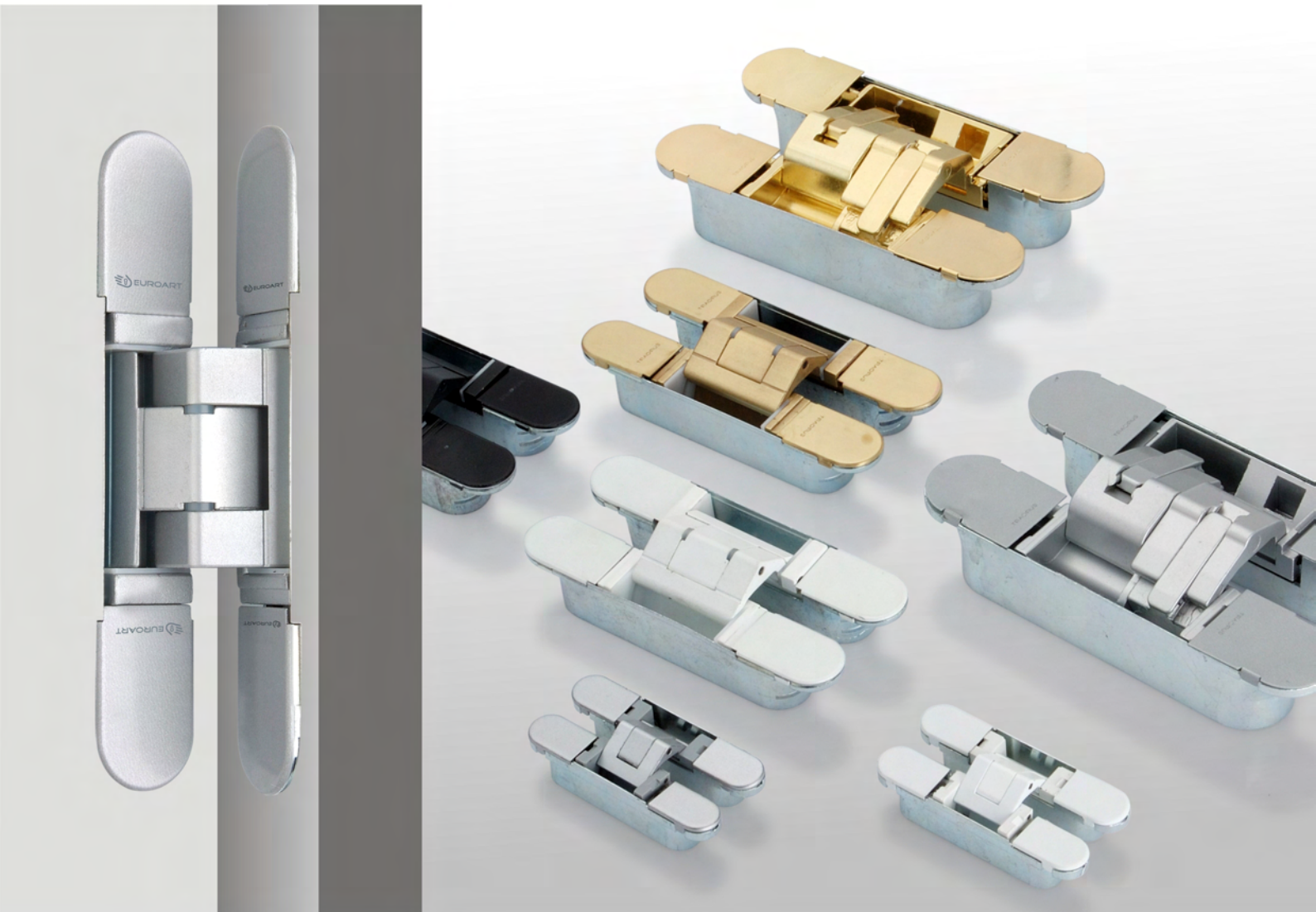




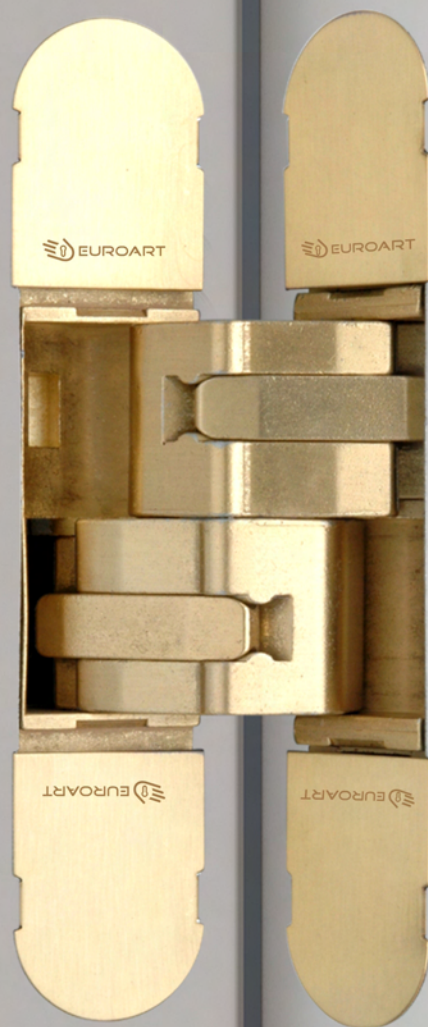
3D Concealed Hinges

For Commercials & Residential

Your Project Partner



The inception ideology of the 3D hinge was to have a solid hinge which is mechanically reliable and suitable. It provides & uninterrupted movement of the door during its long life. The usability of the hinge must be guaranteed in the long term as compared to standard warranties. For this reason, we had set up the manufacturing of these hinges in the European nation. The product cycle of these 3D hinges begins with designing, moulding, tool kitting, best raw materials sorting, cutting, polishing and final assembly.



CONCEALED
HINGES



Malcolm Brown
Honorary Chairman

About EuroArt

EuroArt was founded in 1980's by Mr Malcolm Brown with the vision to develop and manufacture a comprehensive line of door hardware. With our plant operations in Blackburn, UK we manufacture an exclusive range of Architectural Hardware, Furniture Fitting and Glass door fittings.

Under the guidance of Mr Malcolm Brown, EuroArt has done continuous research, brought new technologies and made innovative design to position us among the world leaders of reliable products. EuroArt's impeccable product line and quality management have made our organization the most trusted hardware brand.

In 2006, EuroArt has set up a dedicated export office in Middle East and Asia with a challenging responsibility of stocking and importing among these regions. Mr Sahil Khan, CEO (EuroArt Middle East and Asia) has taken the legacy ahead with his immense knowledge and sense of understanding the market.

EuroArt plays a critical role in supporting international architects. EuroArt considers architects much more than designing and buildings. Architects have a greater task, they're uniquely positioned to improve life on numerous levels for professional clients, cities, and private individuals.

EuroArt's dedicated Sales support teams coordinate with international architects, contractors and multinational corporations who demand the sophistication of quality product in every corner of the globe. Through specification, writing, consulting, and product selection EuroArt offers unmatched product solutions. This matches the demands of today's modern buildings, while offering worldwide local support through our vast network of partners and distributors.

Guarantee

To support the high quality and first class engineering that has gone into the EuroArt product range, we offer a 2 to 10 years guarantee (subject to conditions) against defects due to faulty manufacturing, workmanship or defective material. EuroArt agrees to replace any defective product free of charge provided the product has been fitted in accordance with the fitting instructions and maintained correctly.

Technical Support

Comprehensive information and technical support services are available by contacting:
Tel: +44 1254 433883

Email: uk@euro-art.co.uk





About EuroArt 3D concealed Hinges

EuroArt 3D Concealed hinges have impressive load-bearing capacities, being able to support door elements of up to 300 kg. They also have an opening angle of up to 180° and can be used with wood, steel, and aluminium frames. The hinges can be adjusted in all three dimensions and require no maintenance. 3D concealed Hinges are used on high-quality residential doors and functionally heavy-duty doors. The wide range of finishes available in EuroArt's concealed 3D hinges can provide a variety of applications – they can be harmoniously tailored to an architectural concept and fittings and can completely blend into the background when the respective door is closed.



