



TEC SOFT-CLOSE AND TEC SELF-CLOSE

TEC Face Frame Hinge System Established quality with functional benefits for today's modern cabinetry.





The perfect solution for your face fame cabinetry. TEC Soft-close, with an integrated soft closing action, and TEC Self-close hinge lines offer a complete range of quality hinges made in the USA.

The TEC hinge system offers a proven technology that makes TEC the first brand choice among face frame hinge systems. Quiet and effortless closing action is guaranteed every time with TEC Soft-close hinges. Sleek in design with the Soft-close mechanism pre-mounted in the hinge cup. TEC Self-close hinges include three dimensional adjustment and a variety of overlays to meet your hinge needs. Made in the USA, TEC hinges are built to last.





TEC SOFT-CLOSE AND TEC SELF-CLOSE HINGE SYSTEMS

Made in the USA, the TEC hinge systems offer a solution for every application in kitchen, bath, and residential cabinetry.



TEC Soft-close – the unique face frame hinge with adjustable soft-close action

The TEC Soft-close hinge system is a revolutionary face frame hinge with the soft-closing mechanism pre-mounted into the interior of the hinge cup. An adjustment switch located on the face of the hinge regulates the closing action of the door. Integrated Soft-close combined with the adjustment feature provides functional benefits for today's modern cabinetry. Made in the USA, your doors will close softly, quietly, and consistently with TEC Soft-close.

Innovative three tiered adjustment

TEC Soft-close hinges feature a three tiered adjustment switch enabling you to regulate the closing action of the door. These adjustments provide different levels of damping resistance in the soft-close mechanism. Set at the highest level, the damping system has the most resistance and provides the longest closing action. To achieve less resistance you can place the adjustment switch at the medium level or lower level. The settings can be different for each hinge on the door so that you can achieve the maximum benefit in your closing action regardless of the size or weight of the door.



TEC Self-close hinge system offers a solution for every cabinet application

The TEC 860 family includes a variety of hinges with three dimensional adjustment to hinges used for MDF material. Each hinge is available in a variety of overlays and in an array of hinge and base plate versions. Constructed of all-steel and nickel-finish components for optimal strength and durability, the TEC hinge systems work on a variety of doors with profiled door edges. Made in the USA, TEC hinges are engineered to last.

TEC Hinges

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Opening angle		Description	Adjustments	Page
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Features and Benefits

TEC Soft-close

Features

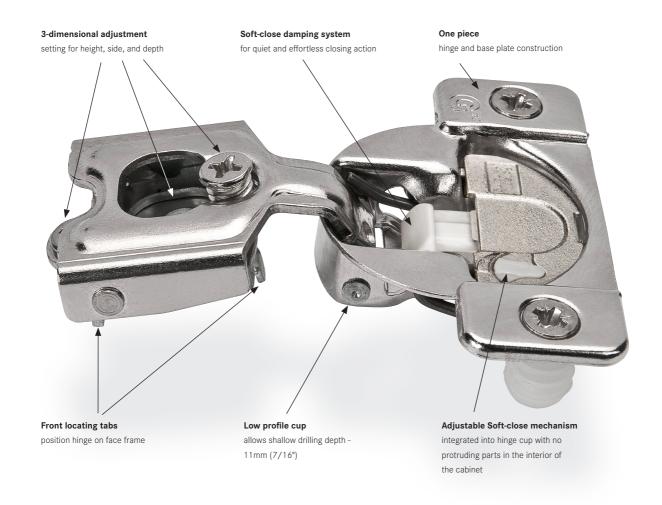


TEC Soft-close hinges are made in the USA of durable and long-lasting materials from time-tested design and manufacturing techniques. Every mechanism is tested for reliability and the user experience.

- One piece hinge and base plate combination
- 3-tier Soft-close adjustment
- 42 and 45mm boring patterns
- For face frame cabinetry
- · Made in the USA

TEC Soft-close hinges are offered in these overlays:

1/4", 7/16", 1/2", 5/8", 3/4", 1", 11/4", 15/16", 13/8", 11/2", 17/16"



Features and Benefits

TEC Self-close



Features

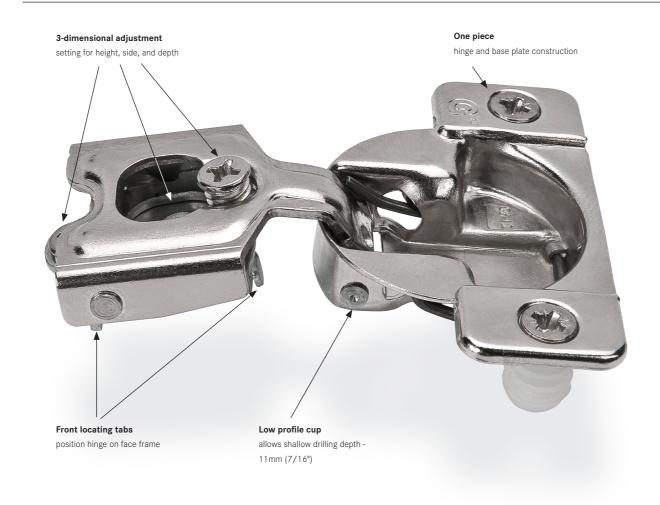


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- One piece hinge and base plate combination
- 42 and 45mm boring patterns
- For face frame cabinetry
- Made in the USA

TEC Self-close hinges are offered in these overlays:

1/4", 7/16", 1/2", 9/16" 5/8", 3/4", 1", 11/4", 15/16", 13/8", 11/2", 17/16"



Technical Information

TEC Hinges

Technical Information

There are numerous variables that will determine the choice of hinge. Determine the requirements of the application. Consider the following points based on the door to cabinet application.

