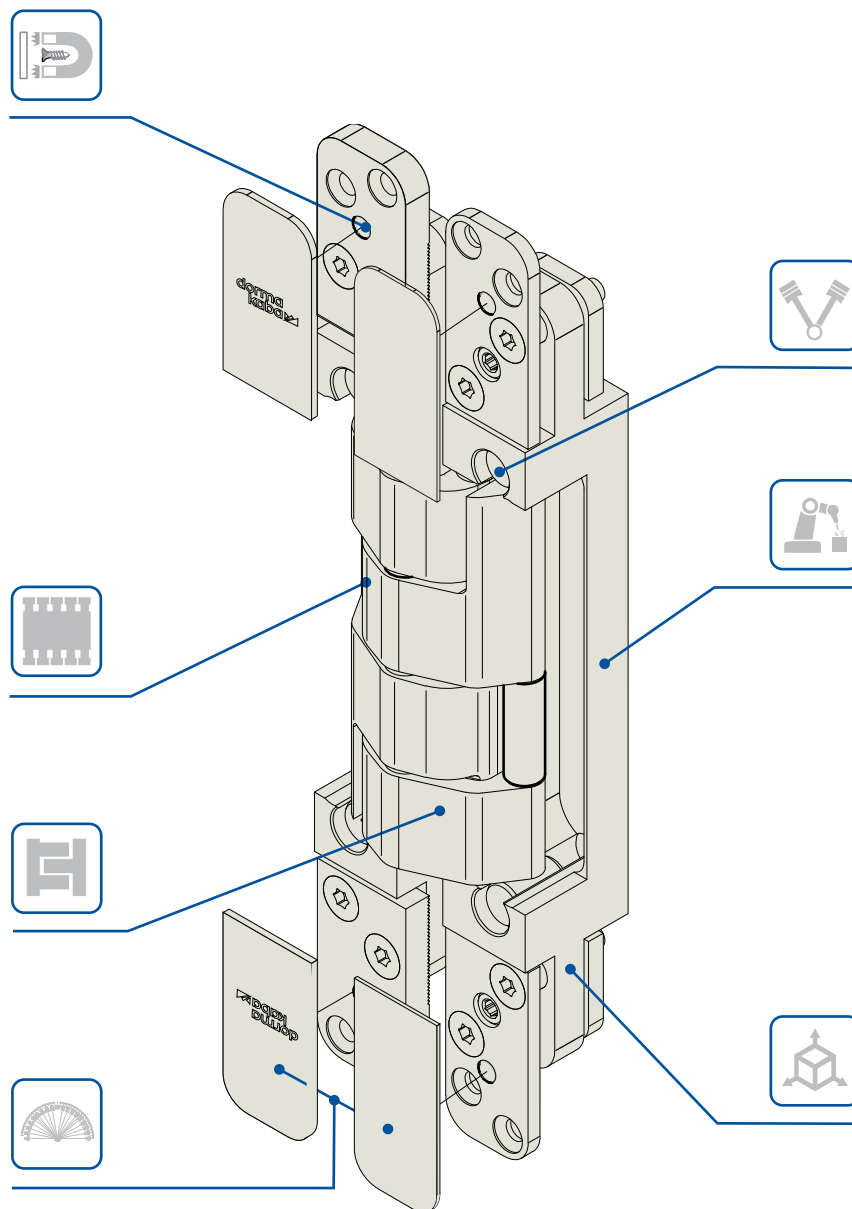




CONCEALEO® Hinges

The concealed
solution for
perfect closure.



Two strong global brands—Dorma and Kaba – have combined forces and are now offering you a comprehensive portfolio of smart & secure access solutions, all from one, reliable source.

Our new product portfolio includes everything from locks and keys to a fully networked electronic access solution, and everything from door closers and automatic doors to a mobile partition system.

All supported by a comprehensive service network.

Table of contents



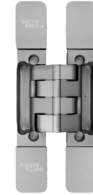
01

CONCEALEO® AS 350
CONCEALEO® AH 300



02

CONCEALEO® BS 250
CONCEALEO® BH 200



03

CONCEALEO® CH 200
CONCEALEO® CS 300
CONCEALEO® CH 150



04

CONCEALEO® DSS 120
CONCEALEO® DS 120
CONCEALEO® DH 120
CONCEALEO® DA 100



05

CONCEALEO® EA 60 N



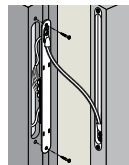
06

CONCEALEO® FA 60



07

CONCEALEO® HA 40 N



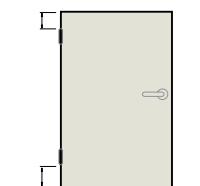
08

CONCEALEO®
CONNECT



09

ACCESSORIES



10

HINGE POSITION



CONCEALEO® HINGE CHARACTERISTICS



Concealed Fixings

Ensuring no visible screws for design aesthetics



Five Axis Joint

Designed for long-term maintenance-free operation

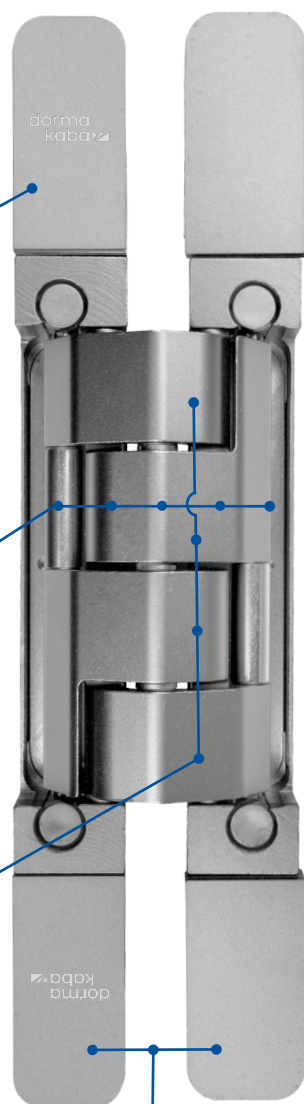


Four Knuckle Joint

To prevent twisting or tilting, smooth transfer of load from door to frame, more knuckle, more capacity



180° Opening Angle



Piston Guides

For maximum efficiency.
For silent operation.



