# **Invisacta** The wide range of concealed hinges



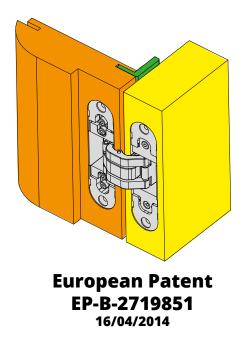
### WARNING! INSTALLATION DEVICE PROTECTED BY PATENT

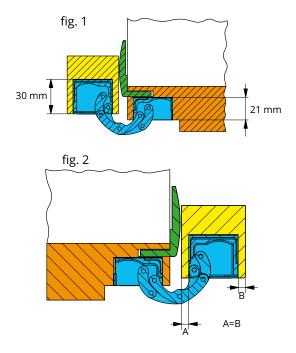
Only (by) using **INVISACTA**, you can avoid to **cut the cover strips** (in green), thanks to the only 21 mm depth of the hull on the frame side (fig. 1), and **at the same time** install the hinge in the middle of the door thickness (fig. 2) **making the door become both left and right, that means reversible** (fig. 3).

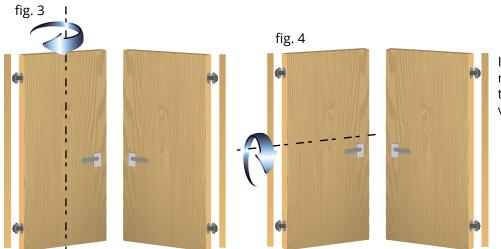


**There are unoriginal INVISACTA hinges** on the market; that don't have the license to use OTLAV patent.

Producing doors as shown herein, with unoriginal **INVISACTA** hinges, **means to make an injury to OTLAV patent rights**, injury which is punishable both civilly and criminally.







INVISACTA hinge is reversible, which makes the door reversible also vertically (fig. 4). Since **1956**, thanks to our hinges, more than **1,000,000,000** doors are opening **in 80 countries** all over the world.



OTLAV S.p.A produces and sells hinges for doors and windows and other accessories for frames.

**Founded in 1956** by entrepreneur Angelo Padovan, Otlav has produced **more than 2,2 billion of hinges.** 

Thanks to almost 100 filed patents, Otlav ensures high quality standards and is present with its wide range of products in more than **80 countries worldwide**. OTLAV new factory was inaugurated in 2007, in Via Angelo Padovan 2 in Santa Lucia di Piave (TV), in an area of 45,000 square meters, 19,500 of which are covered.

Following the opening of the first office in March 1956, OTLAV has nowadays found its perfect location to face the challenges of the new millennium. "OAMH" "Otlav Automatic Material Handling" is a project developed after five years of research and studies all around the world; a technological jewel created by designing at first the best logistical location, and then a subsequent lay out, and eventually the container to cover these structures: an unmistakable technological masterpiece, which is 20 meters high.

Rationalization of space, optimization of logistics and integrated use of automation: all of these account for respectively the flow or transportation of materials and the streaming of information. The goal is to cut costs by making the produced hinges increasingly competitive with an unparalleled level of quality.

### **OTLAV** group companies



In 1990 Otlav creates Myrtus in Maniago (PN), Friuli. The company is specialized in galvanic treatments.



Founded 2002 in Romania is focused on some high-tech producing processes.



As required by European regulations and by Regulation (EU) No. 305/2011 all OTLAV hinges are subjected to stringent resistance tests to check performance both during the design phase and regularly during manufacturing. The I.U.S. (Intensive Use Simulator) is the testing system used in the OTLAV Test Laboratories.

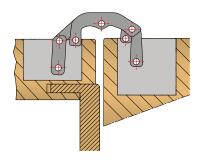
#### **EC Certificates and Performance Declarations**

Tests on the hinges are also carried out at external bodies able to certify that the company manufactures according to rigid, systematically monitored production plans and that the products pass the tests envisaged by the standard UNI EN 1935/2004: they are thereby able to issue, if needed, the CE certificate or certify the data provided by OTLAV in the "performance declarations".



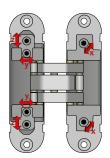
View of the OTLAV test laboratories I.U.S. (Intensive Use Simulator)

## **INVISACTA PLUS+**



### 7 JUNCTION FULCRUMS No sliding wear

**7** fulcrum points allow little friction, good flow, solidity and high loading capacity; no contact between the different bearing units thanks to nylon bushes with high friction resistance.



