 issued by ift Rosenheim.

The suitability of "Eclipse 3.2" (E302000634), produced by the company Alban Giacomo spa for installation in this door construction has been successfully verified by the fire resistance test as per EN 1634-1 for a test duration of 60 minutes.

Use of the "Eclipse 3.2" in door constructions other than those tested must be verified separately.

Best regards  
ift Rosenheim

pp Erich Muders, M. Sc  
Project Engineer  
Certification & Surveillance Body



60  
minutes

EN 1634



ift Rosenheim GmbH  
Notifizierte Produktzertifizierungsstelle  
Gutenstetter Str. 2 ♦ 90449 Nürnberg

Alban Giacomo spa  
Via A. De Gasperi 75  
36060 Romano d'Ezzelino (VI)  
Italien

Your ref. 6026531  
Your letter dated  
Our ref. mue  
Phone +49 (8031) 261-2463  
E-Mail muders@ift-rosenheim.de  
Nuremberg 17 12 2019

### Confirmation Letter for "Eclipse 3.3"

Dear Sirs,

on 25.06.2019 a fire resistance test was conducted on the doorset "X 546"; the exposed face was the opening face. Test duration was 60 minutes.  
The thermal insulation criteria were fulfilled for 60 minutes, integrity was maintained for 60 minutes.

"X 546" is a hinged doorset made from timber and derived timber products, classified EI<sub>2</sub>60. The dimensions of the door leaves were (W x H) 952 mm x 2421 mm with an overall thickness of the door leaf of 70 mm.

For further details refer to the test report 19-002399-PR03 issued by ift Rosenheim.

The suitability of "Eclipse 3.3" (E302000734), produced by the company Alban Giacomo spa for installation in this door construction has been successfully verified by the fire resistance test as per EN 1634-1 for a test duration of 60 minutes.

Use of the "Eclipse 3.3" in door constructions other than those tested must be verified separately.

Best regards  
ift Rosenheim

pp Erich Muders, M. Sc  
Project Engineer  
Certification & Surveillance Body

# Certificates

## Eclipse 3.1

### Evidence of performance Multi-axis hinges and window hinges according to EAD 020001-01-0405 : 2017

**Expert Statement**  
N° 16-001926-PR02 (GAS-G02-03-en-01)



Client **ALBAN GIACOMO spa**  
Via De Gasperi 75  
36060 Romano D'Ezzellino VI  
Italy

**Basis**  
EAD 020001-01-0405 : 2017  
Testing standards:  
EAD 020001-01-0405 : 2017  
EN 1935 : 2002  
Correspond/s to the national  
standard/s (e.g. DIN EN)

Construction product	Multi-axis concealed hinge		
Type	ECLIPSE 3.1		
Product description	Hinge height:	115 mm	
	Hinge material:	Aluminium	
	Opening angle:	180°	
	max. door leaf weight:	40 kg	
Material	According to maintenance and installation instruction from hardware manufacturer.		
Maintenance and installation	According to maintenance and installation instruction from hardware manufacturer.		

Test report n° 16-001926-PR01 (PB-G02-03-de-03) dated 28.03.2018

Design sheets in Annex 1

**Validity**  
Validity of the comparative consideration expires with expiry of any one of the above items referred to as basis (standards or test reports).

#### Result Classification according to EAD 020001-01-0405 : 2017

Category of use	Durability	Test door mass	Fire resistance	Safety	Corrosion resistance	Protection	Hinge grade
<b>2</b>	<b>7</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>7</b>

**Notes on publication**  
The "Guidance Sheet for the Use of ift Test Documents" applies.  
The cover sheet can be used as an abstract.

**ift Rosenheim**  
26.06.2018  
Translation dated 05.10.2021

signed  
Konrad Querengässer, Dipl.-Ing. (FH)  
Head of Testing Department  
Security/Safety Testing

signed  
Florian Luge  
Operating Testing Officer  
Security/Safety Testing

This document is valid without a signature. The original document n° 16-001926-PR02 (GAS-G02-03-de-01) dated 26.06.2018 remains legally binding.

**Contents**  
The report contains a total of 6 pages.

Cover sheet  
Comparative consideration  
1 Order  
2 Basis  
3 Evaluation  
4 Results and statement

Annex 1 (4 pages)



60  
minutes

EN 1634



ift Rosenheim GmbH  
Notifizierte Produktzertifizierungsstelle  
Gutenstetter Str. 2 ♦ 90449 Nürnberg

Alban Giacomo spa  
Via A. De Gasperi 75  
36060 Romano d'Ezzelino (VI)  
Italien

Your ref. 6026531  
Your letter dated  
Our ref. mue  
Phone +49 (8031) 261-2463  
E-Mail muders@ift-rosenheim.de  
Nuremberg 17 12 2019

### Confirmation Letter for "Eclipse 3.1"

Dear Sirs,

on 25.06.2019 a fire resistance test was conducted on the doorset "X 546"; the exposed face was the opening face. Test duration was 60 minutes.  
The thermal insulation criteria were fulfilled for 60 minutes, integrity was maintained for 60 minutes.

"X 546" is a hinged doorset made from timber and derived timber products, classified EI<sub>2</sub>60. The dimensions of the door leaves were (W x H) 952 mm x 2421 mm with an overall thickness of the door leaf of 70 mm.

For further details refer to the test report 19-002399-PR03 issued by ift Rosenheim.

The suitability of "Eclipse 3.1" (E302009334), produced by the company Alban Giacomo spa for installation in this door construction has been successfully verified by the fire resistance test as per EN 1634-1 for a test duration of 60 minutes.

Use of the "Eclipse 3.1" in door constructions other than those tested must be verified separately.

Best regards  
ift Rosenheim

pp Erich Muders, M. Sc  
Project Engineer  
Certification & Surveillance Body





60  
minutes

EN 1634



ift Rosenheim GmbH  
Notifizierte Produktzertifizierungsstelle  
Gutenstetter Str. 2 ♦ 90449 Nürnberg

Alban Giacomo spa  
Via A. De Gasperi 75  
36060 Romano d'Ezzelino (VI)  
Italien

Your ref. 6026531  
Your letter dated  
Our ref. mue  
Phone +49 (8031) 261-2463  
E-Mail muders@ift-rosenheim.de  
Nuremberg 17 12 2019

### Confirmation Letter for "Eclipse 3.4"

Dear Sirs,

on 25.06.2019 a fire resistance test was conducted on the doorset "X 546"; the exposed face was the opening face. Test duration was 60 minutes.  
The thermal insulation criteria were fulfilled for 60 minutes, integrity was maintained for 60 minutes.

"X 546" is a hinged doorset made from timber and derived timber products, classified EI<sub>2</sub>60. The dimensions of the door leaves were (W x H) 952 mm x 2421 mm with an overall thickness of the door leaf of 70 mm.

For further details refer to the test report 19-002399-PR03 issued by ift Rosenheim.

The suitability of "Eclipse 3.4" (E302006034), produced by the company Alban Giacomo spa for installation in this door construction has been successfully verified by the fire resistance test as per EN 1634-1 for a test duration of 60 minutes.

Use of the "Eclipse 3.4" in door constructions other than those tested must be verified separately.

Best regards  
ift Rosenheim

pp Erich Maders, M. Sc  
Project Engineer  
Certification & Surveillance Body



## CERTIFICATE OF COMPLIANCE

**Certificate Number** 20190930-R39790  
**Report Reference** R39790-20190917  
**Issue Date** 2019-SEPTEMBER-30

**Issued to:** AGB Alban Giacomo Spa  
Via A. De Gasperi 75  
36060 Romano d'Ezzelino VI ITALY

**This certificate confirms that representative samples of** DOOR HINGES  
See Addendum Page

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

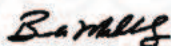
**Standard(s) for Safety:** UL10C - STANDARD FOR POSITIVE PRESSURE FIRE TESTS OF DOOR ASSEMBLIES  
UL10B - STANDARD FOR FIRE TESTS OF DOOR ASSEMBLIES  
CAN/ULC-S104 - FIRE TESTS OF DOOR ASSEMBLIES

**Additional Information:** See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



# Certificates

Eclipse 3.0, Eclipse 3.1, Eclipse 3.2, Eclipse 3.3, Eclipse 3.4



60  
minutes

## CERTIFICATE OF COMPLIANCE

Certificate Number 20190930-R39790  
Report Reference R39790-20190917  
Issue Date 2019-SEPTEMBER-30

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

### Models/Products:

USL, CNL Models Type Eclipse 3.0, Eclipse 3.1, Eclipse 3.2, Eclipse 3.2 HD, Eclipse 3.3, Eclipse 3.4, Eclipse 3.4 HD and Eclipse 3.5 for use on swinging type fire doors of types wood / composite type rated up to and including 1 hour with a minimum thickness of 70 mm, incorporating active bolts and studs, for doors (leaf) limited to 952 mm wide x 2421 mm high.

Bruce Mahrenholz, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>

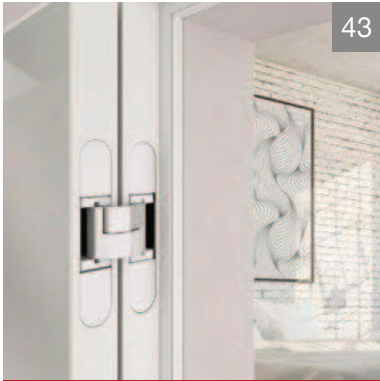




High loading  
capacity  
concealed  
hinges



# High loading capacity concealed hinges



43

Eclipse 3.2 HD



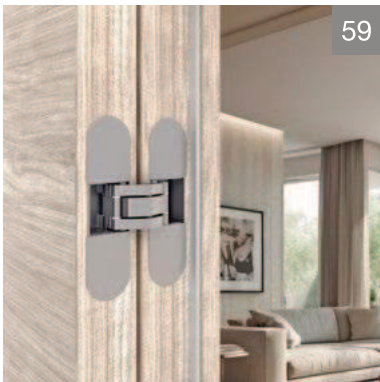
47

Eclipse 3.4 HD



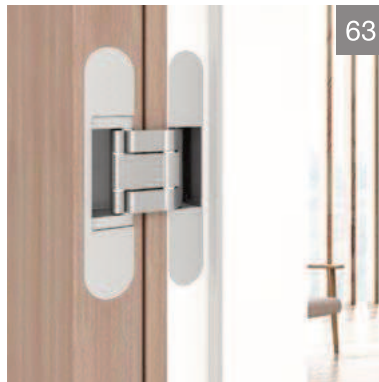
51

Eclipse 2.1



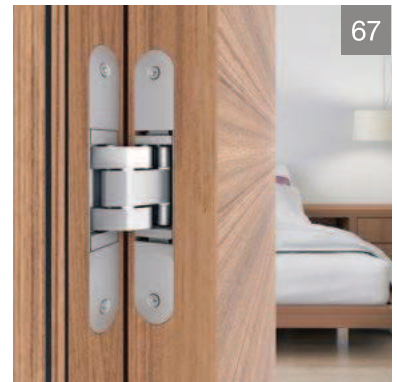
59

Eclipse 2.2



63

Eclipse 4.1



67

Eclipse 5.0

## Certificates

71

Eclipse	TECHNICAL INFORMATION					APPLICATIONS				CERTIFICATES		
	capacity	adjustment	opening	max. extension	covers applications	flush doors with rebate	flush doors without rebate	aluminium flush doors	EN 1634	ift ROSENHEIM	UL LISTED	
3.2 HD	x3 = 80 kg	3	180°	14 mm	●	●	●	●	60 minutes		60 minutes	
	x2 = 60 kg											
3.4 HD	x3 = 80 kg	3	180°	14 mm	●		●	●	60 minutes		60 minutes	
	x2 = 60 kg											
2.1	x3 = 80 kg	3	180°	19 mm	●		●	●	60 minutes			
	x2 = 60 kg											
2.2	x3 = 80 kg	3	180°	19 mm	●	●	●					
	x2 = 60 kg											
4.1	x2 = 50 kg	3	180°	23 mm	●		●	●				
5.0	x2 = 100 kg	3	180°	18 mm	●		●					

# Eclipse 3.2 HD

## High capacity hinges for internal flush doors

Concealed hinge with steel levers for heavy sashes. Suitable for applications with overhead door closer and door stop to the ground. Eclipse 3.2 HD has been designed for flush doors with or without rebate and for aluminium doors, thanks to the 4 mm fastening thickness of hinge. Eclipse 3.2 HD is provided with flush covers and it is available in a wide range of finishes.



Steel levers,  
ideal for heavy  
doors.



Up to 60 kg  
with two hinges,  
80 kg with three  
hinges.



For wood  
and aluminium  
doors.

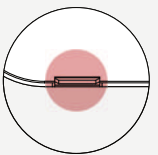
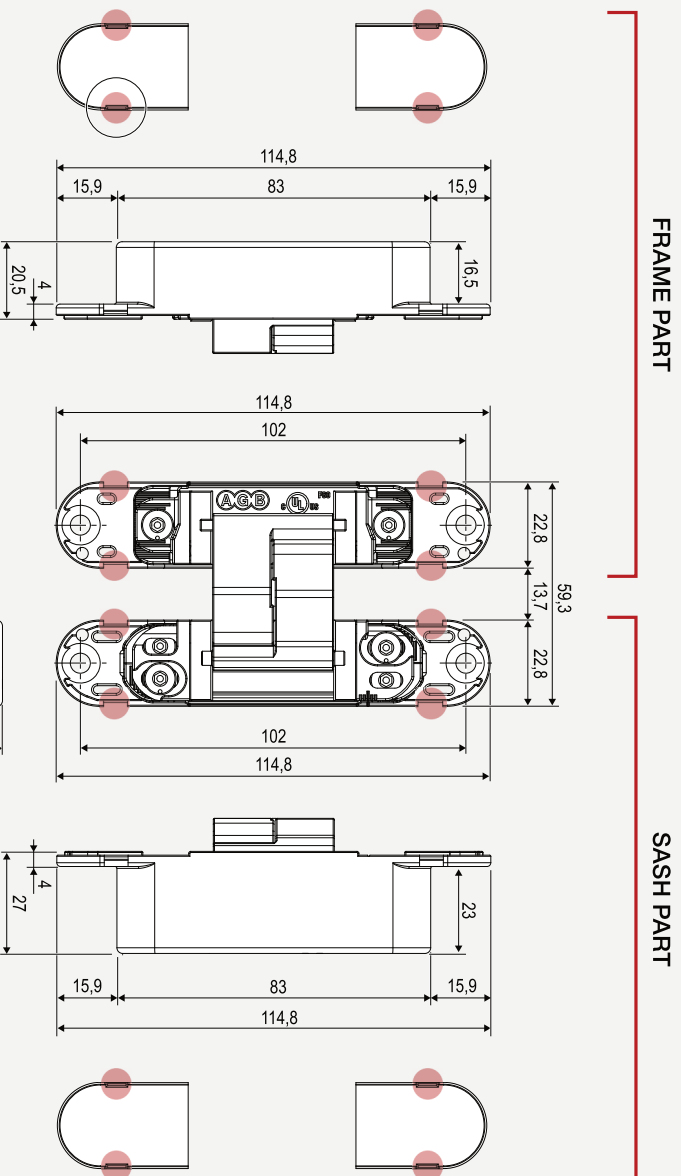


Three adjustments  
completely  
independent.

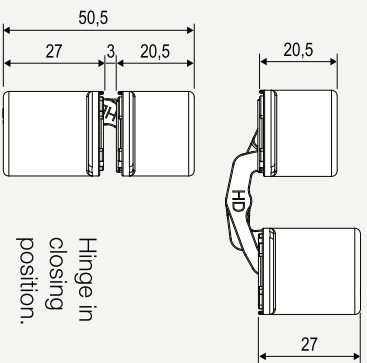


Flush  
covers.

## Hinge dimensions

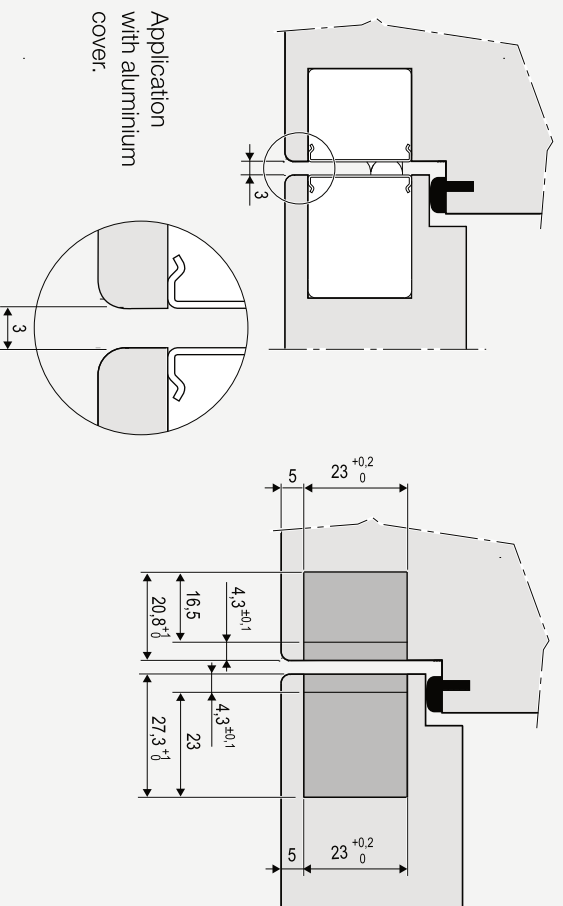


Apply the covers paying attention to the lateral wings. They have to be plugged into the dedicated grooves present in the hinge.



Hinge in closing position.

## Hinge application

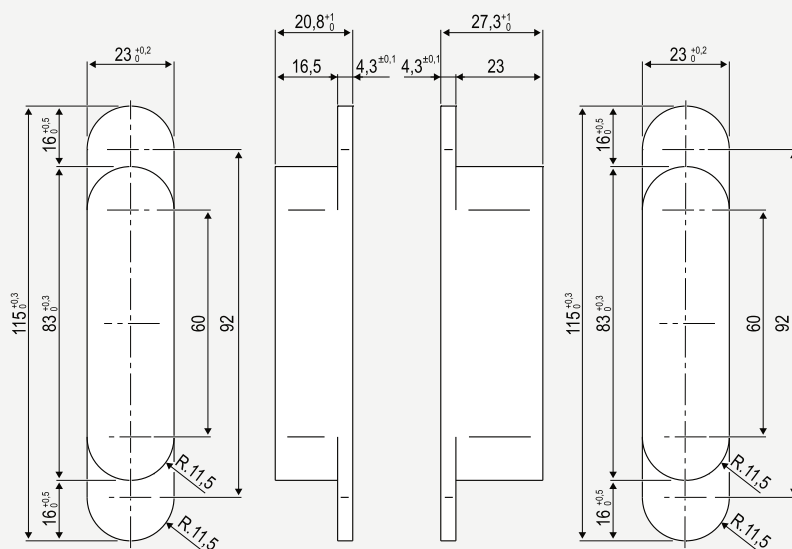




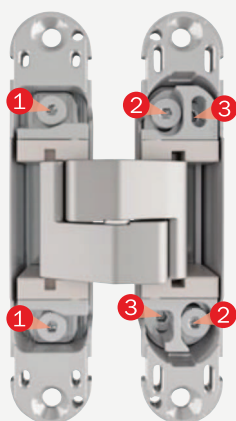
## Drilling diagram

### FRAME PART

### SASH PART



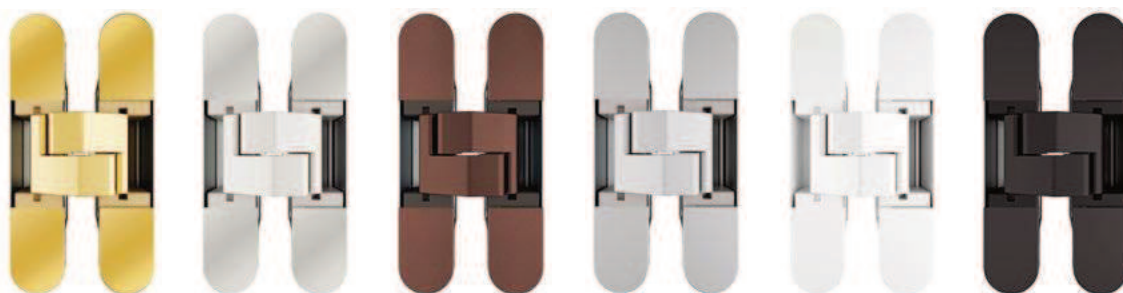
## Hinge adjustments



Please adjust the hinges with a 3 mm Allen key, as indicated here below:

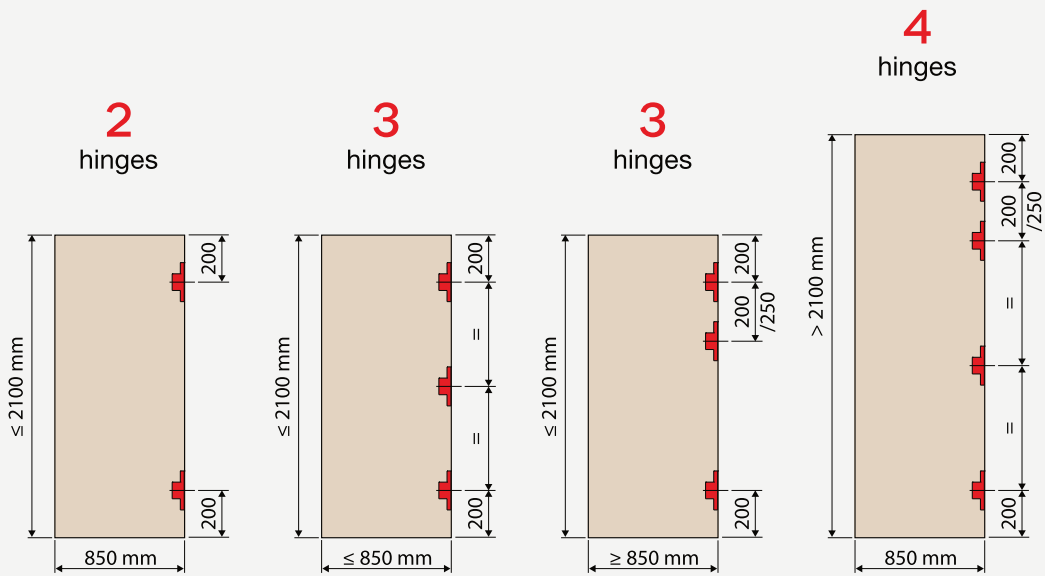
- **±1 mm pressure adjustment:**  
loosen the screws ❶ and move the hinge body.  
After this operation fasten the screws.
- **±2 mm vertical adjustment:**  
loosen the screws ❷ using a screwdriver or a wedge which is suitable for Eclipse hinges, art. E30200.89.01.  
After this operation fasten the screws.
- **±1,5 mm horizontal adjustment:**  
move the screws ❸.

