

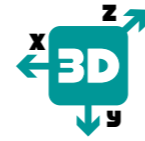
1129
mm.100x22

Cod. CI001129 xxx00

Disponibile in 9 finiture.
Available in 9 finishes.
Disponibile in 9 acabados.

 Pack. 9

Cerniere invisibili regolabili per porte
Invisible adjustable hinges for doors
Bisagras invisibles ajustables para puertas



CARATTERISTICHE:

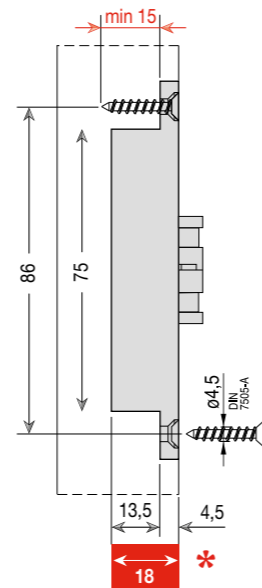
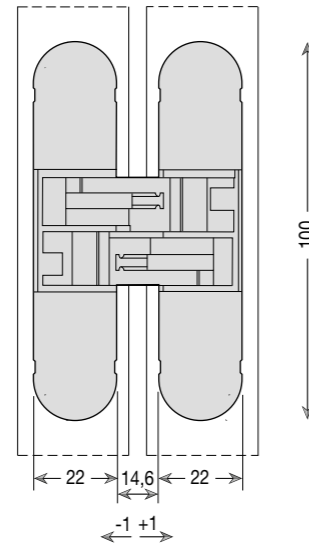
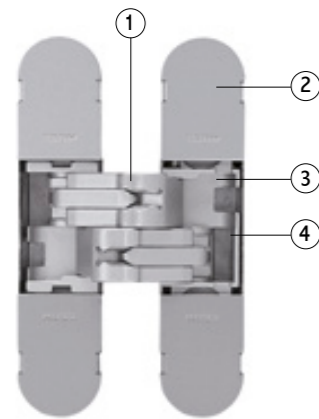
- Realizzata in zama in 9 diverse finiture
- Adatta ad ante con spessore minimo di 28 mm
- Lunghezza totale 100 mm
- Profondità solo **18 mm** "la meno ingombrante sul mercato"
- Regolazione tridimensionale S.T.A.R.S.
- Portata fino a 38 kg
- Easy installation e simmetria di cava

MAIN FEATURES:

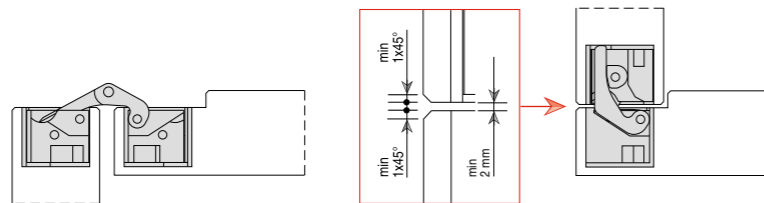
- Manufactured in zamak in 9 different finishes
- Suitable for doors of 28 mm min. thickness
- Total length 100 mm
- Depth **18 mm** "the smallest on the market"
- 3D adjusting system S.T.A.R.S.
- Load capacity up to 38 kg
- Easy installation and slot symmetry

CARACTERÍSTICAS:

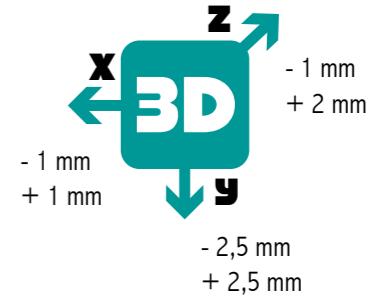
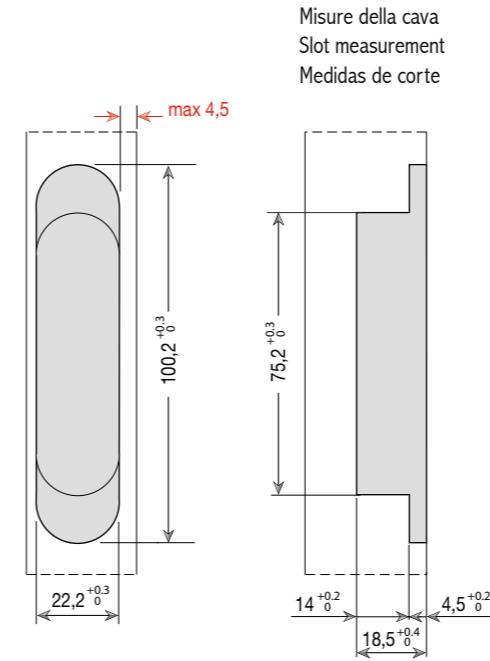
- Fabricada en zamak en 9 acabados diferentes
- Adapta para puertas con un espesor mínimo de 28 mm
- Longitud total 100 mm
- Profundidad de solamente **18 mm** "la menor en el mercado"
- Ajuste en 3D S.T.A.R.S.
- Capacidad de carga hasta 38 kg
- Easy installation y simetría de corte