Raw material used in the making of EuroArt 3D Concealed Hinges

STEEL: Iron-based alloy, which contains a variable percentage of carbon in the range of 0.1% ÷ 2%. Steel is one of the most widely used materials in the world for its strength, complete recyclability, high mechanical resistance, pliability and elasticity. Furthermore, it can gain mechanical resistance and toughness through repeated tempering.

BRASS: Copper-based alloy, which contains a percentage of zinc in the range of 36% ÷ 45%, and other elements like magnesium, tin and aluminium that enhance resistance to corrosion, and iron that increases ultimate strength. Mechanical features, weathering resistance and excellent workability make brass the ideal choice for several applications. Brass can be easily used for galvanic surface coating; hence, it is extensively adopted for decorations.

ZAMA: Zinc-based alloy, which contains a percentage of aluminium in the range of 3% - 5%, and a percentage of copper in the range of 1% - 3%. It can be used for pressure die castings to obtain items with complex shapes and low dimensional tolerance. It can be adopted for any galvanic treatment.

NYLON: Commercial name: Polyamide PA6/66. It is a thermoplastic material that has high mechanical resistance, excellent toughness and high resistance to impact. With excellent resistance to wear and anti-effraction properties, it is extensively used for many technical purposes. Almost transparent when raw, it can be produced in many colours.

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DESIGN

Aesthetics is our core design principle for the concealed hinge to have pleasing qualities. In visual terms, aesthetics includes factors such as balance, color, movement, pattern, scale, shape, and visual weight which were all considered for the design of EuroArt's concealed 3D hinges.



ENGINEERING

Manufactured in different sizes and materials like zinc-alloy, stainless steel, aluminium, and Fiberglass, EuroArt's concealed 3D hinges are symmetrically designed and engineered to solve the new challenges of modern buildings.



WEIGHT CAPACITY 150Kg.

Made Solid, reliable, and long-lasting to with stand 150kg. weight. EuroArt's 3D concealed hinges are tested for 2,00,000 cycles. We also have options of Fire Rated.



3D ADJUSTMENT

With a wide opening of 180°, EuroArt's 3D concealed hinges can be adjusted in 3 dimensions.

- Horizontal from -1.5 mm to + 3.5 mm (see individual specifications)
- Vertical from -3.0 mm to + 3.0 mm (see individual specifications)
- Depth +/- 1.0 mm



DURABILITY

Durability of the concealed hinges is the ability of the product to remain functional, without requiring excessive maintenance or repair, when faced with the challenges of normal operation over its design lifetime. There are several measures of durability which we considered like use, including years of life, hours of use, and the number of operational cycles.



MINIMUM PREPARATION

Installation requires a minimum 18mm depth cut-out on wooden, aluminium, or steel profiles.



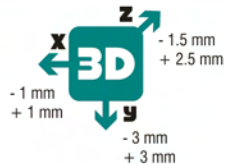
EASY INSTALLATION

The minimum preparation for the hinge makes the installation of EuroArt's 3D concealed hinges hustle-free. The door and frame can be assembled separately. The hinges can be installed on-site without any complex machinery.

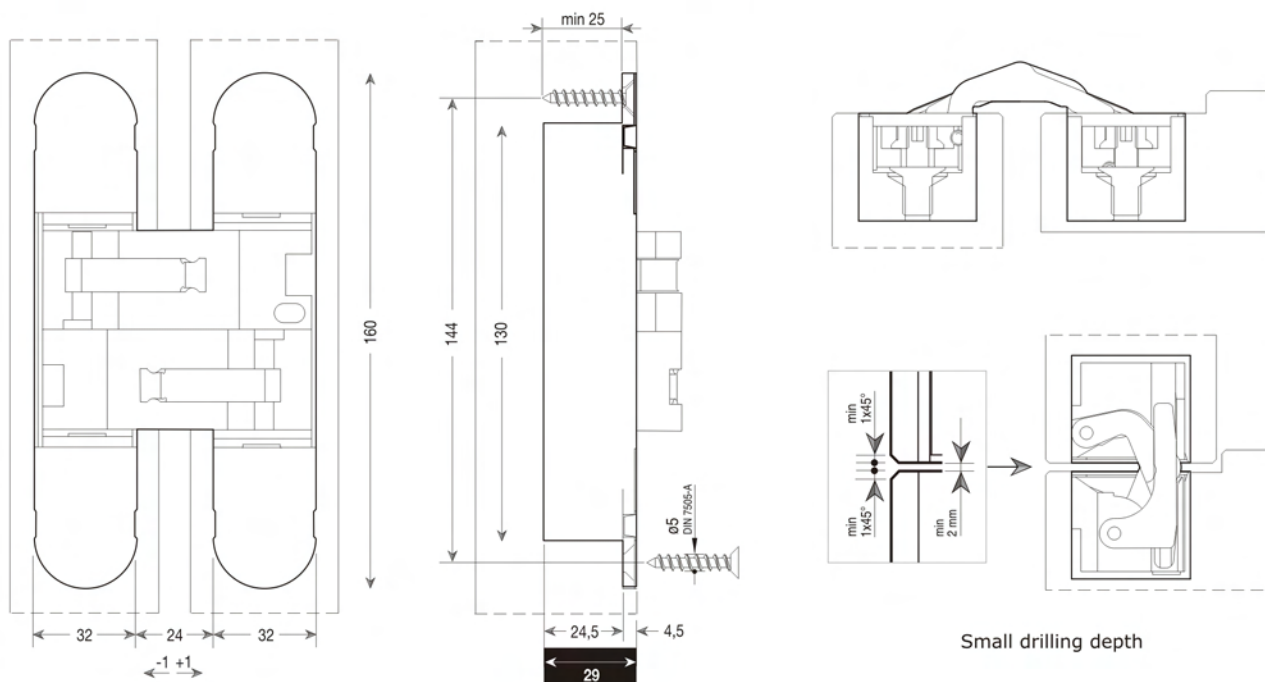


MAINTENANCE FREE

EuroArt's 3D concealed hinges require little or no maintenance. When the hinges are installed correctly and handled accurately, they will require no maintenance throughout their life span.

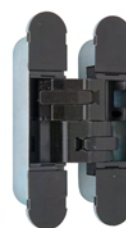
ED360

Features:

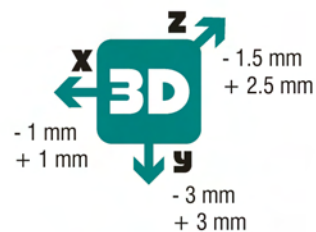
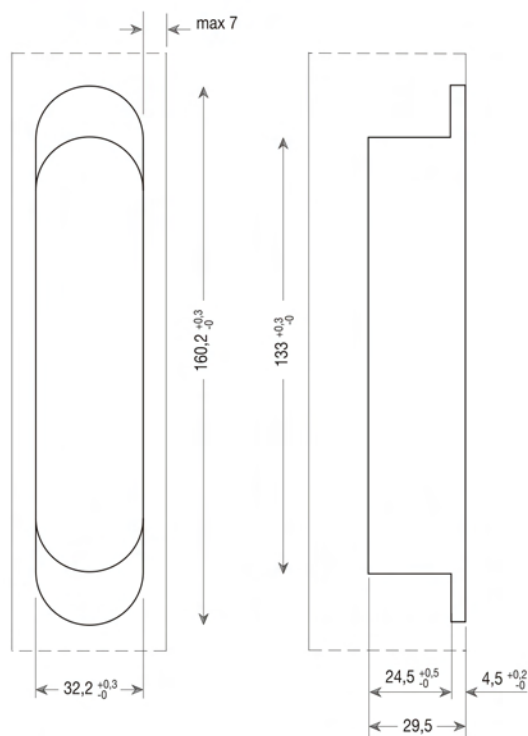
- Available in 5 different finishes.
- Compatible for door thickness minimum 38mm.
- Door width - up to 1000mm.
- Hinge total height 160mm and Depth 29mm.
- Weight capacity :
2 hinges : 80kg.
3 hinges : 120kg.
4 hinges : 140kg.
- Area of application : residential, commercial entrance door & marine use.
- 3D adjusting system – Horizontal, vertical, and depth adjustment.
- Easy installation and slot symmetry.
- The new smart design makes the operation resistant to rusting and oxidation with the help of steel caps.
- Restructuring of the joints for smooth and effortless movement with long-lasting durability.


