Arlu® (Argenta®)
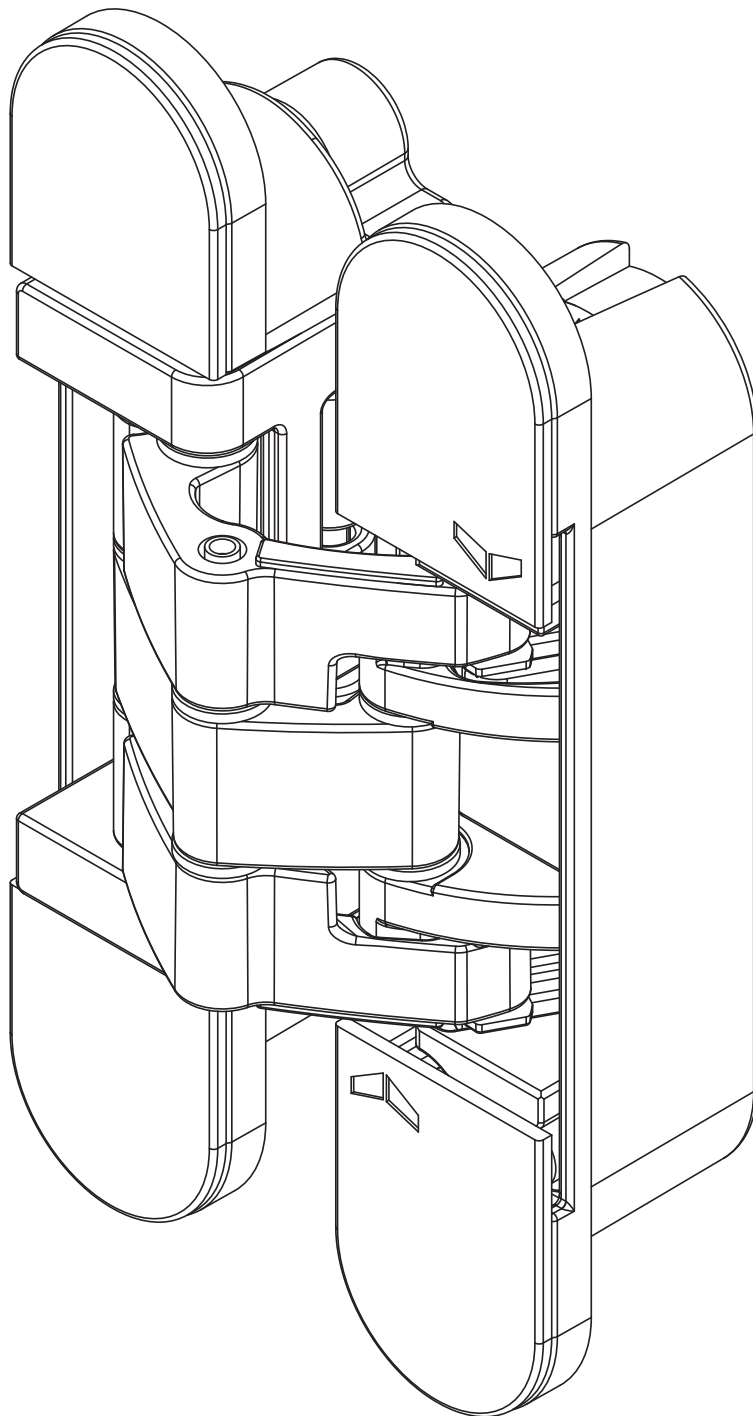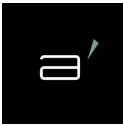
Invisible Neo