## Finishes



03. Brass plated PVD / 06. Nickel plated PVD / 22. Enamelled bronze plated / 34. Matt chromium plated / 91. White / 93. Matt black

Hinges application fields



**Note.** Two hinges capacity is 60 kg and three hinges capacity is 80 kg, in any case if the door is higher than 1600 mm we suggest you a third hinge in the central position to reduce deformations.

Tests carried out with softwood and fixing of the hinge with screws as per technical data sheet\*

	300	400	500	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
600																
700																
800																
900																
1000																
1100																
1200																
1300																
1400																
1500																
1600																
1700																
1800																
1900																
2000																
2100																
2200																
2300																
2400																
2500																
2600																
2700																
2800																

\* The technical sheets are available at [www.agb.it](http://www.agb.it).  
Doors with specific gravity of 25 kg/m<sup>2</sup>.

# Eclipse 3.4 HD

## High loading capacity hinges for internal flush doors with 38-40 mm thickness

Concealed hinge with steel levers for heavy sashes. Suitable for applications with overhead door closer and door stop to the ground. Eclipse 3.4 HD is the ideal solution for applications on flush doors with 38-40 mm thickness, where the handle height must be unchanged.

Three adjustments completely independent with a unique allen key.

Eclipse 3.4 HD is provided with flush covers and it is available in a wide range of finishes. Even suitable for aluminium frames, thanks to the 4 mm of hinge fastening.



Steel levers, ideal for heavy doors.



Up to 60 kg with two hinges, 80 kg with three hinges.



Unchanged handle height even turning the sash on vertical axis.



For wood and aluminium doors.

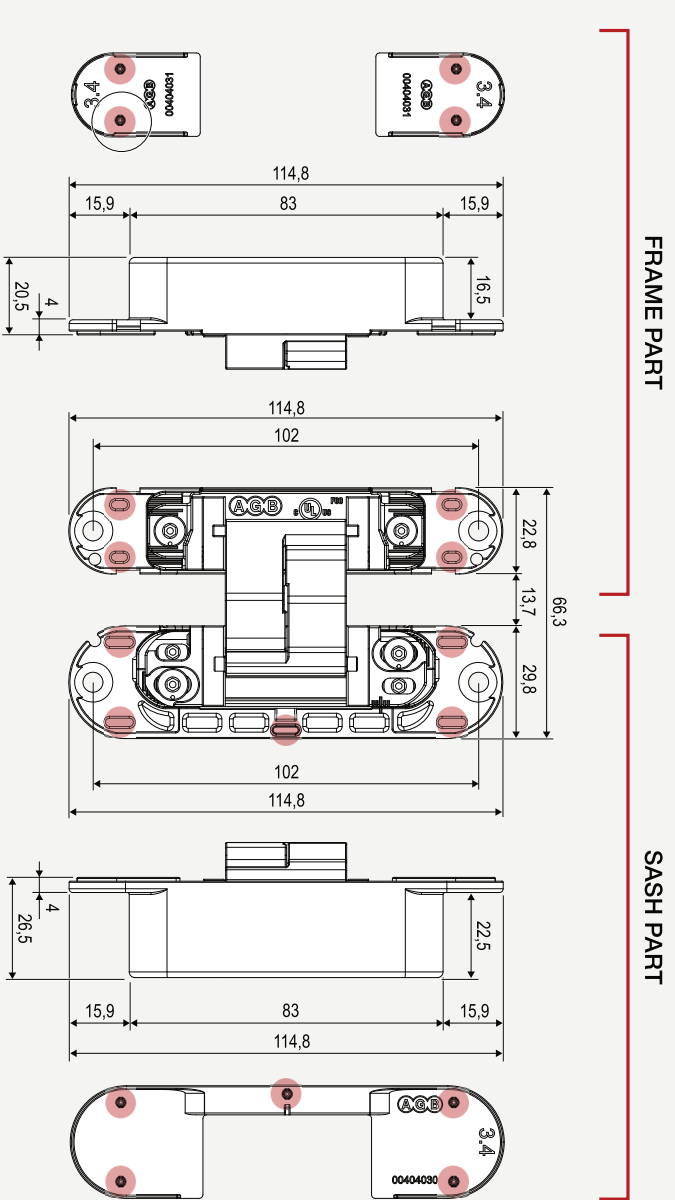


Three adjustments completely independent.

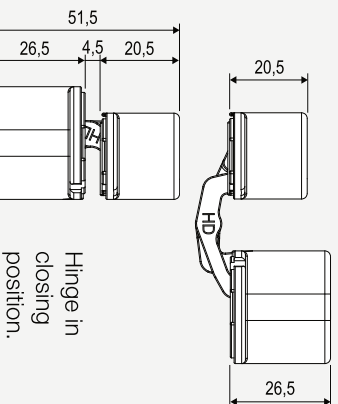
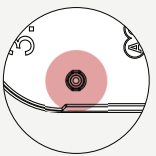


Flush covers.

## Hinge dimensions

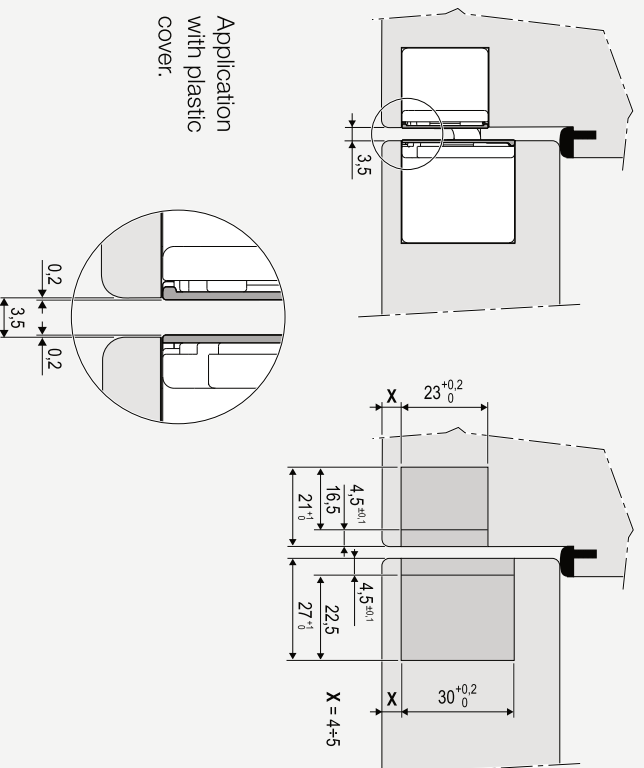


Apply the covers paying attention to the pins on the back. They have to be plugged into the dedicated grooves present in the hinge.



Hinge in closing position.

## Hinge application









# Eclipse 2.1

## For wooden and aluminium flush doors

Concealed hinge for internal flush doors with modern design. Eclipse 2.1 offers wide adjustments on three axis. The sash movement is fluid and precise up to 180°. Covers hide the adjustment screws and keep the door design even when the sash is open. Eclipse 2.1 stands out for high loading capacity, up to 60 kg with 2 hinges.



60 minutes



Up to 60 kg with two hinges, 80 kg with three hinges.



Three adjustments completely independent.



For wood and aluminium doors.



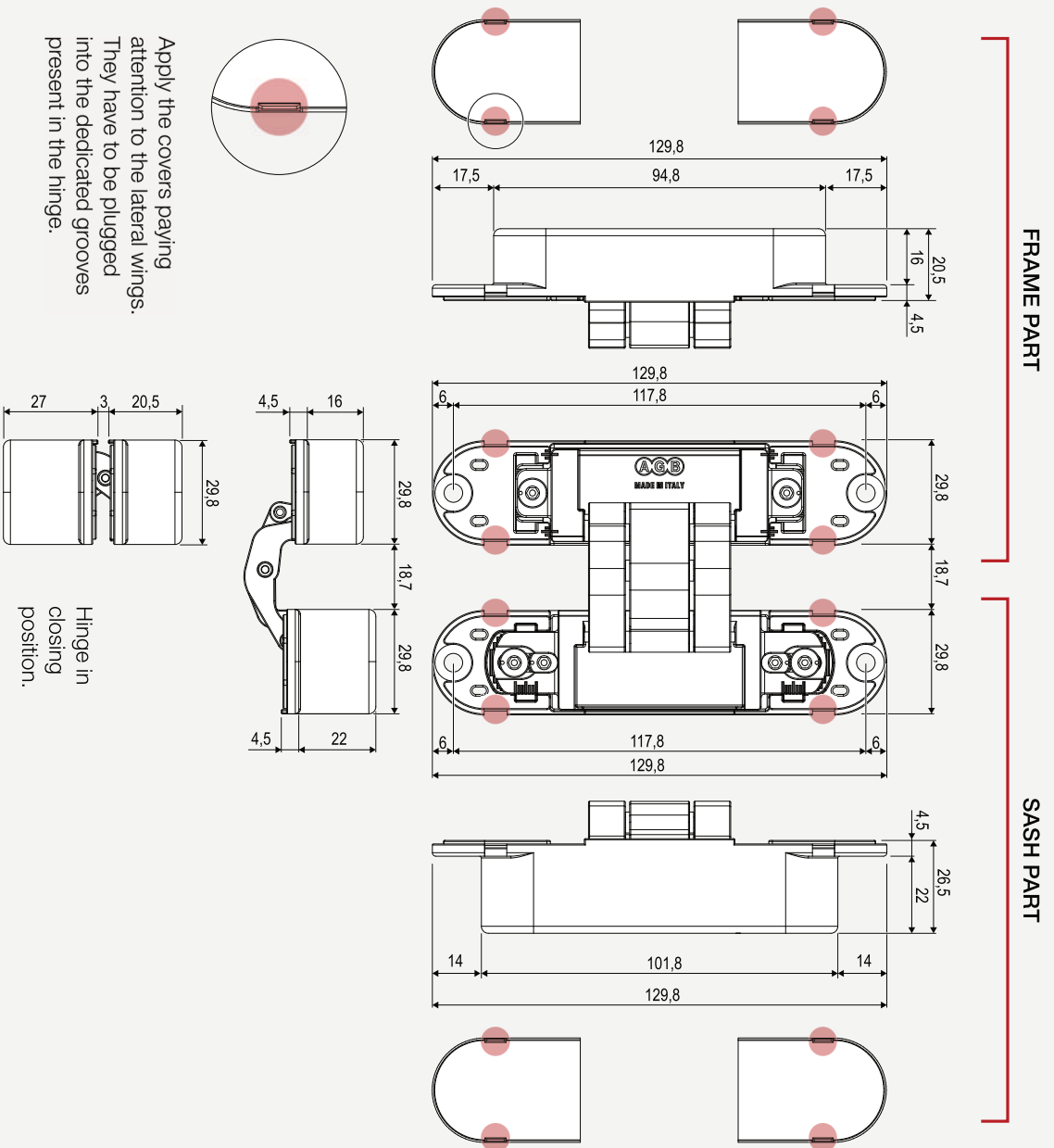
Ideal for sashes covered with glass.



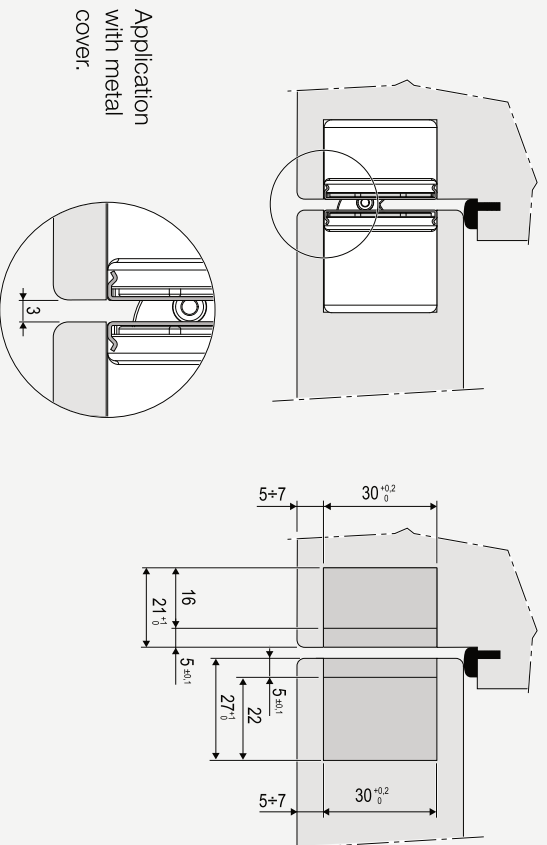
Flush metal covers.



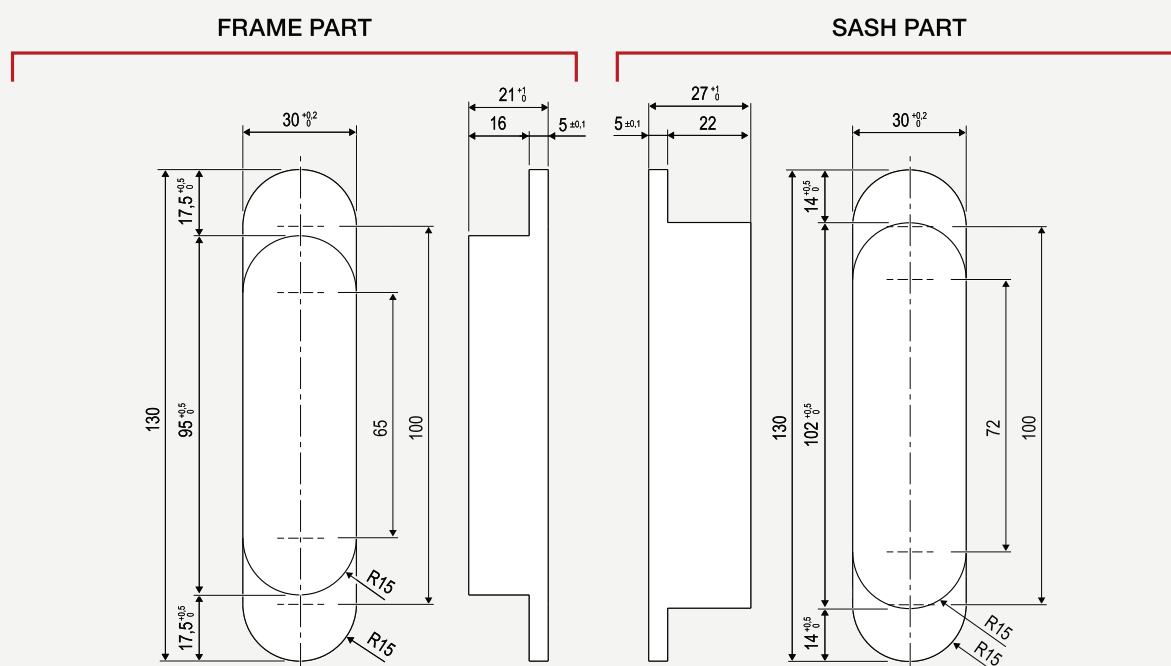
## Hinge dimensions



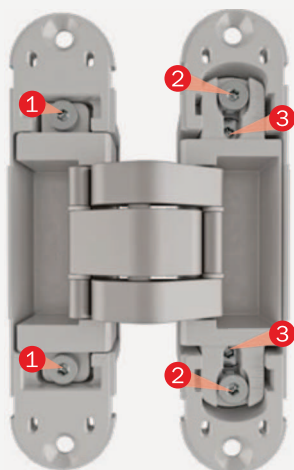
## Hinge application



## Drilling diagram



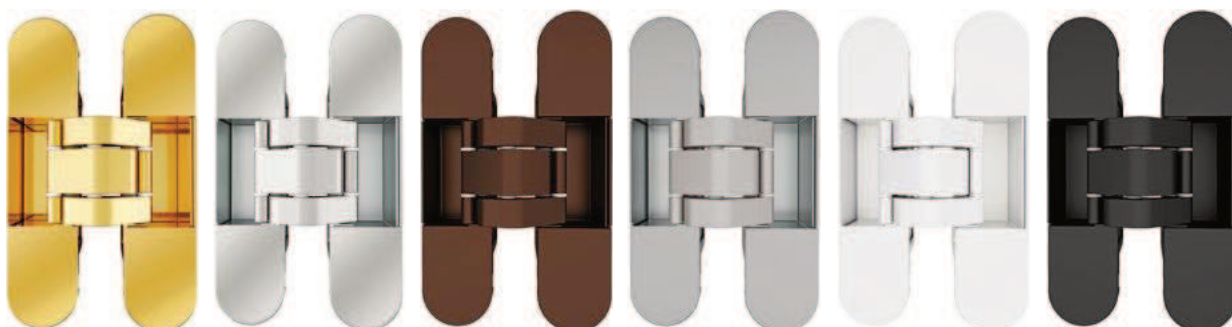
## Hinge adjustments



Please adjust the hinges one by one with a 3 mm Allen key; reach the desired adjustment on two screws alternatively and with little movements.

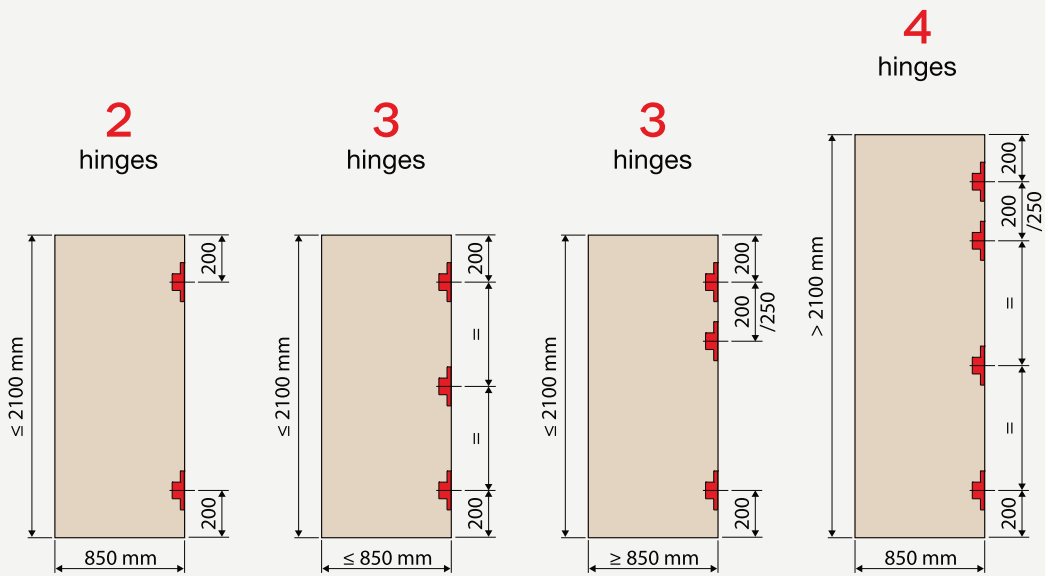
- **±1 mm pressure adjustment:**  
loosen the screws ① and move the hinge body.  
After this operation fasten the screws.
- **±2 mm vertical adjustment:**  
loosen the screws ② using a screwdriver or a wedge which is suitable for Eclipse hinges, art. E30200.89.01.  
After this operation fasten the screws.
- **±1,5 mm horizontal adjustment:**  
move the screws ③.

## Finishes



03. Brass plated PVD / 06. Nickel plated PVD / 22. Enamelled bronze plated / 34. Matt chromium plated / 91. White / 93. Matt black

Hinges application fields



**Note.** Two hinges capacity is 60 kg and three hinges capacity is 80 kg, in any case if the door is higher than 1600 mm we suggest you a third hinge in the central position to reduce deformations.

Tests carried out with softwood and fixing of the hinge with screws as per technical data sheet\*

	300	400	500	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200																
600																																
700																																
800																																
900																																
1000																																
1100																																
1200																																
1300																																
1400																																
1500																																
1600																																
1700																																
1800																																
1900																																
2000																																
2100																																
2200																																
2300																																
2400																																
2500																																
2600																																
2700																																
2800																																

\* The technical sheets are available at [www.agb.it](http://www.agb.it).  
Doors with specific gravity of 25 kg/m<sup>2</sup>.

# Eclipse 2.2

## For flush wooden doors

Concealed hinge for internal flush doors with modern design. Eclipse 2.2 offers wide adjustments on three axis. The sash movement is fluid and precise up to 180°. Covers hide the adjustment screws and keep the door design even when the sash is open. Eclipse 2.2 stands out for high loading capacity, up to 60 kg with 2 hinges.



Up to 60 kg with two hinges,  
80 kg with three hinges.



19 mm  
max. extension.



For wood  
doors.

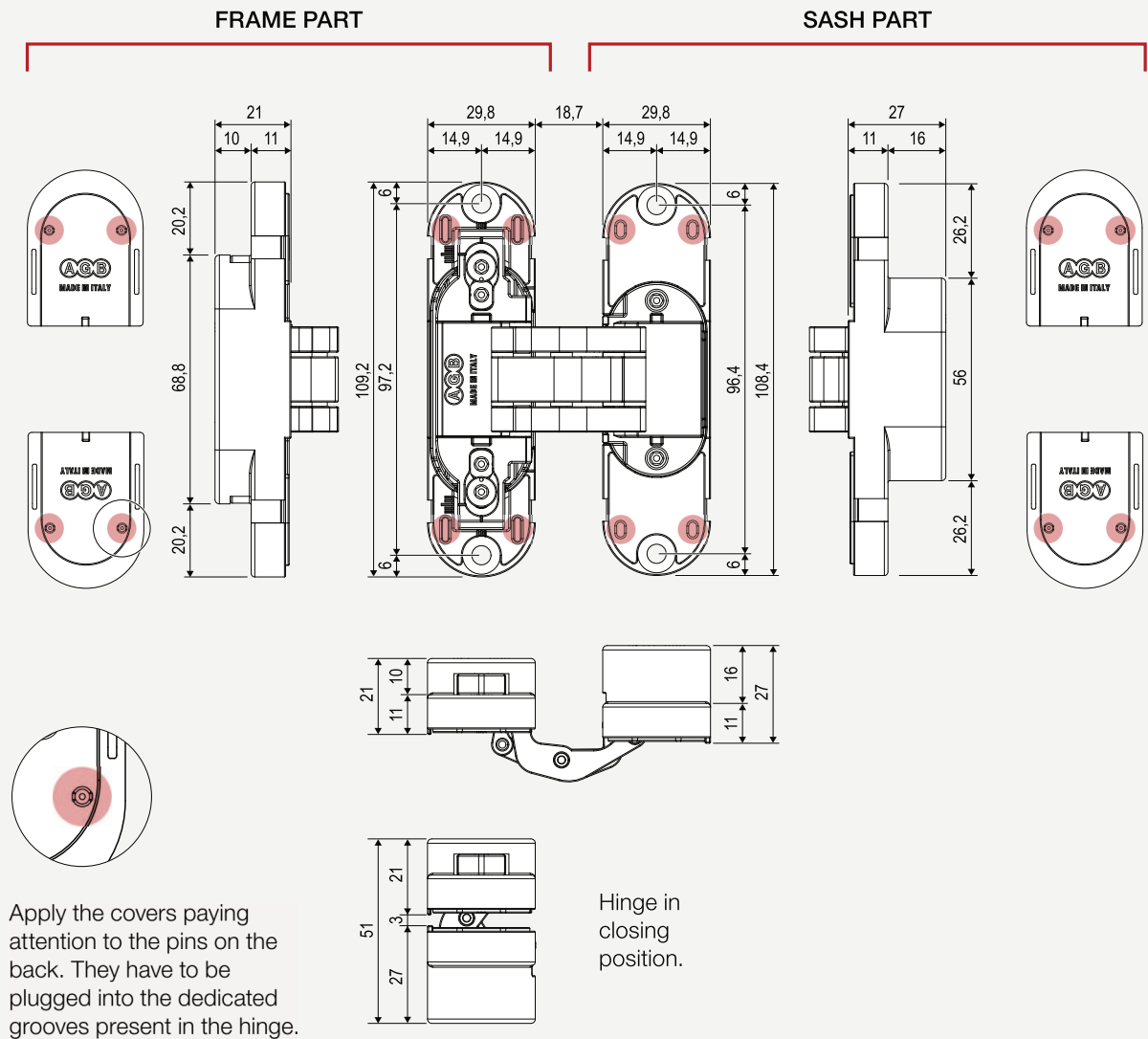


Three adjustments  
completely  
independent.