* Profondità di cava contenuta
Small drilling depth
Baja profundidad de corte

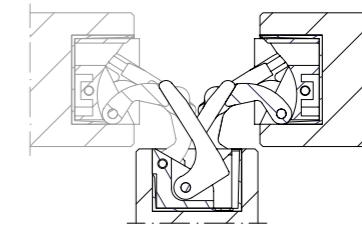


- ① Snodo realizzato in Zama
Mechanism manufactured in zinc-alloy
Mecanizado fabricado en zamak
- ② Covers in acciaio galvanizzato
Galvanized steel covers
Cover en acero galvanizado
- ③ Gabbia interna in Zama
Zinc-alloy internal body
Caja interna en zamak
- ④ Gabbia esterna in Zama
Zinc-alloy external body
Caja externa en zamak

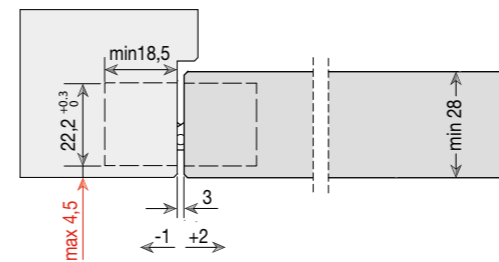


REVERSIBILITÀ - REVERSIBILITY - REVERSIBILIDAD

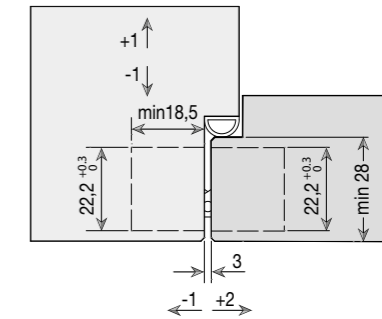
Reversibile per porte da 28 mm a 31 mm di spessore
Reversible for doors from 28 mm to 31 mm thick
Reversible para puertas de 28 mm hasta 31 mm de espesor



Sezione porta raso senza battuta
Unrebated flush door cross-section
Sección puerta enrasada



Sezione porta raso con battuta.
Rebated flush door cross-section
Sección puerta enrasada y solapada



SCHEMA DI PORTATA CON 2 CERNIERE
2 HINGES LOAD CAPACITY CHART

ALTEZZA PORTA (mm) DOOR HEIGHT (mm)	LARGHEZZA PORTA (mm) - DOOR WIDTH (mm)						
	700	800	900	1000	1100	1200	1300
2200	25	25	25	25	21	19	17
2100	25	25	25	23	20	18	16
2000	25	25	25	21	18	17	16
1900	25	25	23	19	17	16	15

SCHEMA DI PORTATA CON 3 CERNIERE
3 HINGES LOAD CAPACITY CHART

ALTEZZA PORTA (mm) DOOR HEIGHT (mm)	LARGHEZZA PORTA (mm) - DOOR WIDTH (mm)							4 HINGES SUGGESTED
	700	800	900	1000	1100	1200	1300	
2500	38	38	38	38	38	33	29	
2400	38	38	38	38	37	31	28	
2300	38	38	38	38	34	29	26	
2200	38	38	38	37	31	27	25	
2100	38	38	38	34	29	26	24	
2000	38	38	38	31	27	24	23	

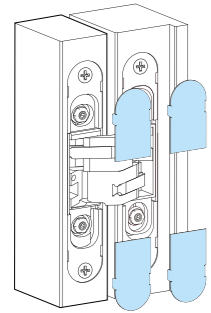
Per porte fuori standard e utilizzi con chiudiporta, consultare l'approfondimento tecnico
For special door sizes and use of door closer devices, please see the technical guidelines
Para puertas fuera estándar y usos con cierrapuertas, por favor vea la información técnica