SB

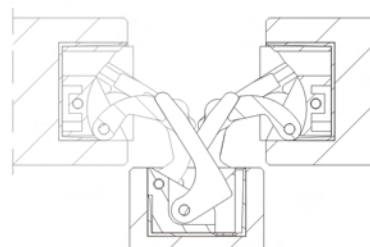
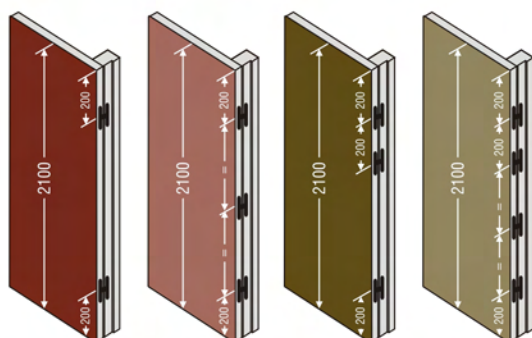
MAB

MSN

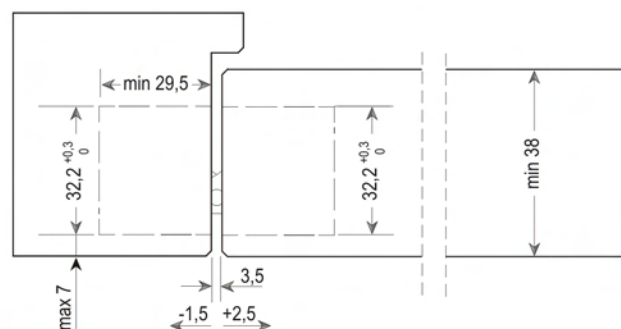
PB

MBL


Reversibility

Reversible for doors from 38 mm to 46 mm thick


Load capacity chart


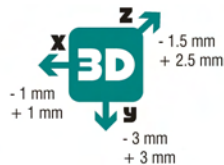
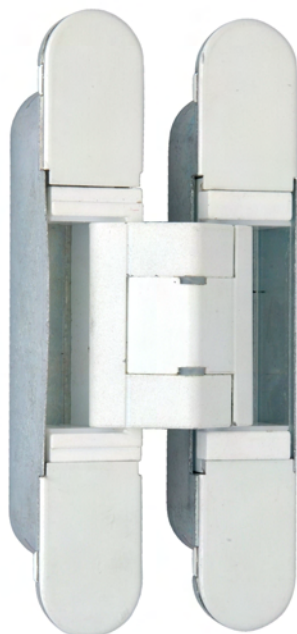
- 2 - Hinges
- 3 - Symmetrical hinges
- 3 - Asymmetrical hinges
- 4 - Hinges


2 HINGES LOAD CAPACITY CHART

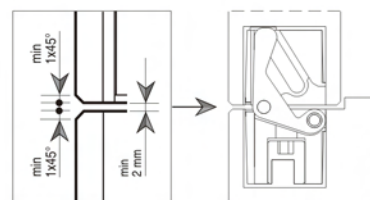
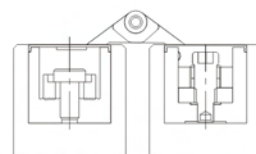
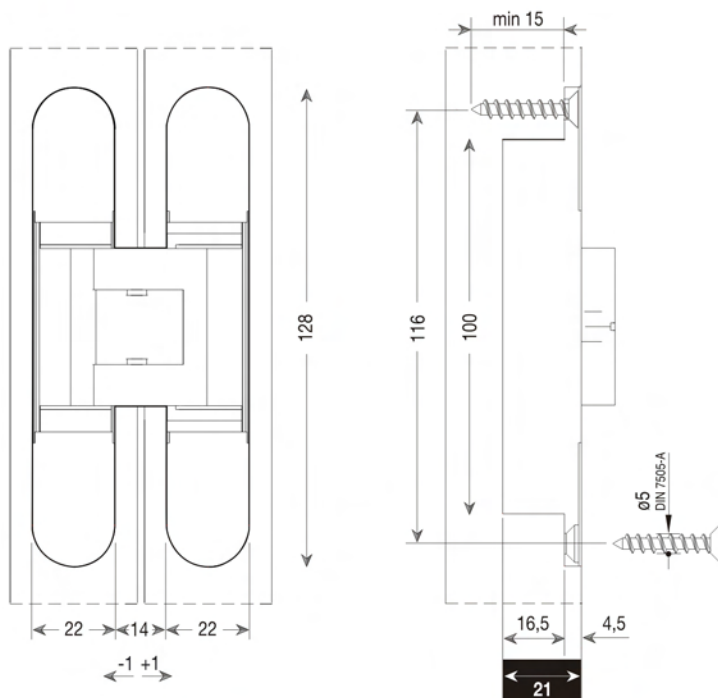
Door Height mm	700	800	900	1000	1100	1200	1300
2200	80	80	80	78	66	59	54
2100	80	80	80	72	62	56	52
2000	80	80	80	66	58	53	49
1900	80	80	73	62	55	51	47

3 HINGES LOAD CAPACITY CHART

Door Height mm	700	800	900	1000	1100	1200	1300	4 HINGES SUGGESTED
3000	120	120	120	120	120	120	120	
2900	120	120	120	120	120	120	120	
2800	120	120	120	120	120	120	112	
2700	120	120	120	120	120	120	105	
2600	120	120	120	120	120	114	98	
2500	120	120	120	120	105	92	87	
2400	120	120	120	115	98	87	83	
2300	120	120	120	106	92	86	78	
2200	120	120	120	117	98	86	78	
2100	120	120	120	107	91	82	75	
2000	120	120	120	98	85	77	71	

ED228

Features:

- Available in 5 different finishes.
- Compatible for door thickness minimum 28mm.
- Door width - up to 1000mm.
- Hinge total height 128mm and Depth 21mm.
- Weight capacity :
2 hinges : 40kg.
3 hinges : 60kg.
4 hinges : 70kg.
- Area of application : residential & commercial.
- 3D adjusting system – Horizontal, vertical, and depth adjustment.
- Easy installation and slot symmetry.
- The new smart design makes the operation resistant to rusting and oxidation with the help of steel caps.
- Restructuring of the joints for smooth and effortless movement with long-lasting durability.



Small drilling depth



SB



MAB



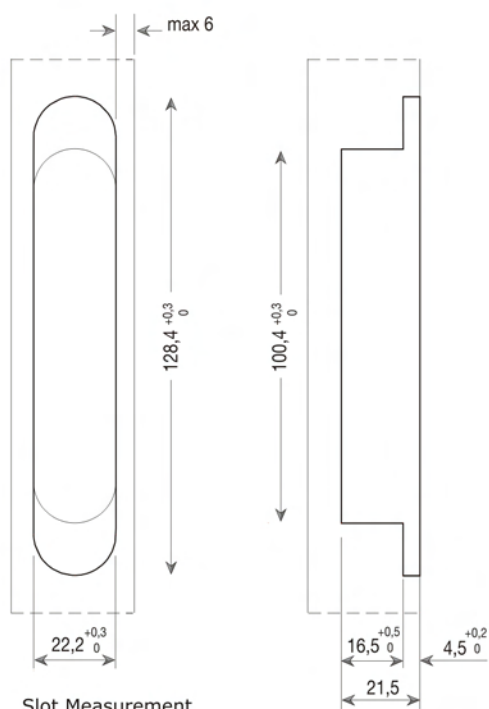
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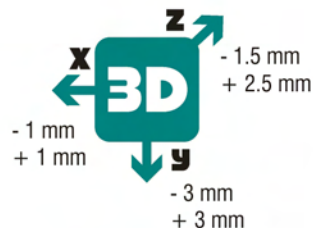
WHT