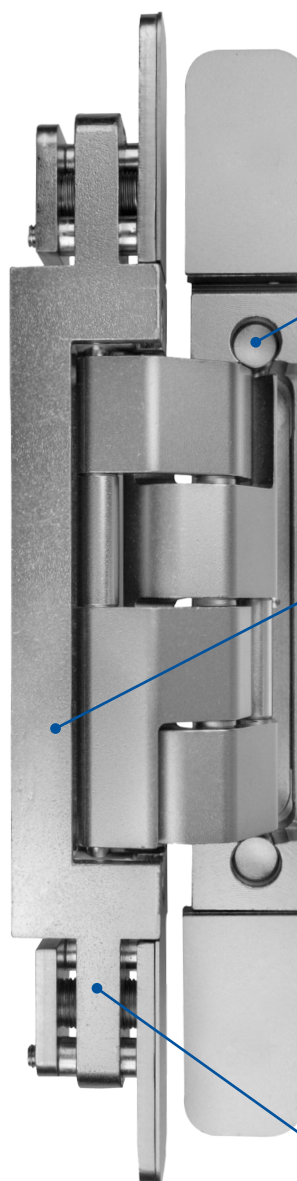
Solid Machined Piece

For strength



3D Adjustment

For hassle-free installation and maintenance



Fire Rated



Anti-Burglary Rated



Smoke Protection



Steel



Stainless Steel



Disability Complied



CE Marked



UL Listed



Aluminium

Please check details for each model

The concealed solution for perfect closure

CONCEALEO® - the new trend setter, combining high aesthetics with demanding functionality. Robust, maintenance free and hidden. A practical yet discreet performance hinge for your needs.

CONCEALEO® door hinges are setting the trend. Even though demands for functionality are growing - modern door hinges cater to a wide range of load-bearing capacities - the hardware needs to be as invisible as possible from the outside.

With the CONCEALEO® product range, dormakaba provides an all-embracing product line-up. With load-bearing capacities of 40 to 350 kilograms per pair, it covers the entire door spectrum from the simple domestic door to the highly complex commercial property door. The choice of material provides the basis for creating a range of concealed hinges for all door weights. dormakaba only uses true steel for the hinge's body which is machined, not cast.

Door manufacturers benefit on no less than two counts when they use CONCEALEO® door hinges: thanks to hybrid technology, each CONCEALEO® model comes with a different load-bearing capacity, yet all models within a group share the same dimensions and are based on only one milling pattern, with one cut-out for all models – a detail that is not found anywhere else on the market.

The design principle forms the heart of the CONCEALEO® hinge range. A symmetric four-knuckle joint evenly transfers the forces from the door-leaf into the frame. It is connected to the hinge elements by pistons which support the hinge transversally and channel the opening and closing forces in circular fashion in all directions. This principle gives doors a smooth mechanical action. It reliably takes up door-leaf weights and, together with

the solid material used, provides a high level of stability – even in conjunction with extreme weights and frequent use. CE certificates verify long-term, maintenance-free operation both in terms of supporting door weight as well as smooth opening and closing movement. Finally, all fixings are concealed, leading to a truly invisible component.

Ordering Guide

		Material Base		Finish
		SS*	Stainless Steel	SNP
		S	Steel	Alu Look F1
		H	Hybrid ST-AL	SSS
		A	Aluminum	Brass
				Bronze
				LB
				DB
				PNP
				PCP
				PGP
				RAL

Concealeo	A	S	300	SSS
	A		350 ²	350 kg
	B		300/300 ⁵	300 kg
	C		250 ²	250 kg
	D		200 ⁴	200 kg
			150 ¹	150 kg
			120 ²	120 kg
			100 ³	100 kg
			60 ⁶	60 kg
			40 ²	40 kg

		Model / Weight

Notes:

- 45mm Minimum Door Thickness
- 40mm Minimum Door Thickness
- 35mm minimum door thickness
- Model 200
Cut out BH has 40mm minimum door thickness
Cut out CH has 45 mm minimum door thickness
- Model 300
Cut out AH has 40mm minimum door thickness
Cut out CS has 45mm minimum door thickness
- Model 60
Cut out EA has 35mm minimum door thickness
Cut out FA has 30mm minimum door thickness
- Material
ST = Steel
AL = Aluminum
SS* = Stainless Steel (available on request)
- For doors with door closers , add 30% more to the weight of the door for the selection of the hinges
- For doors with door closers & Backcheck, kindly contact dormakaba for technical advice