Introducing our smart concealed hinges for a sleek, modern look
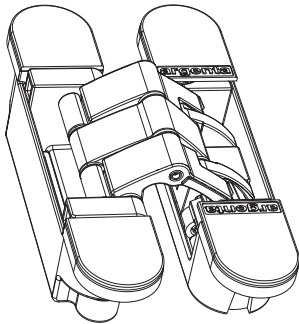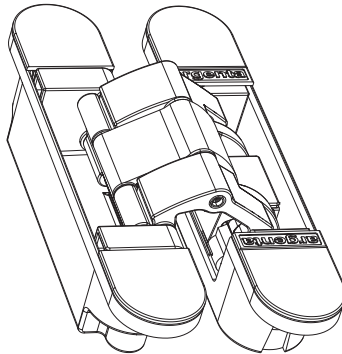
Invisible Neo

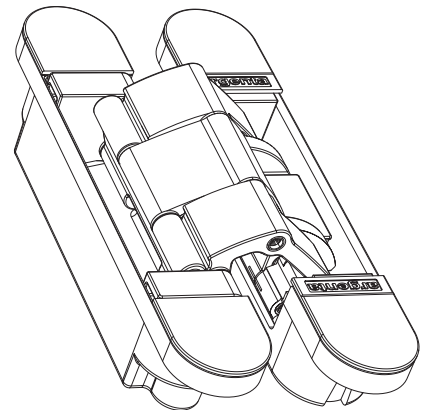## Hinge performance

Invisible Neo S-5   Invisible Neo M-6   Invisible Neo L-7

Each digit refers to a particular feature of the product, using the European standard EN1935: 2002

SIZE	Category of use	Durability	Door mass test	Fire resistance	Safety	Corrosion	Security	Hinge grade
S-5	2	7	3	1	1	4	0	10
M-6	3	7	4	1	1	4	0	11a
L-7	4	7	5	1	1	4	1	12a

1. Category of use:
Four grades

1 Light duty
2 Medium duty
3 Heavy duty
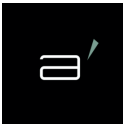**4** Severe duty

2. Durability:
Three grades

3 10,000 test cycles   For light duty on windows only
4 2,500 test cycles   For light duty on windows & doors
7 200,000 test cycles   For medium, heavy & severe duty hinges on doors only

3. Door mass test:
Eight grades

0 10 kg   **4** 80 kg
1 20 kg   **5** 100 kg
2 40 kg   **6** 120 kg
3 60 kg   **7** 160 kg

Invisible Neo

Hinge performance
European standard EN1935: 2002

4. Fire durability smoke door use:
Two grades:

0 Not suitable for fire/smoke resistant door assemblies

1 Suitable for fire/smoke resistant door assemblies subject to satisfactory assessment of the contribution of the hinge to the fire resistance of the specified fire/smoke door assemblies. Such assessment is beyond the scope of this European standard (see EN 1364-1).

5. Safety
One grade:

1 Single-axis hinges are required to satisfy the essential requirements of safety in use. Therefore, only grade 1 is identified.

6. Corrosion resistance:
Five grades

0 No defined resistance
1 Mild resistance
2 Moderate resistance
3 High resistance
4 Very high resistance

7. Security:
Two grades

0 Not suitable for use on burglar-resistant door assemblies

1 Suitable for applications requiring a degree of security. Annex C of this European standard details the hinge grade to use for the level of security required.

8. Hinge grade:
Thirteen grades

Hinge Grade	Usage		Test Cycles	Door Mass (Kg)
1	Window		10 000	10
2	Window		10 000	20
3	Window	Door	25 000	20
4		Door	200 000	20
5	Window		10 000	40
6	Window	Door	25 000	40
7		Door	200 000	40
8	Window		10 000	60
9	Window	Door	25 000	60
10		Door	200 000	60
11		Door	200 000	80
12		Door	200 000	100
13		Door	200 000	120
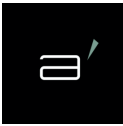
Hinge guide

Invisible Neo S-5

Invisible Neo S-5 (Max. door weight)		730 mm	830 mm	930 mm	1030 mm	1130 mm	1230 mm
120 kg	› 4 pieces						**S-5**
115 kg							
110 kg	4 pieces						
105 kg							
100 kg							
95 kg	3 pieces						
90 kg							
85 kg							
80 kg							
75 kg	2 pieces						
70 kg							
65 kg							
60 kg							
55 kg							
50 kg							
45 kg							
		730 mm	830 mm	930 mm	1030 mm	1130 mm	1230 mm
				Door width			

Measurements displayed on the table are based on door with max. height 2000 mm.