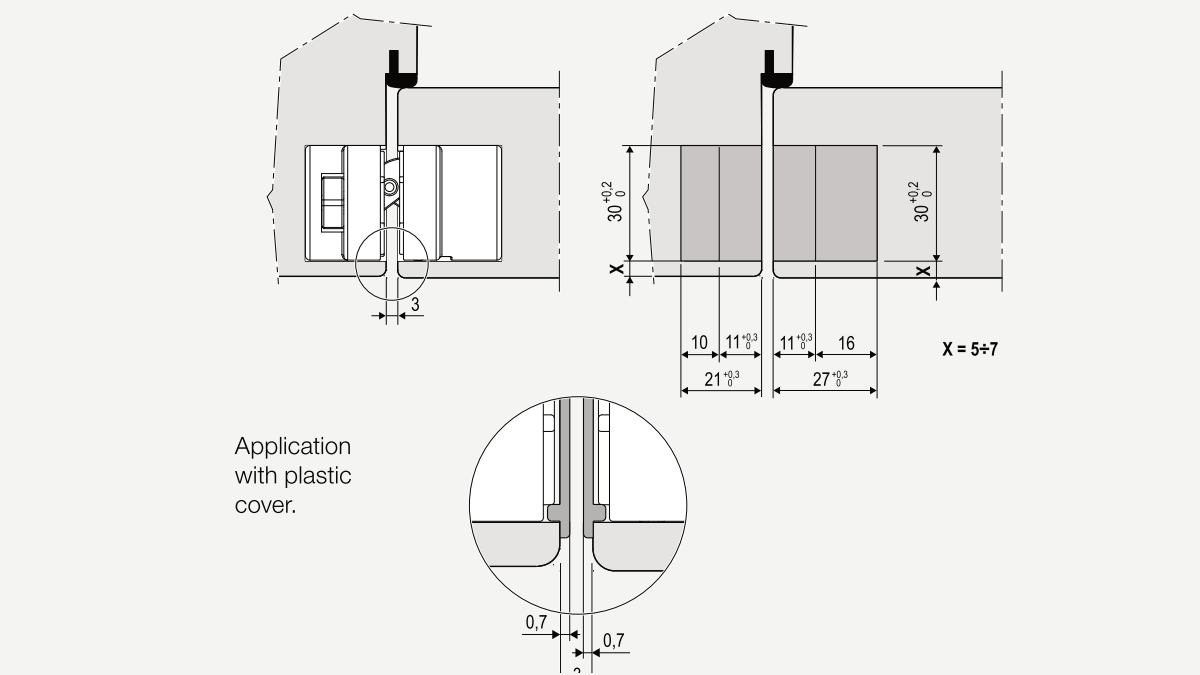


Covers with  
coverplate.

Hinge dimensions



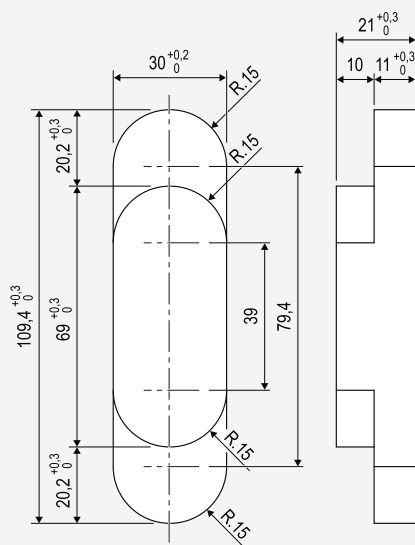
Hinge application



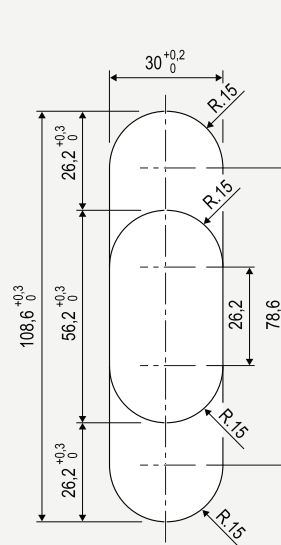


## Drilling diagram

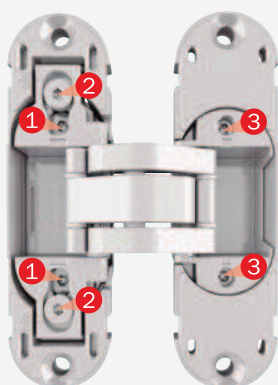
### FRAME PART



### SASH PART



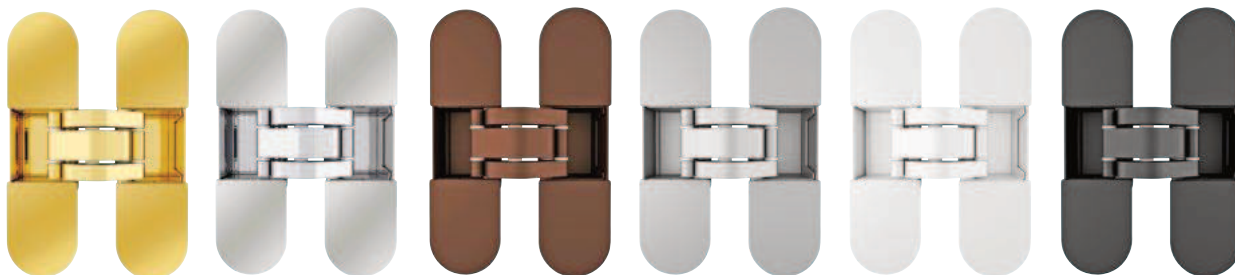
## Hinge adjustments



Please adjust the hinges with a 3 mm Allen key, as indicated here below:

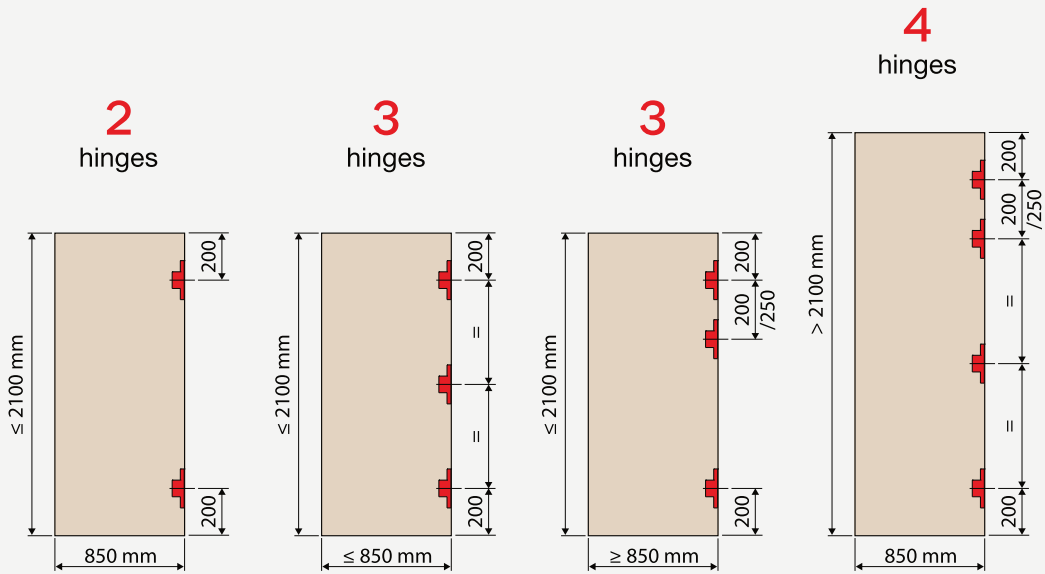
- **±1 mm pressure adjustment:**  
loosen the screws ❶ and move the hinge body.  
After this operation fasten the screws.
- **±2 mm vertical adjustment:**  
loosen the screws ❷ using a screwdriver or a wedge which is suitable for Eclipse hinges, art. E30200.89.01.  
After this operation fasten the screws.
- **±1,5 mm horizontal adjustment:**  
move the screws ❸.

## Finishes



03. Brass plated PVD / 06. Nickel plated PVD / 22. Enamelled bronze plated / 34. Matt chromium plated / 91. White / 93. Matt black

Hinges application fields



**Note.** Two hinges capacity is 60 kg and three hinges capacity is 80 kg, in any case if the door is higher than 1600 mm we suggest you a third hinge in the central position to reduce deformations.

Tests carried out with softwood and fixing of the hinge with screws as per technical data sheet\*

	300	400	500	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
600																
700																
800																
900																
1000																
1100																
1200																
1300																
1400																
1500																
1600																
1700																
1800																
1900																
2000																
2100																
2200																
2300																
2400																
2500																
2600																
2700																
2800																

\* The technical sheets are available at [www.agb.it](http://www.agb.it).  
Doors with specific gravity of 25 kg/m<sup>2</sup>.



# Eclipse 4.1

## For flush doors in wood paneling

Concealed hinge for internal flush doors, suitable for applications with drywall and surface mounted coverplate, thanks to the 23 mm high opening. Capacity up to 50 kg with 2 hinges. The sash part hinge stays at 5 mm from the external surface, in order to avoid deformations during millings. From the frame side, thanks to the reduced milling of the hinge body, Eclipse 4.1 ensures a 13 mm overlap and the possibility to mill even when the gasket is already installed.



Ideal for applications with drywall and overlapping frame architraves.



Up to 50 kg of loading capacity with two hinges.



Unchanged handle height even turning the sash on vertical axis



Central on 44 mm sashes.

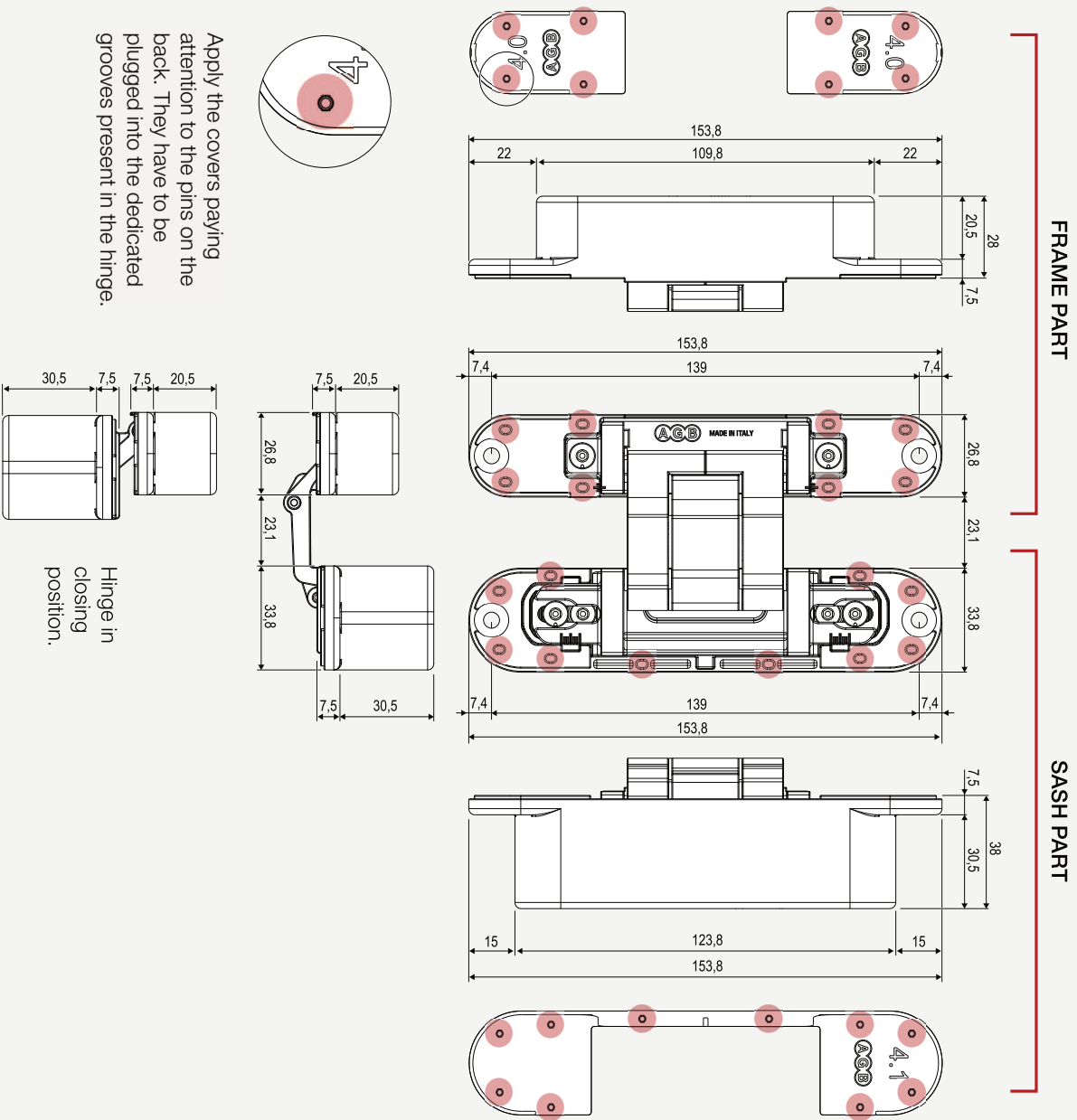


For wood and aluminium doors.

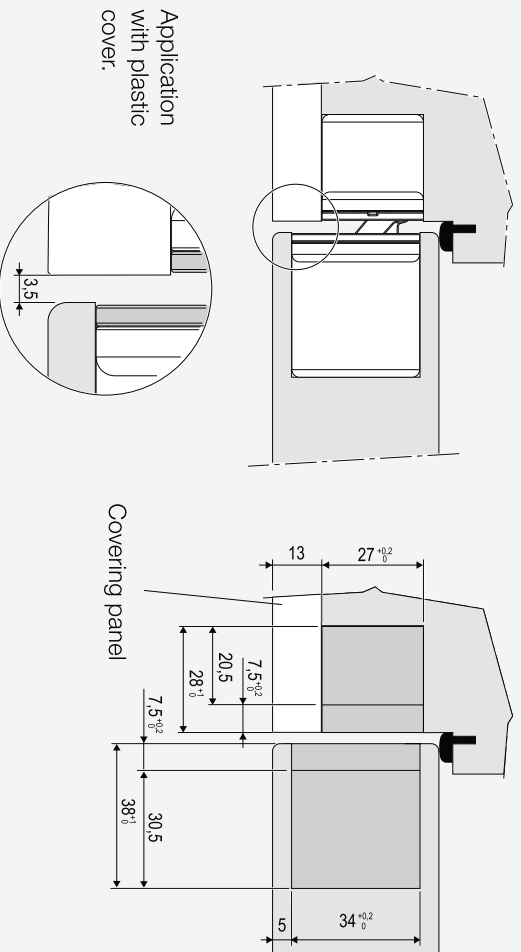


Flush covers.

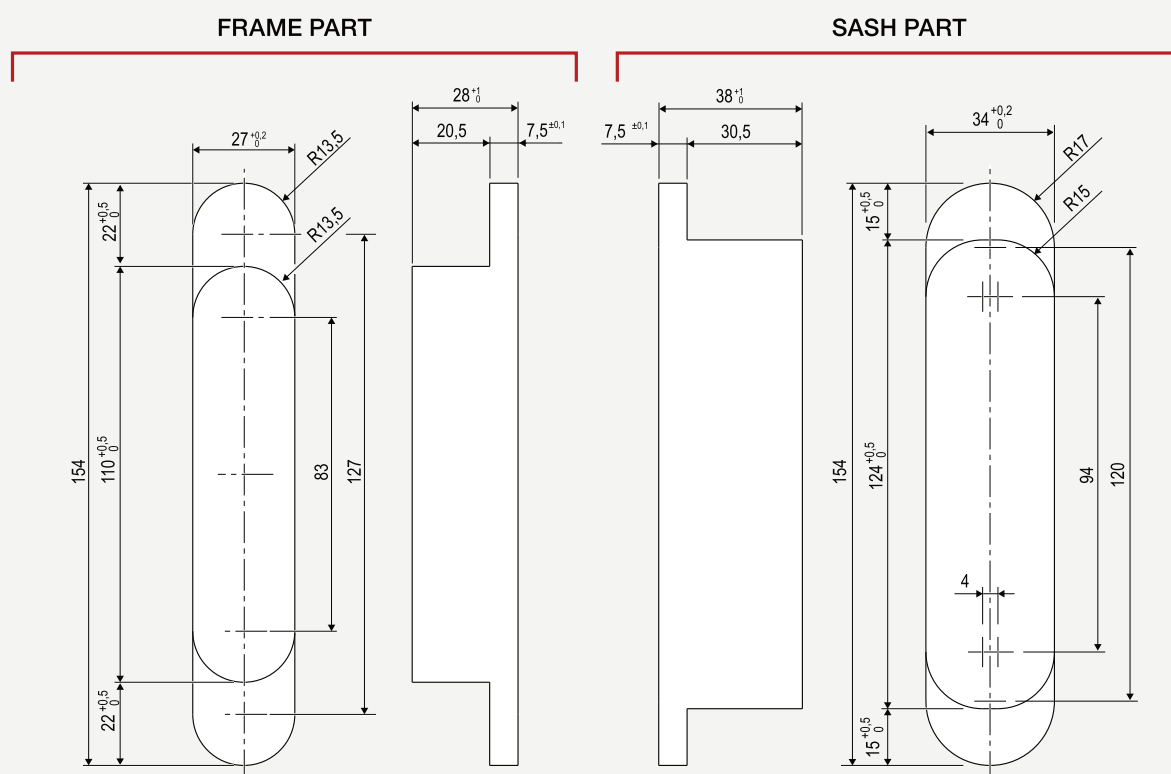
## Hinge dimensions



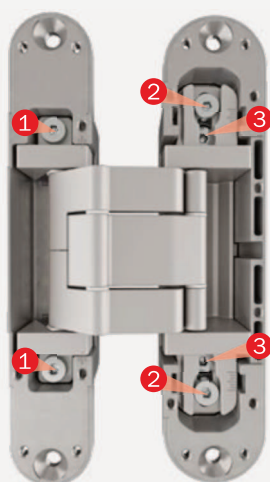
## Hinge application



## Drilling diagram



## Hinge adjustments



Please adjust the hinges one by one with a 3 mm Allen key; reach the desired adjustment on two screws alternatively and with little movements.

- **±1 mm pressure adjustment:**  
loosen the screws ① and move the hinge body.  
After this operation fasten the screws.
- **±3 mm vertical adjustment:**  
loosen the screws ② using a screwdriver or a wedge which is suitable for Eclipse hinges, art. E30200.89.01.  
After this operation fasten the screws.
- **+3/-2 mm horizontal adjustment:**  
move the screws ③.

## Finishes



03. Brass plated PVD / 06. Nickel plated PVD / 22. Enamelled bronze plated / 34. Matt chromium plated / 91. White / 93. Matt black



# Eclipse 5.0

## High loading capacity hinges for flush doors

New high-capacity concealed hinge, designed for flush doors with heavy sashes and for hotel doors. Thanks to the three micrometric and independent adjustments, Eclipse 5.0 makes it easy to adjust even on very heavy doors. The screw-fixed metal covers ensure a precise and long-lasting fit.



Up to 100 kg  
of loading capacity  
with two hinges.



Three micrometric and separate  
adjustments. Simple management  
of heavy sash.



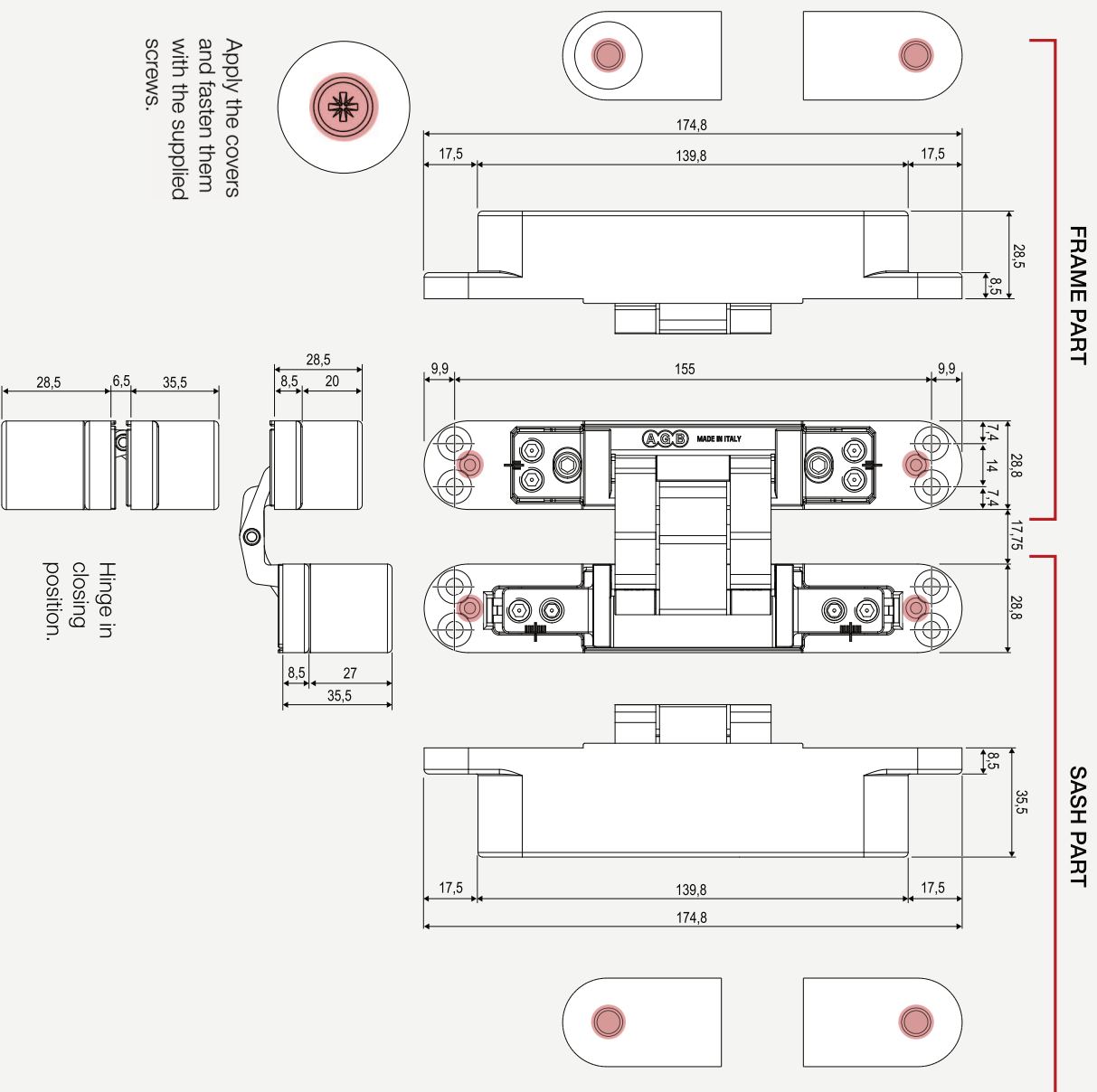
Perfect together  
with door closer  
or door stopper.