### **3 ADJUSTMENTS** With only one hex spanner

The clamping screws, placed in the outer casings, are not used for hinge adjustment, therefore they **remain stable for a long time**.

IN570, IN310, IN303, IN300, IN305, IN230 and IN235 models

### **COMPATIBILITY** Same millings, different hinges.



IN235 Doors up to 40 kg.



AI230 Door alignment device



IN303 Doors up to 80 kg.



**IN300** Doors up to 60 kg.



**IN305** Doors up to 40 kg.

Millings 23x120 mmh



**CI335** Doors up to 40 kg.

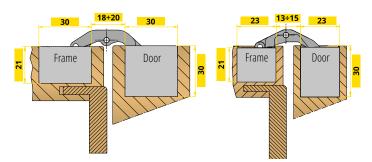


**AI300** Door alignment device



Millings 30x120 mmh

## **INVISACTA PLUS**<sup>+</sup>



### MINIMAL DIMENSIONS Slot on frame side: 21 mm

A 21 mm depth slot on the frame side makes it unique and enables its perfect integration in reduced spaces. No need to cut the architrave which can be flush mounted.

IN303, IN300, IN305, IN301, IN230, IN232 and IN235 models



### **REVERSIBILITY** Invisacta hinges are all reversible

The hinge if mounted in the center of the door thickness\*, allows the reversibility of the door, thus enabling the **optimization of the stock and logistics at installation.** 

\* IN570, IN303, IN300, IN305 and IN301 models

### **KIND OF FINISHING** The wide range of colours allows finding the right correspondence with any finish of the doors











Satinized Silver Plated

Zinc Plated

Satinized Nickel Plated

**Bronze Plated** 

**Bronze Plastified** 











**Polished Gold** 

Matt Gold

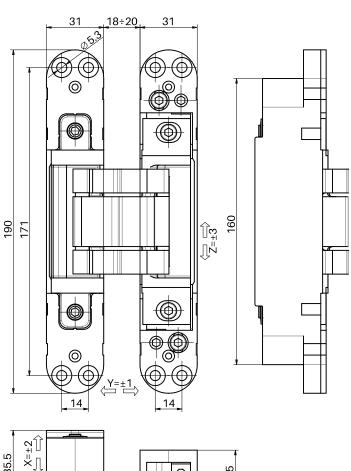
**Chrome Plated** 

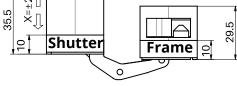
White Matt RAL 9016

Matt Black Plastified

## **IN310190** 3D invisible hinge for 120 kg. doors









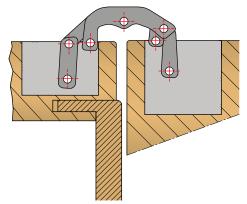
### **Technical data**

Capacity*	120 Kg.
Hinge height	190 mm
Width shutter side	31 mm
Width frame side	31 mm
Depth shutter side	35,5 mm
Depth frame side	29,5 mm
Door opening angle	180°

Side adjustment	± 2 mm
Height adjustment	± 3 mm
Depth adjustment	± 1 mm

\* Tested with 90x210 cm doors - For more information on the number of hinges to be used according to the weight and dimension of the door, please see the loading charts available on the website www.otlav.it.





- · Movement on 7 junction fulcrums equipped with bearing in plastic HT with high resistance and long life.
- Equipped with **3-way adjustments** that can be settled by means of just one 4 mm hex-spanner. Once installed, the door has natural sinking, Invisacta hinge allows to set the door back to the start position.
- The hinge can be fitted with door closing devices.
- Outer casings protect the inner junction fulcrums against rubble coming from door installation works.
- The clamping screws, placed in the outer casings, are not used for hinge adjustment, therefore they remain stable for a long time.
- CE certified according European Assessment Document 020001-01-0405.
- The hinge meets the **anti-burglary** criteria according European Assessment Document 020001-01-0405.
- UL certified Fireproof 90' standard UL 10C.
- Fireproof certified 90' according UNI-EN 1634-1.
- Reversible
- Material of levers: aluminum.
- Material of casing: zamak.
- Caps available to conceal the screws.