Linee guida di regolazione

Adjustment guidelines

Guía general de ajuste



- 1131s
- 1230s
- 1130 inox
- 1130s
- 1235s
- 1129
- 1229

Cerniere invisibili regolabili per porte
Invisible adjustable hinges for doors
Bisagras invisibles ajustables para puertas



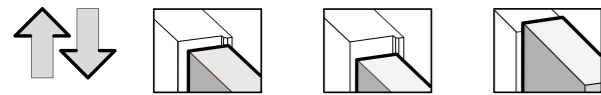
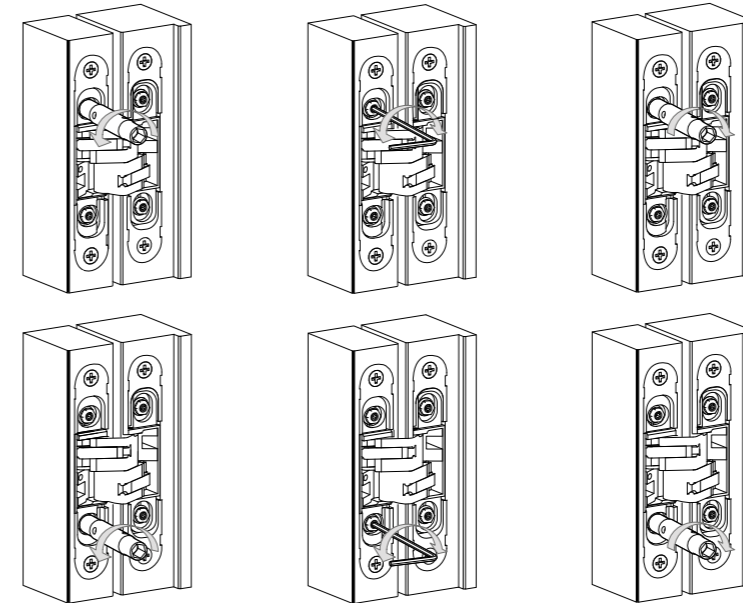
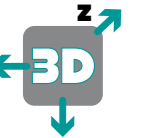
Adjustment Video



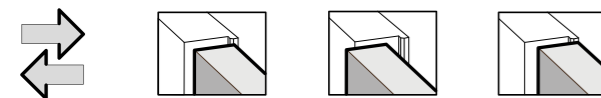
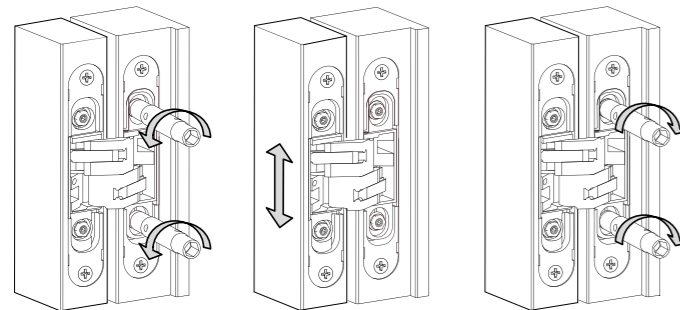
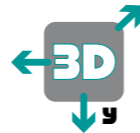
Drilling template Video