MBL

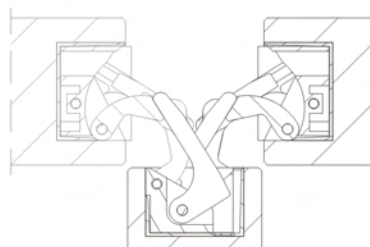


Slot Measurement

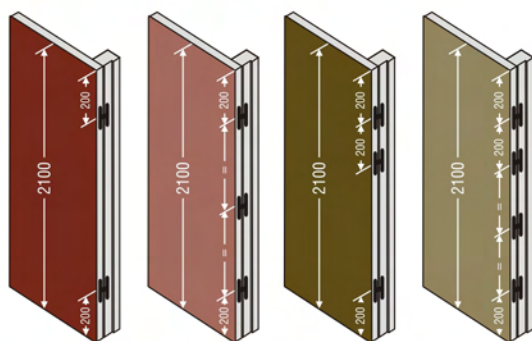


Reversibility

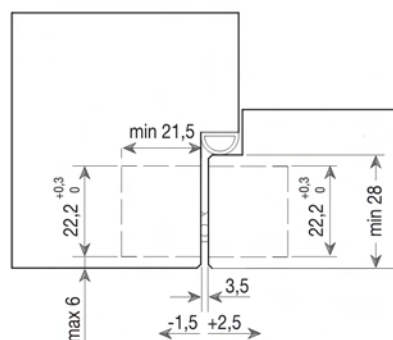
Reversible for doors from 28 mm to 34 mm thick



Load capacity chart



- 2 - Hinges
- 3 - Symmetrical hinges
- 3 - Asymmetrical hinges
- 4 - Hinges

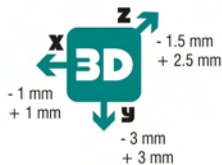


2 HINGES LOAD CAPACITY CHART

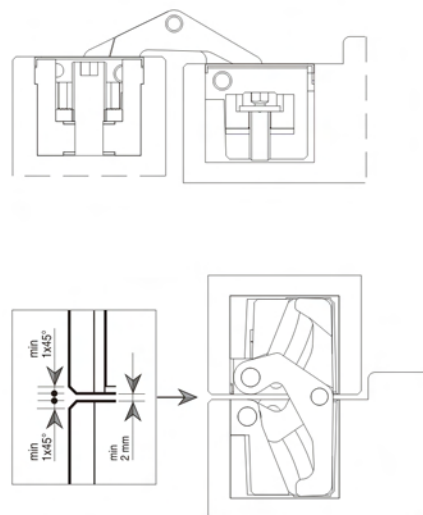
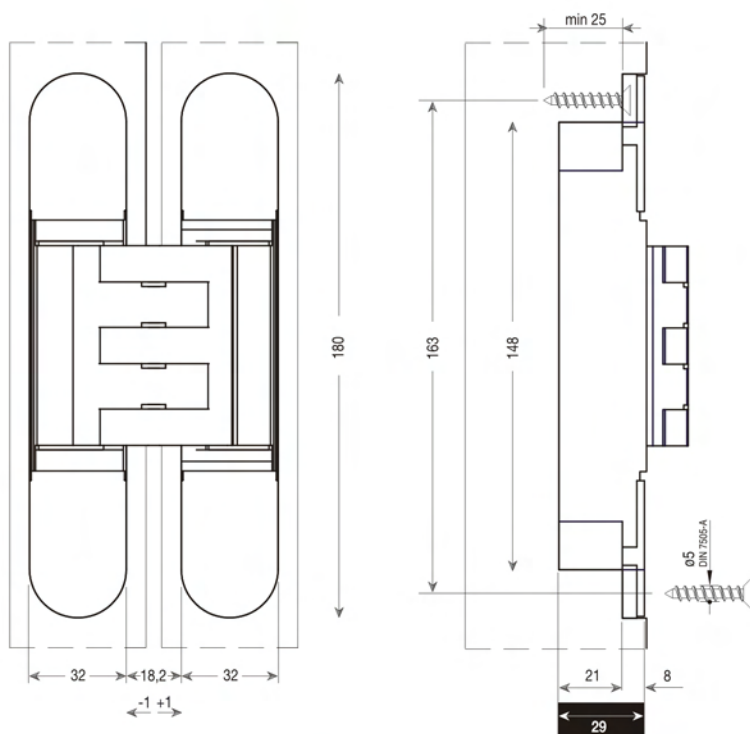
Door Height mm	2200	50	50	50	49	41	37	34
	2100	50	50	50	45	39	35	32
	2000	50	50	50	41	36	33	31
	1900	50	50	45	38	34	32	29
		700	800	900	1000	1100	1200	1300
Door width mm								

3 HINGES LOAD CAPACITY CHART

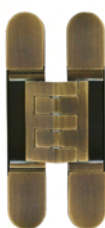
Door Height mm	Door width mm								4 HINGES SUGGESTED
	700	800	900	1000	1100	1200	1300		
3000	65	65	65	65	65	65	65	65	
2900	65	65	65	65	65	65	65	65	
2800	65	65	65	65	65	65	65	61	
2700	65	65	65	65	65	65	65	57	
2600	65	65	65	65	65	65	61	53	
2500	65	65	65	65	65	65	57	50	
2400	65	65	65	65	62	53	47		
2300	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		

ED380

MAINTENANCEFREE
Features:

- Available in 4 different finishes.
- Compatible for door thickness minimum 38mm.
- Door width - up to 1000mm.
- Hinge total height 180mm and Depth 29mm.
- Weight capacity :
2 hinges : 120kg.
3 hinges : 145kg.
4 hinges : 160kg.
- Area of application : residential & commercial.
- 3D adjusting system – Horizontal, vertical, and depth adjustment.
- Easy installation and slot symmetry.
- The new smart design makes the operation resistant to rusting and oxidation with the help of steel caps.
- Restructuring of the joints for smooth and effortless movement with long-lasting durability.

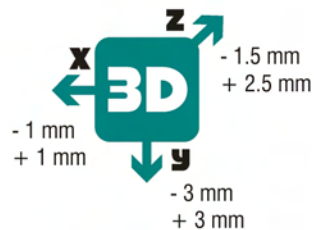
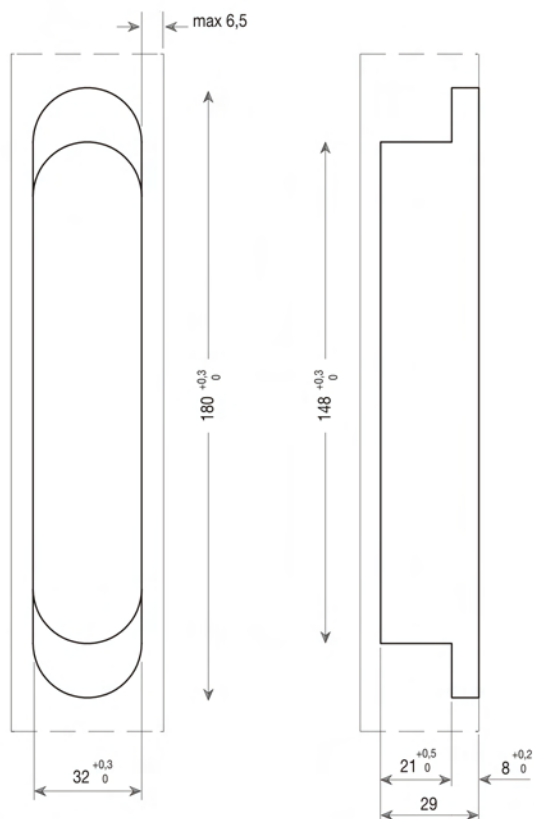


Small drilling depth


SB

MAB

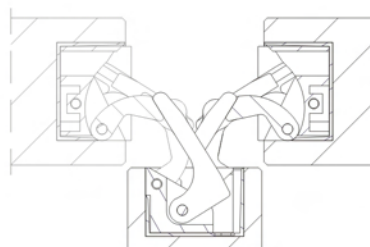
MSN

MBL

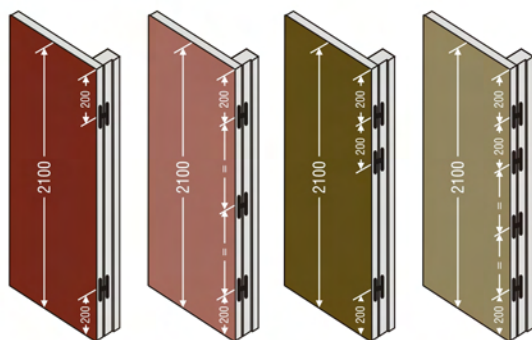


Reversibility

Reversible for doors from 38 mm to 45 mm thick



Load capacity chart



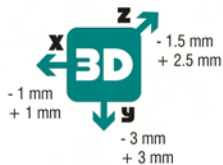
- 2 - Hinges
- 3 - Symmetrical hinges
- 3 - Asymmetrical hinges
- 4 - Hinges