### Finishing



IN310190V703 Satinized Silver Plated





Satinized Nickel Plated



IN3101909P03

White Matt RAL 9016

IN3101909N03 Matt Black Plastified



IN310190VD03 Polished Crome

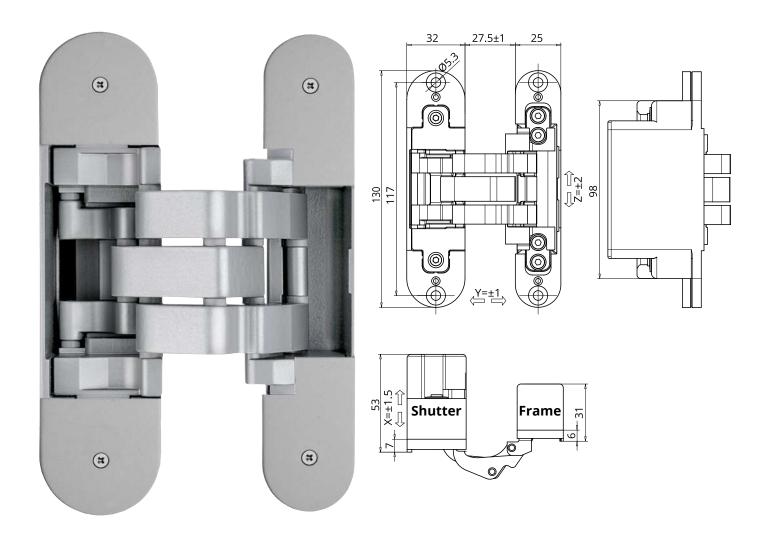
IN310190VO03 Polished Gold

#### **OTHER KIND OF FINISHING AVAILABLE ON REQUEST**



IN310190VN03

## **IN570130** 3D offset concealed hinge for 60 kg. doors

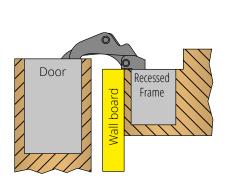


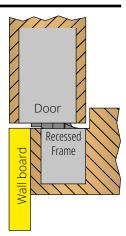
### **Technical data**

Capacity*	60 Kg.
Hinge height	130 mm
Width shutter side	32 mm
Width frame side	25 mm
Depth shutter side	53 mm
Depth frame side	31 mm
Door opening angle	180°
Side adjustment	± 1.5 mm
Height adjustment	± 2 mm
Depth adjustment	±1mm

\* Tested with 90x210 cm doors - For more information on the number of hinges to be used according to the weight and dimension of the door, please see the loading charts available on the website www.otlav.it.







### Finishing





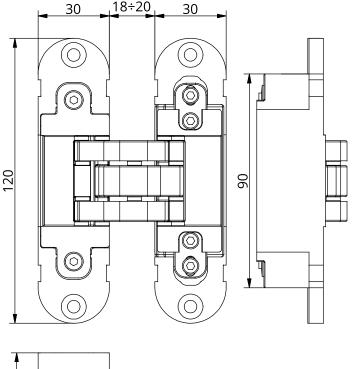
IN570130V703 Satinized Silver Plated

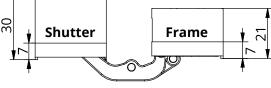
IN570130VN03 Satinized Nickel Plated

- The hinge is suitable to be installed on doors with **recessed frame** to accept application of wall board to match the door.
- Suitable for installation on panels with **thickness 40 and 44 mm**.
- The hinge can be installed with mounted gasket up to 6 mm thick.
- Allows the application of very thick architraves or coating panels: up to 18 mm.
- Material of casing: zamak.
- Material of levers: aluminum.
- The hinge is reversible, if mounted in the center of the door thickness, allows the **reversibility of the door**, thus enabling the optimization of the stock and logistics at installation.
- Movement on **7 junction fulcrums** equipped with bearing in plastic HT with high resistance and long life.
- Equipped with **3-way adjustments** that can be settled by means of just one hex-spanner. Once installed, the door has natural sinking, Invisacta hinge allows to set the door back to the start position.
- Outer casings protect the inner junction fulcrums against rubble coming from door installation works.
- The clamping screws, placed in the outer casings, are not used for hinge adjustment, therefore they remain stable for a long time.
- Equipped with **caps** to conceal the screws.