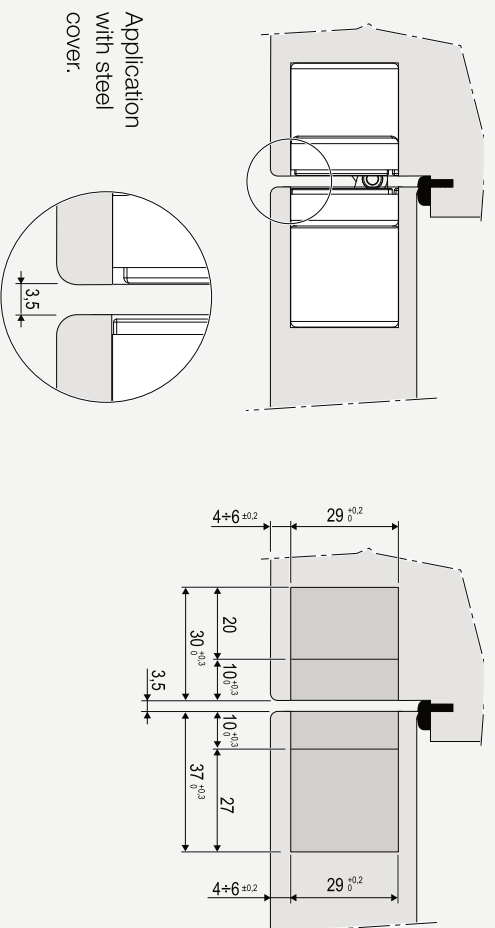
Flush steel  
covers.



## Hinge dimensions

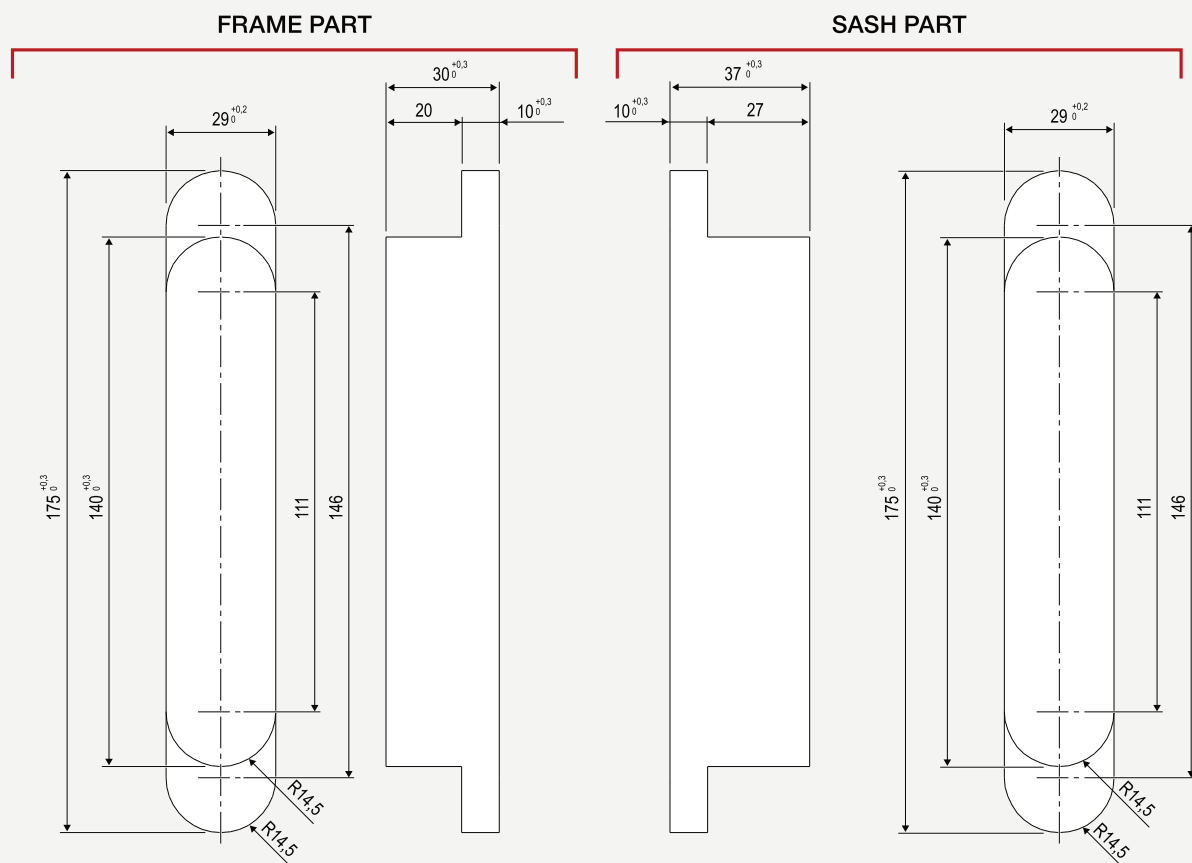


## Hinge application

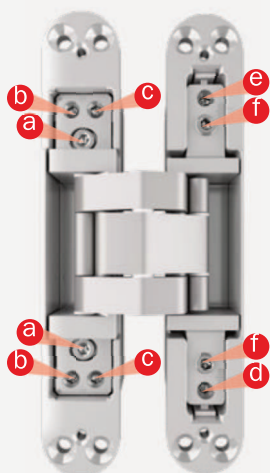




## Drilling diagram



## Hinge adjustments



Please adjust the hinges one by one with a 4 mm Allen key; reach the desired adjustment on two screws alternatively and with little movements.

- **±1 mm pressure adjustment:**

PRESSURE INCREASE:

loosen **a**; screw **b** and unscrew **c**; fasten **a**.

PRESSURE DECREASED:

loosen **a**; unscrew **b** and screw **c**; fasten **a**.

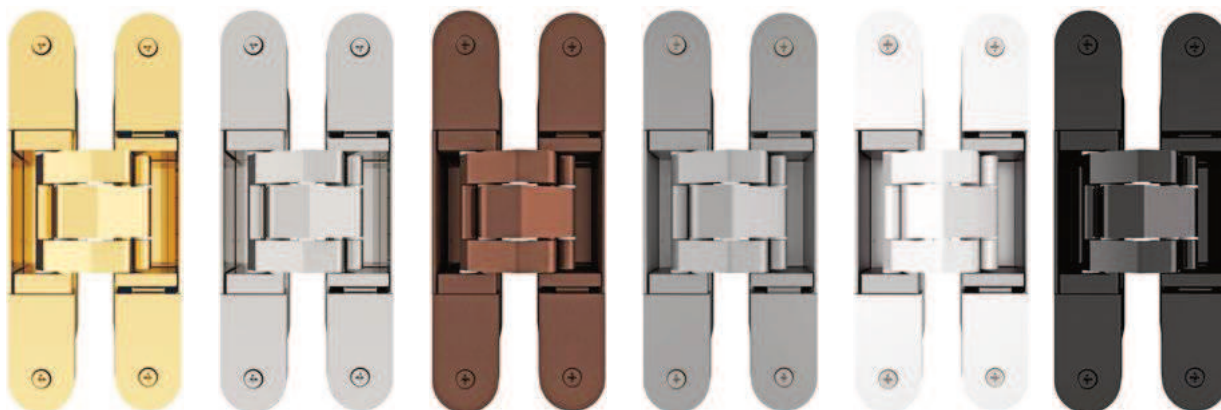
- **±3 mm vertical adjustment:**

loosen **d**; raise (screw) or lower (unscrew) **e**; fasten **d**.

- **±3 mm horizontal adjustment:**

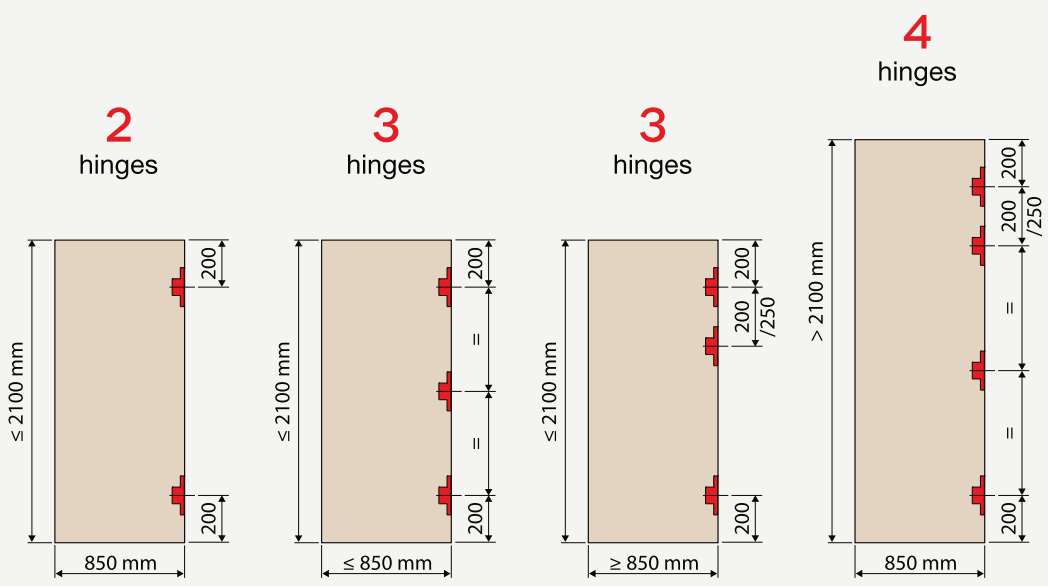
increase (unscrew) or decrease (screw) **f**.

## Finishes



03. Brass plated PVD / 06. Nickel plated PVD / 22. Enamelled bronze plated / 34. Matt chromium plated / 91. White / 93. Matt black

Hinges application fields



**Note.** Two hinges capacity is 100 kg and three hinges capacity is 130 kg, in any case if the door is higher than 1600 mm we suggest you a third hinge in the central position to reduce deformations.

Tests carried out with softwood and fixing of the hinge with screws as per technical data sheet\*

Door Height (mm)	Door Width (mm)															
	300	400	500	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
600	Application field diagram showing regions for 2, 3, and 4 hinges based on height and width.															
700																
800																
900																
1000																
1100																
1200																
1300																
1400																
1500																
1600																
1700																
1800																
1900																
2000																
2100																
2200																
2300																
2400																
2500																
2600																
2700																
2800																

\* The technical sheets are available at [www.agb.it](http://www.agb.it).  
Doors with specific gravity of 60 kg/m<sup>2</sup>.

# Certificates

Eclipse 3.2 HD



60  
minutes



ift Rosenheim GmbH  
Notifizierte Produktzertifizierungsstelle  
Gutenstetter Str. 2 ♦ 90449 Nürnberg

Alban Giacomo spa  
Via A. De Gasperi 75  
36060 Romano d'Ezzelino (VI)  
Italien

Your ref. 6026531  
Your letter dated  
Our ref. mue  
Phone +49 (8031) 261-2463  
E-Mail muders@ift-rosenheim.de  
Nuremberg 17 12 2019

## Confirmation Letter for "Eclipse 3.2 HD"

Dear Sirs,

on 25.06.2019 a fire resistance test was conducted on the doorset "X 546"; the exposed face was the opening face. Test duration was 60 minutes.

The thermal insulation criteria were fulfilled for 60 minutes, integrity was maintained for 60 minutes.

"X 546" is a hinged doorset made from timber and derived timber products, classified EI<sub>2</sub>60. The dimensions of the door leaves were (W x H) 952 mm x 2421 mm with an overall thickness of the door leaf of 70 mm.

For further details refer to the test report 19-002399-PR03 issued by ift Rosenheim.

The suitability of "Eclipse 3.2 HD" (E302006134), produced by the company Alban Giacomo spa for installation in this door construction has been successfully verified by the fire resistance test as per EN 1634-1 for a test duration of 60 minutes.

Use of the "Eclipse 3.2 HD" in door constructions other than those tested must be verified separately.

Best regards  
ift Rosenheim

pp Erich Muders, M. Sc  
Project Engineer  
Certification & Surveillance Body



60  
minutes

EN 1634



ift Rosenheim GmbH  
Notifizierte Produktzertifizierungsstelle  
Gutenstetter Str. 2 ♦ 90449 Nürnberg

Alban Giacomo spa  
Via A. De Gasperi 75  
36060 Romano d'Ezzelino (VI)  
Italien

Your ref. 6026531  
Your letter dated  
Our ref. mue  
Phone +49 (8031) 261-2463  
E-Mail muders@ift-rosenheim.de  
Nuremberg 17 12 2019

### Confirmation Letter for "Eclipse 3.4 HD"

Dear Sirs,

on 25.06.2019 a fire resistance test was conducted on the doorset "X 546"; the exposed face was the opening face. Test duration was 60 minutes.  
The thermal insulation criteria were fulfilled for 60 minutes, integrity was maintained for 60 minutes.

"X 546" is a hinged doorset made from timber and derived timber products, classified EI<sub>2</sub>60. The dimensions of the door leaves were (W x H) 952 mm x 2421 mm with an overall thickness of the door leaf of 70 mm.

For further details refer to the test report 19-002399-PR03 issued by ift Rosenheim.

The suitability of "Eclipse 3.4 HD" (E302006234), produced by the company Alban Giacomo spa for installation in this door construction has been successfully verified by the fire resistance test as per EN 1634-1 for a test duration of 60 minutes.

Use of the "Eclipse 3.4 HD" in door constructions other than those tested must be verified separately.

Best regards  
ift Rosenheim

pp Erich Muders, M. Sc  
Project Engineer  
Certification & Surveillance Body

## CERTIFICATE OF COMPLIANCE

**Certificate Number** 20190930-R39790  
**Report Reference** R39790-20190917  
**Issue Date** 2019-SEPTEMBER-30

**Issued to:** AGB Alban Giacomo Spa  
Via A. De Gasperi 75  
36060 Romano d'Ezzelino VI ITALY

**This certificate confirms that representative samples of** DOOR HINGES  
See Addendum Page

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

**Standard(s) for Safety:** UL10C - STANDARD FOR POSITIVE PRESSURE FIRE TESTS OF DOOR ASSEMBLIES  
UL10B - STANDARD FOR FIRE TESTS OF DOOR ASSEMBLIES  
CAN/ULC-S104 - FIRE TESTS OF DOOR ASSEMBLIES

**Additional Information:** See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>







60  
minutes

## CERTIFICATE OF COMPLIANCE

Certificate Number 20190930-R39790  
Report Reference R39790-20190917  
Issue Date 2019-SEPTEMBER-30

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Models/Products:

USL, CNL Models Type Eclipse 3.0, Eclipse 3.1, Eclipse 3.2, Eclipse 3.2 HD, Eclipse 3.3, Eclipse 3.4, Eclipse 3.4 HD and Eclipse 3.5 for use on swinging type fire doors of types wood / composite type rated up to and including 1 hour with a minimum thickness of 70 mm, incorporating active bolts and studs, for doors (leaf) limited to 952 mm wide x 2421 mm high.

Bruce Mahrenholz, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





TESTING and RESEARCH

Laboratory: „F Plus“ OOD, ul. „Vitosha“, 2042 Kostenets, Sofiiska oblast  
Office: bul. „Al.Stamboliyski“ 205, sgrada B, floor 3, off. 306B, Sofia 1000  
Telephone: +359 878 112 112; e-mail: office@fplus-eu.com; www.fplus-eu.com



Out № 620  
from 21.07.2023

To  
**The representatives of Alban  
Giacomo Spa**

On 16.12.2022 a fire resistance test was conducted on the doorset "Halspan 44 mm Prima". The fire impact was on the side of the hinges. Test duration was 70 minutes.

The thermal insulation criteria were fulfilled for 69 minutes, integrity was maintained for 70 minutes.

Halspan 44 mm Prima is a hinged door made from timber and derived timber products, classified EI1; EI260. The dimensions of the door leaves were (W x H) 2156 mm x 871 mm with an overall thickness of the door leaf of 56 mm.

The suitability of "Eclipse 2.1" (E302009234), produced by the company Alban Giacomo spa – Italy for installation in this door construction has been successfully verified by the fire resistance test as per EN 1634-1 for a test duration of 60 minutes.

For further details refer to the test report TR-391-01/29.05.2023 issued by F Plus Ltd.

The Halspan 44 mm Prima door, produced by the company YIANNAKIS KOKKINOS LTD. Has been successfully verified by the fire resistance test as per EN 1634-1;2014+A1:2018 for test duration of 70 minutes.

With respect,  
Head of Laboratory  
"Fplus" fire tests:

.....  
/Assoc. Proff. Eng. Detelin Spassov, PhD/

21.07.2023



LAB N° 0021 L

Laboratorio autorizzato ai sensi del Decreto del Ministero dell'Interno 26 marzo 1985

## RAPPORTO DI PROVA N. 387470/4165FR

Oggetto\*

**porta di legno, a un'anta su cardini, ad azione semplice,  
senza finestratura denominata "ESSENZAZERO 30"**

Attività



**determinazione della resistenza al fuoco  
secondo le norme**

**UNI EN 1634-1:2018/EC 1-2018 ed UNI EN 1363-1:2020**

Descrizione

Cerniera ad incasso in acciaio modello "Eclipse 5.0" della ditta AGB Alban Giacomo S.p.A. - Via Alcide De Gasperi, 75 - 36060 Romano d'Ezzelino (VI) - Italia

Anta	larghezza esterna	914 mm
	altezza esterna	2401 mm
	larghezza della battuta	894 mm
	altezza della battuta	2391 mm
	spessore	60 mm

Risultati

Integrità	44 min
Isolamento I <sub>2</sub>	44 min**
Isolamento I <sub>1</sub>	44 min**

(\*\*) in concomitanza con la perdita di integrità secondo il paragrafo 11.4.2 "Insulation versus integrity" ("Isolamento rispetto all'integrità") della norma UNI EN 1363-1:2020.

(\*) secondo le dichiarazioni del cliente.

Bellaria-Igea Marina - Italia, 6 ottobre 2021

L'Amministratore Delegato  
(Dott. Arch. Sara Lorenza Giordano)  
**L'AMMINISTRATORE DELEGATO**  
Arch. Sara Lorenza Giordano

Commissa:  
89195

Provenienza dell'oggetto:  
campionato da Istituto Giordano secondo i criteri definiti nel verbale di prelievo del 23 luglio 2021 e fornito dal cliente (campionamento non accreditato da ACCREDIA)

Identificazione dell'oggetto in accettazione:  
2021/2354/A del 3 agosto 2021  
2021/2354/C del 3 agosto 2021

Data dell'attività:  
dal 12 agosto 2021 al 31 agosto 2021

Luogo dell'attività:  
Istituto Giordano S.p.A. - Blocco 7 - Via Giovanni Verga, 6 - 47043 Gatteo (FC) - Italia

Indice	Pagina
Introduzione	2
Descrizione dell'oggetto	2
Condizionamento	6
Verifiche prima della prova	6
Modalità	8
Risultati	9
Conclusioni	11
Campo di applicazione diretta dei risultati di prova	12

Il presente documento è composto da n. 39 pagine e n.1 allegato e non può essere riprodotto parzialmente, estrapolando parti di interesse a discrezione del cliente, con il rischio di favorire una interpretazione non corretta dei risultati, fatto salvo quanto definito a livello contrattuale.

I risultati si riferiscono solo all'oggetto in esame, così come ricevuto, e sono validi solo nelle condizioni in cui l'attività è stata effettuata.

Responsabile Tecnico di Prova:  
Dott. Geol. Franco Berardi  
Direttore del Laboratorio di Resistenza al Fuoco:  
Dott. Ing. Stefano Vasini

Compilatore: Paolo Bonito  
Revisore: Dott. Geol. Franco Berardi

Pagina 1 di 39





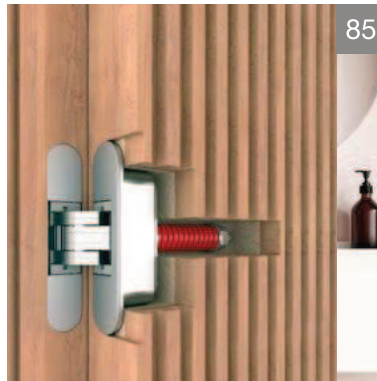
High loading  
capacity  
concealed  
hinges with  
built-in door  
closer

# High loading capacity concealed hinges with built-in door closer



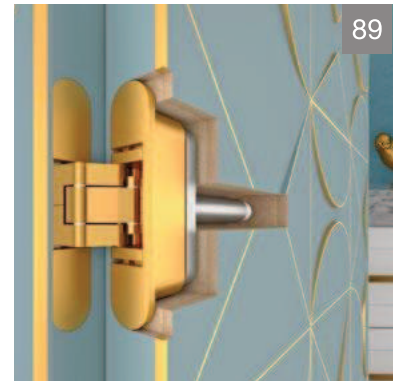
81

Eclipse 3.2 HD Self



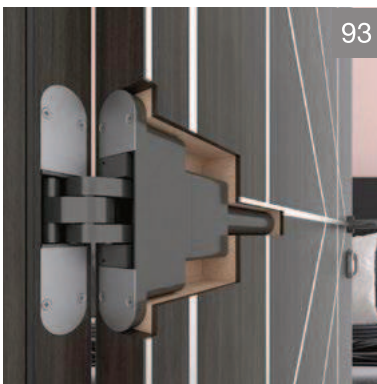
85

Eclipse 3.4 HD Self



89

Eclipse 4.1 Self



93

Eclipse Self

Eclipse	TECHNICAL INFORMATION						APPLICATIONS			CERTIFICATES		
	capacity	adjustment	opening	max. extension	covers applications		flush doors with rebate	flush doors without rebate	aluminium flush doors	fire and smoke resistant doors	ift ROSENHEIM EAD 020001-01-0405 EN 1935	UL LISTED UL LISTED
3.2 HD Self	≤ 60 kg	3	180°	14 mm	●		●	●	●			
3.4 HD Self	≤ 60 kg	3	180°	14 mm	●			●	●			
4.1 Self	x2 = 50 kg	3	180°	23 mm	●			●	●			
Self	x2 = 100 kg	7	Max. 125°	/	●		●	●	●	●	●	



# Eclipse 3.2 HD Self

## Self-closing hinges for internal flush aluminium and wooden doors

The new concealed hinge with integrated closing system with spring Eclipse 3.2 HD Self is reversible with frame part reduced to 21 mm.