Number of invisible hinges to be used in function of door weight and a maximum
door of 2000 mm (height) x 1000 mm (width) according to EN 1935:

- **2 hinges*** Max. 75 kg
- **3 hinges** Max. 95 kg

In order to maintain the perpendicular line of the door panel, the use of a minimum
of 4 hinges is recommended ,
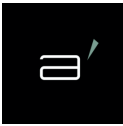
Hinge guide

Invisible Neo M-6

Invisible Neo M-6 (Max. door weight)		730 mm	830 mm	930 mm	1030 mm	1130 mm	1230 mm
	140 kg	› 4 pieces					**M-6**
	135 kg						
	130 kg	4 pieces					
	125 kg						
	120 kg						
	115 kg	3 pieces					
	110 kg						
	105 kg						
	100 kg						
	95 kg	2 pieces					
	90 kg						
	85 kg						
	80 kg						
	75 kg						
	70 kg						
	65 kg						
Door width		730 mm	830 mm	930 mm	1030 mm	1130 mm	1230 mm

Measurements displayed on the table are based on door with max. height 2000 mm.

Number of invisible hinges to be used in function of door weight and a maximum door of 2000 mm (height) x 1000 mm (width) according to EN 1935:

- **2 hinges*** Max. 95 kg
- **3 hinges** Max. 115 kg

In order to maintain the perpendicular line of the door panel, the use of a minimum of 4 hinges is recommended ,
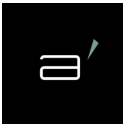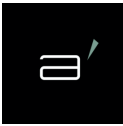
Hinge guide

Invisible Neo L-7

Invisible Neo L-7 (Max. door weight)	730 mm	830 mm	930 mm	1030 mm	1130 mm	1230 mm	
170 kg	4 pieces		› 4 pieces				**L-7**
165 kg							
160 kg	3 pieces						
155 kg							
150 kg							
145 kg							
140 kg							
135 kg							
130 kg							
125 kg							
120 kg							
115 kg							
110 kg	2 pieces						
105 kg							
100 kg							
95 kg							
90 kg							
85 kg							
80 kg							
75 kg							
70 kg							

Door width

Measurements displayed on the table are based on door with max. height 2000 mm.

Number of invisible hinges to be used in function of door weight and a maximum door of 2000 mm (height) x 1000 mm (width) according to EN 1935:

- **2 hinges*** Max. 110 kg
- **3 hinges** Max. 160 kg

In order to maintain the perpendicular line of the door panel, the use of a minimum of 4 hinges is recommended ,

Supplies and Installation

Invisible Neo S - 5

- Allen key
  (supplied in the package)   SW3
- Proposal screws
  (not included*)
→ For installation in wood:
- DIN 97 / DIN 7505   Ø 4 / Ø 4,5, L= 30
- DIN 7982   Ø 4,2, L= 32
- SPAX Z2   Ø 4 / Ø 4,5, L= 30
→ For installation in steel:
- DIN 963 / DIN 965 /
  DIN 7991   M4 / M5, L= 20
→ Quantity   2 + 2

Invisible Neo M- 6

- Allen key
  (supplied in the package)   SW4
- Proposal screws
  (not included*)
→ For installation in wood:
- DIN 97 / DIN 7505   Ø 4,5 / Ø 5, L= 35
- DIN 7982   Ø 4,8, L= 32
- SPAX Z2   Ø 5, L= 35
→ For installation in steel:
- DIN 963 / DIN 965 /
  DIN 7991   M5, L= 20
→ Quantity   2 + 2