## **IN303120** 3D invisible hinge for 80 kg. doors







DOOR

FRAME



### **Technical data**

Capacity*	80 Kg.
Hinge height	120 mm
Width shutter side	30 mm
Width frame side	30 mm
Depth shutter side	30 mm
Depth frame side	21 mm
Door opening angle	180°
Side adjustment	±1mm
Height adjustment	± 2 mm
Depth adjustment	±1mm

\* Tested with 90x210 cm doors - For more information on the number of hinges to be used according to the weight and dimension of the door, please see the loading charts available on the website www.otlav.it.



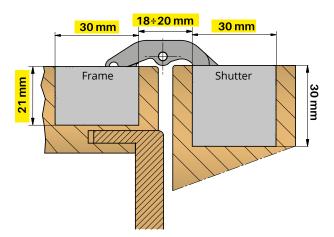
DOOR

IN303 hinge allows at the same time: **Reversibility of the door** only 21 mm

with hinge mounted in the center of the door thickness.

No need to cut the architrave thanks to only 21 mm of frame slot depth. Patented EP-B2719851.





- A 21 mm depth slot on the frame side makes it unique and enables its **perfect integration in reduced spaces**. No need to cut the architrave which can be flush mounted.
- The hinge is reversible, if mounted in the center of the door thickness, allows the **reversibility of the door**, thus enabling the optimization of the stock and logistics at installation.
- Movement on **7 junction fulcrums** equipped with bearing in plastic HT with high resistance and long life.
- Equipped with **3-way adjustments** that can be settled by means of just one 3 mm hex-spanner. Once installed, the door has natural sinking, Invisacta hinge allows to set the door back to the start position.
- Outer casings protect the inner junction fulcrums against rubble coming from door installation works.
- The clamping screws, placed in the outer casings, are not used for hinge adjustment, therefore they remain stable for a long time.
- The hinge can be fitted with door closing devices.
- Material of levers: aluminum.
- Material of casing: zamak.
- **CE certified** according European Assessment Document 020001-01-0405.
- Fireproof certified 45' according UNI-EN 1634-1.
- UL certified Fireproof 90' standard UL 10C.
- Aluminum caps available to conceal the screws.

### Finishing



Hinge **IN303120V702** Caps **GC300010J102** Satinized Silver Plated





Hinge **IN303120VN02** Caps **GC300010J205** Satinized Nickel Plated

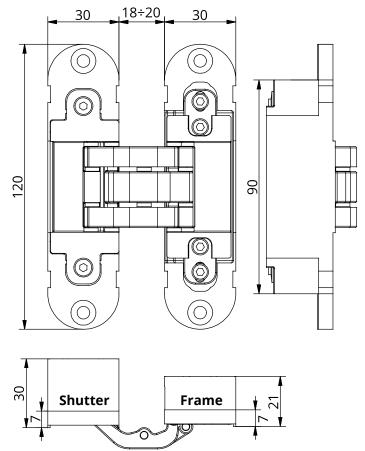


Hinge IN303120VO02 Caps GC300010JO05 Polished Gold

Hinge IN303120VD02 Caps GC300010VD02 Polished Crome

# IN300120 3D hinge for 60 kg. doors





### **Technical data**

Capacity*	60 Kg.
Hinge height	120 mm
Width shutter side	30 mm
Width frame side	30 mm
Depth shutter side	30 mm
Depth frame side	21 mm
Door opening angle	180°
Side adjustment	±1mm
Height adjustment	± 2 mm
Depth adjustment	±1mm

\* Tested with 90x210 cm doors - For more information on the number of hinges to be used according to the weight and dimension of the door, please see the loading charts available on the website www.otlav.it.