Finish



Selection Guide

CONCEALEO® Model:		AS 350	AH 300	BS 250	BH 200	CS 300	CH 200	CH 150	DS 120	DH 120	DA 100	EA 60 N	FA 60	HA 40 N
Standard Load (kg) with two hinges		350	300	250	200	300	200	150	120	120	100	60	60	40
Cut-Out Type		A	A	B	B	C	C	C	D	D	D	E	F	H
Material	Base	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Aluminum	Aluminum	Aluminum	Aluminum
	Joint	Steel	Aluminum	Steel	Aluminum	Steel	Aluminum	Aluminum	Steel	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Opening Angle		180 degree	180 degree	180 degree	180 degree	180 degree	180 degree	180 degree	180 degree	180 degree	180 degree	180 degree	180 degree	180 degree
Door Thickness (mm)		≥40	≥40	≥40	≥40	≥45	≥45	≥45	≥35	≥35	≥35	≥35	≥30	≥40
Adjustment		3D	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D	3D
Hinge weight in kg		1.92	1.92	1.65	1.65	2.32	2.32	1.33	1.10	0.89	0.541	0.413	0.425	0.425
Dimension mm	Length	270	270	235	235	235	235	235	180	180	180	180	Frame 174 Door 194	165
	Width on Frame	30	30	30	30	37	37	37	27	27	27	24	21	25
	Width on Door	28	28	28	28	35	35	35	24	24	24	24	19	23
	Depth	35	35	35	35	45	45	45	30	30	30	25	25	27
Tested to	CE Mark	0757-CPR-229 EAD-9021559-1-2	0757-CPR-229 EAD-9021559-1-2	0757-CPR-229 EAD-9021559-1-2	0757-CPR-229 EAD-9021559-1-2	0757-CPR-229 EAD-9021559-1-2	0757-CPR-229 EAD-9021559-1-2	0757-CPR-229 EAD-9021559-1-2	0757-CPR-229 EAD-9021559-2-1	0757-CPR-229 EAD-9021559-2-1	0757-CPR-229 EAD-9021559-2-1	-	-	-
	Hinge Grade Hinge Test Cylce	14 200,000	14 200,000	14 200,000	14 200,000	14 200,000	14 200,000	14 200,000	14 200,000	13 200,000	12 200,000	10 200,000	10 200,000	7 200,000
	Fire Resistance (min)	180	30	180	30	180	30	-	180	30	30	-	-	-
	UL	R39352	R39352	R39352	R39352	-	-	-	R39352	R39352	R39352	-	-	-
	Burglary Resistance	RC2	RC2	RC2	RC2	-	-	-	-	-	-	-	-	-

CONCEALEO®**AS 350, AH 300**

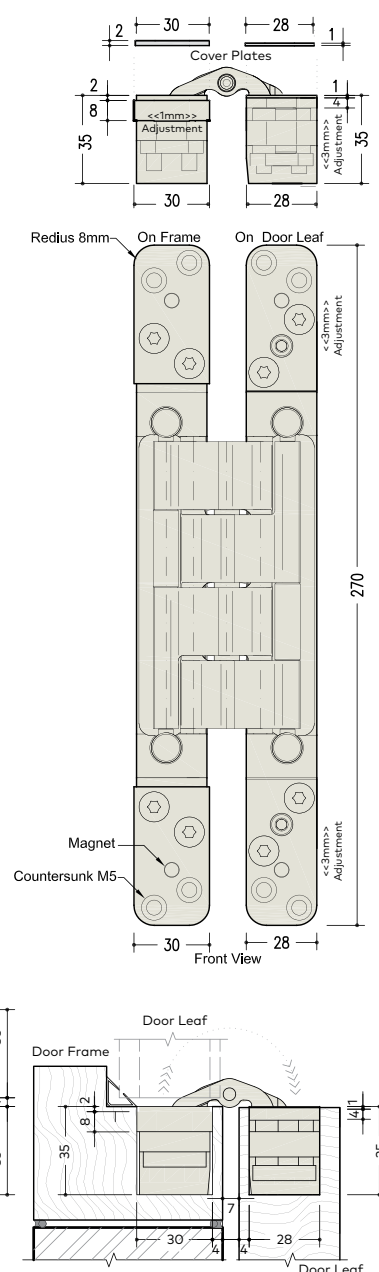
3D adjustable concealed hinge suitable for extra heavy duty wood, aluminium and steel doors with weight upto 350kg and minimum door thickness 40mm.

Size:	270mm x 30/28mm x 35mm								
Material:	AS350: Base and Joints made of steel AH300:Base made of Steel and Joints made of Aluminium								
Weight Capacity:	AS350 for doors upto 350Kg. AH300for doors upto 300Kg. 2 hinges per door.								
Finishes:	All eleven finishes available. Refer to page 7. SNP - Standard Finish.								
Salient Features:	'Safe & Sound' break-in protection 'Silent' Soundless closing 'Discrete Design' Plates								
Certifications:									
- Fire Resistance	Suitable for smoke control & fire rated doors.								
- CE Mark-ETA	Classification Code <table><tr><td>4</td><td>7</td><td>7</td><td>1</td><td>1</td><td>4</td><td>1</td><td>14</td></tr></table>	4	7	7	1	1	4	1	14
4	7	7	1	1	4	1	14		
- UL Listed - ANSI/UL10C	Test reference UL R39352.								
- Burglar Resistance	Tested to RC2								

SPECIFICATION TEXT

Concealed hinges to be dormakaba Concealeo series with 3D adjustment, solid metal machined body fully concealed when door is in closed position. Invisible screws fixings, suitable for minimum 40mm thick doors, with possibility to open 180°. The 3D adjustment limits to be $\pm 3\text{mm}$ in sides, $\pm 3\text{mm}$ in height and $\pm 1\text{mm}$ in compression.