Same millings of the Eclipse 3.2 range plus the milling for the spring body.



SELF  
CLOSING



Self-closing system.



Steel levers, ideal for heavy doors.



The same millings of the Eclipse 3.2 hinges adding the spring milling.

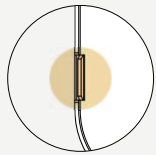
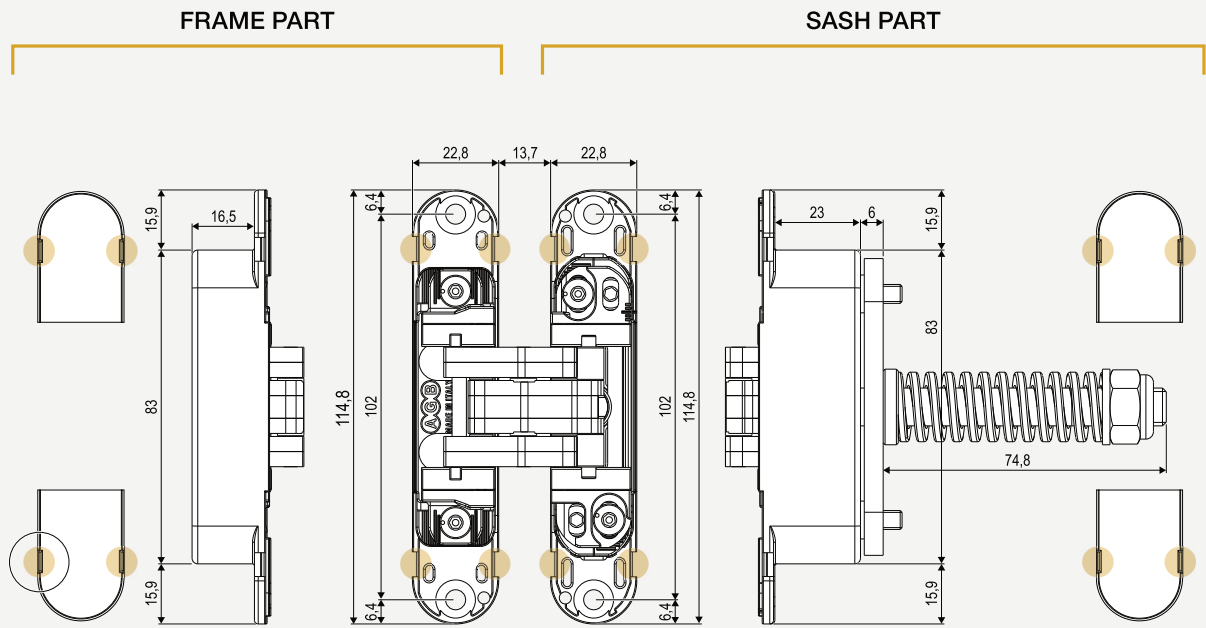


Wide adjustments.

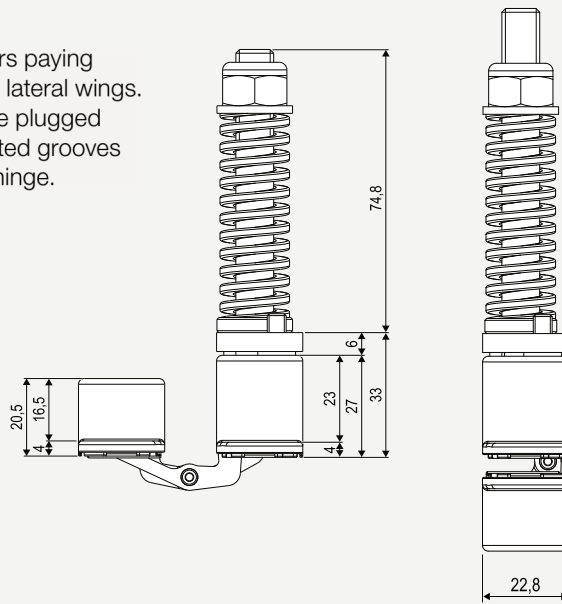


Flush covers.

Hinge dimensions

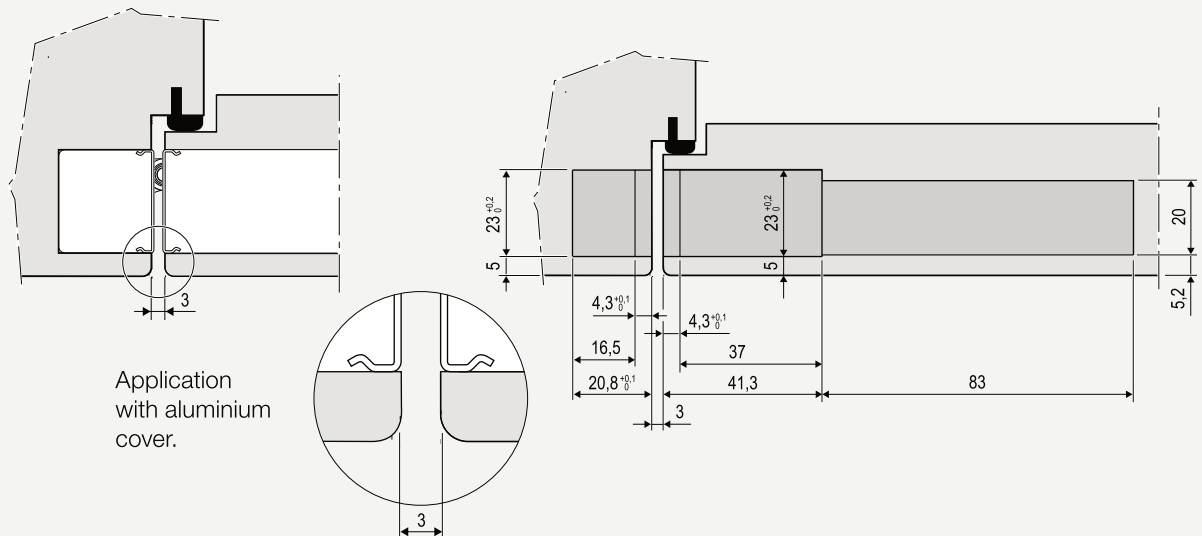


Apply the covers paying attention to the lateral wings. They have to be plugged into the dedicated grooves present in the hinge.



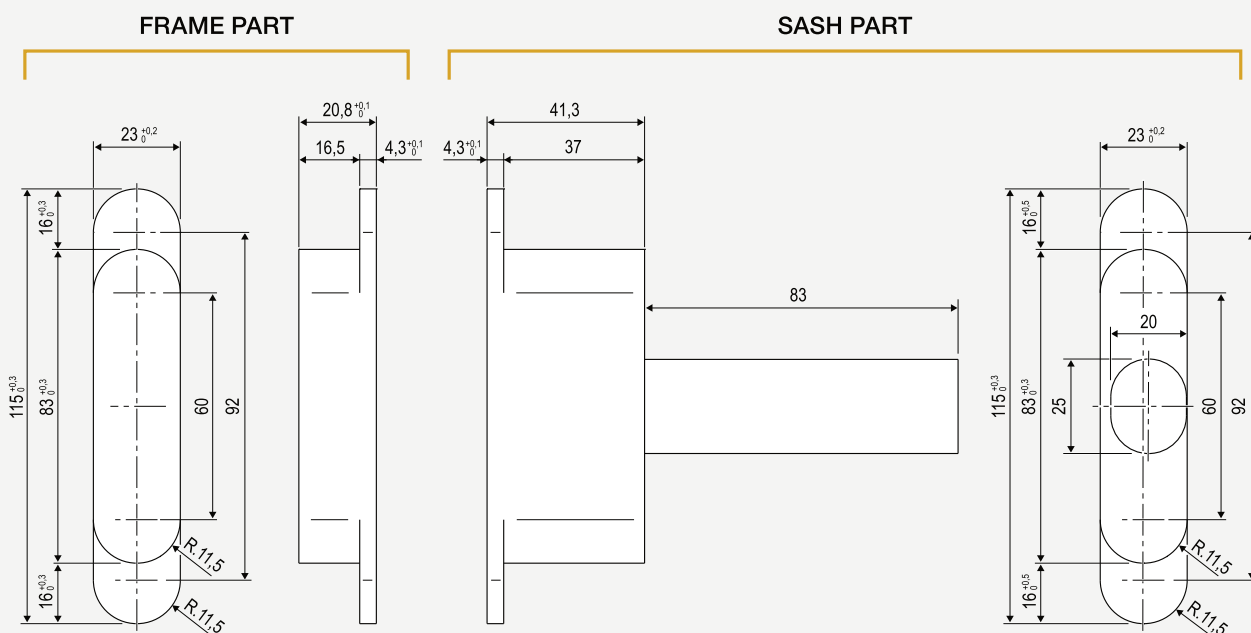
Hinge in closing position.

Hinge application

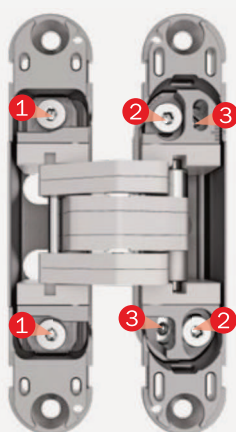


Application with aluminium cover.

## Drilling diagram



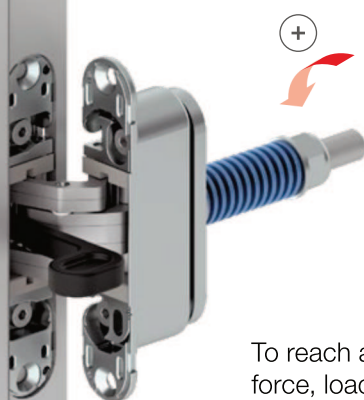
## Hinge adjustments



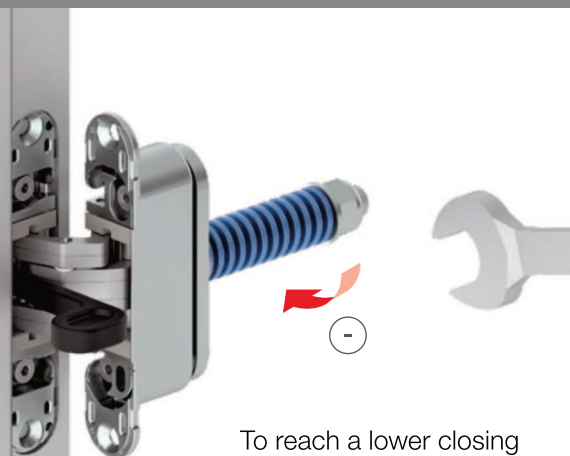
Please adjust the hinges with a 3 mm Allen key, as indicated here below:

- **±1 mm pressure adjustment:**  
loosen the screws ① and move the hinge body.  
After this operation fasten the screws.
- **±2 mm vertical adjustment:**  
to reach the desired adjustment, loosen the screws ② and, against the spring thrust, move vertically the hinge body by using a screwdriver and the wedge, art. E30200.89.01.  
After this operation, fasten the screws.
- **±1,5 mm horizontal adjustment:**  
move the screws ③.

## Adjustments of the closing system

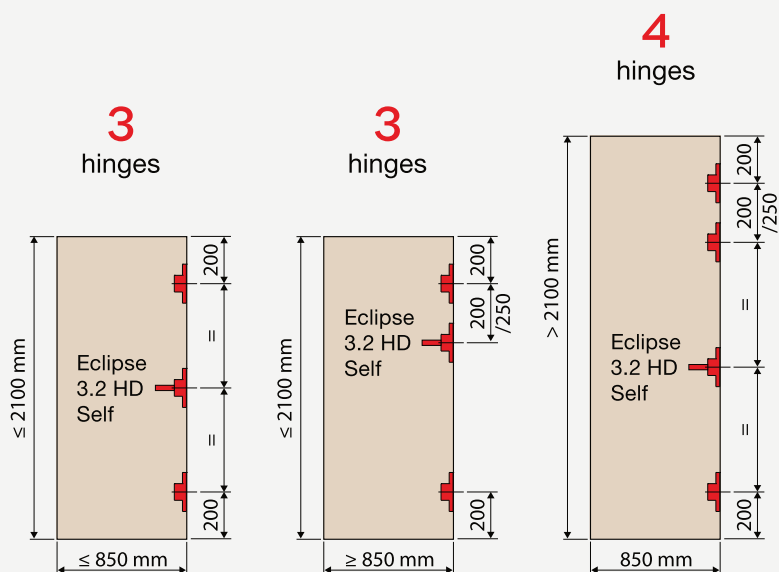






To reach a higher closing force, load the spring turning the nut in a counter-clockwise using a 17 mm wrench.



To reach a lower closing force, turn the nut in a clockwise to loosen the spring.

### Mounting ways for Eclipse 3.2 HD Self hinge



	TECHNICAL INFORMATION		
	 Spring	 Suitable for sashes	 Compatibility
3.2 HD Self	Blue	Up to 40 kg	Eclipse 3.0 Eclipse 3.2 Eclipse 3.2 HD
	Red	Up to 60 kg	Eclipse 3.0 Eclipse 3.2 Eclipse 3.2 HD

### Capacity

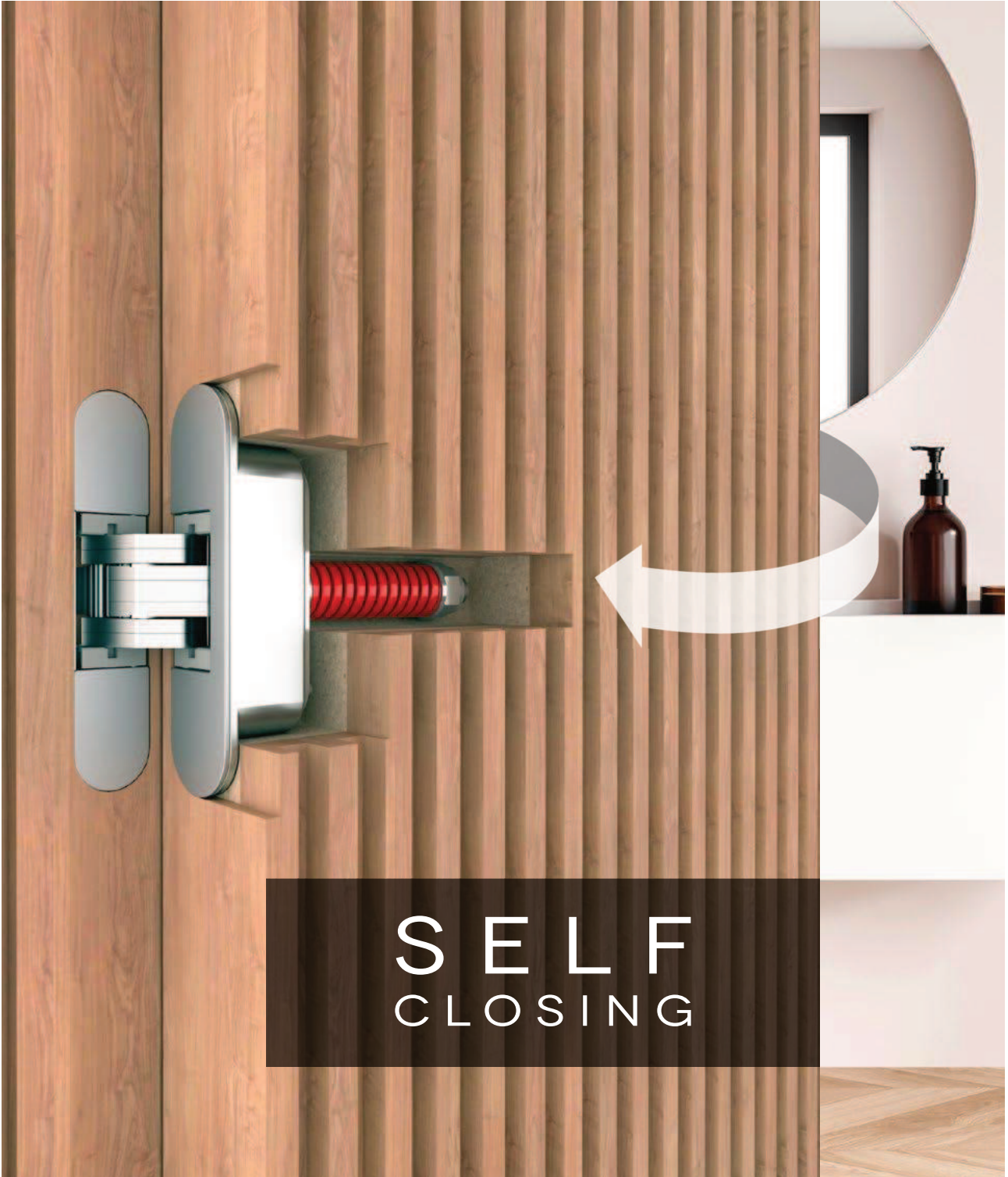
The capacity depends on the type of hinge with which it is combined.  
Refer to the "Hinge application fields" of the Eclipse 3.2 and Eclipse 3.2 HD series.

**Note.** The technical sheets are available at [www.agb.it](http://www.agb.it).

# Eclipse 3.4 HD Self

## Self closing hinge for internal flush aluminium and wooden doors

The new concealed hinge with integrated closing system with spring Eclipse 3.4 HD Self is reversible with frame part reduced to 21 mm. Same millings of the Eclipse 3.4 range plus the milling for the spring body.



**SELF  
CLOSING**



Self-closing system.



Steel levers, ideal for heavy doors.



The same millings of the Eclipse 3.4 hinges adding the spring milling.



Wide adjustments.



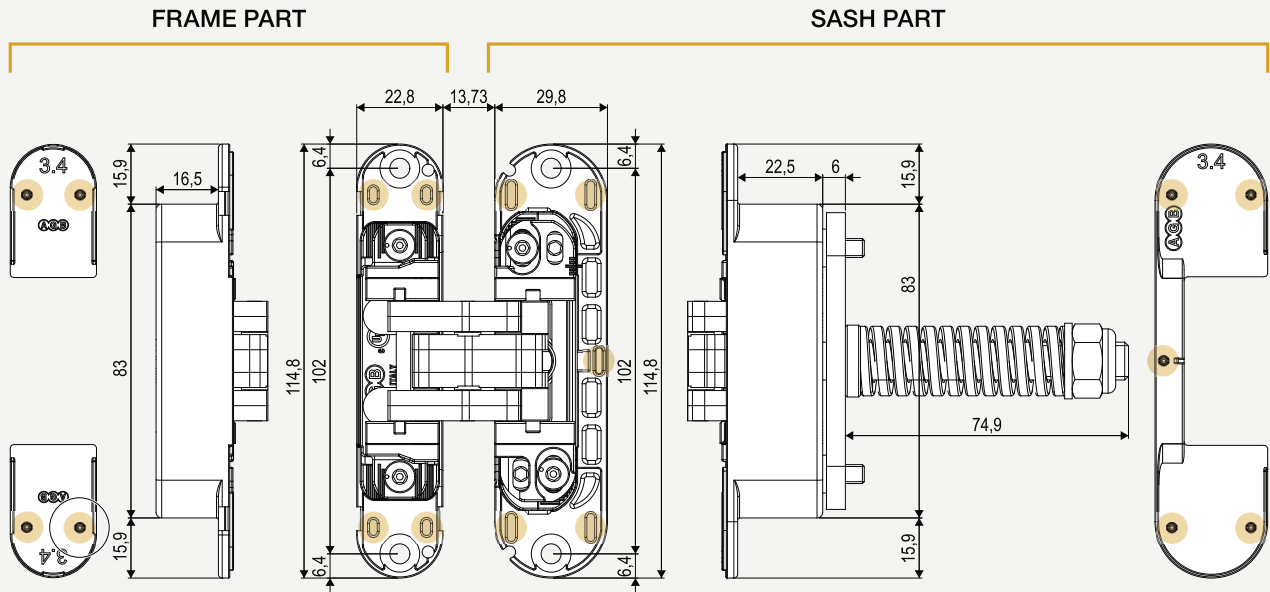
For reversible doors 38-40 mm.



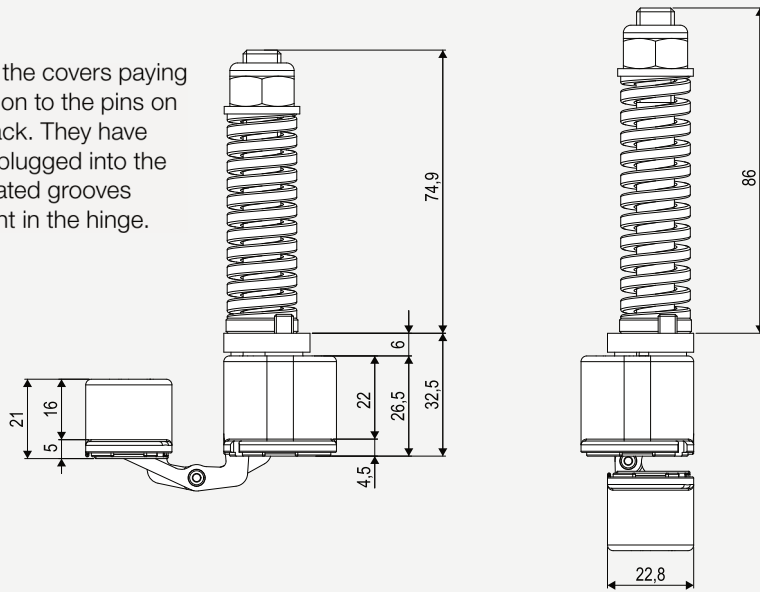
Flush covers.