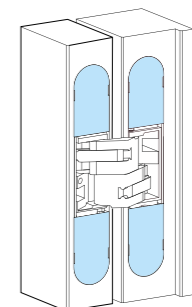
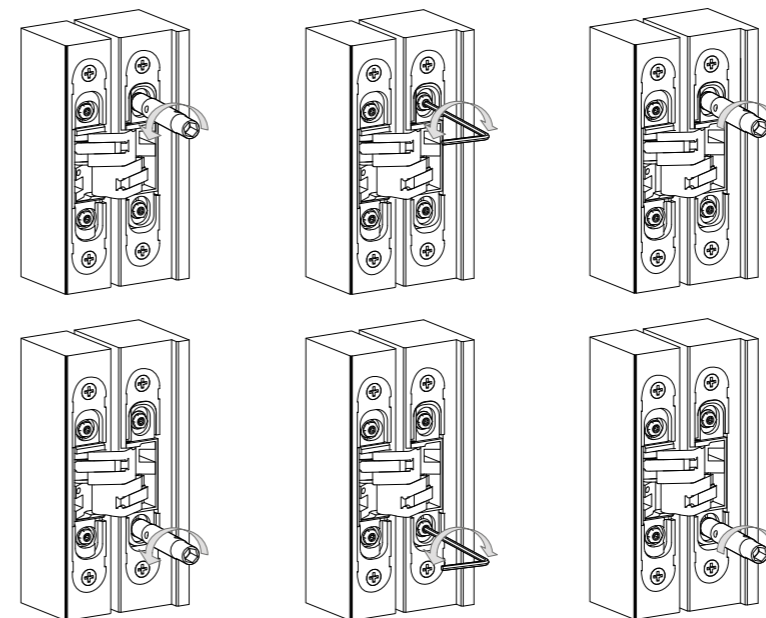
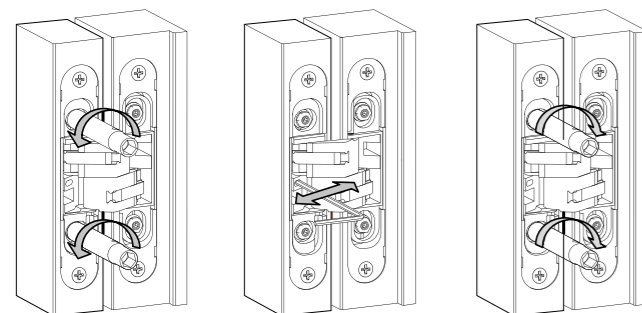
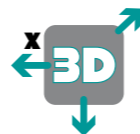
Regolazione in profondità
Depth adjustment
Ajuste de profundidad



Regolazione verticale
Vertical adjustment
Ajuste vertical



Regolazione orizzontale
Horizontal adjustment
Ajuste horizontal



Technical information

The following variables must be considered when choosing the right hinges, in order the system to work properly and efficiently and prevent any possible malfunction:

- Door dimensions
- Weight of the door leaf
- Type of use and frequency of opening
- Placement and installation of the hinges
- Door closer and other accessories
- Automatic or semi-automatic opening systems

In particular, hinges are increasingly stressed:

- By increasing door weight
- By decreasing height/width ratio or, simplifying, by increasing of the door width in relation to the door height.

In the catalog, technical sheets and instruction sheets, you can find the load capacity chart for every single product. These charts give clear orientations to the end user to determine the right model, the proper combination and positioning of the whole system.

EXAMPLE 1430

DOOR HEIGHT (mm)	DOOR WIDTH (mm)							
	700	800	900	1000	1100	1200	1300	
2200	50	50	50	49	41	37	34	
2100	50	50	50	45	39	35	32	
2000	50	50	50	41	36	33	31	
1900	50	50	45	38	34	32	29	

DOOR HEIGHT (mm)	DOOR WIDTH (mm)								4 HINGES SUGGESTED
	700	800	900	1000	1100	1200	1300		
3000	65	65	65	65	65	65	65	65	
2900	65	65	65	65	65	65	65	65	
2800	65	65	65	65	65	65	65	61	
2700	65	65	65	65	65	65	65	57	
2600	65	65	65	65	65	61	53		
2500	65	65	65	65	65	57	50		
2400	65	65	65	65	62	53	47		
2300	65	65	65	65	57	50	45		
2200	65	65	65	63	53	47	42		
2100	65	65	65	58	49	44	40		
2000	65	65	65	53	46	42	39		

All Ceam hinges are manufactured in Italy and tested by the standard European norm EN1935, passing all the necessary tests of stress, corrosion resistance, overload and durability both on our internal certified machines and on external laboratories structures, credited for the CE mark, available on the vast majority of our 3D range.

FOURTH HINGE

In some cases, the use of a fourth hinge may be decisive for the load capacity.

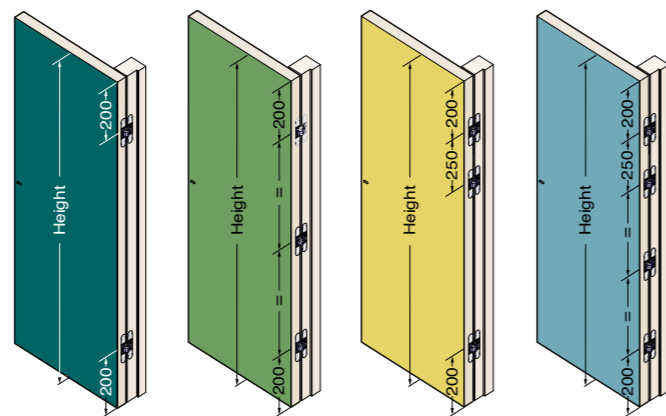
More specifically, In case of big widths (>1000 mm) or heights (>2700 mm) when different forces are produced by leverage effect and center of gravity moves towards the lock side, the fourth hinge must be installed in the upper part of the door, 250 mm away from the first hinge, to positively affect the weight capacity.