Hinges to be Fire rated as per ANSI/UL10C and ETA, burglar resistant (RC2) certified. Hinges to have Five Axis Joint System, with four knuckles and have a Piston Guide System for smooth guided opening/closing cycles. For door upto 350kg use Concealeo AS350 with Steel base and joints. For door upto 300kg use Concealeo AH300 with Steel base and Aluminium joints.



CONCEALEO®

BS 250, BH 200



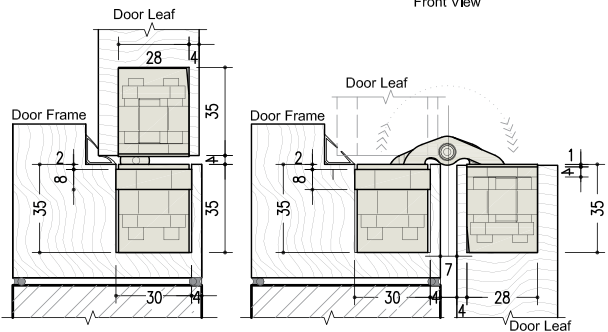
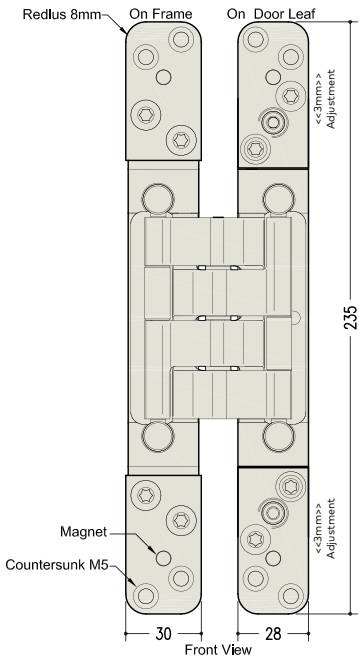
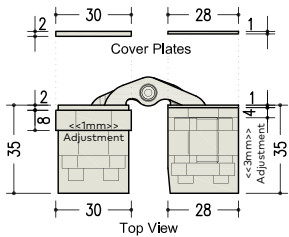
3D adjustable concealed hinge suitable for heavy duty wood, aluminium and steel doors with weight upto 250kg and minimum door thickness 40mm.

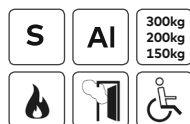
Size:	235mm x 30/28mm x 35mm								
Material:	BS250: Base and Joints made of steel BH200:Base made of Steel and Joints made of Aluminium								
Weight Capacity:	BS250 for doors upto 250Kg. BH200 for doors upto 200Kg. 2 hinges per door.								
Finishes:	All eleven finishes available. Refer to page 7. SNP - Standard Finish.								
Salient Features:	'Safe & Sound' break-in protection 'Silent' Soundless closing 'Discrete Design' Plates								
Certifications:									
- Fire Resistance	Suitable for smoke control & fire rated doors.								
- CE Mark-ETA	Classification Code <table><tr><td>4</td><td>7</td><td>7</td><td>1</td><td>1</td><td>4</td><td>1</td><td>14</td></tr></table>	4	7	7	1	1	4	1	14
4	7	7	1	1	4	1	14		
- UL Listed - ANSI/UL10C	Test reference UL R39352.								
- Burglar Resistance	Tested to RC2								

SPECIFICATION TEXT

Concealed hinges to be dormakaba Concealeo series with 3D adjustment, solid metal machined body fully concealed when door is in closed position. Invisible screws fixings, suitable for minimum 40mm thick doors, with possibility to open 180°. The 3D adjustment limits to be ±3mm in sides, ± 3mm in height and ±1mm in compression.

Hinges to be Fire rated as per ANSI/UL10C and ETA, burglar resistant (RC2) certified. Hinges to have Five Axis Joint System, with four knuckles and have a Piston Guide System for smooth guided opening/closing cycles. For door upto 250kg use Concealeo BS250 with Steel base and joints. For door upto 200kg use Concealeo BH200with Steel base and Aluminium joints.



CONCEALEO®**CS 300, CH 200, CH 150**

3D adjustable concealed hinge suitable for heavy duty wood, aluminium and steel doors with weight upto 300kg and minimum door thickness 45mm.

Size:	235mm x 37/35mm x 45mm
Material:	CS300 : Base and Joints made of steel CH200 : Base made of Steel and Joints made of Aluminium CH150 : Base and Joints made of Aluminium
Weight Capacity:	CS300 for doors upto 300Kg. CH200 for doors upto 200Kg. CH150 for doors upto 150Kg. 2 hinges per door.
Finishes:	All eleven finishes available. Refer to page 7, SNP-Standard finish.
Salient Features:	'Safe & Sound' break-in protection 'Silent' Soundless closing 'Discrete Design' Plates

Certifications:
- **Fire Resistance** Suitable for smoke control & fire rated doors.