DOOR

DOOR

FRAME

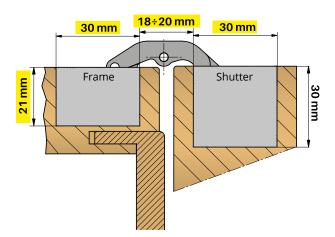
Π

IN300 hinge allows at the same time:

**Reversibility of the door** with hinge mounted in the center of the door thickness.

**No need to cut the architrave** thanks to only 21 mm of frame slot depth. Patented EP-B2719851.





- A 21 mm depth slot on the frame side makes it unique and enables its **perfect integration in reduced spaces**. No need to cut the architrave which can be flush mounted.
- The hinge is reversible, if mounted in the center of the door thickness, allows the **reversibility of the door**, thus enabling the optimization of the stock and logistics at installation.
- Movement on **7 junction fulcrums** equipped with bearing in plastic HT with high resistance and long life.
- Equipped with **3-way adjustments** that can be settled by means of just one 3 mm hex-spanner. Once installed, the door has natural sinking, Invisacta hinge allows to set the door back to the start position.
- Material of hinge: zamak.
- The hinge can be fitted with door closing devices.
- Outer casings protect the inner junction fulcrums against rubble coming from door installation works.
- The clamping screws, placed in the outer casings, are not used for hinge adjustment, therefore they remain stable for a long time.
- Material of hinge: ZAMAK.
- **CE certified** according European Assessment Document 020001-01-0405
- Fireproof certified 30' according UNI-EN 1634-2.
- Aluminum caps available to conceal the screws.

### Finishing



Hinge IN300120V702 Caps GC300010J102 Satinized Silver Plated



Hinge **IN3001209P02** Caps **GC3000109P02** White Matt RAL 9016



Hinge IN300120BO02 Caps GC3000109R02 Bronze Plated



Hinge **IN3001209N02** Caps **GC3000109N02** Matt Black Plastified





Hinge IN300120VN02 Caps GC300010J205 Satinized Nickel Plated



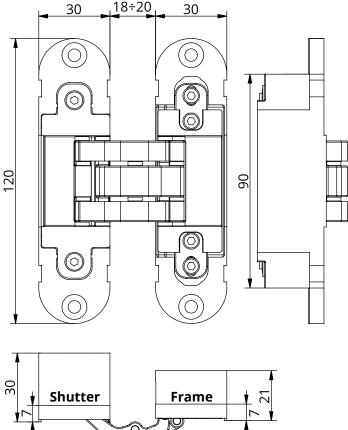
Hinge IN300120H004 Caps GC300010J102 Zinc Plated



Hinge **IN300120VO02** Caps **GC300010JO05** Polished Gold

## **IN305120** 3D invisible hinge for 40 kg. doors





### **Technical data**

Capacity*	40 Kg.
Hinge height	120 mm
Width shutter side	30 mm
Width frame side	30 mm
Depth shutter side	30 mm
Depth frame side	21 mm
Door opening angle	180°
Side adjustment	±1mm
Height adjustment	± 2 mm
Depth adjustment	±1mm

\* Tested with 90x210 cm doors - For more information on the number of hinges to be used according to the weight and dimension of the door, please see the loading charts available on the website www.otlav.it.



DOOR

DOOR

FRAME

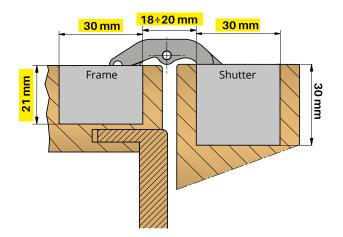
Π

IN305 hinge allows at the same time:

**Reversibility of the door** with hinge mounted in the center of the door thickness.

**No need to cut the architrave** thanks to only 21 mm of frame slot depth. Patented EP-B2719851.





- A 21 mm depth slot on the frame side makes it unique and enables its **perfect integration in reduced spaces**. No need to cut the architrave which can be flush mounted.
- The hinge is reversible, if mounted in the center of the door thickness, allows the **reversibility of the door**, thus enabling the optimization of the stock and logistics at installation.
- Movement on **7 junction fulcrums** equipped with bearing in plastic HT with high resistance and long life.
- Equipped with **3-way adjustments** that can be settled by means of just one 3 mm hex-spanner. Once installed, the door has natural sinking, Invisacta hinge allows to set the door back to the start position.
- Material of hinge: ZAMAK.
- Material of casing: thermoplastic polymer.
- Outer casings protect the inner junction fulcrums against rubble coming from door installation works.
- The clamping screws, placed in the outer casings, are not used for hinge adjustment, therefore they remain stable for a long time.
- Aluminum caps available to conceal the screws.