- 1 Door overlay
- 2 Adjustment requirements:
 - a. Height only
 - b. Height and side
 - c.Height, side, and depth
- 3 Base plate mounting to face frame:
 - a. Wrap-around 3/4" thick frames only
 - b. Side mount frames thicker than 3/4"
 - c. Face mount any overlay greater than 1 7/16"
 - d. MDF material mounting into end grain
- 4 Door removal:
 - a. With base plate mounting screw (one-piece hinges)
 - b. With depth adjustment screw (two-piece hinges)

- Open clearance/hinge arm clearance (for interior rollout trays)
- Oppose the closed door
 Open and the back of the closed door
- Minimum reveal distance between two doors hinged back to back
- 3 Door thickness thicker doors can restrict opening angle and minimum reveal
- 9 Hinge cup boring pattern for dowelled hinges
- Door opening angle
- Soft- or Self-closing

Number of Hinges Per Door

The number of hinges is determined by the door height, door weight, quality of the material and the fixing of the cup and base plate.

The load and height data refer to 24" standard door widths.

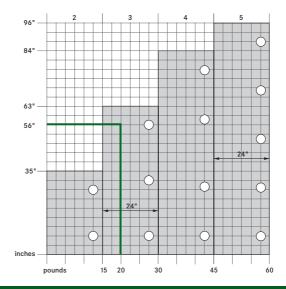
Grass strongly recommends a trial mount for all hinges and base plates.

Example:

For doors measuring 56" x 24" and weighing 19lbs, Grass recommends the installation of 3 hinges.

Note: The distance between the top and bottom hinge must be greater than the width of the door.

The **TEC** hinge meets and exceeds the minimum requirements of ANSI/BHMA A 156.9 standard.



Features

All-steel Construction

TEC hinges feature a solid metal hinge cup. All moving mechanism parts, including pivot pins, linkages and springs are hardened to ensure long-term durability.

Shallow Cup Depth

TEC hinges feature a shallow 11mm (7/16") cup to accommodate profiled door edge. There are no protruding parts from the hinge cup. ACC140 hinges have a 10mm ('½z") cup depth.

Interchangeable

TEC Soft-close and **Self-close** have the same boring pattern so no change is necessary in your existing setup.

All-steel Construction

3-dimensional adjustment is built into the 864 and 872 hinge series.

2-dimensional adjustment is available for 861, 862, 863, MDF and ACC 140 hinge series.

Integrated Soft-close

The Soft-close damper is pre-mounted in the hinge cup. No additional installation of the Soft-close is required. A three tiered adjustment switch allows various levels of resistance in the damping system.

Made in the USA

TEC hinges are manufactured at the Grass facility in Kernersville, NC.

Technical Information

for TEC Hinges

G*

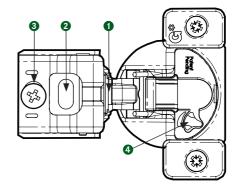
Adjustments

TEC hinges offer a convenient three dimensional adjustment.

- 1 Side Adjustment Rotate cam adjustment screw.
- 2 Height Adjustment Loosen screw, align door, tighten screw.
- 3 Depth Adjustment Rotate cam screw.

TEC Soft-close hinges offer an adjustable three tier closing mechanism.

4 Soft-close Tension - A Light, B Medium, and C Strong settings





LIGHT

A This is the "LIGHT" setting for the Soft-closing mechanism. Set here for light or small doors with very little closing pressure.

















This is the "STRONG" setting for the Soft-closing mechanism. Set here for larger or heavier doors with a strong closing pressure. (Factory Setting)

Note: To reset the Soft-close damper, move the adjustment switch to "**STRONG**", then to the desired position. Close the door and the Soft-close will be reset.

TEC Soft-close

108° Opening Angle - 1/4" to 1" Overlay



- Soft-close damper is pre-mounted in the hinge cup
- · Adjustment switch to regulate closing action
- One piece hinge and base plate combination
- 3 dimensional adjustment
- 11mm (7/16") cup drilling depth
- Front locating tabs position hinge on face frame
- Cam side adjustment
- · Cam depth adjustment
- Height adjustment at mounting screw
- Works with current GRASS insertion machinery
- Made in the USA







Side-mount - 45mm Drilling Pattern							
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)				
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU		
12.7 (1/2")	3.5 (1/8)	11 (7/16")	TEC 864-VS8-45U 1/2 SM A-SC	02750A-15	300		
16 (5/8")	0.3 (1/32")	11 (7/16")	TEC 864-VS8-45U 5/8 SM A-SC	01995A-15	300		

Screw-on Hinge Cup (VS)					
Description	Item No.	PU			
TEC 864-VS-45U 1/2 SM A-SC	04423A-15	300			
-	-	300			







Wrap-around - 45mm Drilling Pattern							
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge C	Dowelled Hinge Cup (VS8)			
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU		
6 (1/4")	11 (7/16")	14.5 (9/16")	TEC 864-VS8-45U 1/4 WM A-SC	02791A-15	300		
11 (7/16")	5.1 (13/64")	11 (7/16")	TEC 864-VS8-45U 7/16 WM A-SC	02858A-15	300		
12.7 (1/2")	3.5 (1/8")	11 (7/16")	TEC 864-VS8-45U 1/2 WM A-SC	02870A-15	300		
19 (3/4")	0	11 (7/16")	TEC 864-VS8-45U 3/4 WM A-SC	02875A-15	300		
25 (1")	0	11 (7/16")	TEC 864-VS8-45U 1 WM A-SC	02745A-15	300		