2 HINGES LOAD CAPACITY CHART

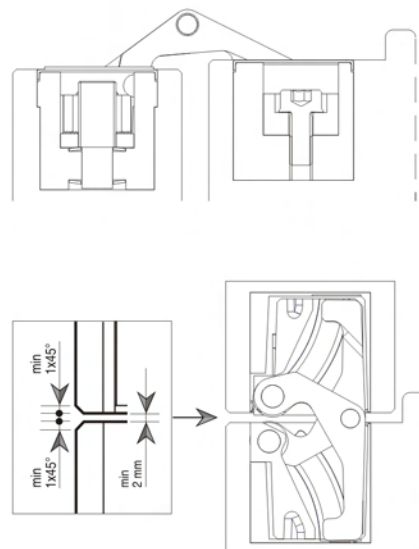
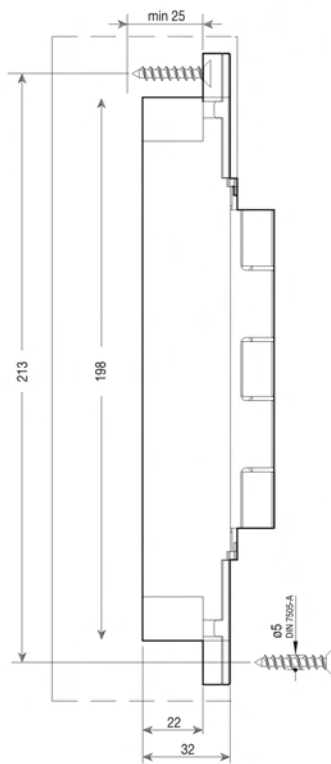
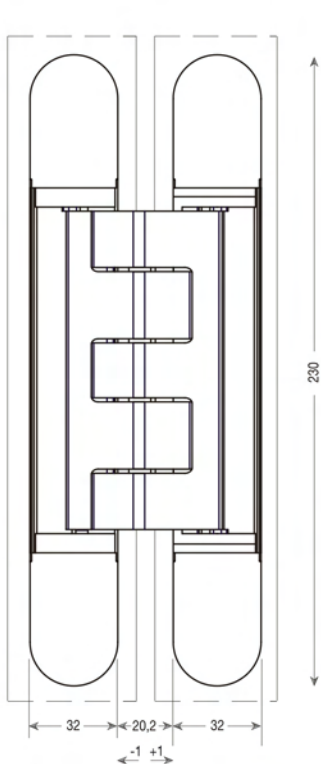
Door Height mm	700	800	900	1000	1100	1200	1300
2200	120	120	120	118	100	89	81
2100	120	120	120	108	94	84	78
2000	120	120	120	100	88	80	74
1900	120	120	109	93	83	76	71

3 HINGES LOAD CAPACITY CHART

Door Height mm	700	800	900	1000	1100	1200	1300	4 HINGES SUGGESTED
3000	135	135	135	135	135	135	135	
2900	135	135	135	135	135	135	135	
2800	135	135	135	135	135	135	126	
2700	135	135	135	135	135	135	118	
2600	135	135	135	135	135	128	110	
2500	135	135	135	135	135	119	104	
2400	135	135	135	135	130	110	98	
2300	135	135	135	135	119	103	93	
2200	135	135	135	132	110	97	88	
2100	135	135	135	120	103	92	84	
2000	135	135	135	110	96	87	80	

ED430

Features:

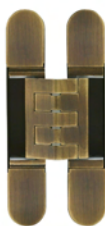
- Available in 4 different finishes.
- Compatible for door thickness minimum 38mm.
- Door width - up to 1000mm.
- Hinge total height 230mm and Depth 32mm.
- Weight capacity :
 2 hinges : 180kg.
 3 hinges : 230kg.
 4 hinges : 250kg.
- Area of application : residential & commercial.
- 3D adjusting system – Horizontal, vertical, and depth adjustment.
- Easy installation and slot symmetry.
- Design for heavy duty doors.
- The new smart design makes the operation resistant to rusting and oxidation with the help of steel caps.
- Restructuring of the joints for smooth and effortless movement with long-lasting durability.



Small drilling depth



SB



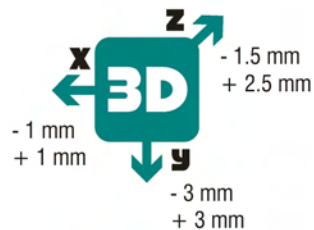
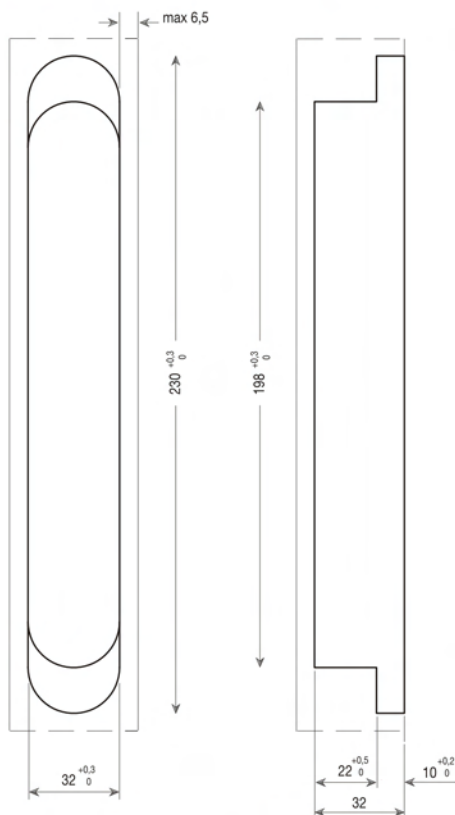
MAB



MSN

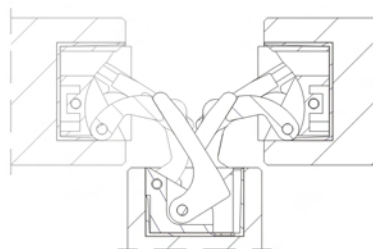


MBL

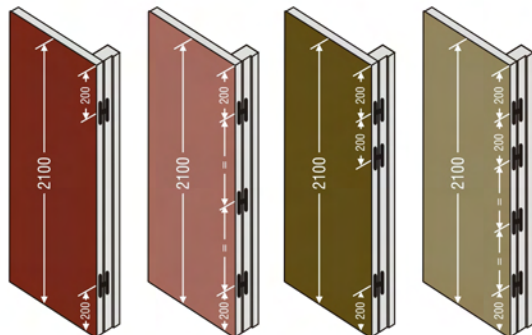


Reversibility

Reversible for doors from 38 mm to 45 mm thick



Load capacity chart



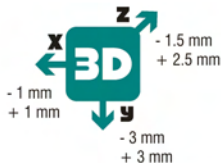
- 2 - Hinges
- 3 - Symmetrical hinges
- 3 - Asymmetrical hinges
- 4 - Hinges

2 HINGES LOAD CAPACITY CHART

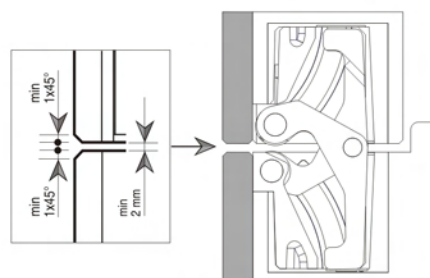
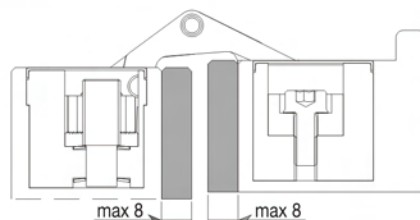
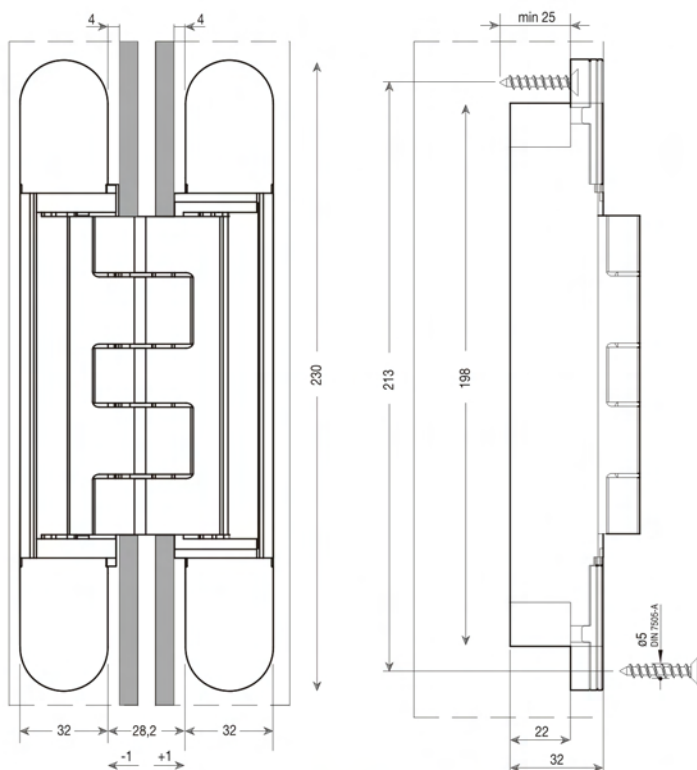
Door Height mm	2200	2100	2000	1900	700	800	900	1000	1100	1200	1300
180	180	180	180	180	176	150	133	122			
162	140	126	116								
150	132	120	111								
140	125	114	107								