In case of door height >3000 mm please contact our technical department. ut@ceamitalia.it

PROPER PLACEMENT OF THE HINGES ON DOORS

The less the distance between the two hinges placed at the two extremities of the door (independently of a third/fourth hinge between them), the more stress the hinges experience.

We strongly suggest following the centre-to-centre measurements reported aside.



DOOR CLOSERS

When using door closer devices, Ceam suggest installing a third or a fourth hinge in the upper part of the door, given that these mechanisms modify the opening forces, increase the load and may alter the capacity of the hinges.

In particular, as reported by the European norm EN1935:

- For closers without backcheck Ceam suggest adding 20% on top of the real door weight.
- For closers with backcheck the effect it is much greater: Ceam suggest adding 75% on top of the real door weight.

CALCULATION EXAMPLE:

- 1- Real door weight: 70 kg.
- 2- Door closer with backcheck to be installed (+75%).
Calculation $70 \text{ kg} * 1,75 = 122,50 \text{ kg}$ is the actual weight to be considered for the proper system functionality.
- 3- Choose and proportion the hinges according to the load capacity charts reported un every technical datasheet.
- 4- Place the third or fourth hinge in the upper part, 250mm below the first hinge.
For any doubt or special uses, please contact our technical department. ut@ceamitalia.it

DOOR STOPPERS OR FRAME/WALL PROTRUSIONS

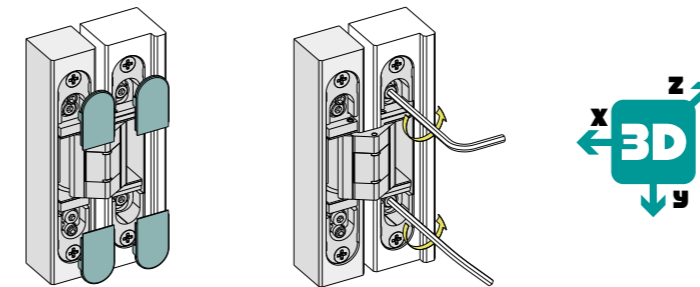
In some cases, a door stop, a handle hitting the wall or simply a protrusion of the wall/door frame can cause a leverage effect on the hinge joints which can lead to a system malfunction. It is advisable to install a door stop which can limit this leverage effect, and it is advisable to position it at a distance from the hinge equal to 75% of the door width in the direction of the handle.

3D ADJUSTMENTS

The adjustment range is reported in every technical sheet and the instructions are placed in every box and available online and the video instructions are available in our YouTube channel.

Every adjustment requires adequate attention. The adjustment range reported must be absolutely respected. Excessive force during adjustments takes to possible malfunctions that could cause system failure.

All Ceam hinges are delivered with all the adjustments centered (neutral position). After installation and after each adjustment, all components must be tightened firmly but not excessively in order not to compromise functionality.



- X** - 1 mm / + 1 mm
- Y** - 3 mm / + 3 mm
- Z** - 1,5 mm / + 2,5 mm

Adjustment range varies according to different hinge models

TAILOR MADE

If you have special applications and none of the published hinges on this catalog can be used, please send us more information about your technical and design needs. Ceam will check if some of our hinges can be modified to suit your requirements.

NOTES

The information herewith reported are indicative guidelines. In practice, every specific case is unique and the variables that affect the correct functioning of the hinge can be even more.

The customer must be sure that hinges proportions secure even external factors beyond what is indicated and verified by tests done in our facilities and in external laboratories credited facilities. In particular in public buildings, where, due to the high opening frequencies not always calculable and special stress, should be used an adequate number of hinges, even if the weight of the door does not require

For an ideal performance, depending on hinge model, scope and environment, it could be useful, even if not mandatory, to lubricate the hinge once every two years, or more, depending on the frequency of opening using a silicon type lubricant.