Screw-on Hinge Cup (VS)							
Description	Item No.	PU					
TEC 864-VS-45U 1/4 WM A-SC	04429A-15	300					
TEC 864-VS-45U 7/16 WM A-SC	02670A-15	300					
TEC 864-VS-45U 1/2 WM A-SC	04431A-15	300					
TEC 864-VS-45U 3/4 WM A-SC	04432A-15	300					
TEC 864-VS-45U 1 WM A-SC	04441A-15	300					





Side-mount - 42mm Drilling Pattern							
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)				
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU		
12.7 (1/2")	3.5 (1/8")	11 (7/16")	TEC 864-VS8-42U 1/2 SM A-SC	02749A-15	300		

Angle Reduction Clip					
Description	Item No.	PU			
85° Angle reduction clip	80125-42	100			



02834A-15

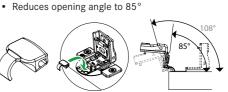


Wrap-around - 42mm Drining Fattern							
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)				
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU		
6 (1/4")	11 (7/16")	14.5 (9/16")	TEC 864-VS8-42U 1/4 WM A-SC	02788A-15	300		
11 (7/16")	5.1 (13/64")	11 (7/16")	TEC 864-VS8-42U 7/16 WM A-SC	02809A-15	300		
12.7 (1/2")	3.5 (1/8")	11 (7/16")	TEC 864-VS8-42U 1/2 WM A-SC	02824A-15	300		
19 (3/4")	0	11 (7/16")	TEC 864-VS8-42U 3/4 WM A-SC	02825A-15	300		

TEC 864-VS8-42U 1 WM A-SC

11 (7/16")





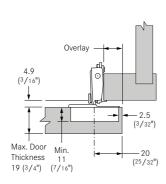
PU - Packaging unit

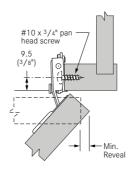
25 (1")



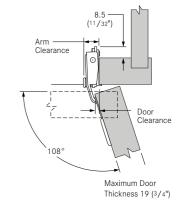
Minimum Reveal

Clearances - Door Ope





TEC 864 Minimum Reveal



Arm and door clearances see page 10.

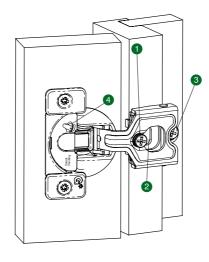
Adjustments

Dimensions

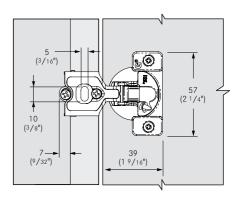
- Side Adjustment+/-1.5mm (1/16") Rotate cam adjustment screw.
- 2 Height Adjustment +/-2mm (3/32") Loosen screw, align door, tighten screw.
- 3 Depth Adjustment...... + 2.5mm (3/32"), -5mm (1/32") Rotate cam screw.
- Soft-close Tension...... Light, Medium, and Strong setting See page 9 for complete adjustment explanation

Mounting Screws

Hinge cup to door, #6 x $^5/8$ " Flat head screw Base plate to face frame, #10 x $^3/4$ " Pan head screw

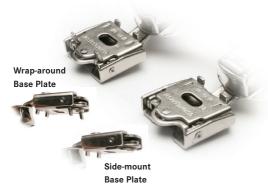


Overall Dimensions



Base Plates

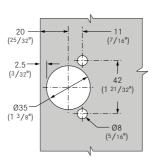
Drilling Pattern



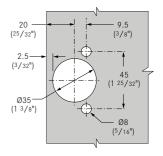


To determine the correct application, GRASS strongly recommends a trial mounting for all hinges and base plates.

42mm drilling pattern



45mm drilling pattern



TEC Soft-close

108° Opening Angle - 11/4" to 11/2" Overlay



- Soft-close damper is pre-mounted in the hinge cup
- Adjustment switch to regulate closing action
- One piece hinge and base plate combination
- 3 dimensional adjustment
- 11mm (7/16") cup drilling depth
- Front locating tabs position hinge on face frame
- · Cam side adjustment
- · Cam depth adjustment
- Height adjustment at mounting screw
- Works with current GRASS insertion machinery
- Made in the USA





Side-mount - 45mm Drilling Pattern									
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)						
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU				
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-45U 1 1/4 SM A-SC	02780A-15	300				
35 (1 3/8")	0	10 (13/32")	TEC 864-VS8-45U 1 3/8 SM A-SC	02785A-15	300				







Wrap-around - 45mm Drilling Pattern								
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)			Screw-on Hinge	Cup (VS)	
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	Description	Item No.	PU
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-45U 1 1/4 WM A-SC	02910A-15	300	TEC 864-VS-45U 1 1/4 WM A-SC	04547A-15	300
33.5(1 5/16")	0	10 (13/32")	TEC 864-VS8-45U 1 5/16 WM A-SC	02198A-15	300	TEC 864-VS-45U 1 5/16 WM A-SC	02176A-15	300
35 (1 3/8")	0	10 (13/32")	TEC 864-VS8-45U 1 3/8 WM A-SC	02782A-15	300	TEC 864-VS-45U 1 3/8 WM A-SC	04548A-15	300
38 (1 1/2")	0	10 (13/32")	TEC 864-VS8-45U 1 1/2 WM A-SC	02805A-15	300	TEC 864-VS-45U 1 1/2 WM A-SC	04549A-15	300



02839A-15



Side-mount - 42mm Drilling Pattern							
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)				
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU		
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-42U 1 1/4 SM A-SC	02838A-15	300		

Angle Reduction City		•
Description	Item No.	PU
85° Angle reduction c	lip 80125-42	100