3 HINGES LOAD CAPACITY CHART

Door Height mm	3000	2900	2800	2700	2600	2500	2400	2300	2200	2100	2000	700	800	900	1000	1100	1200	1300
215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215
201																		
188																		
204																		
176																		
189																		
165																		
207																		
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192																		
164																		
146																		
134																		
176																		
153																		
138																		
128																		

ED430W For Cladded Door (8mm)

Features:

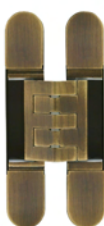
- Available in 4 different finishes.
- Compatible for door thickness minimum 38mm.
- Door width - up to 1000mm.
- Hinge total height 230mm and Depth 32mm.
- Weight capacity :
2 hinges : 160kg.
3 hinges : 190kg.
4 hinges : 220kg.
- Area of application : residential & commercial.
- 3D adjusting system – Horizontal, vertical, and depth adjustment.
- Easy installation and slot symmetry.
- Design for heavy duty doors.
- The new smart design makes the operation resistant to rusting and oxidation with the help of steel caps.
- Restructuring of the joints for smooth and effortless movement with long-lasting durability.



Small drilling depth



SB



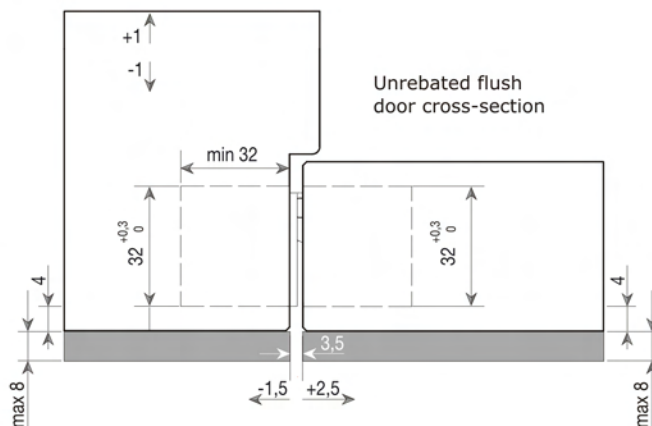
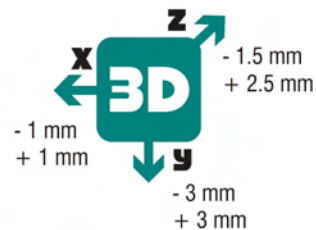
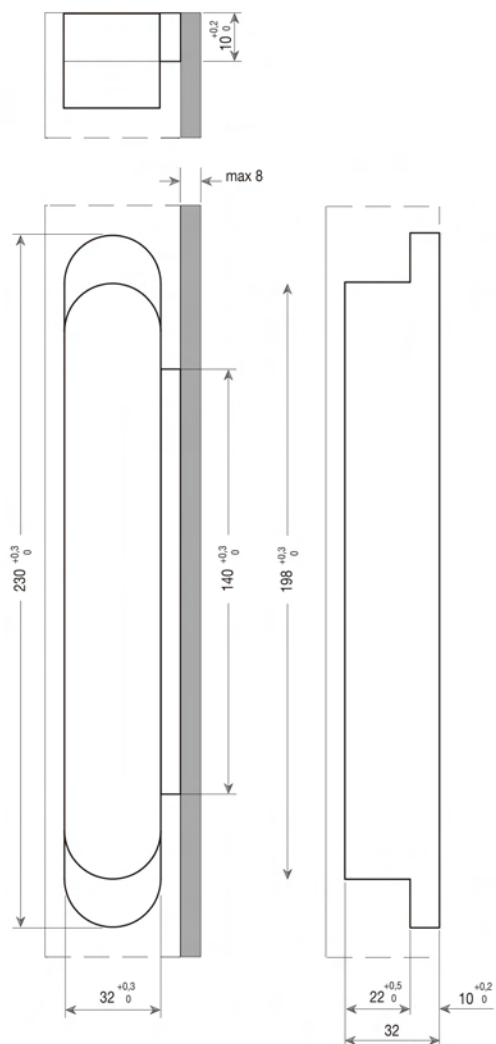
MAB



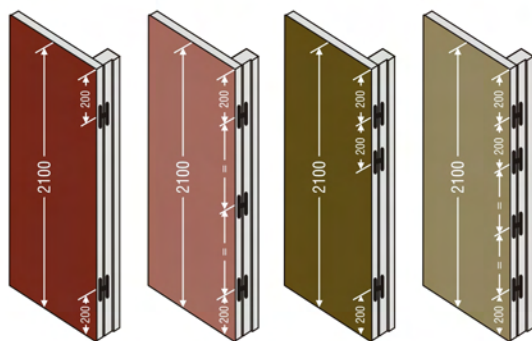
MSN



MBL



Load capacity chart



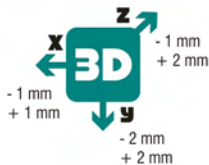
- 2 - Hinges
- 3 - Symmetrical hinges
- 3 - Asymmetrical hinges
- 4 - Hinges

2 HINGES LOAD CAPACITY CHART

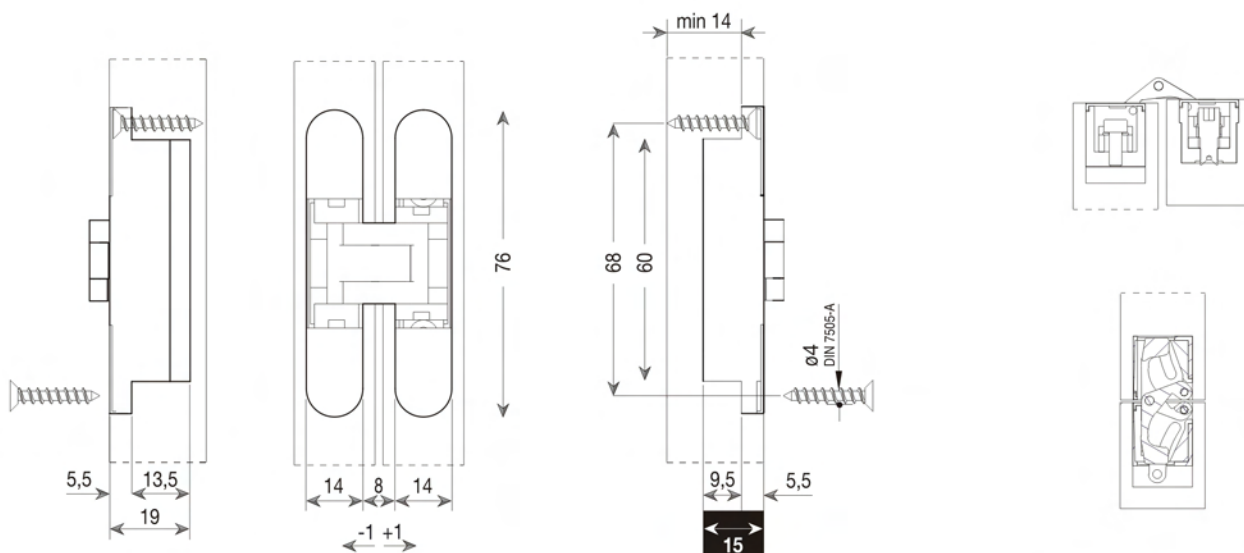
Door Height mm	Door width mm							
	700	800	900	1000	1100	1200	1300	
	2200	160	160	160	157	133	119	108
	2100	160	160	160	144	125	112	103
2000	160	160	160	133	117	107	99	
1900	160	160	145	124	111	102	95	