- **CE Mark-ETA**
CS300, CH200
CH150

Classification Code

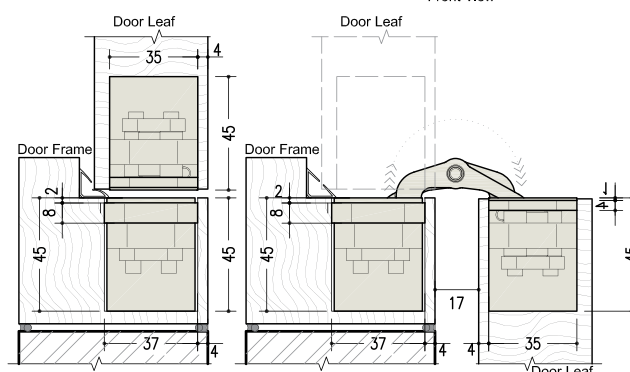
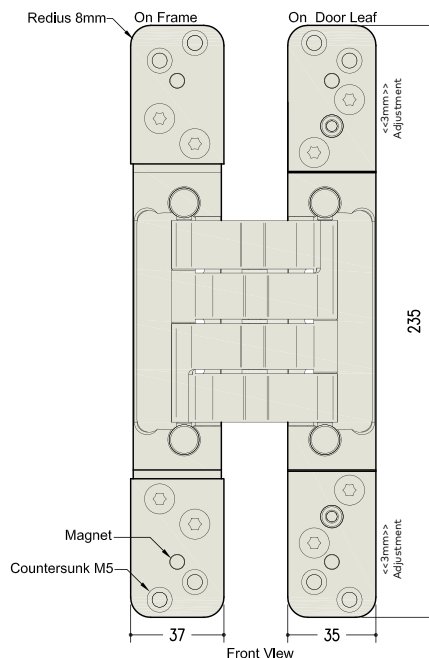
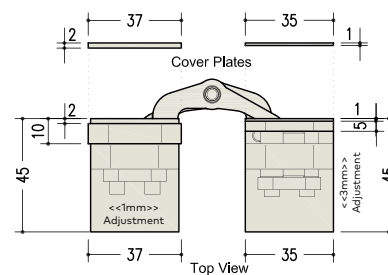
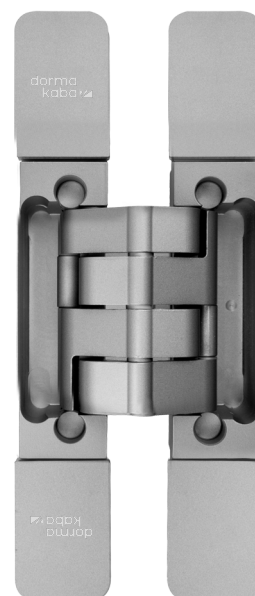
4	7	7	1	1	4	1	14
4	7	7	0	1	4	1	14

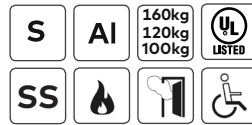
Note: CH150 is not fire rated hinge

SPECIFICATION TEXT

Concealed hinges to be dormakaba Concealeo series with 3D adjustment, solid metal machined body fully concealed when door is in closed position. Invisible screws fixings, suitable for minimum 45mm thick doors, with possibility to open 180°. The 3D adjustment limits to be ± 3 mm in sides, ± 3 mm in height and ± 1 mm in compression.

Hinges to have Five Axis Joint System, with four knuckles and have a Piston Guide System for smooth guided opening/closing cycles. For door upto 300kg use Concealeo CS300 with Steel base and joints. For door upto 200kg use Concealeo CH200 with Steel base and Aluminium joints. For door upto 150kg use Concealeo CH150 with Aluminium base and joints.



CONCEALEO®**DSS 120, DS 120, DH 120, DA 100**

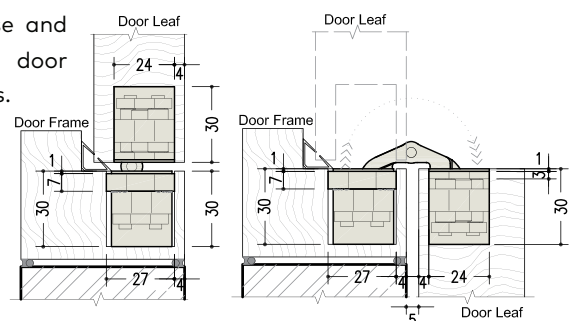
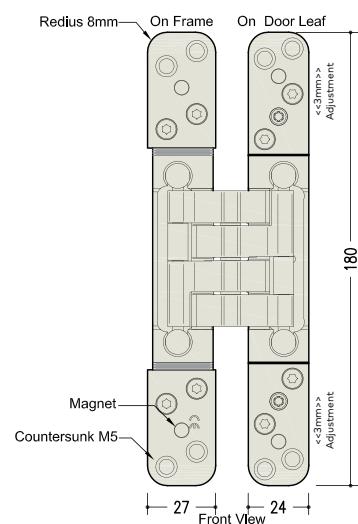
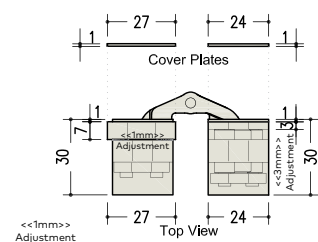
3D adjustable concealed hinge suitable for wood, aluminium and steel doors with weight upto 160kg and minimum door thickness 35mm.