• Reduces opening angle to 85°

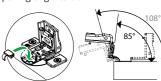


300

Wrap-around - 42mm Drilling Pattern							
Overlay	Door Clearance	Arm Clearance Dowelled Hinge Cup (VS8)					
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU		
32 (1/4")	0	10 (13/32")	TEC 864-VS8-42U 1 1/4 WM A-SC	02836A-15	300		
35 (1 3/8")	0	10 (13/32")	TEC 864-VS8-42U 1 3/8 WM A-SC	02781A-15	300		

10 (13/32")

TEC 864-VS8-42U 1 1/2 WM A-SC



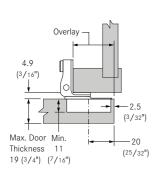
PU - Packaging unit

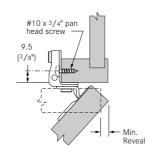
38 (1 1/2")



Minimum Reveal

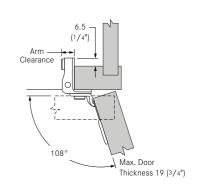
Clearances - Door Ope





TEC 864 Minimum Reveal

Based on door with square edge.



Arm and door clearances see page 12.

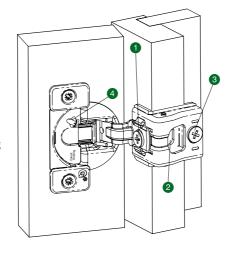
Adjustments

djustments Dimensions

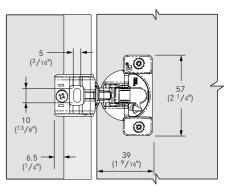
- Side Adjustment+/-1.5mm (1/16") Rotate cam adjustment screw.
- 2 Height Adjustment +/-2mm (3/32") Loosen screw, align door, tighten screw.
- 3 Depth Adjustment...... + 3mm (1/8") Rotate cam screw.
- Soft-close Tension...... Light, Medium, and Strong setting See page 9 for complete adjustment explanation

Mounting Screws

Hinge cup to door, #6 x $^5/8$ " Flat head screw Base plate to face frame, #10 x $^3/4$ " Pan head screw



Overall Dimensions



Base Plates

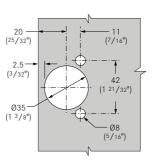
Drilling Pattern



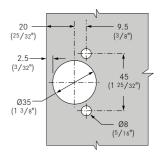
IMPORTANT

To determine the correct application, GRASS strongly recommends a trial mounting for all hinges and base plates.

42mm drilling pattern



45mm drilling pattern



TEC Soft-close

108° Opening Angle - Face-mount



- Available in Soft-close and Self-close
- Soft-close damper is pre-mounted in the hinge cup
- Adjustment switch on Soft-close to regulate closing action
- One piece hinge and base plate combination
- 2 dimensional adjustment
- 11mm (7/16") cup drilling depth
- Height adjusment at mounting screw
- $\bullet~$ For overlays 1 $^7/_{16}\text{"}$ and greater
- $85\,^\circ$ angle reduction clip available for Soft-close and Self-close
- Made in the USA







Face-mount - 45mm Drining Fattern Sort-Close						
Overlay Door Clearance Arm Clearance Dowelled Hinge Cup (VS8)						
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	
37 (1 7/16")	0	0	TEC 863-VS8-45U 17/16 FM A-SC	02294A-15	300	

Screw-on Hinge Cup (VS)					
Description	Item No.	PU			
TEC 863-VS-45U 1 7/16 FM A-SC	02295A-15	300			





Face-mount - 45mm Drining Fattern Sen-close								
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)			Screw-on Hinge	Cup (VS)	
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	Description	Item No.	PU
37 (1 7/16")	0	0	TEC 863-VS8-45U 1 7/16 FM	02283-15	300	TEC 863-VS-45U 1 7/16 FM	02284-15	300

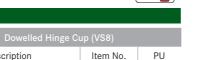


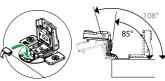
Face-mount - 42mm Drilling Pattern Soft-close						
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge C	up (VS8)		
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	
37 (1 7/16")	0	0	TEC 863-VS8-42U 1 7/16 FM A-SC	02293A-15	300	

Angle Reduction Clip					
Description	Item No.	PU			
85° Angle reduction clip	80125-42	100			

 $\bullet\,$ Reduces opening angle to 85°







37 (1 7/16")	0	0	TEC 863-VS8-42U 1 7/16 FM	02282-15	300

Description

Face-mount - 42mm Drilling Pattern Self-close

Arm Clearance

mm (inch)

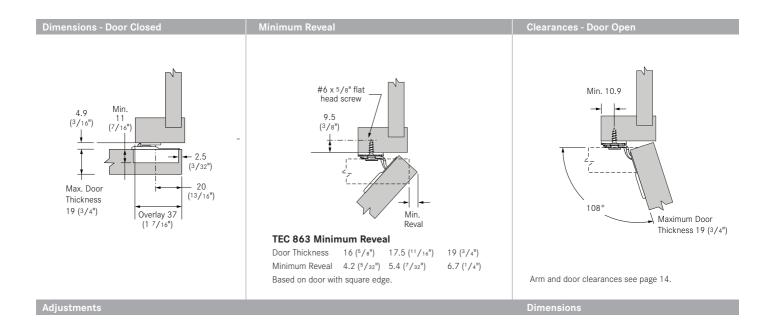
Door Clearance

mm (inch)

Overlay

mm (inch)