3 HINGES LOAD CAPACITY CHART

Door Height mm	3000	195	195	195	195	195	195	195	4 HINGES SUGGESTED	
	2900	195	195	195	195	195	195	195		
	2800	195	195	195	195	195	195	183		
	2700	195	195	195	195	195	195	170		
	2600	195	195	195	195	195	185	160		
	2500	195	195	195	195	195	171	150		
	2400	195	195	195	195	187	160	142		
	2300	195	195	195	195	172	149	134		
	2200	195	195	195		191	160	140		127
	2100	195	195	195		174	149	132		121
2000	195	195	195		160	139	125	116		
		700	800	900	1000	1100	1200	1300		
Door width mm										

EA176 (For Cabinet Door)

Features:

- Available in 2 different finishes.
- Compatible for door thickness minimum 18mm.
- Door width - up to 700mm.
- Hinge total height 76mm and Depth 15mm.
- Weight capacity :
 2 hinges : 12kg.
 3 hinges : 16kg.
 4 hinges : 21kg.
- Area of application : residential & commercial.
- 3D adjusting system – Horizontal, vertical, and depth adjustment.
- Easy installation and slot symmetry.
- The new smart design makes the operation resistant to rusting and oxidation with the help of steel caps.
- Restructuring of the joints for smooth and effortless movement with long-lasting durability.



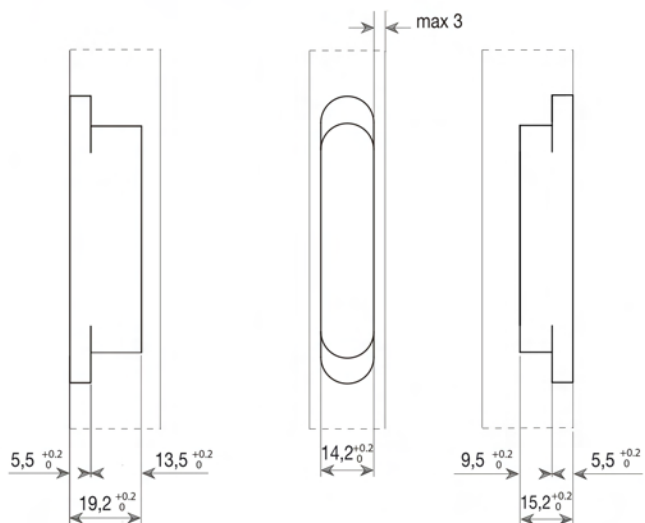
Small drilling depth



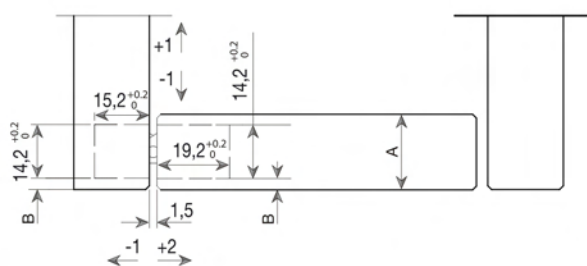
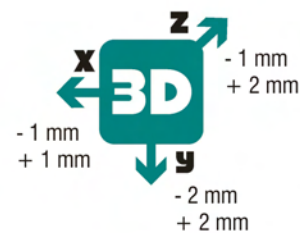
MSN



WHT

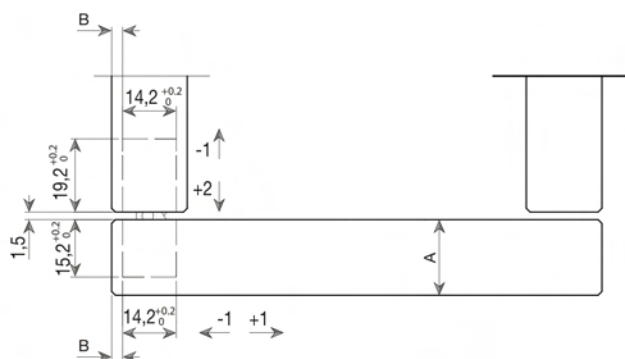


Slot measurement



Inset application
Cabinet cross-section
with door inside the box

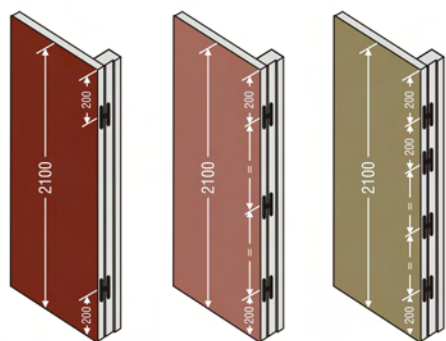
A	B
18	2
20	3



Full overlay application
Cabinet cross-section
with door outside the box

A	B
18	2
20	3

Load capacity chart



● 2 - Hinges

● 4 - Hinges

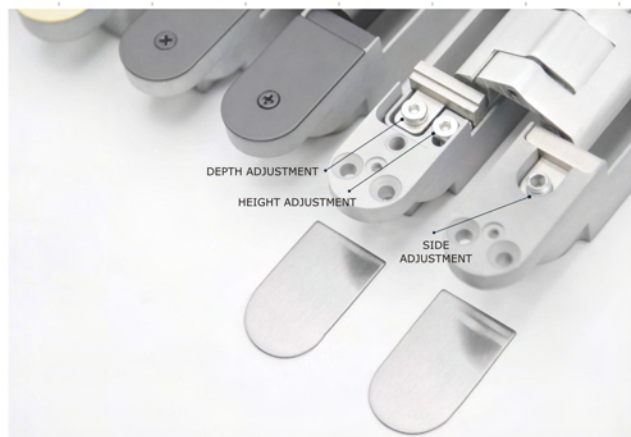
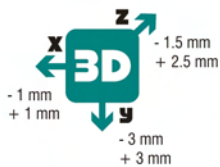
● 3 - Symmetrical hinges

2 HINGES LOAD CAPACITY CHART

Door Height mm	1000	800	600	500
Door width mm	500	600	700	800
1000	14	14	14	13
800	14	14	14	12
600	14	14	14	11
500	14	14	12	10

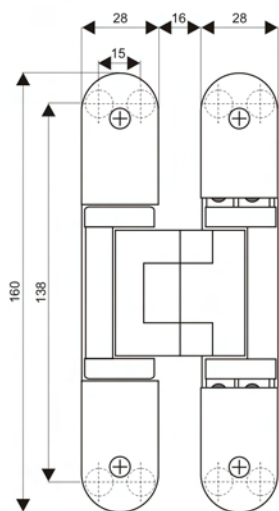
3 HINGES LOAD CAPACITY CHART

Door Height mm	2000	18	18	18	18	4 HINGES SUGGESTED
	1600	18	18	18	18	
	1200	18	18	18	18	
	1000	18	18	18	18	
	800	18	18	18	17	
	600	18	18	18	16	
	500	18	18	16	14	
			500	600	700	800
Door width mm						

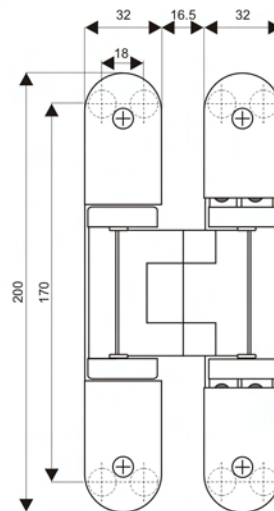
3D160/3D200

Features

- Completely concealed for unrebated doors with timber, steel and aluminium frames
- Cycle tested: 200,000
- Right hand and left hand applicable
- Three-dimensionally adjustable
- Opening angle 180 degrees
- Pre-cut intumescent hinge pads available

Ref. No.	Size	Load Capacity
• 3D160	28 x 160mm	80kg.
	Minimum door thickness required: 36mm	
	2 Pcs. for door width upto 900mm	
	3 Pcs. for door width upto 1000mm	



Ref. No.	Size	Load Capacity
• 3D200	32 x 200mm	120kg.
	Minimum door thickness required: 40mm	
	2 Pcs. for door width upto 1000mm	
	3 Pcs. for door width upto 1150mm	



Installation process:

- Separate the hinge body of Door Side, from the frame base marked as Frame Side. Insert the frame base in the frame cut-out.
- Height adjustment screws should be closer to the frame reference side. Make sure that the height adjustment screws are set and secure the frame base to the frame with 4 fixing screws.
- Insert the hinge body in the door cut-out and fasten securely using 4 fixing screws.
- Turn the hinge body and insert the hinges body completely in the frame bases simultaneously at the top and bottom. By lowering the door slowly in that position, the door should be held in place.