Size:	180mm x 27/24mm x 30mm
Material:	DSS120 : Base and Joints made of Stainless Steel DS120 : Base and Joints made of Steel DH120 : Base made of Steel and Joints made of Aluminium DA100 : Base and Joints made of Aluminium
Weight Capacity:	DSS120 for doors up to 160Kg. DS120, DH120 for doors up to 120Kg. DA100 for doors up to 100Kg. 2 hinges per door (2m x 1m).
Finishes:	All eleven finishes available. Refer to page 7. SNP - Standard finish.
Salient Features:	'Safe & Sound' break-in protection 'Silent' Soundless closing 'Discrete Design' Plates
Certifications:	
- Fire Resistance	Suitable for smoke control & fire rated doors.
- CE Mark-ETA	Classification Code
DSS120	4 7 7 1 1 3 1 14
DS120	4 7 7 1 1 3 1 14
DH120	4 7 6 1 1 3 1 13
DA100	4 7 5 1 1 3 1 12
- UL Listed - ANSI/UL10C	Test reference UL R39352.

SPECIFICATION TEXT

Concealed hinges to be dormakaba Concealeo series with 3D adjustment, solid metal machined body fully concealed when door is in closed position. Invisible screws fixings, suitable for minimum 35mm thick doors, with possibility to open 180°. The 3D adjustment limits to be ± 3 mm in sides, ± 3 mm in height and ± 1 mm in compression.

Hinges to be Fire rated as per ANSI/UL10C and ETA. Hinges to have Five Axis Joint System, with four knuckles and have a Piston Guide System for smooth guided opening/closing cycles. For door upto 160kg use Concealeo DSS120 with Stainless Steel base and joints. For door upto 120kg use Concealeo DS120 with Steel base and joints or DH120 with Steel base and Aluminium joints. For door upto 100kg use Concealeo DA100 with Aluminium base and joints.



CONCEALEO®**EA 60 N**

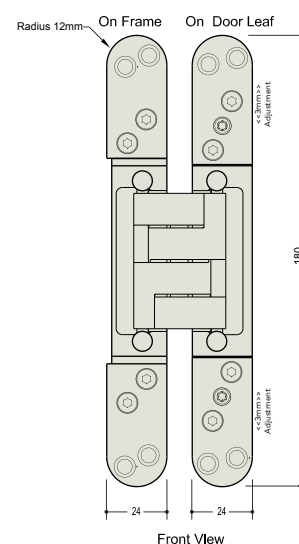
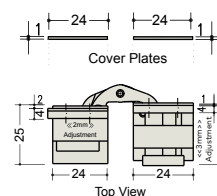
3D adjustable concealed hinge suitable for wood, aluminium and steel doors with weight upto 60kg and minimum door thickness 35mm.

Size :	180mm x 24/24mm x 25/26mm
Material :	Base and Joints made of Aluminium
Weight Capacity :	For doors upto 60Kg. 2 hinges per door.
Finishes :	All eleven finishes available. Refer to page 7. SNP - Standard Finish
Salient Features :	'Safe & Sound' break-in protection 'Silent' Soundless closing 'Discrete Design' Plates

**SPECIFICATION TEXT**

Concealed hinges to be dormakaba Concealeo series with 3D adjustment, solid metal machined body fully concealed when door is in closed position. Invisible screws fixings, suitable for minimum 35mm thick doors, with possibility to open 180°. The 3D adjustment limits to be ± 3 mm in sides, ± 3 mm in height and ± 1 mm in compression.

Hinges to have Five Axis Joint System, with four knuckles and have a Piston Guide System for smooth guided opening/closing cycles. For door upto 60kg use Concealeo EA60 N with Aluminium base and joints.



CONCEALEO®**FA 60**

3D adjustable concealed hinge suitable for wood, aluminium and steel doors with weight upto 60kg and minimum door thickness 30mm.

Size: 174/194mm x 21/19mm x 25mm

Material: Base and Joints made of Aluminium

Weight Capacity: For doors upto 60Kg.
2 hinges per door.

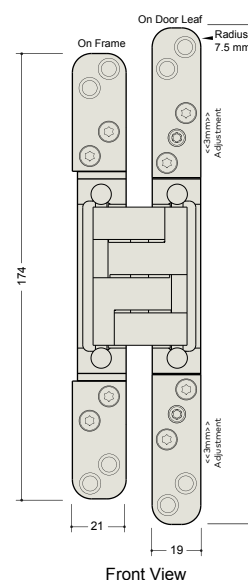
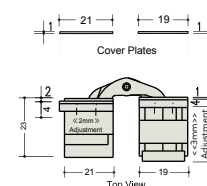
Finishes: All eleven finishes available.
Refer to page 7. SNP - Standard finish.

Salient Features: 'Safe & Sound' break-in protection
'Silent' Soundless closing
'Discrete Design' Plates

**SPECIFICATION TEXT**

Concealed hinges to be dormakaba Concealeo series with 3D adjustment, solid metal machined body fully concealed when door is in closed position. Invisible screws fixings, suitable for minimum 30mm thick doors, with possibility to open 180°. The 3D adjustment limits to be ± 3 mm in sides, ± 3 mm in height and ± 1 mm in compression.

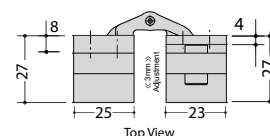
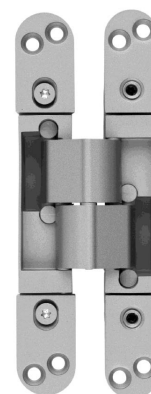
Hinges to have Five Axis Joint System, with four knuckles and have a Piston Guide System for smooth guided opening/closing cycles. For door upto 60kg use Concealeo FA60 with Aluminium base and joints.