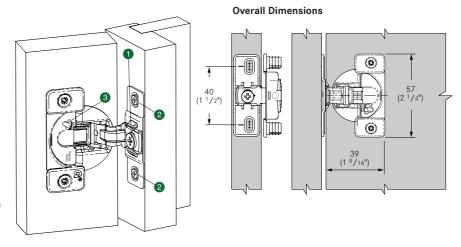


- Side Adjustment+/-1.5mm (1/16") Rotate cam adjustment screw.
- 2 Height Adjustment +/-2mm (3/32") Loosen screws, align door, tighten screws.
- Soft-close Tension...... Light, Medium, and Strong setting See page 9 for complete adjustment explanation

Mounting Screws

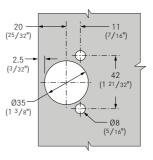
Hinge cup to door, #6 x $^5/_8"$ Flat head screw Base plate to face frame, #6 x $^5/_8"$ Flat head screw

Door Overlay = 37 (1 $^7/\ensuremath{_{16}^{"}})$ when base plate is flush inside edge of face frame.

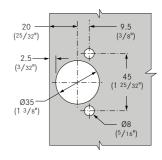


Drilling Pattern

42mm drilling pattern



45mm drilling pattern



IMPORTANT

To determine the correct application, GRASS strongly recommends a trial mounting for all hinges and base plates.

TEC Self-close

108° Opening Angle - 1/4" to 1" Overlay



- One piece hinge and base plate combination
- 3 dimensional adjustment
- 11mm (7/16") cup drilling depth
- Front locating tabs position hinge on face frame
- Cam side adjustment
- Cam depth adjustment
- Height adjustment at mounting screw
- · Works with current GRASS insertion machinery
- Made in the USA





Side-mount - 45 mm Drilling Pattern						
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge C	Sup (VS8)		
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	
6 (1/4")	11 (7/16")	14.5 (9/16")	TEC 864-VS8-45U 1/4 SM	02851-15	300	
12.7 (1/2")	3.5 (1/8")	11 (7/16")	TEC 864-VS8-45U 1/2 SM	02872-15	300	
16 (5/8")	0.3 (1/32")	11 (7/16")	TEC 864-VS8-45U 5/8 SM	01864-15	300	
19 (3/4")	0	11 (7/16")	TEC 864-VS8-45U 3/4 SM	02878-15	300	
25 (1")	0	11 (7/16")	TEC 864-VS8-45U 1 SM	02885-15	300	

Screw-on Hinge (Cup (VS)	
Description	Item No.	PU
TEC 864-VS-45U 1/4 SM	04386-15	300
TEC 864-VS-45U 1/2 SM	04387-15	300
-	-	-
TEC 864-VS-45U 3/4 SM	04390-15	300
TEC 864-VS-45U 1 SM	04395-15	300

Wrap-around - 45 mm Drilling Pattern						
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge C	up (VS8)		
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	
6 (1/4")	11 (7/16")	14.5 (9/16")	TEC 864-VS8-45U 1/4 WM	02847-15	300	
11 (7/16")	5.1 (13/64")	11 (7/16")	TEC 864-VS8-45U 7/16 WM	02904-15	300	
12.7 (1/2")	3.5 (1/8")	11 (7/16")	TEC 864-VS8-45U 1/2 WM	02905-15	300	
19 (3/4")	0	11 (7/16")	TEC 864-VS8-45U 3/4 WM	02907-15	300	
25 (1")	0	11 (7/16")	TEC 864-VS8-45U 1 WM	02882-15	300	

Screw-on Hinge (Cup (VS)	
Description	Item No.	PU
TEC 864-VS-45U 1/4 WM	04396-15	300
-	-	-
TEC 864-VS-45U 1/2 WM	04399-15	300
TEC 864-VS-45U 3/4 WM	04400-15	300
TEC 864-VS-45U 1 WM	04401-15	300

Side-mount - 42 mm Drilling Pattern						
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge C	up (VS8)		
mm (inch)	mm (inch) mm (inch) mm (inch)		Description	Item No.	PU	
12.7 (1/2")	3.5 (1/8")	11 (7/16")	TEC 864-VS8-42U 1/2 SM	02871-15	300	
19 (3/4")	0	11 (7/16")	TEC 864-VS8-42U 3/4 SM	02877-15	300	
25 (1")	0	11 (7/16")	TEC 864-VS8-42U 1 SM	02884-15	300	

Angle Reduction Clip			
Description	Item No.	PU	
85° Angle reduction clip	80125-42	100	

 $\bullet\,$ Reduces opening angle to 85°







Wrap-around - 42 mm Drilling Pattern						
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)			
mm (inch)	mm (inch) mm (inch) Description Item No.			PU		
6 (1/4")	11 (7/16")	14.5 (9/16")	TEC 864-VS8-42U 1/4 WM	02846-15	300	
12.7 (1/2")	3.5 (1/8")	11 (7/16")	TEC 864-VS8-42U 1/2 WM	02869-15	300	
19 (3/4")	0	11 (7/16")	TEC 864-VS8-42U 3/4 WM	02873-15	300	
25 (1")	0	11 (7/16")	TEC 864-VS8-42U 1 WM	02879-15	300	

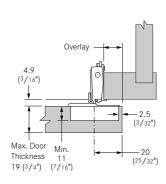
PU - Packaging unit

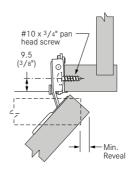


Minimum Reveal

Clearances - Door Ope

Clearance





TEC 864 Minimum Reveal

Thickness 19 (3/4")

Arm and door clearances see page 14.