Hinge dimensions

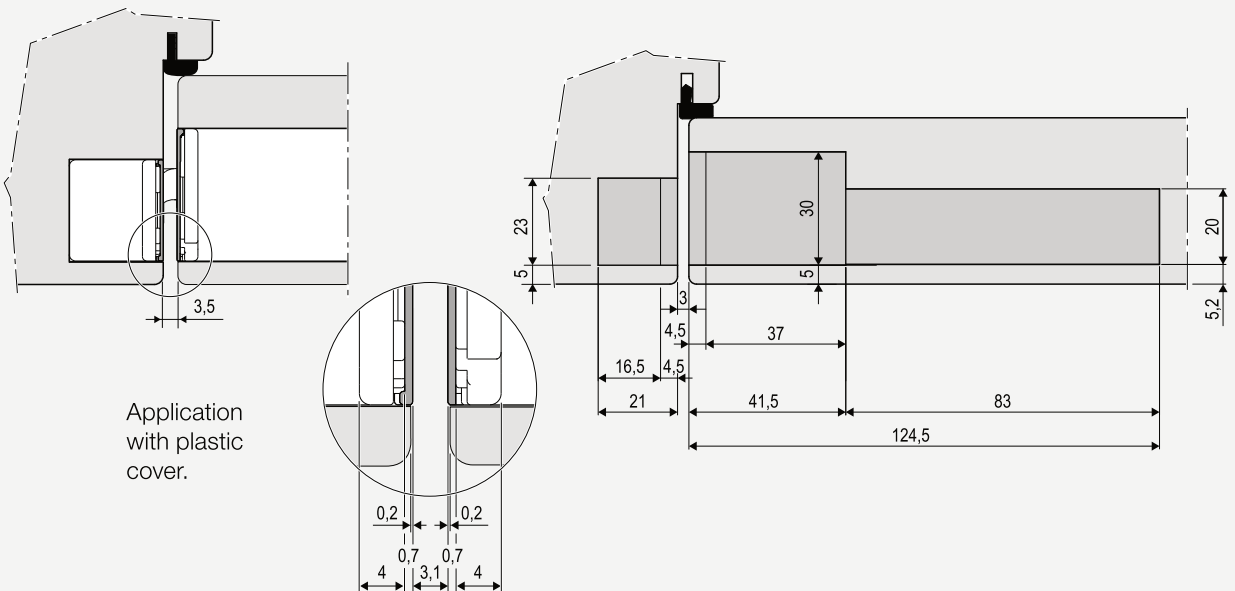


Apply the covers paying attention to the pins on the back. They have to be plugged into the dedicated grooves present in the hinge.



Hinge in closing position.

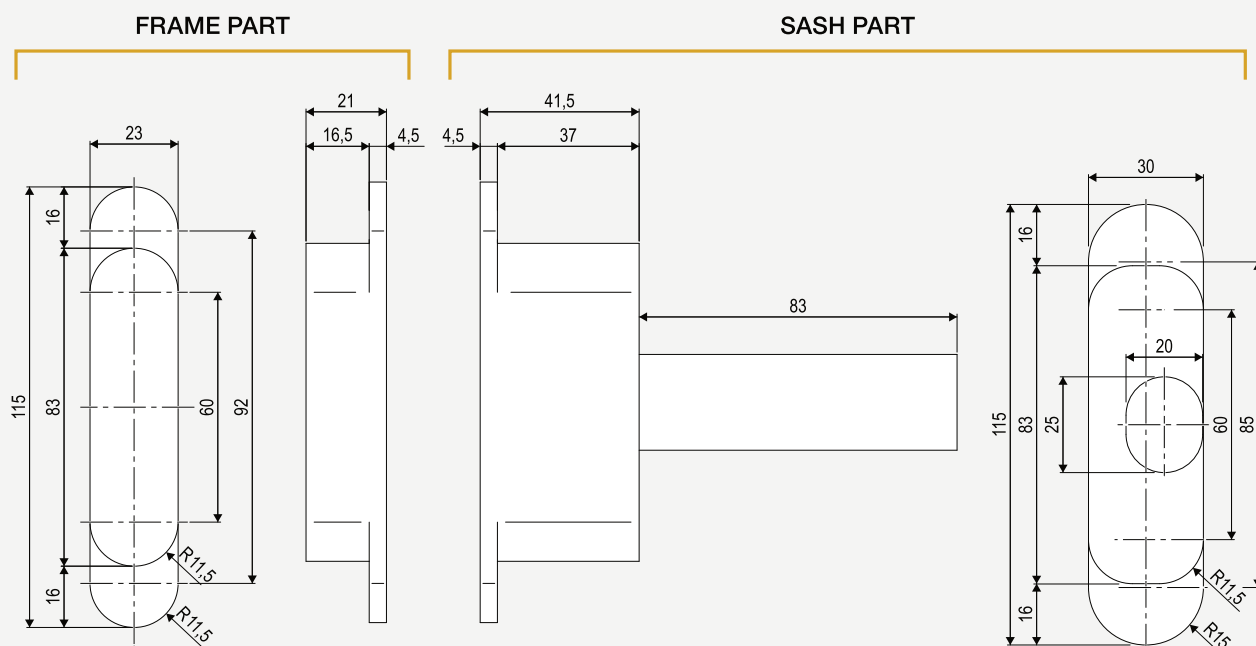
Hinge application



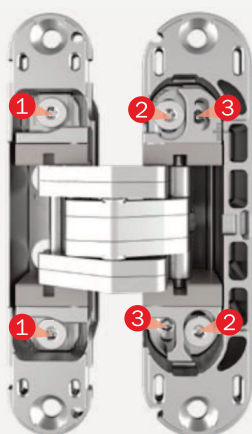
Application with plastic cover.



## Drilling diagram



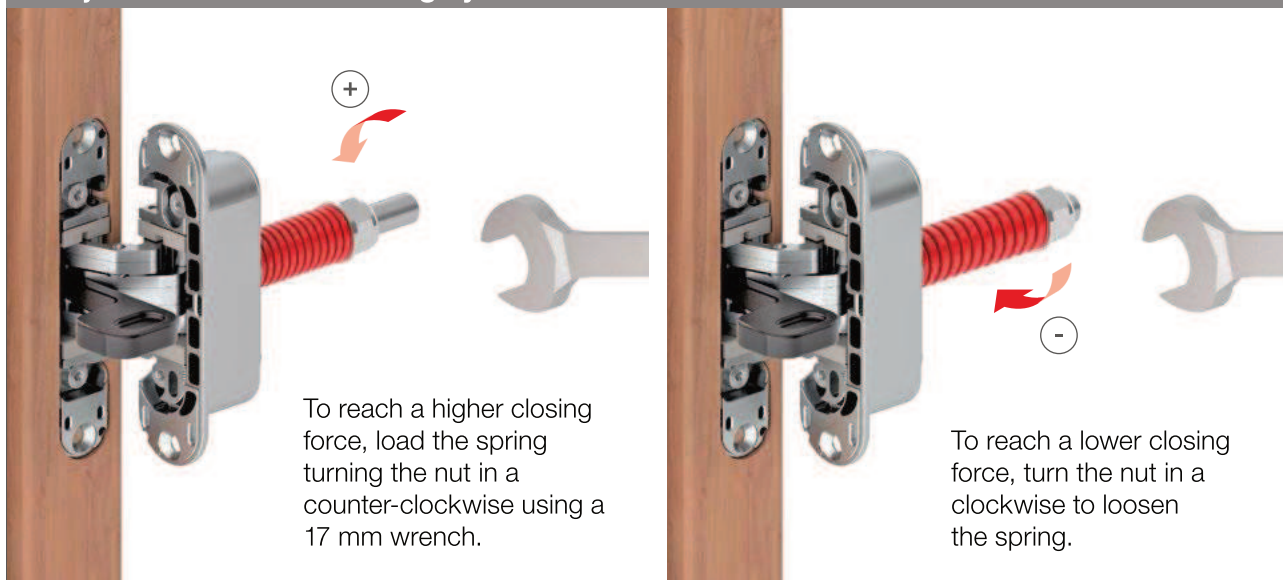
## Hinge adjustments



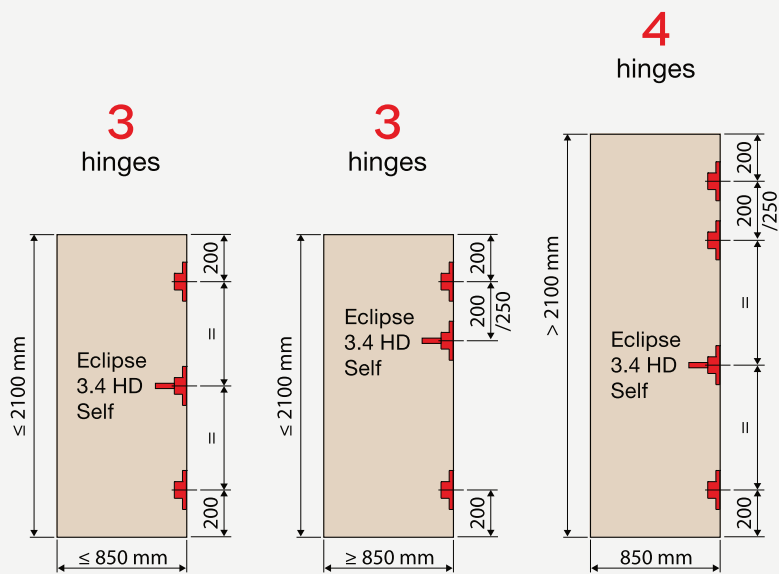
Please adjust the hinges with a 3 mm Allen key, as indicated here below:





- **±1 mm pressure adjustment:**  
loosen the screws ① and move the hinge body.  
After this operation fasten the screws.
- **±2 mm vertical adjustment:**  
to reach the desired adjustment, loosen the screws ② and, against the spring thrust, move vertically the hinge body by using a screwdriver and the wedge, art. E30200.89.01.  
After this operation, fasten the screws.
- **±1,5 mm horizontal adjustment:**  
move the screws ③.

## Adjustments of the closing system



### Mounting ways for Eclipse 3.4 HD Self hinge



	TECHNICAL INFORMATION		
	 Spring	 Suitable for sashes	 Compatibility
3.4 HD Self	Red	Up to 60 kg	Eclipse 3.4 Eclipse 3.4 HD

### Capacity

The capacity depends on the type of hinge with which it is combined. Refer to the "Hinge application fields" of the Eclipse 3.4 and Eclipse 3.4 HD series.

**Note.** The technical sheets are available at [www.agb.it](http://www.agb.it).

# Eclipse 4.1 Self

## For flush doors in wood paneling

Concealed hinge with integrated self-closing system for internal flush doors, suitable for applications with drywall and surface mounted coverplate, thanks to the 23 mm high opening. High capacity up to 50 kg with 2 hinges.

The sash part hinge stays at 5 mm from the external surface, in order to avoid deformations during millings.

From the frame side, thanks to the reduced milling of the hinge body, Eclipse 4.1 ensures a 13 mm overlap and the possibility to mill even when the gasket is already installed.



Self-closing system.



Ideal for applications with drywall and overlapping frame architraves.



Up to 50 kg of loading capacity with two hinges.



Unchanged handle height even turning the sash on vertical axis.



For wood and aluminium doors.

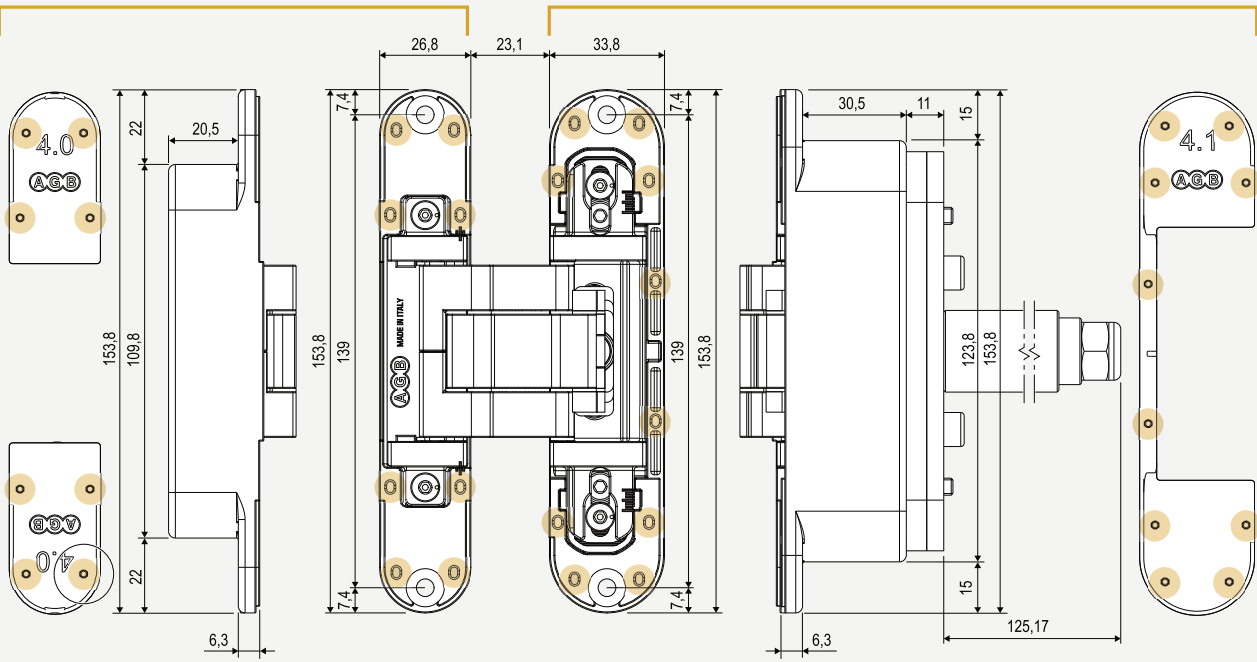


Flush covers.

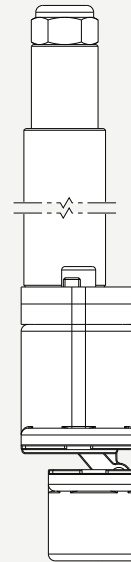
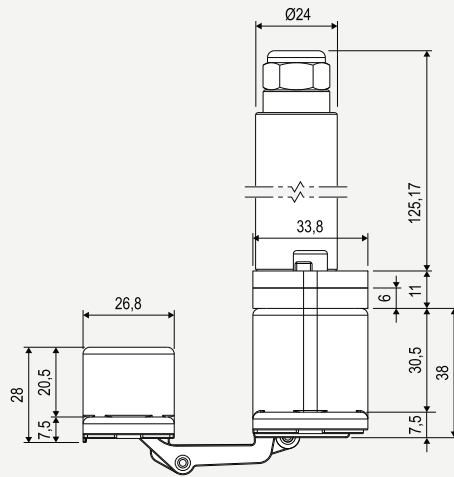
## Hinge dimensions

### FRAME PART

### SASH PART

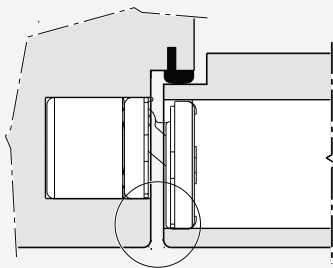


Apply the covers paying attention to the pins on the back. They have to be plugged into the dedicated grooves present in the hinge.

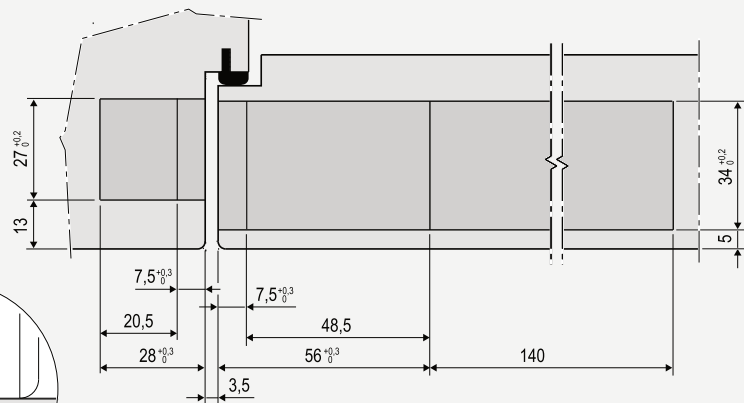
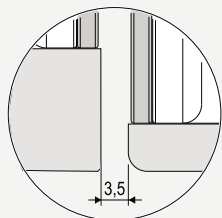


Hinge in closing position.

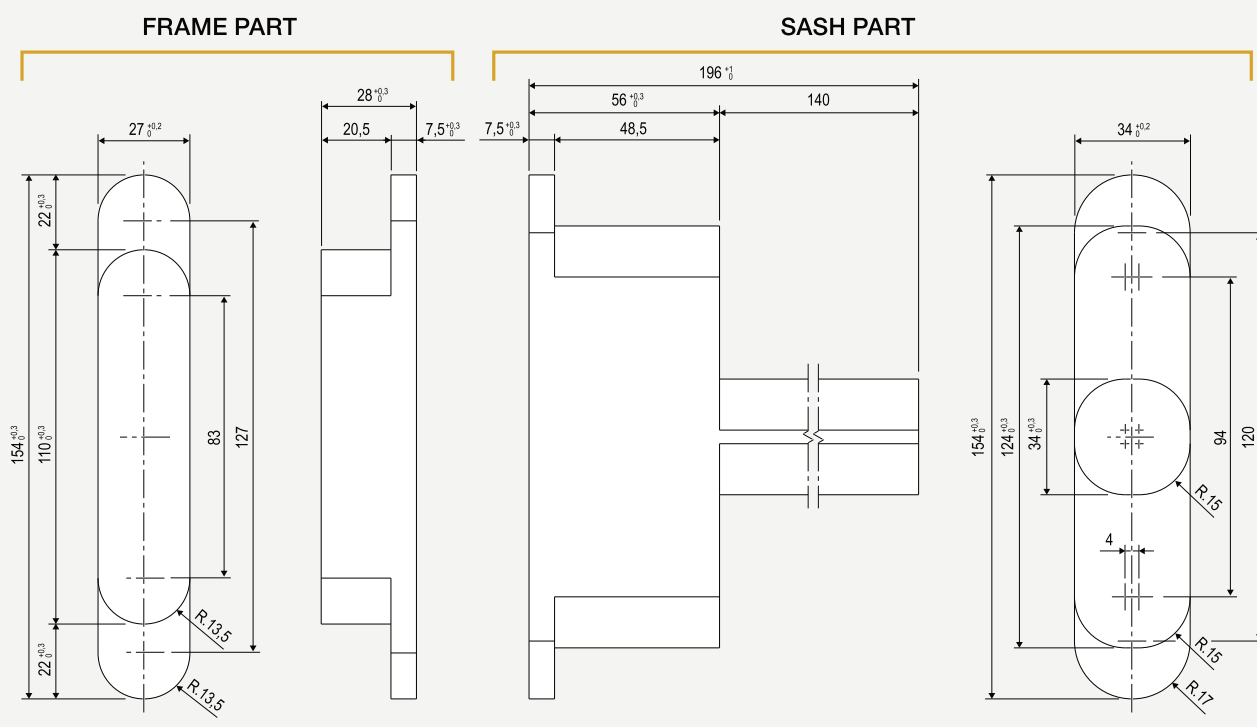
## Hinge application



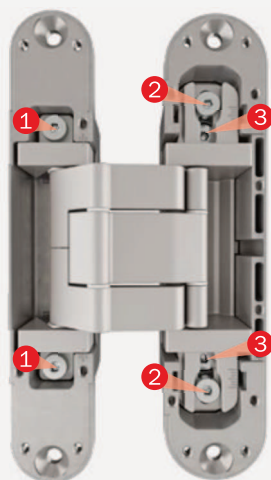
Application with plastic cover.



## Drilling diagram



## Hinge adjustments



Please adjust the hinges one by one with a 3 mm Allen key; reach the desired adjustment on two screws alternatively and with little movements.

• **±1 mm pressure adjustment:**

loosen the screws ① and move the hinge body. After this operation fasten the screws.

• **±3 mm vertical adjustment:**

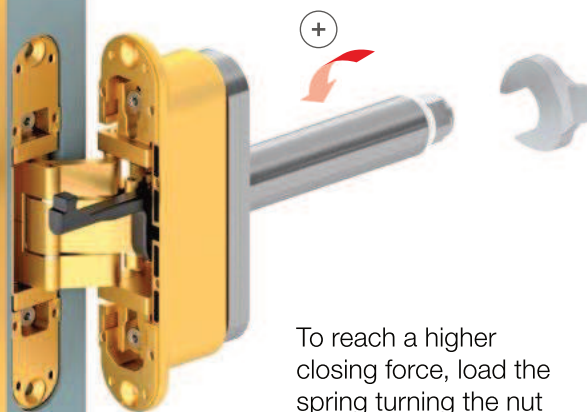
loosen the screws ② using a screwdriver or a wedge which is suitable for Eclipse hinges, art. E30200.89.01. After this operation fasten the screws.

• **+3/-2 mm horizontal adjustment:**

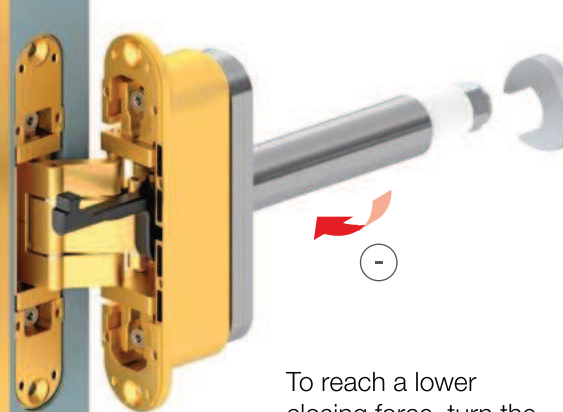
move the screws ③.

*Attention: the horizontal adjustment affects the spring preload. Preload after all other adjustments.*

## Adjustments of the closing system

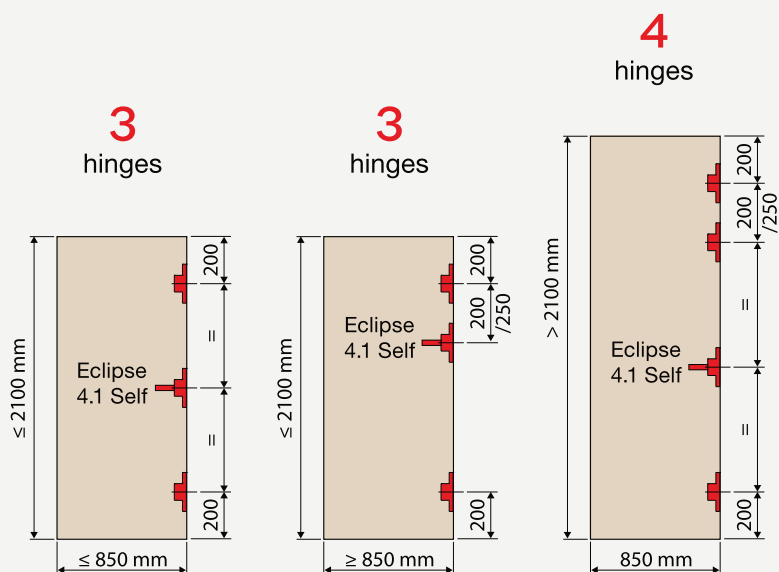





To reach a higher closing force, load the spring turning the nut in a counter-clockwise using a 17 mm wrench.