### Finishing



Hinge **IN305120V702** Caps **GC300010J102** Satinized Silver Plated



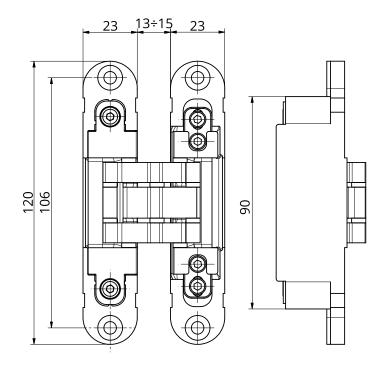
Hinge IN305120VN02 Caps GC300010J205 Satinized Nickel Plated

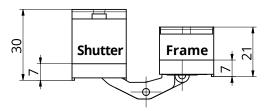


Hinge IN305120H002 Caps GC300010J102 Zinc Plated

# **IN230120** 3D invisible hinge for 60 kg. doors







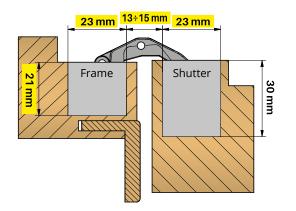


### **Technical data**

Capacity*	60 Kg.
Hinge height	120 mm
Width shutter side	23 mm
Width frame side	23 mm
Depth shutter side	30 mm
Depth frame side	21 mm
Door opening angle	180°
Side adjustment	±1mm
Height adjustment	± 2 mm
Depth adjustment	± 1 mm

\* Tested with 90x210 cm doors - For more information on the number of hinges to be used according to the weight and dimension of the door, please see the loading charts available on the website www.otlav.it.





- A **21 mm depth slot** on the frame side makes it unique and enables its perfect integration in reduced spaces. No need to cut the architrave which can be flush mounted.
- Movement on **7 junction fulcrums** equipped with bearing in plastic HT with high resistance and long life.
- Equipped with **3-way adjustments** that can be settled by means of just one 3 mm hex-spanner. Once installed, the door has natural sinking, Invisacta hinge allows to set the door back to the start position.
- The hinge is reversible.
- The hinge can be fitted with door closing devices.
- Outer casings protect the inner junction fulcrums against rubble coming from door installation works.
- The clamping screws, placed in the outer casings, are not used for hinge adjustment, therefore they remain stable for a long time.
- Material of hinge: ZAMAK.
- **CE certified** according European Assessment Document 020001-01-0405
- Fireproof certified 30' according UNI-EN 1634-2
- Aluminum caps available to conceal the screws.

### Finishing



Hinge **IN230120V702** Caps **GC230010J102** Satinized Silver Plated



Hinge IN230120VN02 Caps GC230010J202 Satinized Nickel Plated



Hinge IN230120BO02 Caps GC2300109R02 Bronze Plated

Hinge IN230120H004

Caps **GC230010J102** Zinc Plated



Hinge IN230120VO02

Caps **GC230010J005** 

Polished Gold

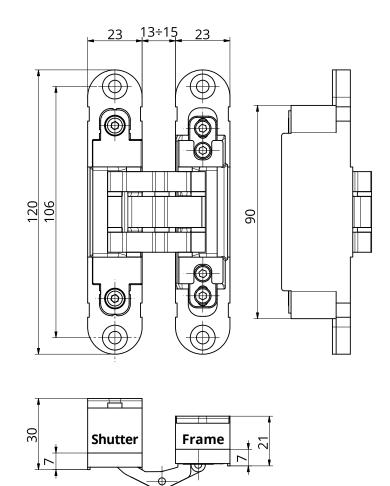
Hinge **IN2301209P02** Caps **GC2300109P02** White Matt RAL 9016



Hinge IN2301209N02 Caps GC2300109N02 Matt Black Plastified

## **IN235120** 3D invisible hinge for 40 kg. doors



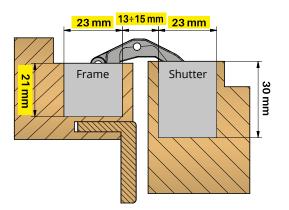


### **Technical data**

40 Kg.
120 mm
23 mm
23 mm
30 mm
21 mm
180°
±1mm
± 2 mm
±1mm

\* Tested with 90x210 cm doors - For more information on the number of hinges to be used according to the weight and dimension of the door, please see the loading charts available on the website www.otlav.it.