8.5 — (11/32")

> Door Clearance

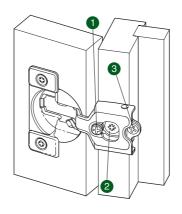
Maximum Door

Adjustments Dimension

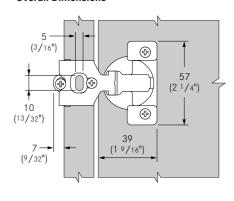
- Side Adjustment+/-1.5mm (1/16")
 Rotate cam adjustment screw.
- 2 Height Adjustment +/-2mm (3/32") Loosen screw, align door, tighten screw.
- 3 Depth Adjustment......+ 2.5mm (3/32"), -5mm (1/32") Rotate cam screw.

Mounting Screws

Hinge cup to door, #6 x $^5/\rm 8"$ Flat head screw Base plate to face frame, #10 x $^3/\rm 4"$ Pan head screw



Overall Dimensions



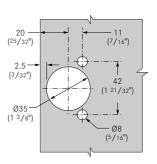
Base Plates Drilling Pattern



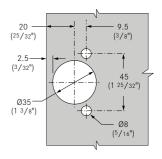
IMPORTANT

To determine the correct application, GRASS strongly recommends a trial mounting for all hinges and base plates.

42mm drilling pattern



45mm drilling pattern



TEC Self-close

108° Opening Angle - $1^{1}/_{4}$ " to $1^{1}/_{2}$ " Overlay



- One piece hinge and base plate combination
- 3 dimensional adjustment
- 11mm (7/16") cup drilling depth
- Front locating tabs position hinge on face frame
- Cam side adjustment
- Cam depth adjustment
- Height adjustment at mounting screw
- · Works with current GRASS insertion machinery
- Made in the USA





Side-moun	Side-mount - 45mm Drilling Pattern				
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)		
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-45U 1 1/4 SM	02894-15	300
33.5 (15/16")	0	10 (13/32")	TEC 864-VS8-45U 1 5/16 SM	01094-15	300
35 (1 3/8")	0	10 (13/32")	TEC 864-VS8-45U 1 3/8 SM	02898-15	300
38 (1 1/2")	0	10 (13/32")	TEC 864-VS8-45U 1 1/2 SM	02903-15	300

Description	item no.	PU
TEC 864-VS-45U 1 1/4 SM	04466-15	300
-	-	-
TEC 864-VS-45U 1 3/8 SM	04468-15	300
TEC 864-VS-45U 1 1/2 SM	04469-15	300





Wrap-around - 45mm Drilling Pattern						
Overlay	Overlay Door Clearance Arm Clearance Dowelled Hinge Cup (VS8)					
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-45U 1 1/4 WM	02887-15	300	
33.5 (1 5/16")	0	10 (13/32")	TEC 864-VS8-45U 1 5/16 WM	01095-15	300	
35 (1 3/8")	0	10 (13/32")	TEC 864-VS8-45U 1 3/8 WM	02896-15	300	
38 (1 1/2")	0	10 (13/32")	TEC 864-VS8-45U 1 1/2 WM	02901-15	300	

Screw-on Hinge Cup (VS)				
Description	Item No.	PU		
TEC 864-VS-45U 1 1/4 WM	04493-15	300		
-	-	-		
TEC 864-VS-45U 1 3/8 WM	04498-15	300		
TEC 864-VS-45U 1 1/2 WM	04499-15	300		





Side-mount	Side-mount - 42mm Drilling Pattern					
Overlay	Overlay Door Clearance Arm Clearance Dowelled Hinge Cup (VS8)					
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-42U 1 1/4 SM	02889-15	300	
35 (1 3/8")	0	10 (13/32")	TEC 864-VS8-42U 1 3/8 SM	02897-15	300	
38 (1 1/2")	0	10 (13/32")	TEC 864-VS8-42U 1 1/2 SM	02902-15	300	

em No. PL	J
125-42 10	0

Reduces opening angle to 85°







Wrai	p-around	- 42mm	Drilling	Pattern
wild	p ai oana	772	D111111115	I detection

•					
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)		
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU
32 (1 1/4")	0	10 (13/32")	TEC 864-VS8-42U 1 1/4 WM	02886-15	300
35 (1 3/8")	0	10 (13/32")	TEC 864-VS8-42U 1 3/8 WM	02895-15	300

PU - Packaging unit

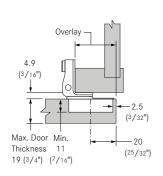


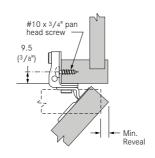
Minimum Revea

Clearances - Door Ope

Arm

Clearance





TEC 864 Minimum Reveal

Arm and door clearances see page 16.

108

Max. Door Thickness 19 (3/4")

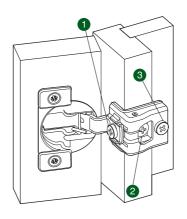
Adjustments

Dimensions

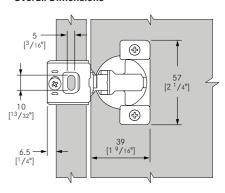
- Side Adjustment+/-1.5mm (1/16") Rotate cam adjustment screw.
- 2 Height Adjustment +/-2mm (3/32") Loosen screw, align door, tighten screw.
- 3 Depth Adjustment...... + 3mm (1/8") Rotate cam screw.

Mounting Screws

Hinge cup to door, #6 x $^5/\rm e^{\rm H}$ Flat head screw Base plate to face frame, #10 x $^3/\rm e^{\rm H}$ Pan head screw



Overall Dimensions



Base Plates

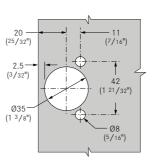
Drilling Pattern



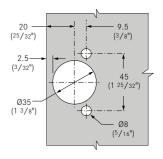


To determine the correct application, GRASS strongly recommends a trial mounting for all hinges and base plates.