To reach a lower closing force, turn the nut in a clockwise to loosen the spring.

### Mounting ways for Eclipse 4.1 Self hinge



		TECHNICAL INFORMATION	
	 <p>Suitable for sashes</p>	 <p>Compatibility</p>	
	4.1 Self	Up to 50 kg	Eclipse 4.1

### Capacity

The capacity depends on the type of hinge with which it is combined.

**Note.** The technical sheets are available at [www.agb.it](http://www.agb.it).



# Eclipse Self

## Controlled self-closing hinge for hotel doors

Hinge with adjustable integrated door closer and patented device that controls the closing rotation of the door.

The device is adjustable and ensures the excellent movement of sash for every kind of door. The system is concealed in order to enhance the design of hotel door.



Self-closing system.



Steel levers, ideal for heavy doors.



Up to 100 kg of loading capacity with two hinges.



Wide adjustments for the closing system.

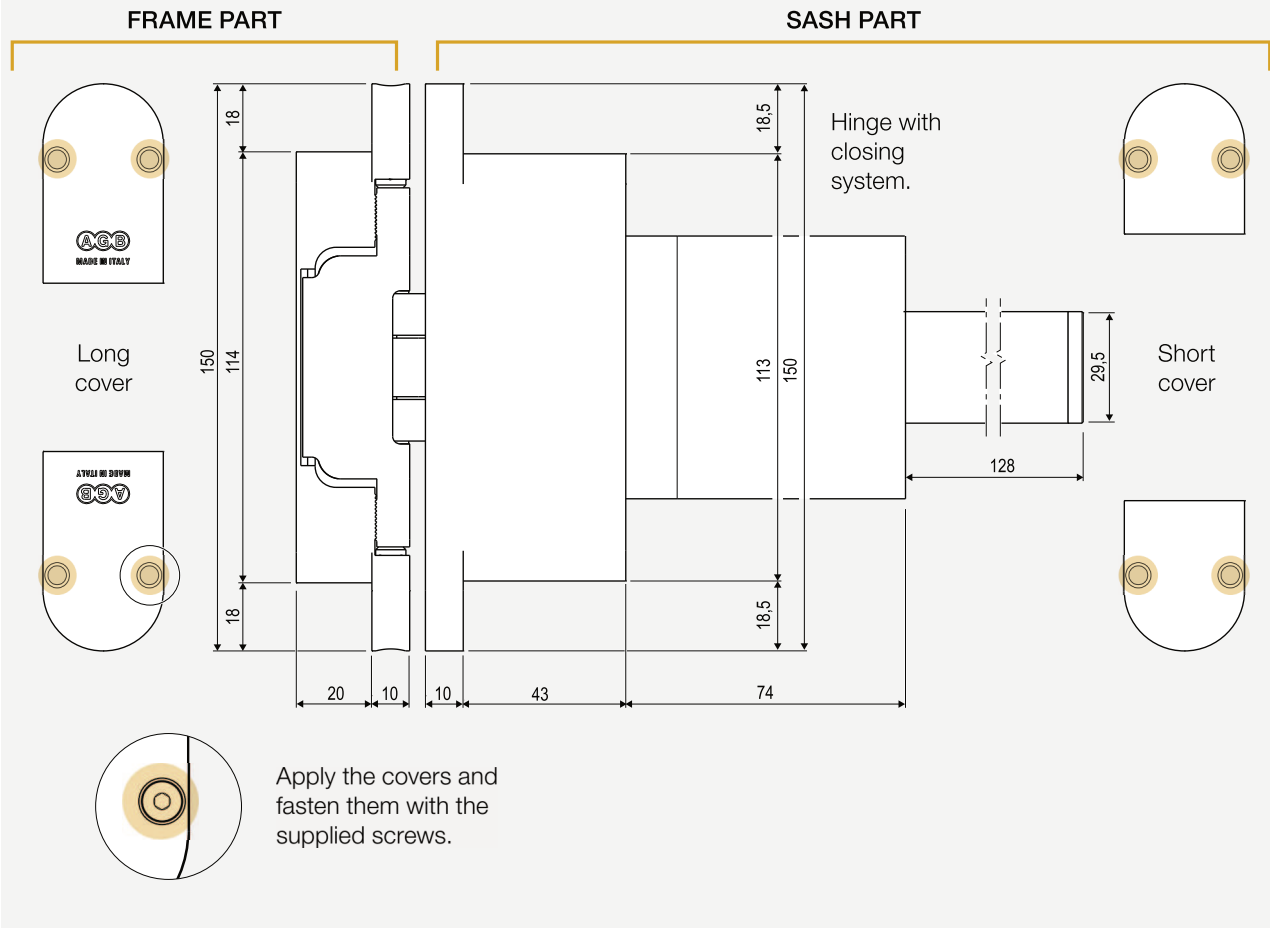


Hinges reversible.

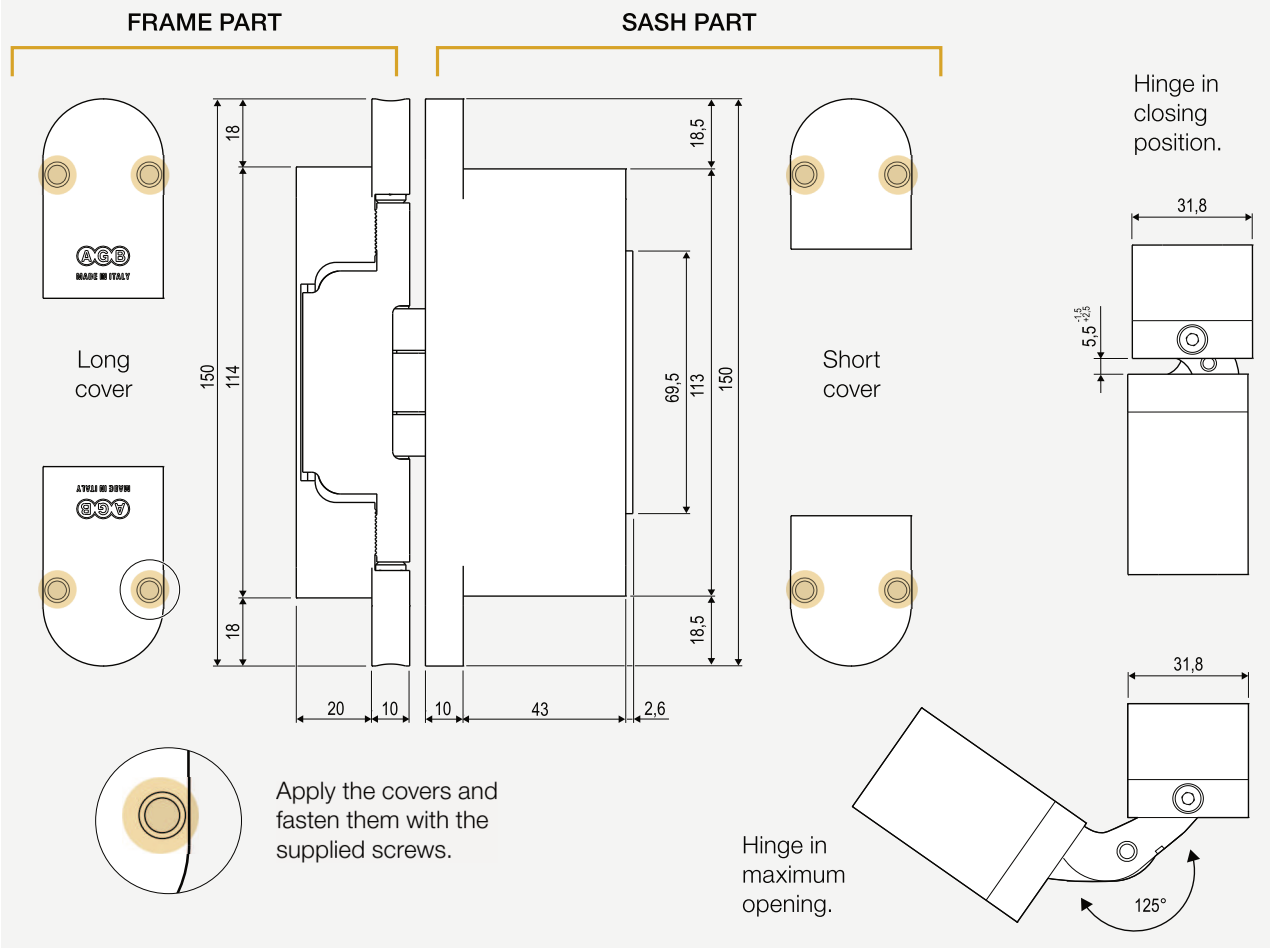


Flush steel covers.

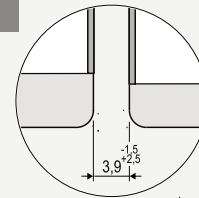
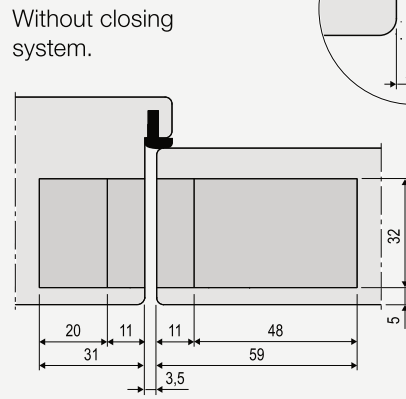
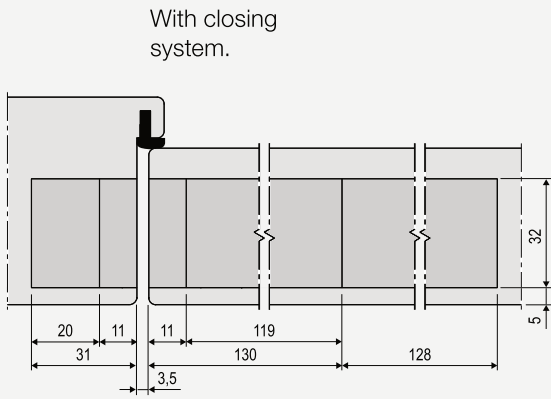
Hinge dimensions with closing system



Hinge dimensions without closing system

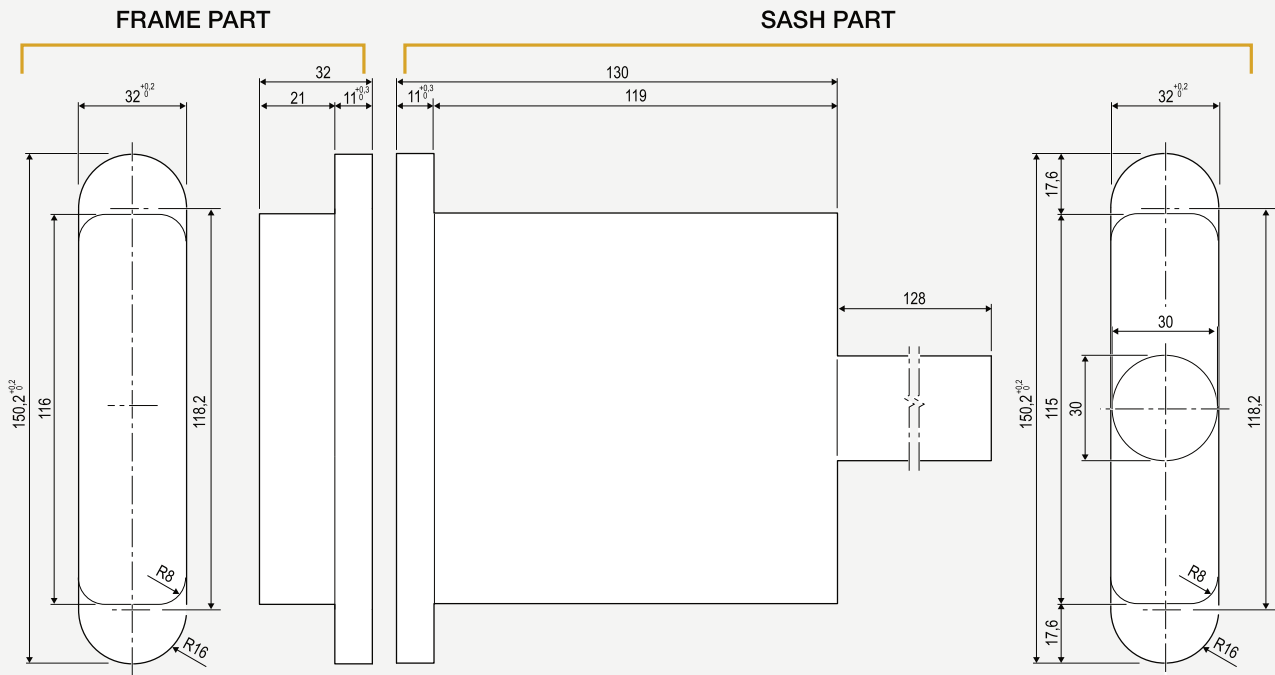


Hinge application

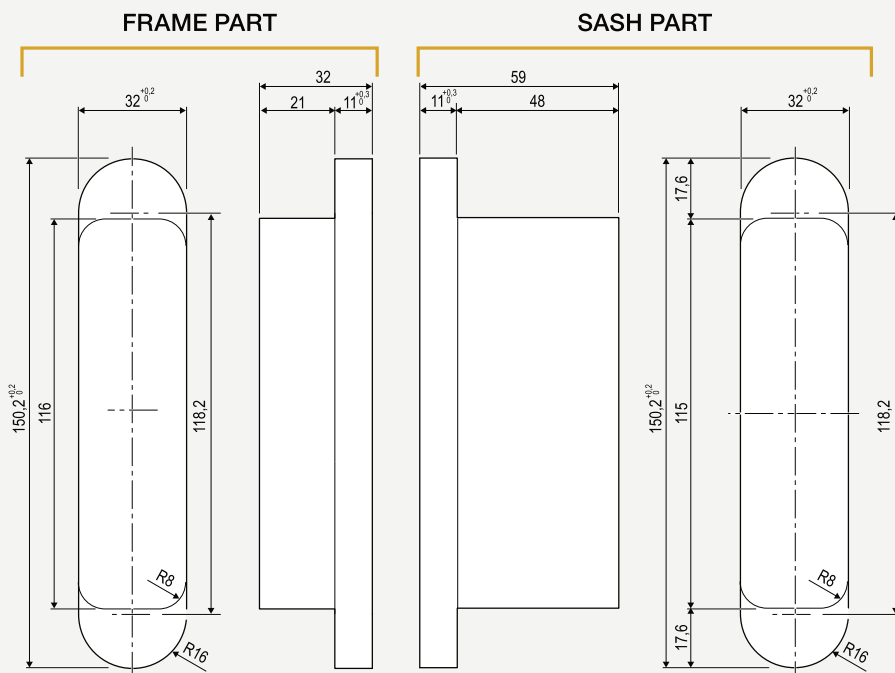


Hinge with applied covers.

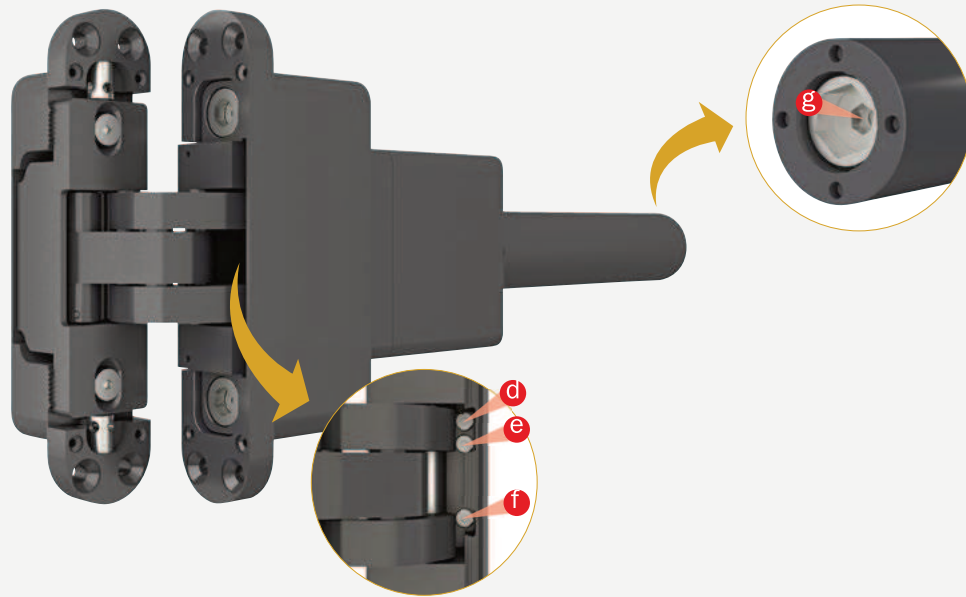
Hinge drilling diagram with closing system



Hinge drilling diagram without closing system



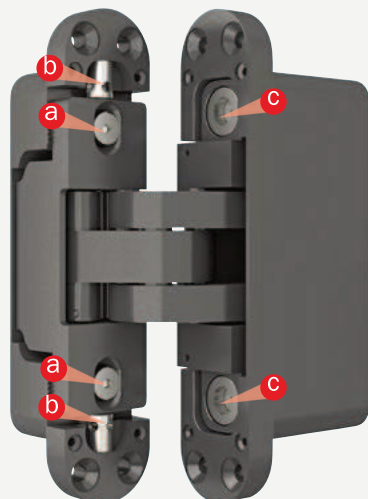
## Hinge adjustments with closing system



Please adjust the hinges one by one with a 2,5 mm and 12 mm Allen key. The door closing can be adjusted as follows:

- Power for final step**  
 Power of the final step in the last 12° with a 2,5 mm Allen key **d**. In counter-clockwise, the speed increases.
- Max. corner opening**  
 Maximum opening corner with a 2,5 mm Allen key **e**. In counter-clockwise, the maximum of opening corner increases.
- Speed of closing**  
 With a 2,5 mm Allen key **f**.  
 In counter-clockwise, the speed increases.
- Closing power**  
 Power of closing during rotation, with a 12 mm Allen key **S**. This adjustment can be done only before installing the hinge; from the factory setting, please never turn in counter-clockwise.

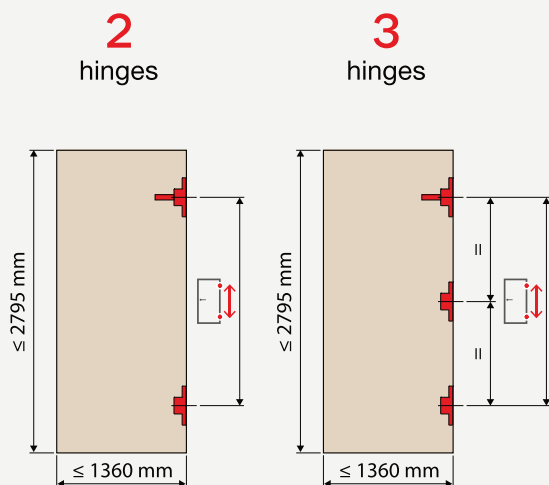
## Hinge adjustments without closing system



Please adjust the hinges one by one with a 3 mm and 8 mm Allen key.




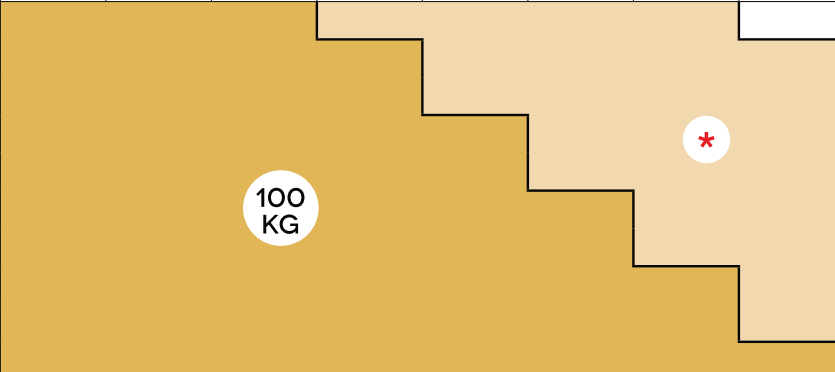
- ±1 mm pressure adjustment:**  
 with a 3 mm Allen key **a**.
- ±2 mm vertical adjustment:**  
 with a 3 mm Allen key **b**.
- -1,5 / +2,5 mm horizontal adjustment:**  
 with a 8 mm Allen key **c**.

Hinges application fields



**Note.** The maximum capacity with 2 hinges is 100 Kg, refer to the “Application fields” shown on this page.  
 In any case, it is possible to use a third hinge in a central position to reduce deformations. The third hinge will not affect the overall capacity.

Application fields

									
		485	610	735	860	985	1110	1235	1360
1546 / 1670	1060								
1671 / 1795	1185								
1796 / 1920	1310								
1921 / 2045	1435								
2046 / 2170	1560								
2171 / 2295	1685								
2296 / 2420	1810								
2421 / 2545	1935								
2546 / 2670	2060								
2671 / 2795	2185								

\* Contact AGB Sales Force.

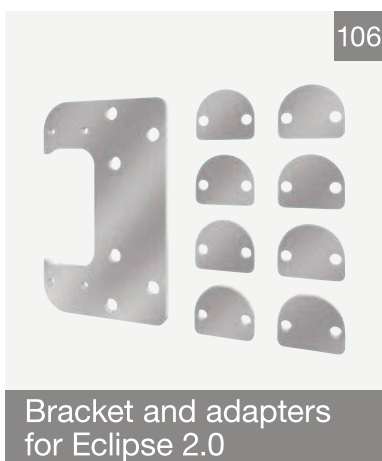
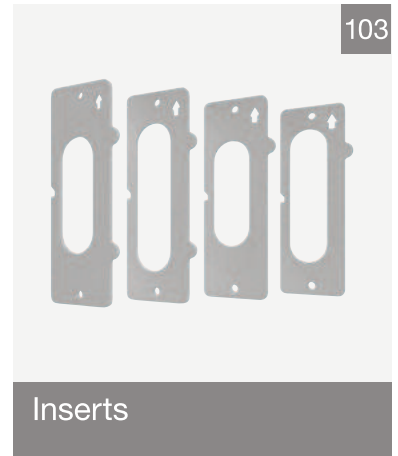
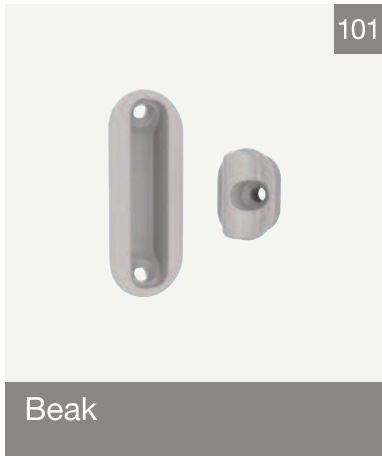
The technical sheets are available at [www.agb.it](http://www.agb.it).