Note : Do not move the door at this stage as it may fall off.

- Slightly tighten the fixing screws through the oval holes of the hinge body.

Adjustment Process:

Door can be adjusted in all three dimensions

1. Vertical adjustment (± 3 mm)

Make sure fixing screws are only slightly tightened. Lift the door and adjust its height by turning the vertical adjustment screw (lower side), then firmly tighten all fixing screws. Lastly, move the vertical adjustment screw (upper side) to the inner direction so that it touches the hinge body.

2. Horizontal adjustment (+2 mm 1.5 mm)

Turn the horizontal adjustment screw right (+) to increase and left (-) to decrease the gap between the side frame and the door.

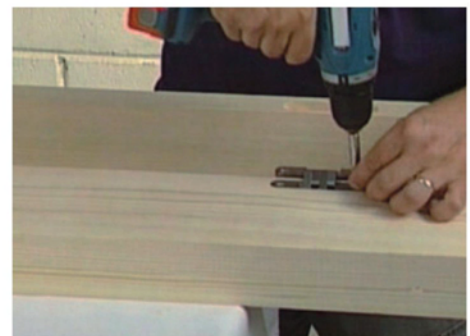
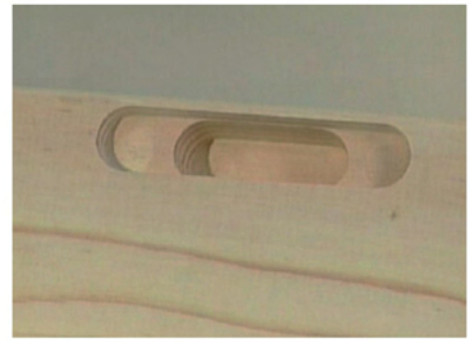
Note : Do not unscrew the adjustment screw completely as the door may fall off.

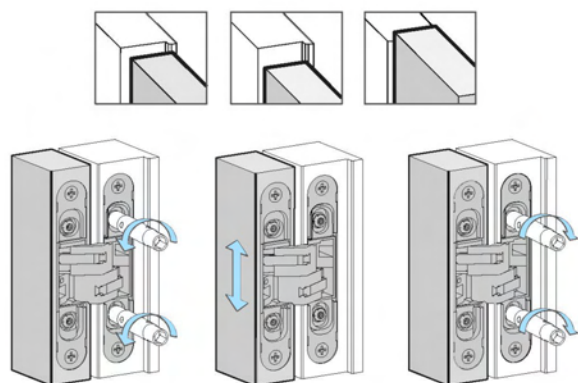
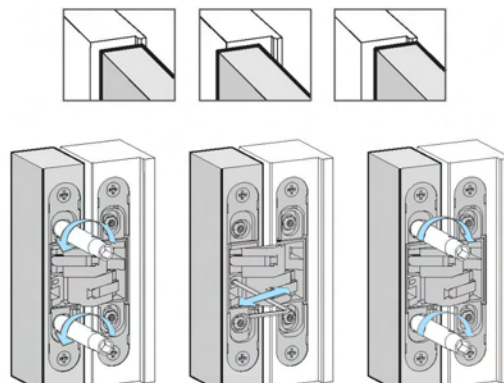
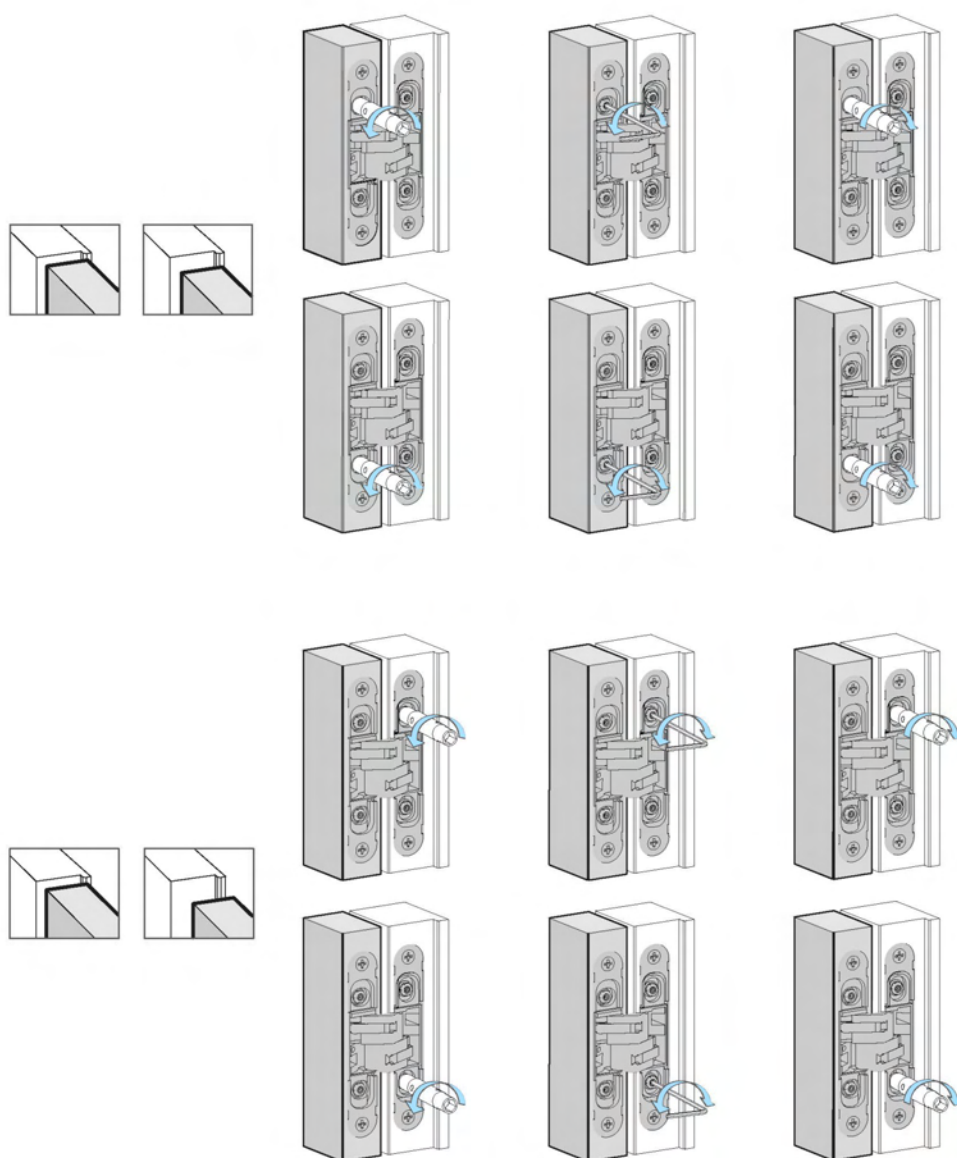
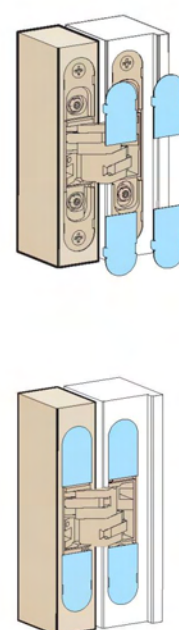
3. Depth adjustment (+1mm -1mm)

Turn the depth adjustment screw left (+) for front and right (-) for back adjustment.

Cover installation

Attach covers on the hinge and frame side of the hinge adjustment. Turn the depth adjustment screw left (+) for front and right (-) for back 4 mm for the door side.



Vertical adjustment

Horizontal adjustment

Depth adjustment

Fixing of cover


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