42mm drilling pattern



45mm drilling pattern



TEC 861 Self-close

108° Opening Angle



- One piece hinge and base plate combination
- 11mm (7/16") cup drilling depth
- Front locating tabs position hinge on face frame
- Works on door thicknesses from 13mm ($^{1}/_{2}$ ") to 19mm ($^{3}/_{4}$ ")
- Works with current GRASS machinery
- 85° angle reduction clip available
- Made in the USA



Wrap-arou	Wrap-around - 45mm Drilling Pattern						
Overlay	Door Clearance	Arm Clearance	Dowelled Hinge Cup (VS8)				
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU		
11 (7/16")	5 (3/16")	9.5 (3/8")	TEC 861-VS8-45U 7/16 WM	04728-16	400		
12 (1/2")	3 (1/8")	7 (9/32")	TEC 861-VS8-45U 1/2 WM	04780-16	400		
14 (9/16")	2.5 (3/32")	7 (9/32")	TEC 861-VS8-45U 9/16 WM	04729-16	400		



Wrap-around - 42mm Drilling Pattern							
Overlay	Overlay Door Clearance Arm Clearance Dowelled Hinge Cup (VS8)						
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU		
12 (1/2")	3 (1/8")	7 (9/32")	TEC 861-VS8-42U 1/2 WM	04679-16	400		
14 (9/16")	2.5 (3/32")	7 (9/32")	TEC 861-VS8-42U 9/16 WM	04700-16	400		



Side-mount - 42mm Drilling Pattern							
Overlay Door Clearance Arm Clearance Dowelled Hinge Cup (VS8)							
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU		
11 (7/16")	5 (3/16")	9.5 (3/8")	TEC 861-VS8-42U 7/16 SM	04616-16	400		

Angle Reduction Clip					
Description	Item No.	PU			
85° Angle reduction clip	80125-42	100			

- Reduces opening angle to $85\,^\circ$



ouncil opace.		
Description	Item No.	PU
1.5 mm (1/16") slotted spacer	00047-42	100





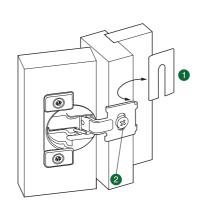


Dimensions - Door Closed #10 x 3/4" pan head screw Overlay Arm —— Clearance 9.5 Door Max. Door Min. 11 20 Reveal Thickness (7/16") (25/32") 19 (3/4") 1089 Maximum Door Thickness 19 (3/4") **TEC 861 Minimum Reveal** Door Thickness 16 (5/8") 17.5 (11/16") 19 (3/4") Minimum Reveal 4.2 (5/32") 5.4 (7/32") 6.7 (1/4") Arm and door clearances see page 20. Based on door with square edge. Adjustments

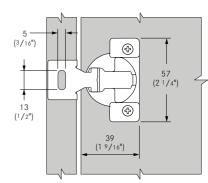
- Side Adjustment Decreasing overlay achieved with use of 1.5mm (1/16") spacer.
- 2 Height Adjustment +/-2mm (3/32") Loosen screw, align door, tighten screw.

Mounting Screws

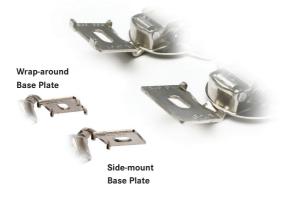
Hinge cup to door, #6 x $^5/8$ " Flat head screw Base plate to face frame, #10 x $^3/4$ " Pan head screw



Overall Dimensions



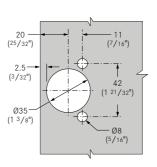
Base Plates Drilling Patter



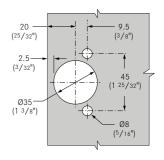
IMPORTANT

To determine the correct application, GRASS strongly recommends a trial mounting for all hinges and base plates.

42mm drilling pattern



45mm drilling pattern



TEC 861 for MDF Frame Material

108° Opening Angle



12.5 (1/2")

3 (1/8")

19 (3/4")

- Patented wrap-around base plate prevents splitting of frame material
- One piece hinge and base plate combination
- 11mm (7/16") cup drilling depth
- Front locating tabs position hinge on face frame
- Works on door thicknesses from 13mm ($^{1}/_{2}$ ") to 19mm ($^{3}/_{4}$ ")
- Works with current GRASS machinery
- 85° angle reduction clip available
- Made in the USA

Wrap-around - 42mm Drilling Pattern							
Frame Thickness	Overlay	Door Clearance	Arm Clearance	Dowel	led Hinge Cup (VS8)		
mm (inch)	mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	
12 (1/2")	12.5 (1/2")	3 (1/8")	7.5 (9/32")	TEC 861-VS8-42U 1/2 FT	04742-14	250	
16 (5/8")	12.5 (1/2")	3 (1/8")	7.5 (9/32")	TEC 861-VS8-42U 5/8 FT	04743-14	250	

TEC 861-VS8-42U 3/4 FT

pacer and screws			
	Description	Item No.	PU
Spacer	1.5 mm (1/16") slotted for MDF 861, clear	00209-42	100
Screw	No. 8 x 3/4" Round head, self drilling, zinc	81018-43	500
Screw	No. 8 x 5/8" Round head, truss quad, self drilling,	81017-43	500

7.5 (9/32")



04744-14

250

Angle Reduction Clip				
Description	Item No.	PU		
85° Angle reduction clip	80125-42	100		



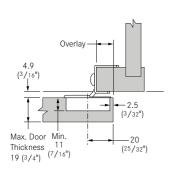


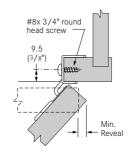




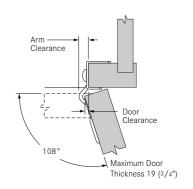
Minimum Revea

Clearances - Door Ope





TEC 861 Minimum Reveal



Arm and door clearances see page 22.