Invisible Neo L - 7

- Allen key
  (supplied in the package)   SW4
- Proposal screws
  (not included*)
→ For installation in wood:
- DIN 97 / DIN 7505   Ø 4,5 / Ø 5, L= 35
- DIN 7982   Ø 4,8, L= 32
- SPAX Z2   Ø 5, L= 35
→ For installation in steel:
- DIN 963 / DIN 965 /
  DIN 7991   M5, L= 20
→ Quantity   4 + 4

FYI; in order to mill easily and correctly ARLU® developed the universal argenta® milling template
* Use the appropriate screws depending on the surface

Easy-Hook
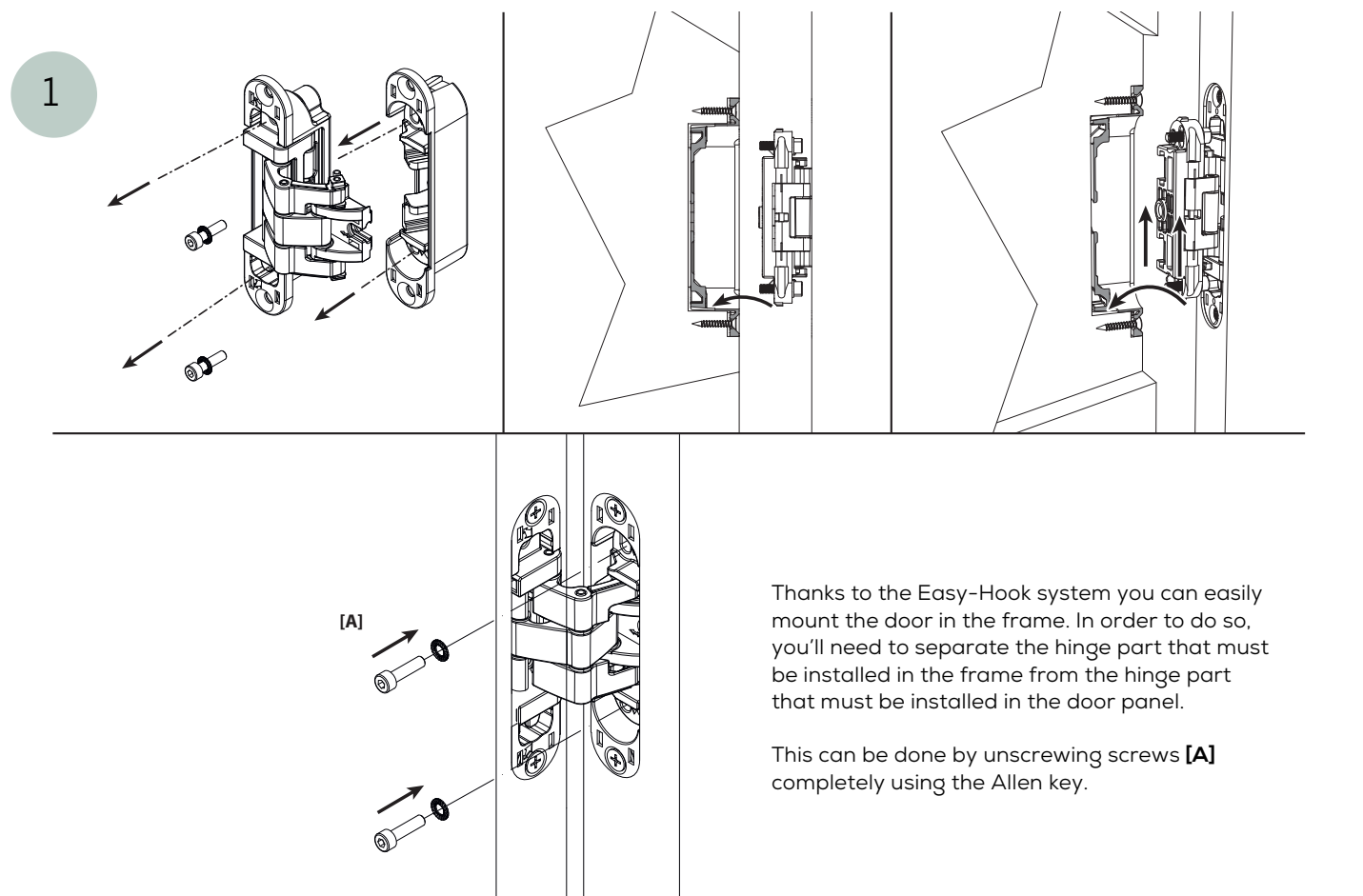
Thanks to the Easy-Hook system you can easily mount the door in the frame. In order to do so, you'll need to separate the hinge part that must be installed in the frame from the hinge part that must be installed in the door panel.
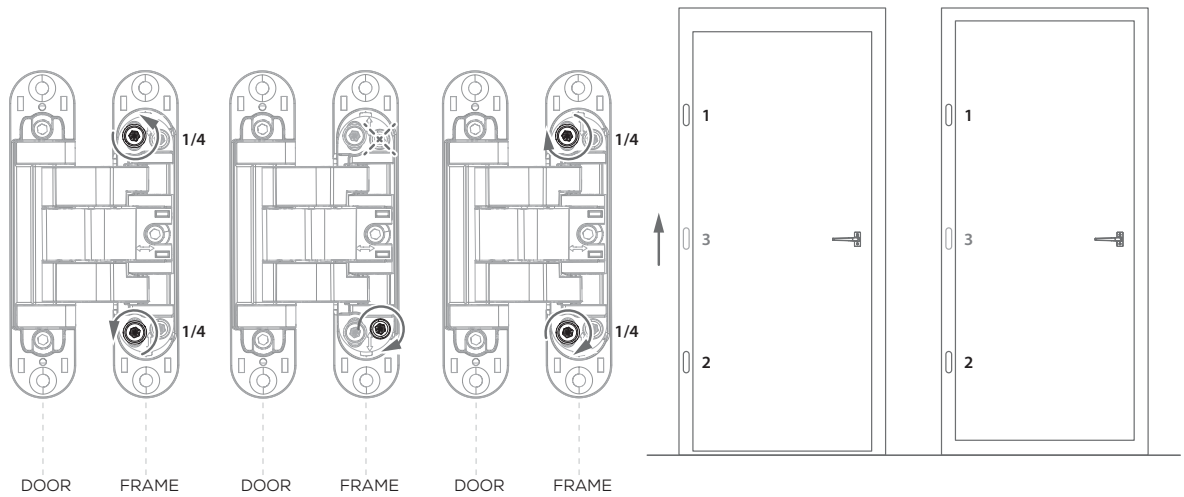
This can be done by unscrewing screws **[A]** completely using the Allen key.
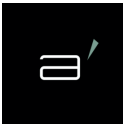
Installation

