MARATHON HARDWARE

DTC

C81 Pivot Star

Technical Specifications & Assembly

C81 Pivot Star 110 Degree Soft-Close

Product Features

- New improved design and engineering
- Enhanced soft-close
- Relaxed opening with stronger catch
- 2-way cam adjust
- Depth of hinge cup: 11.5mm
- Diameter of hinge cup: 35mm
- Range of door thickness: 16-26mm
- Range of drilling distance (TAB/K): 3-6mm

Product Description

The award-winning DTC C-81 Pivot Star hinge is the world's first speed adjustable soft-close hinge. A new snap-on design speeds installation and creates a more solid connection between hinge and mounting plate. The C-81 Pivot Star is not just for the kitchen. Installing these premium hinges throughout the home avoids the unwanted noise of closing a cabinet door with the ability to adjust

Full Overlay

	Part#	Mounting	Qty
	105-C81-A675F	Screw-On	200/Box
	105-C81-A675NF	Press-In Dowel	200/Box

Half Overlay

	Part#	Mounting	Qty
	105-C81-B675F	Screw-On	200/Box
	105-C81-B675NF	Press-In Dowel	200/Box

Inset Overlay

	Part#	Mounting	Qty
	105-C81-C675F	Screw-On	200/Box
	105-C81-C675NF	Press-In Dowel	200/Box

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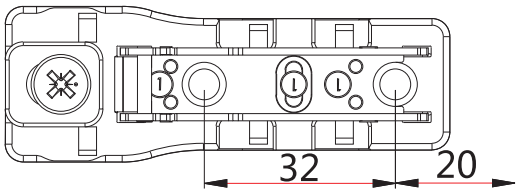
Inline Plates

	Part#	Mounting	Qty
	105-81H00YQ	0mm Inline Cam Adjust Plate	600/Box
	105-81H20QY	2mm Inline Cam Adjust Plate	600/Box

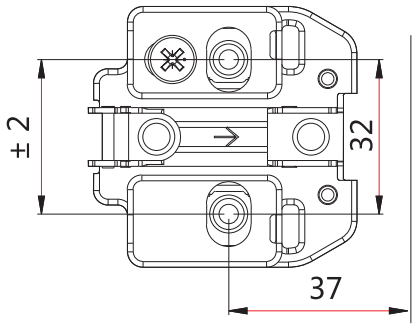
Winged Plates

	Part#	Mounting	Qty
	105-81T00TQ	0mm Winged Cam Adjust Plate	600/Box
	105-81T20TQ	2mm Winged Cam Adjust Plate	600/Box
	105-81T02TQ	0mm Winged Cam Adjust Plate with Euroscrews	600/Box
	105-81T22TQ	2mm Winged Cam Adjust Plate with Euroscrews	600/Box

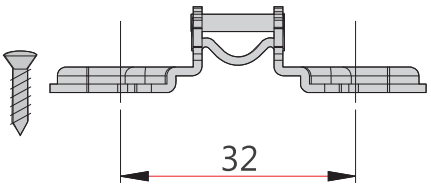
Inline Plate Specifications



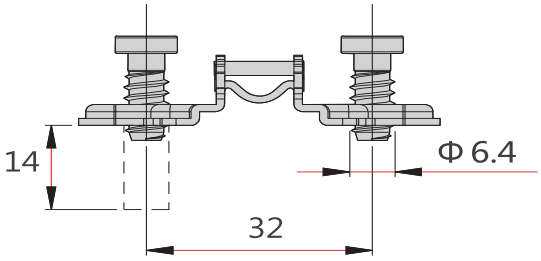
Winged Plate Specifications



Screw On Plate Specification



Euro-Screw Specification



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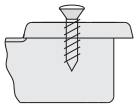
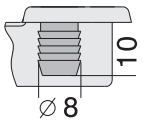
Screw or Dowels Option Specifications

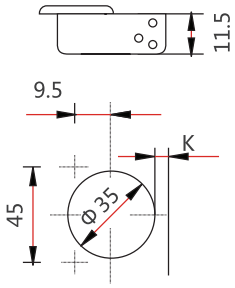


#6 or #5 and 5/8 recommended for this application



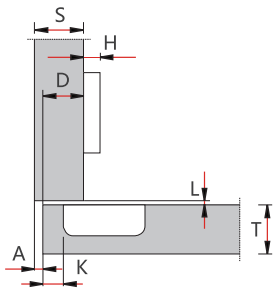
M8 Dowel Included in the ordering of this application refer to ordering "NF" Series of hinges