- A **21 mm depth slot** on the frame side makes it unique and enables its perfect integration in reduced spaces. No need to cut the architrave which can be flush mounted.
- Movement on **7 junction fulcrums** equipped with bearing in plastic HT with high resistance and long life.
- Equipped with **3-way adjustments** that can be settled by means of just one 3 mm hex-spanner. Once installed, the door has natural sinking, Invisacta hinge allows to set the door back to the start position.
- Material of hinge: ZAMAK.
- Material of casing: thermoplastic polymer.
- The hinge is reversible.
- Outer casings protect the inner junction fulcrums against rubble coming from door installation works.
- The clamping screws, placed in the outer casings, are not used for hinge adjustment, therefore they remain stable for a long time.
- Aluminum caps available to conceal the screws.

### Finishing



Hinge **IN235120V704** Caps **GC230010J102** Satinized Silver Plated





Hinge IN235120H006 Caps GC230010J102 Zinc Plated



Caps **GC2300109P02** 

White Matt RAL 9016

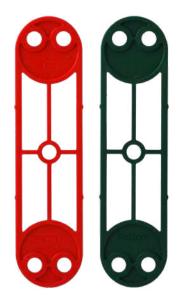
Hinge IN235120VN04 Caps GC230010J202 Satinized Nickel Plated

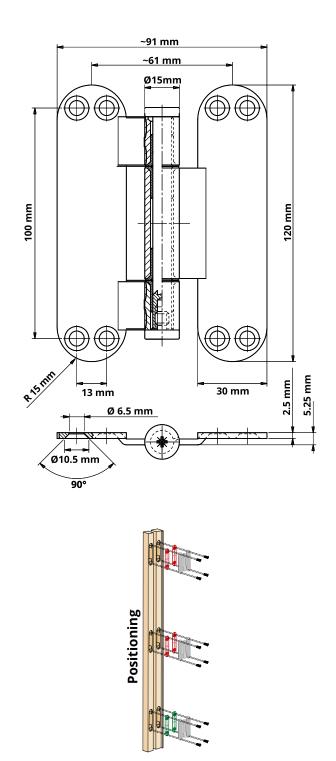


Hinge IN235120VO02 Caps GC230010JO05 Polished Gold

# CI335150N035 plate hinge for 40 kg. doors







### **Technical features**

- The hinge is suitable to be installed on doors and frames with IN300, IN303 and IN305 millings.
- The hinge can be fitted right and left.
- Equipped with spacers that allows to prevent the natural sinking of the door.
- Kit composed by: 3 hinges, 4 green spacer, 4 red spacer and 24 screws

### **Technical data**

40 Kg.

\* Tested with 90x210 cm doors - For more information on the number of hinges to be used according to the weight and dimension of the door, please see the loading charts available on the website www.otlav.it.

### Finishing

Capacity\*

Nickel plated

# Accessories

### Adjustable door alignment device

- The device allows to keep the shutter aligned to the frame, avoiding in this way door deformities.
- Equipped with adjustable tension of the door jamb.
- Aluminum caps available to conceal the screws.



### AI300

Compatible with millings of IN300, IN305 and IN303 hinges



### AI230

Compatible with millings of IN230 and IN235 hinges

## Plate



JC522 Fixing plate for IN310



Jigs



MU230120G002 Aluminium jig for IN230, IN232 and IN235 hinges

MU300120G002 Aluminium jig for IN300 and IN303 hinges

MU310190G002 Aluminium jig for IN310 hinges

MUINV500G004 Nylon jig for IN230, IN232 and IN235 hinges

MUINV500G002 Nylon jig for IN300 and IN303 hinges

MUINV500G006 Nylon jig for IN310 hinges





PP105050Y202 Wedge with 5 spacers



### NP120040H502

Plate for IN300, IN303 and IN305 hinges

NP120040H504 Plate for IN230 and IN235 hinges



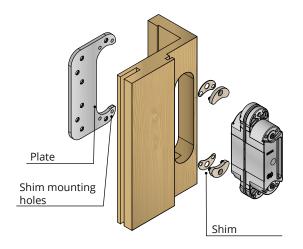
### **PP02**

Shim to set up the plate NP120



Cap

TP230120Z002 Nylon cap for IN230, IN235 and IN232 hole





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