Adjustment

2


DOOR   FRAME   DOOR   FRAME   DOOR   FRAME

---

1. Height Adjustment

Loosen the clamping screws **[A]** a quarter turn using an allen key SW3 (Invisible neo S-5) or SW4 (invisible neo M-6 / L-7).

Turn only the lower adjustment screw **[B]** in order to ad-just the height. Lightly tighten the other adjusting screw. Tighten the clamping screws **[A]** again.

Check: the alignment has not been executed properly if the covers cannot be aligned perfectly.

Note: when fully unscrewing the screws **[A],** the door can be hooked in or hooked out of the frame thanks to the integrated "easy-hook" system.


DOOR   FRAME

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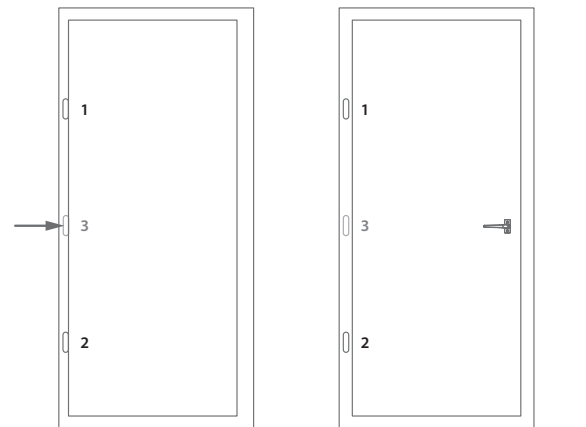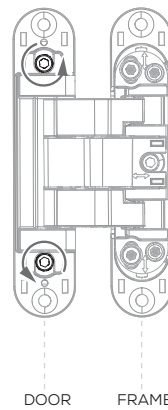
2. Width-side Adjustment

Adjust screw **[C]** using the Allen key in the desired direction to allow the door to hang horizontally and in order to achieve the same slack between the door and frame at both sides of the door panel.

3. Closure Adjustment

Adjust alignment screw **[D]** using the Allen key in the required direction so that the depth is adjusted and the door presses against the closure strip.
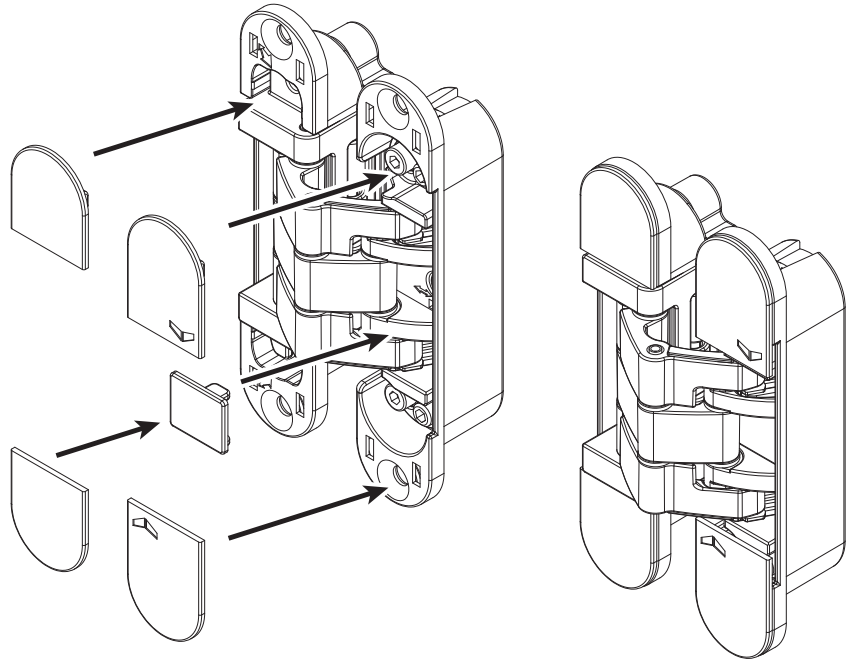

DOOR   FRAME
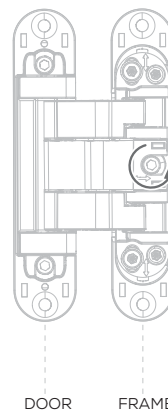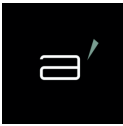
Installation

Finishing

3

After having adjusted the door, place the included cover plates onto the hinge by pushing them firmly onto the intended places.

The cover plates with the argenta® logo (to cover the height adjustment) and the small cover plate (to conceal the pressure adjustment) should be installed on the part of the hinge that is situated in the frame.

Maintenance

Bearings and guides are made of self-lubricating plastic argentalon®, meaning the invisible hinge needs no lubrication at all.
Verify once a year the slack and adjust (if necessary).