35mm Hinge Cup Patterns

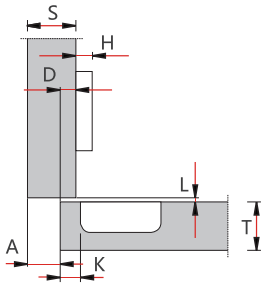


Use these formulas to determine the type of hinge arm, the drilling distance "K" and the height of the mounting plate "H" for each door application

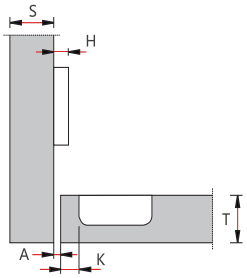
Speed-Adjustable Soft-Close Hinge 110 Degree



H=12+K-(D)

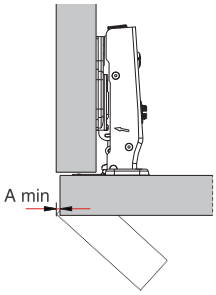


H=3+K-(D)



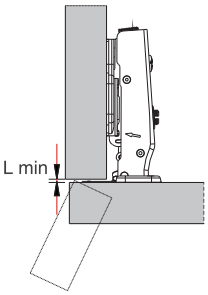
H=6+K+(A)

Speed Needed to Open the Door



	T=	16	17	18	19	20	21	22	23	24	25	26
K=3	A=	0.7	0.9	1.2	1.5	1.8	2.2	2.6	3.2	3.8	4.5	5.3
K=4	A=	0.7	0.9	1.1	1.4	1.8	2.1	2.5	3.0	3.5	4.4	4.9
K=5	A=	0.6	0.9	1.1	1.4	1.7	2.0	2.4	2.9	3.4	3.9	4.6
K=6	A=	0.6	0.8	1.1	1.3	1.6	2.0	2.4	2.8	3.2	3.8	4.4

- T=Door thickness
- K=Cup hole drilling distance from door edge



	T=	16	17	18	19	20	21	22	23	24	25	26
K=3	L=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
K=4	L=	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.7	0.9	1.1
K=5	L=	0.0	0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0
K=6	L=	0.9	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0

- The above values are calculated on the assumption that the doors have square edges.
- They are reduced if the doors have radiussed edges.

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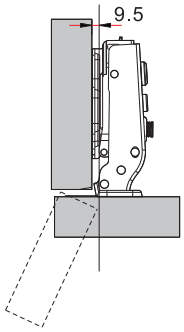
Projection of the Door

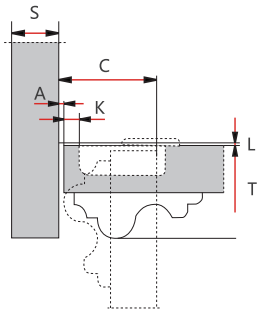
Projection of the door from the cabinet side at the max opening.The figures are based on a straight arm hinge, H=0mm mounting plate and drilling distance (K) =3mm.

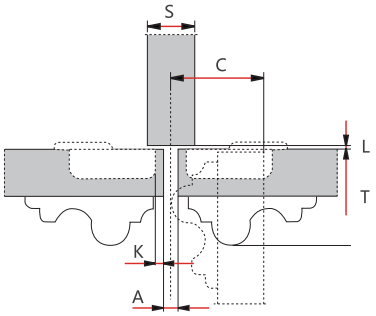


"C" Value

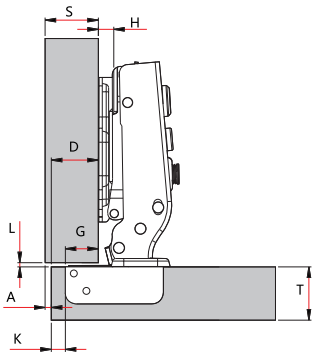
C=20+K+ **A**

With this formula you can obtain the max. thickness of the moulded door that can be opened without touching adjacent carcase sides, doors or walls, whilst bearing in mind the above L-K-T values.