CONCEALEO®**HA 40 N**

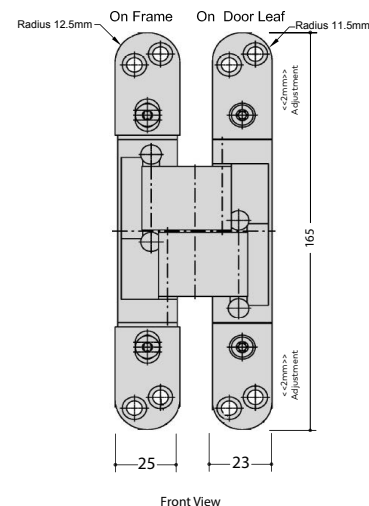
3D adjustable concealed hinge suitable for wood, aluminium and steel doors with weight upto 40kg and minimum door thickness 40mm.

Size:	165mm x 25/23mm x 27mm
Material:	Base and Joints made of Aluminium
Weight Capacity:	For doors upto 40Kg. 2 hinges per door.
Finishes:	Available in two finishes - SNP and SSS
Salient Features:	'Safe & Sound' break-in protection 'Silent' Soundless closing Maintenance free bearings

**SPECIFICATION TEXT**

Concealed hinges to be dormakaba Concealeo series with 3D adjustment, solid metal machined body fully concealed when door is in closed position. Screws fixings, suitable for minimum 40mm thick doors, with possibility to open 180°. The 3D adjustment limits to be $\pm 3\text{mm}$ insides and $\pm 2\text{mm}$ in height.

Hinges to have Five Axis Joint System, with Two knuckles for smooth guided opening/closing cycles. For door upto 40kg use Concealeo HA 40 N with Aluminium base and joints.



CONCEALEO®

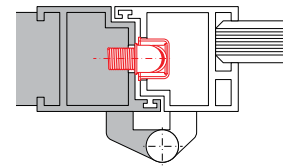
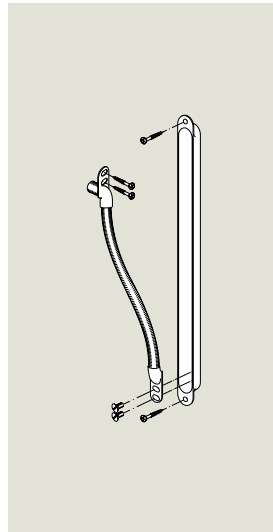
CONNECT

KÜ – Cable transition

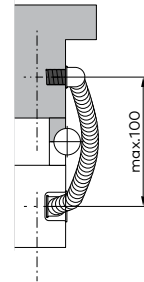
Robust stainless steel spiral with stainless steel receptacle for inserting flexible connecting cables up to 8 mm Ø. Ensures a pinch-free and tamper-proof connection between panel and door and window frames

KÜ 480

For door hinges with a pivot of up to 36 mm and opening angles up to 180°, flexible length of the spiral: 370 mm, Fitting dimensions of the receptacle (W x H x D): approx. 24 x 480 x 17mm
Order No. 15813000



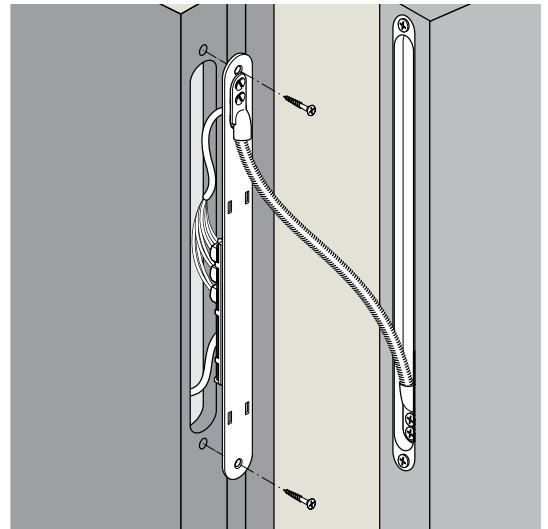
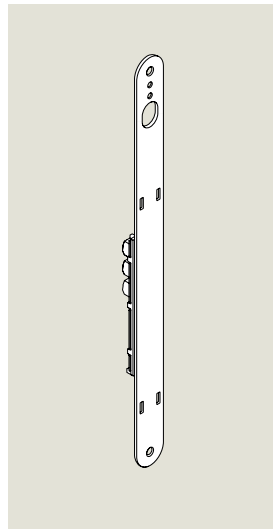
KÜ 480



LK-12 Detachable cable transition connector

Detachable cable transition connector for the installation into the door frame, can be combined with the cable transitions KU and spiral cables KS. 12-pole, with rear connecting terminals.
Order No. 15813010

Dimension (W x H x D):	24 x 300 x 3 mm
Dimensions incl. circuit board (W x H x D):	24 x 300 x 20 mm
Maximum current rating:	2 A
Maximum voltage:	48 V DC
Maximum cable section for each connecting terminal:	Ø 0.8 mm