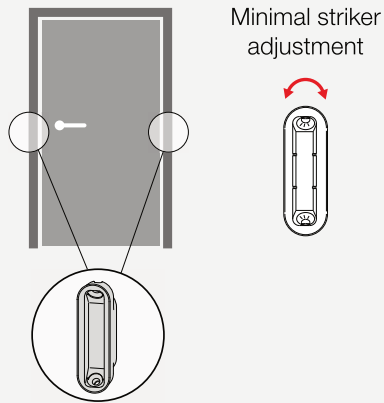
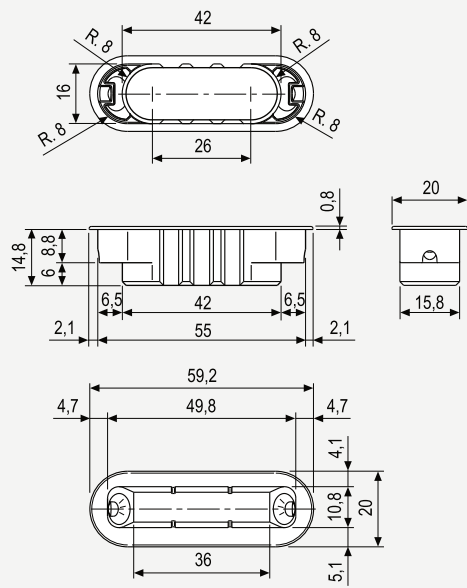
# Accessories

# Accessories

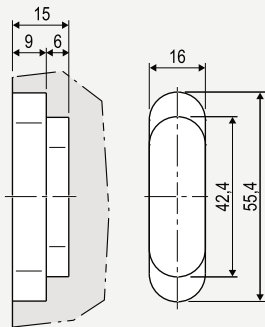


# Beak and striker

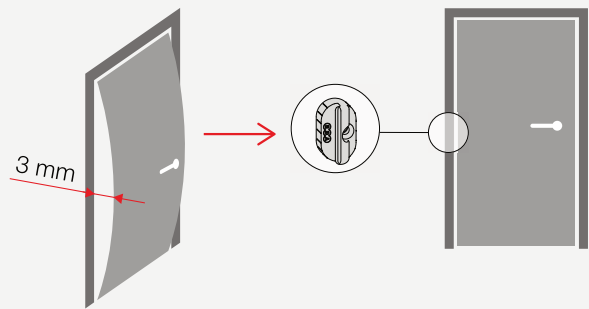
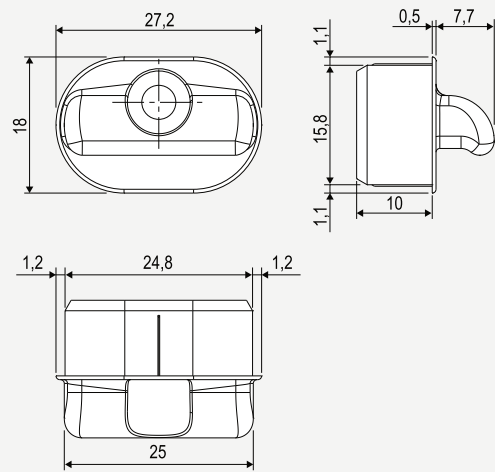
## FRAME PART



The frame milling of lock and hinge sides is the same.

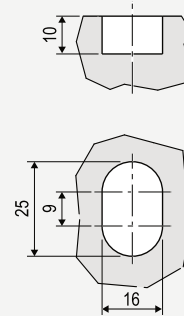


## SASH PART



The beak avoids sash deformations caused by humidity or high heights, regaining up to 3 mm.

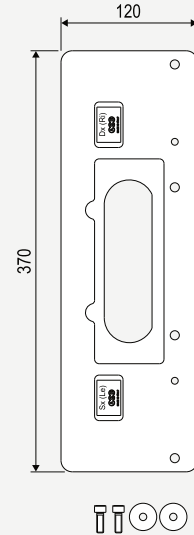
The beak is compatible with:  
Minimal Plus, Alutop and Easy-Fix.



### TECHNICAL INFORMATION

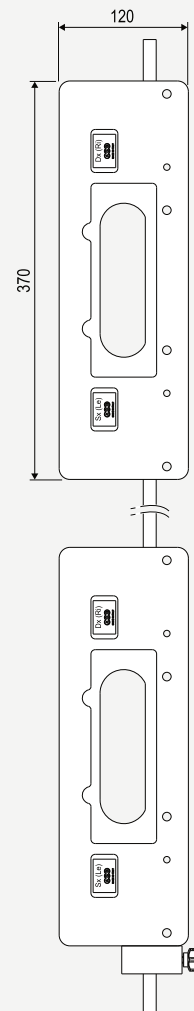
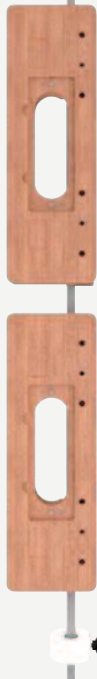
TECHNICAL INFORMATION	
Use	Compatibility with Eclipse models
To be coupled with hinges for flush doors.	Complete range

Single jig without inserts for flush hinges

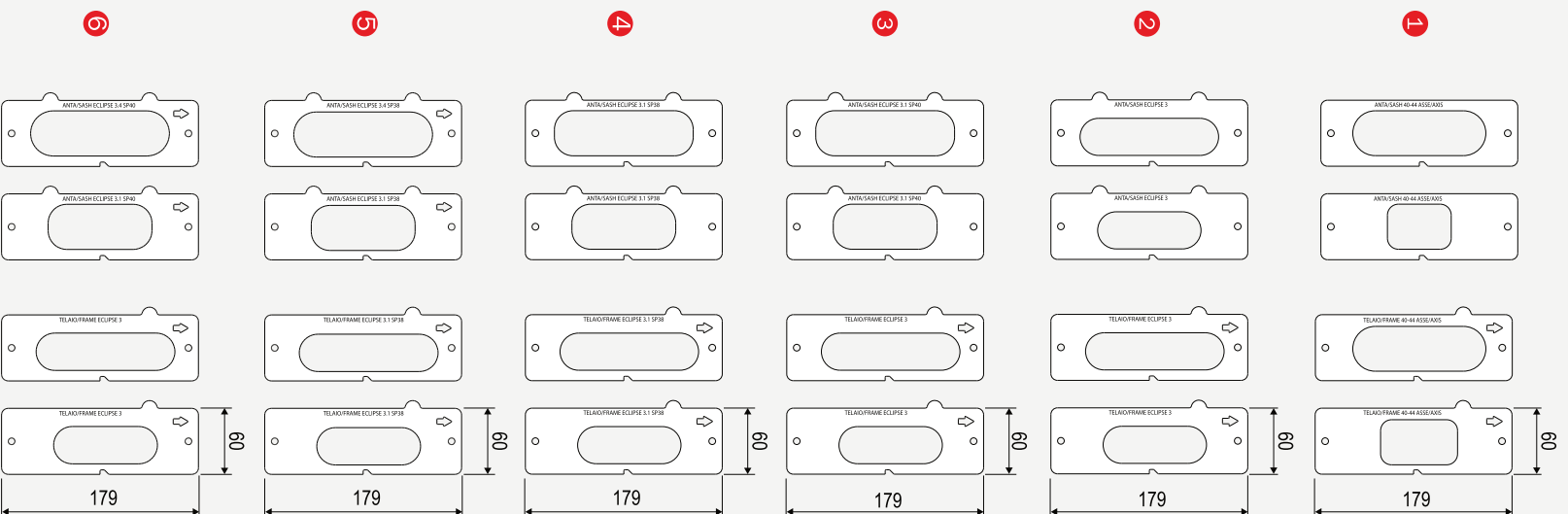


TECHNICAL INFORMATION			
Fastening	Compatibility with Eclipse models		
Check the assembly instructions available on the website <a href="http://www.agb.it">www.agb.it</a>	3.2	3.2 HD	3.2 HD Self
	3.4	3.4 HD	3.4 HD Self
	3.0	3.3	
	3.1	2.0	

Double jig without inserts for flush hinges



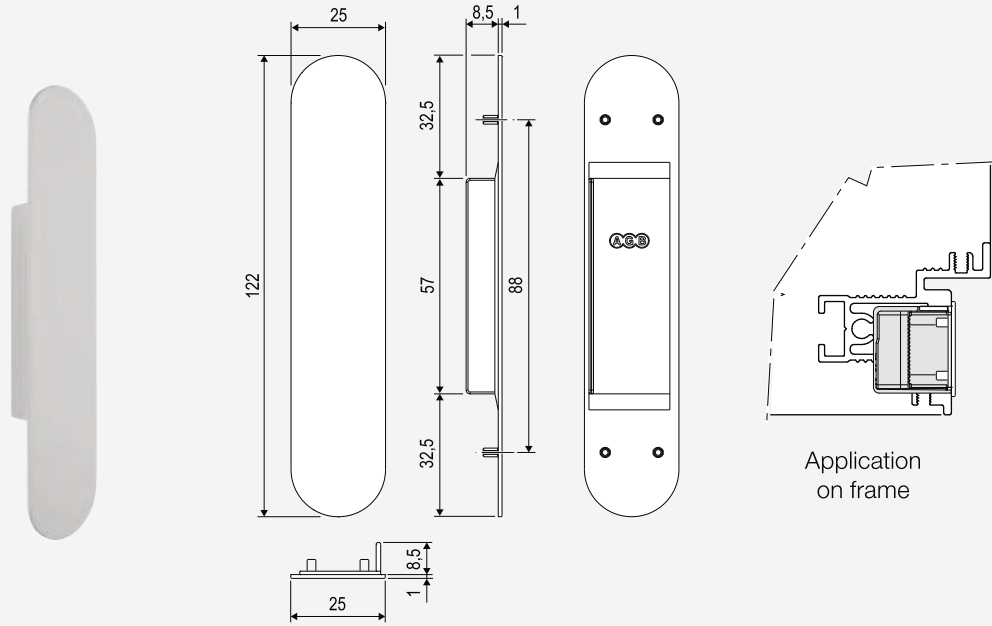
TECHNICAL INFORMATION			
Fastening	Compatibility with Eclipse models		
Check the assembly instructions available on the website <a href="http://www.agb.it">www.agb.it</a>	3.2	3.2 HD	3.2 HD Self
	3.4	3.4 HD	3.4 HD Self
	3.0	3.3	
	3.1	2.0	



**TECHNICAL INFORMATION**

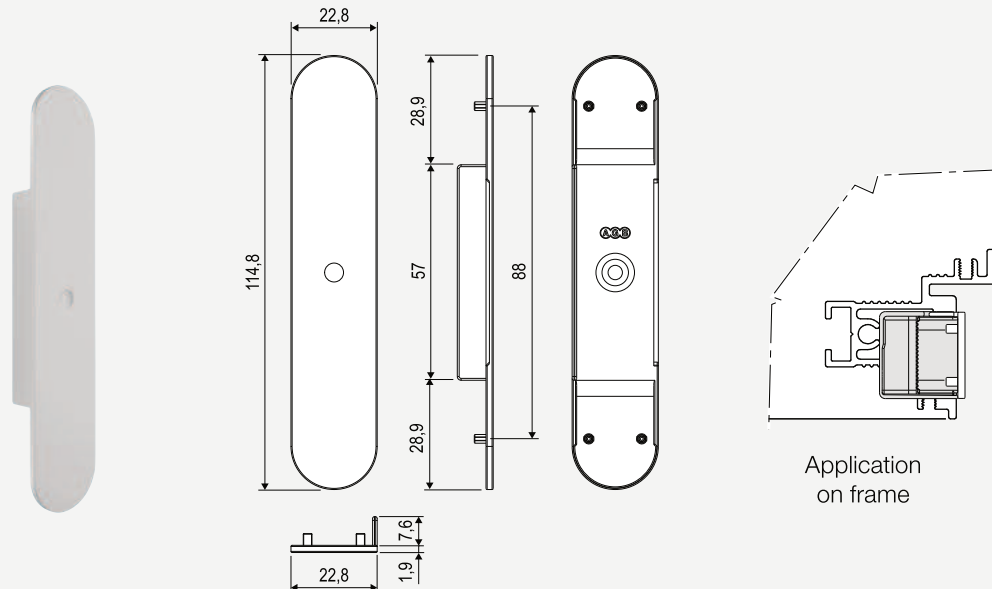
Application	Fastening	Compatibility with Eclipse models
Installed to the jig.	Check the assembly instructions available on the website <a href="http://www.agb.it">www.agb.it</a>	<b>1</b> 2.0
		<b>2</b> 3.0, 3.3, 3.2, 3.2 HD, 3.2 HD Self
		<b>3</b> 3.1 (40 mm thickness)
		<b>4</b> 3.1 (38 mm thickness)
		<b>5</b> 3.4, 3.4 HD, 3.4 HD Self (40 mm thickness)
		<b>6</b> 3.4, 3.4 HD, 3.4 HD Self (38 mm thickness)

Cover with cover-edges for frame



TECHNICAL INFORMATION			
Application	Fastening	Compatibility with Eclipse models	
For flush doors, it avoids dirt during wall installations of frame.	To be coupled to the frame side hinge body. Remove the cover starting from one side.	3.0	3.1

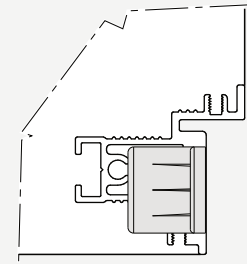
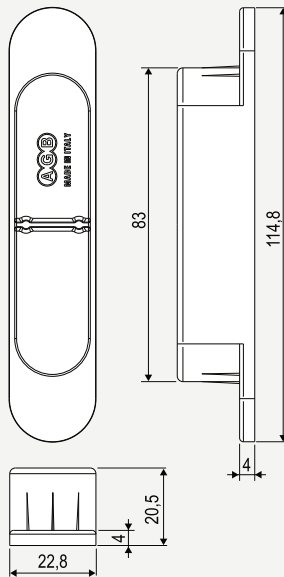
Flush cover for frame



TECHNICAL INFORMATION				
Application	Fastening	Compatibility with Eclipse models		
For flush doors, it avoids dirt during wall installations of frame.	Coupled to the frame side hinge body for the cap removal, please operate on the central hole.	3.2	3.2 HD	3.2 HD Self
		3.4	3.4 HD	3.4 HD Self
		3.3		



## Frame cap

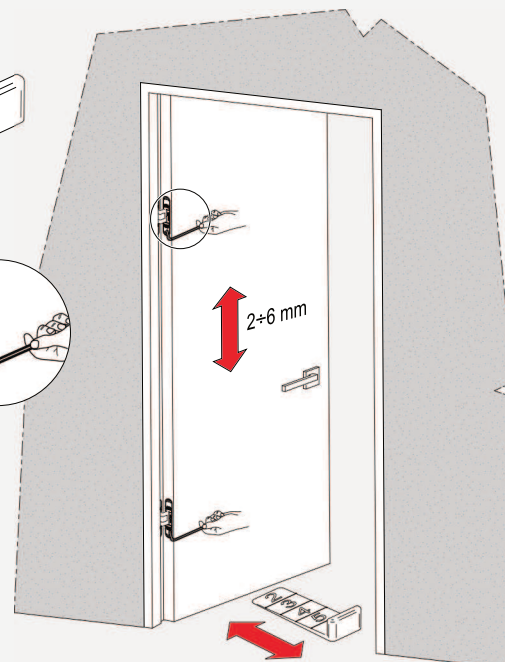
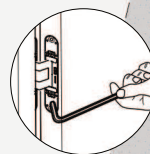
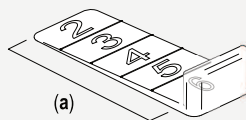
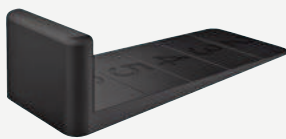


Application on frame

### TECHNICAL INFORMATION

Application	Fastening	Compatibility with Eclipse models		
For flush doors, in order to avoid dirt inside the hinge milling, during the frame application.	With pressure. For removal, please use a clamp operating on the central part.	3.2	3.2 HD	3.2 HD Self
		3.4	3.4 HD	3.4 HD Self
		3.0	3.1	

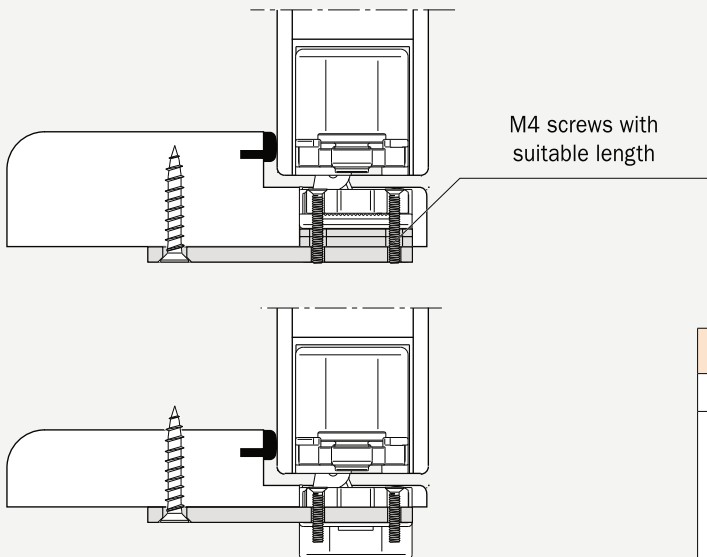
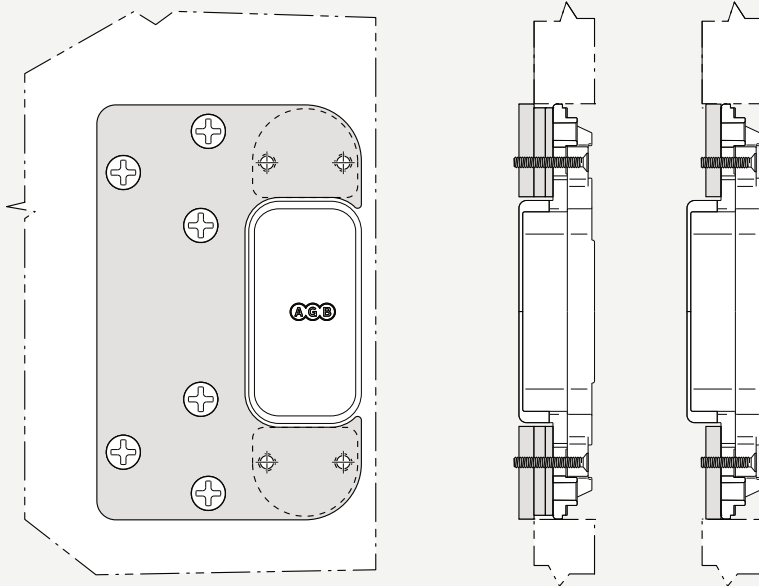
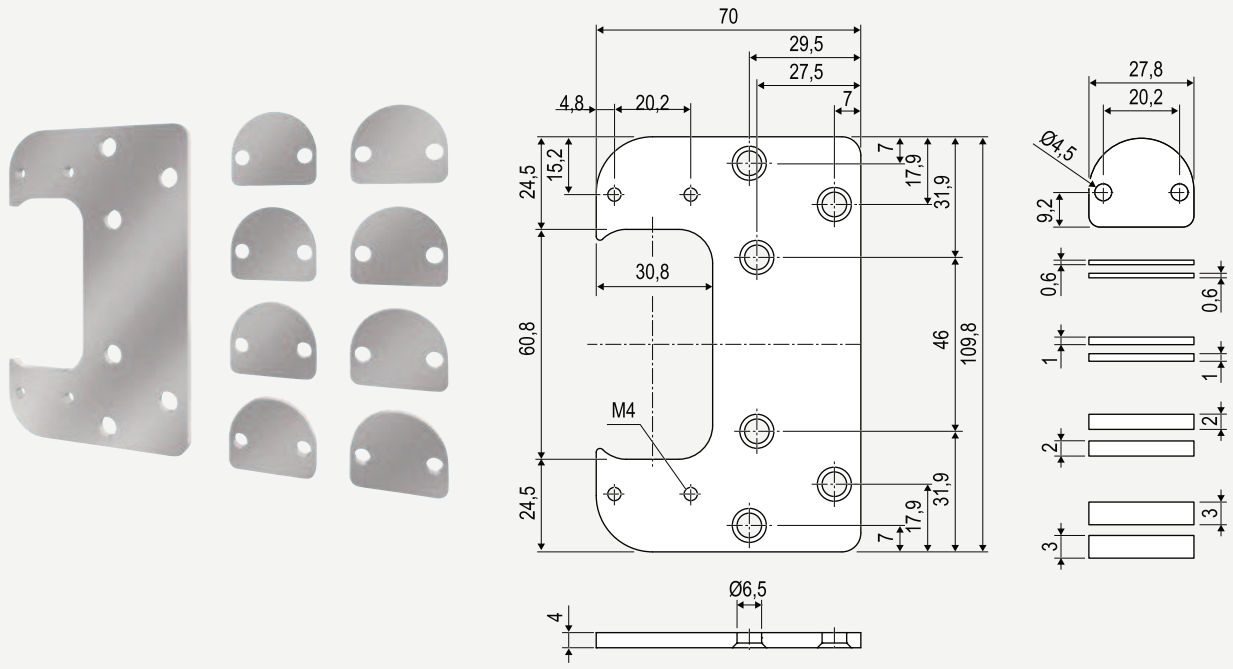
## Height adjustment wedge



### TECHNICAL INFORMATION

Use	Compatibility with Eclipse models
During the vertical adjustment of Eclipse hinges, insert the wedge under the sash to lift it and reach the desired gap; the wedge supports the sash in adjustment, from 2 to 6 mm (a). <i>Note. For further information about adjustment process and ranges, please consult the catalogue pages of the specific hinge on the website <a href="http://www.agb.it">www.agb.it</a></i>	Complete range

## Bracket and adapters for Eclipse 2.0



TECHNICAL INFORMATION
Compatibility with Eclipse models
2.0



This products was made entirely  
in Italy. The design, production,  
processing and packaging are  
carried out exclusively on the Italian  
territory, into the AGB plants.

100% MADE IN ITALY







Open, Close, Live

Alban Giacomo SpA  
Via A. De Gasperi, 75  
36060 Romano d'Ezzelino (VI) Italy  
+39 0424 832 832

[www.agb.it](http://www.agb.it) - [info@agb.it](mailto:info@agb.it)

MADE IN ITALY