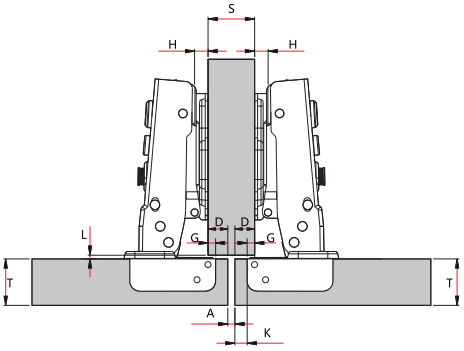


Planning Application for Full Overlay Door



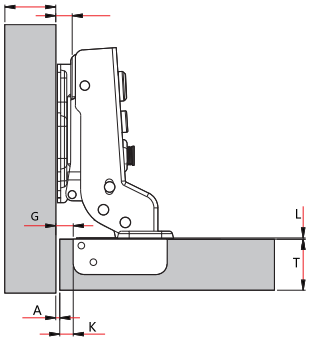
S = Thickness of the cabinet side	A = Reveal
D = Required door overlay	L = Gap between door and carcase
T = Door thickness	H = Height of the mounting plate
K = Drilling distance	G = Hinge constant

Planning Application for Half Overlay Door



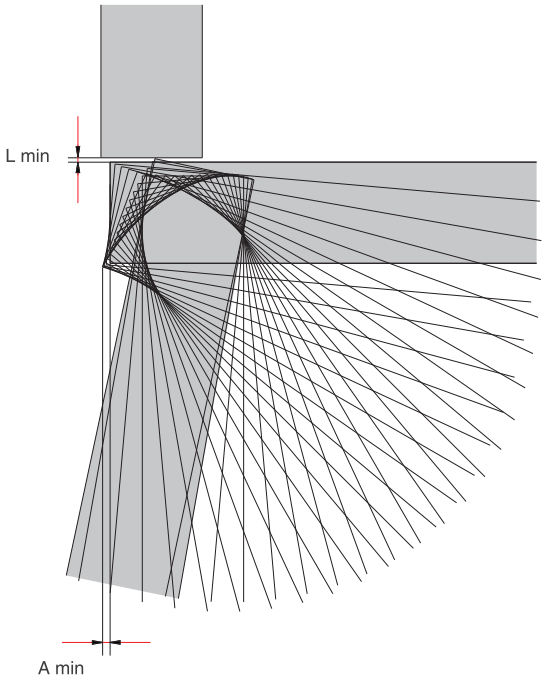
S = Thickness of the cabinet side	A = Reveal
D = Required door overlay	L = Gap between door and carcase
T = Door thickness	H = Height of the mounting plate
K = Drilling distance	G = Hinge constant

Planning Application for Inset Door



S = Thickness of the cabinet side	L = Gap between internal face of door and internal cabinet elements(e.g.shelves, drawers,etc.)
T = Door thickness	H = Height of the mounting plate
K = Drilling distance	G = Hinge constant
A = Reveal	

Simulation of the Opening of a 110 Degree Full Overlay Door



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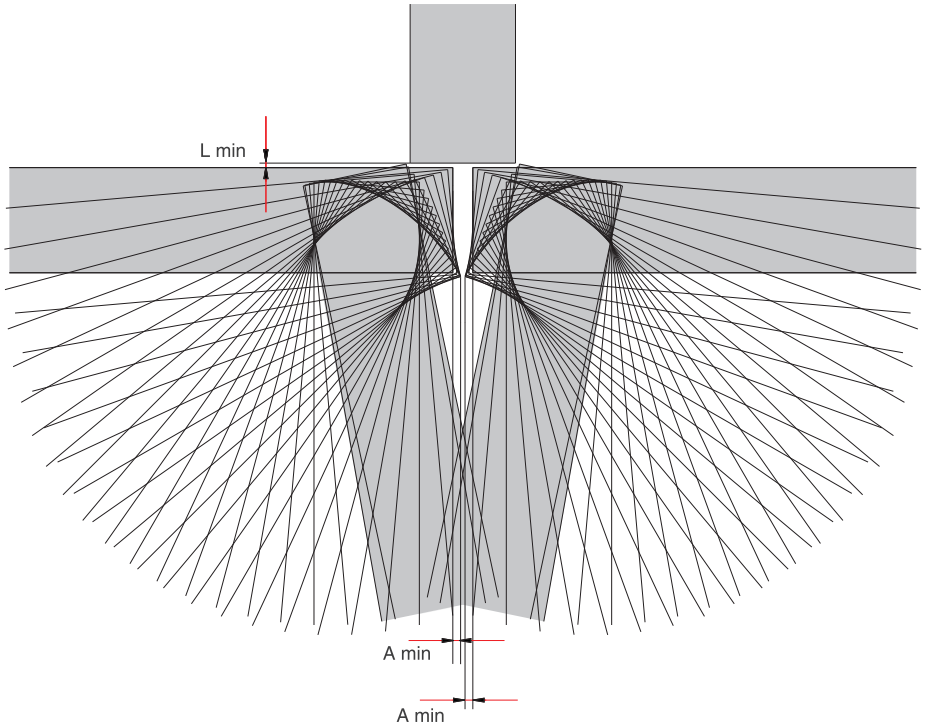