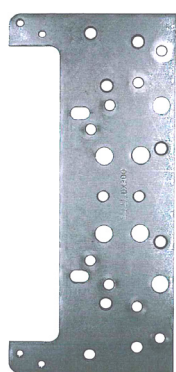


CONCEALEO®

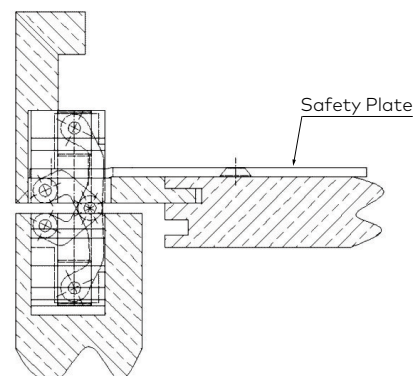
ACCESSORIES

Safety plate for CONCEALEO®

Screwing of concealed hinge into wooden frames used where the door is installed in cladding structure, or when the frame part is a cladding not enough to receive a hinge

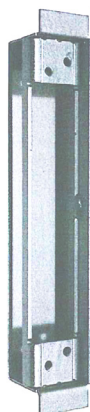


Cut-out	Model	Safety Plate
A	AS350, AH300	SP01A
B	BS250, BH200	SP02B
C	CS300, CH200, CH150	SP03C
D	DH120, DA100	SP04D
E	EA60 N	SP05E
F	FA60	SP06F
H	HA40 N	SP07H

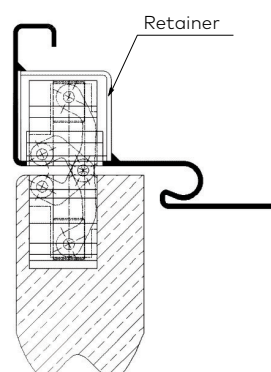


Retainer for CONCEALEO®

Screwing of concealed hinge to steel frames, the retainer is adapted to the respective profile of the steel frame. Retainer are used for unrebuted door, available upon request.



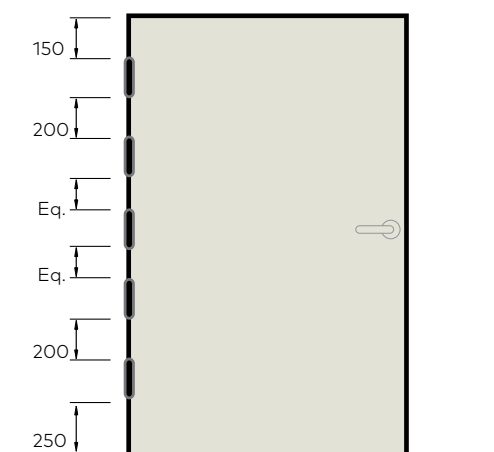
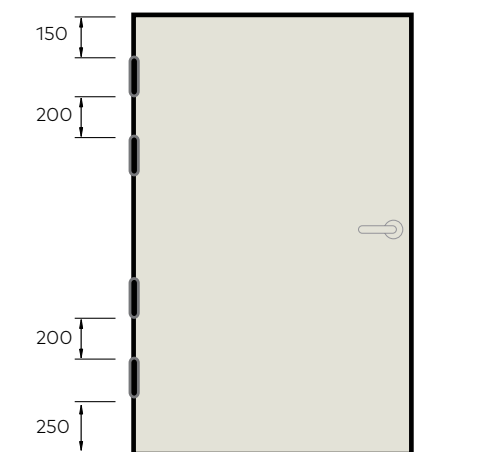
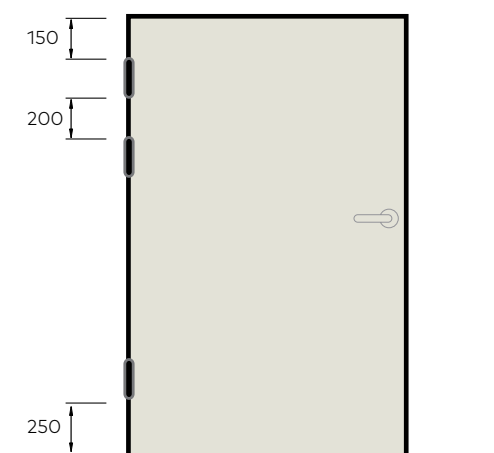
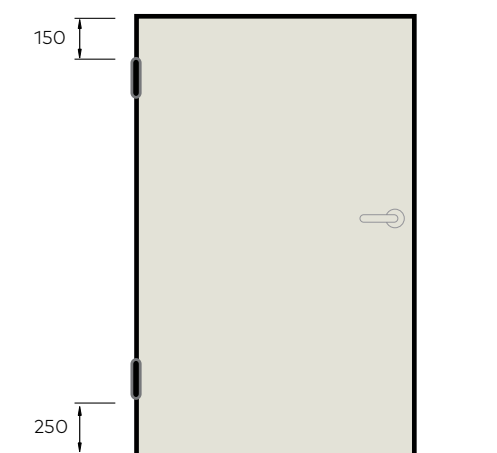
Cut-out	Model	Retainer
A	AS350, AH300	RT01A
B	BS250, BH200	RT02B
C	CS300, CH200, CH150	RT03C
D	DH120, DA100	RT04D
E	EA60 N	RT05E
F	FA60	RT06F
H	HA40 N	RT07H



CONCEALEO®

Hinge placement for standard door weight

As a standard, we recommend installing two hinges per door. Top and bottom hinges should be located 150mm and 250mm respectively from top and bottom edge of the door. Adding third or more hinges does not increase the rated capacity. Consult factory for special applications. For doors with door closers, add 30% more to the weight of the door for the selection of the hinges. For doors with door closers & Backcheck, kindly contact dormakaba for technical advice.



Eq. = minimum 300 mm

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