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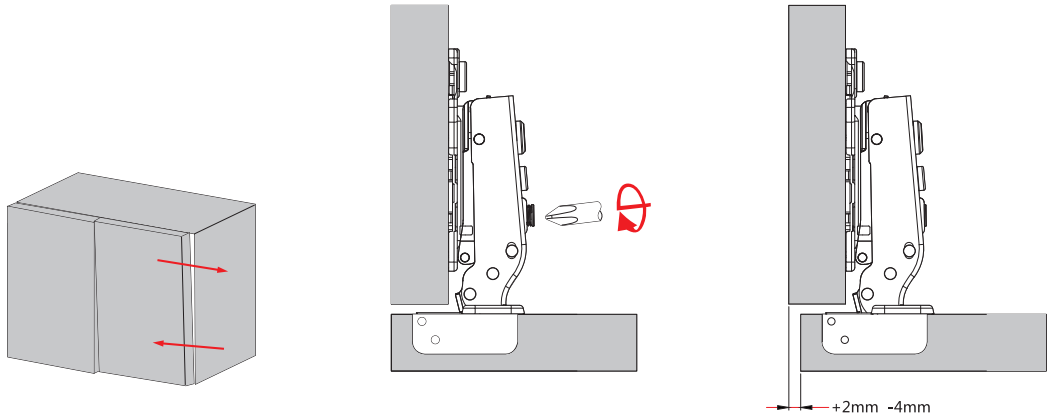
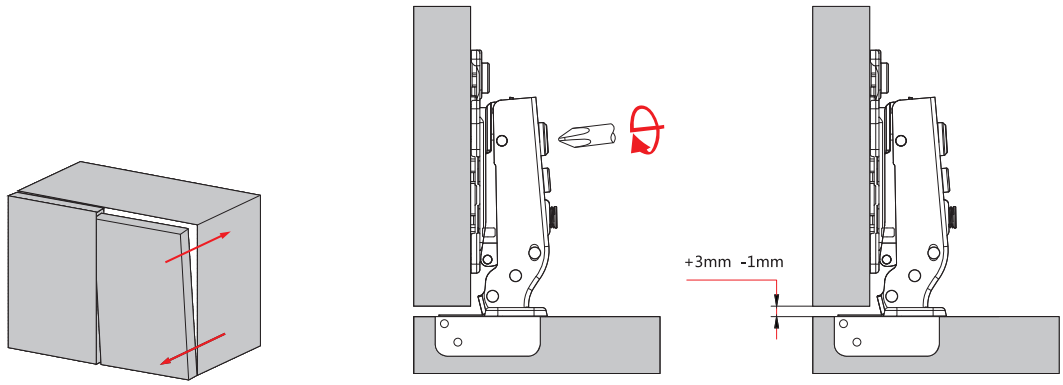
Side Adjustment

Side adjustment of the door is made by using the indicated screw.



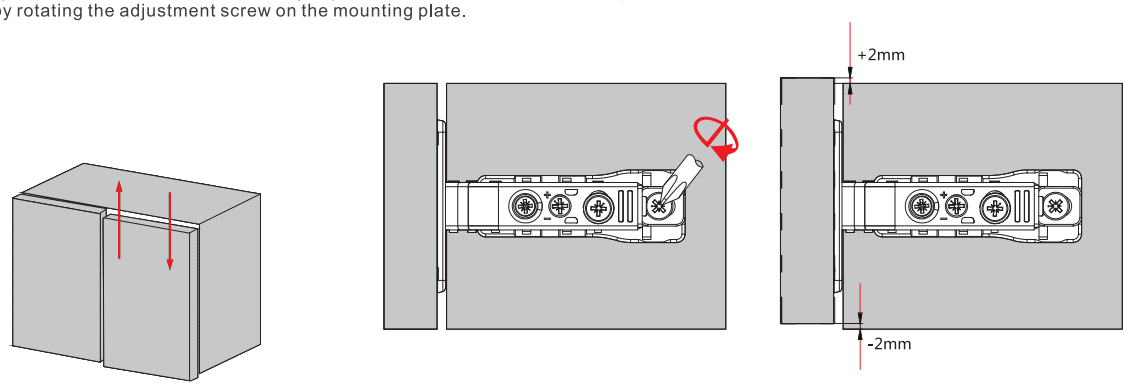
Depth Adjustment

Depth adjustment is made without loosening any screw. The door can be moved in or out by rotating the adjustment screw on the hinge arm.



Height Adjustment

Height adjustment is made without loosening any screw. The door can be moved up or down by rotating the adjustment screw on the mounting plate.



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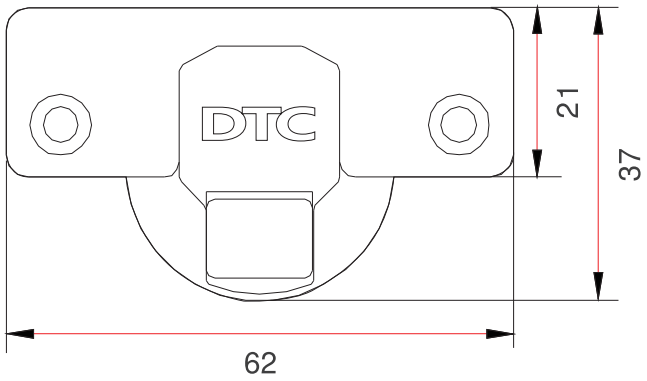
C81 Pivot Star Hinge Cup Dimensions

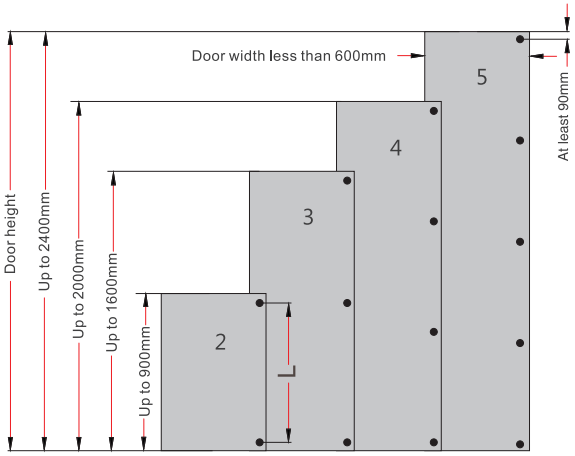


L = distance between hinges

Number of hinges needed for each door

The number of hinges needed for each door depends on the width of the door, the height of the door and the type of material the door is made of. It varies in particular practices. The hinge installation proposal listed above is only for your reference. Experiment is suggested in an uncertain situation. "L" volume shall be relatively large considering stability.

Door Drilling Dimension Recommendations



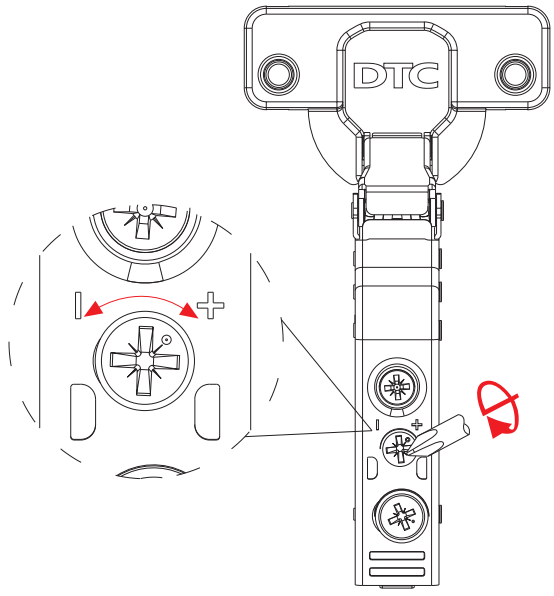
Adjustment

Side adjustment: -4mm~+2mm
Depth adjustment: -1~+3mm
Height adjustment: ±2mm

Mounting plates

Two-hole and four-hole mounting plates
Standard and in-line cam adjustable mounting plates

Door Speed Adjustment



"-" Reducing door closing time
"+" Increasing door closing time