Adjustments

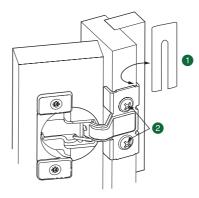
djustments Dimensions

- Side Adjustment Decreasing overlay achieved with use of 1.5mm (1/16") spacer.
- 2 Height Adjustment +/-2mm (³/₃₂") Loosen screws, align door, tighten screws.

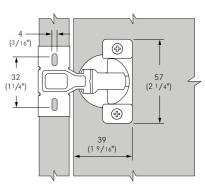
Mounting Screws

Hinge cup to door, #6 x $^{5}/_{8}$ " Flat head screw Base plate to face frame,

#8 x ³/4" Round head, self drilling screw or #8 x ⁵/8" Round head, self drilling screw

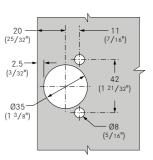


Overall Dimensions



Drilling Pattern

42mm drilling pattern



IMPORTANT

To determine the correct application, GRASS strongly recommends a trial mounting for all hinges and base plates.

TEC 872

110° Opening Angle



- 1/2" overlay achievable on profile door
- Available in 45mm boring pattern
- 3-dimensional hinge
- All metal construction, nickel finish
- Height adjustment in elongated screw hole
- Minimal gap between the door and frame
- Minimal protrusion into cabinet
- Hinge and base plate must be ordered separately





TEC 872 Opening Angle 110°								
Dowelled Hinge Cup (VS8)			Screw-on Hinge Cup (VS)					
Description	Item No.	PU	Description	Item No.	PU			
TEC 872-VS8-45	43729-17	500	TEC 872-VS-45	43727-17	500			

Side-mount Base Plates						
Plate Height	Description	Item No.	PU			
00	872-18 Side-mount	43730-43	500			
04	872-22 Side-mount	43731-43	500			

24



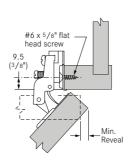
Max. Door 11.5 CC Thickness 19 (3/4")

Cup Center (CC) = DD + 1/2 (Cup diameter)

Drilling Distance (DD)

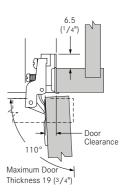
		3	4	5	6	7
	19					0
	18				0	
	17			0		
	16		0			
×	15	0				4
Ĕ	14				4	
Door Overlay max.	13			4		
2	12		4			
8	11	4	Base	Plate H	leight (BPH)

Minimum Reveal



TEC 872 Minimum Reveal

Clearances - Door Open

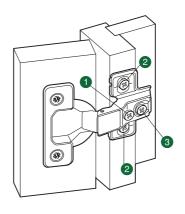


Adjustments

- Side Adjustment+/-2mm (3/32") Rotate cam adjustment screw.
- 2 Height Adjustment +/-2mm (3/32") Loosen screws, align door, tighten screws.
- 3 Depth Adjustment......+/-2mm (3/32") Loosen screw, align door, tighten screw.

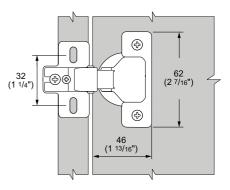
Mounting Screws

Hinge cup to door, #6 x $^5/8$ " Flat head screw Base plate to face frame, #6 x $^5/8$ " Flat head screw or #6 x $^3/4$ " Flat head screw



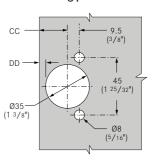
Dimensions

Overall Dimensions



Drilling Pattern

45mm drilling pattern



IMPORTANT

To determine the correct application, GRASS strongly recommends a trial mounting for all hinges and base plates.

ACC 140

130° Opening Angle



- One piece hinge and base plate combination
- Available in 48mm drilling pattern
- Zinc die-cast, nickel plated
- Minimal gaps between the door and frame
- Overlays from 26-29mm (1 $\frac{1}{32}$ 1 $\frac{1}{8}$)
- Shallow cup depth of 10mm ($^{1}\%_{32}$ ")
- Optimal 130° opening angle

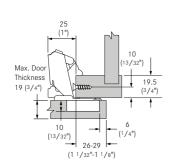


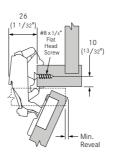
ACC 140 Opening Angle 130°						
Overlay	Door Clearance	Arm Clearance	Screw-	on Hinge Cup (VS)		
mm (inch)	mm (inch)	mm (inch)	Description	Item No.	PU	
26-29 (1 1/32" - 1/8")	2 (1/16")	26 (1 1/32")	ACC 140-VS-48-WM	276.743.59.9215	125	

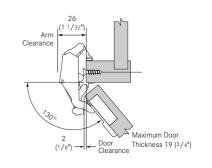


Minimum Reveal

Clearances - Door Ope







ACC 140 Minimum Reveal

Arm and door clearances see page 26.

Adjustments

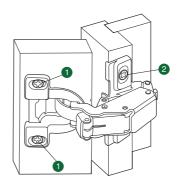
Dimensions

- Side Adjustment+/-1.5mm (¹/1ሬ")

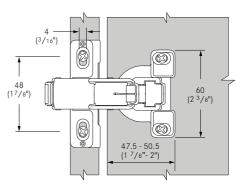
 Loosen screws, align door, tighten screws.
- 2 Height Adjustment +/-3mm (1/8") Loosen screws, align door, tighten screws.

Mounting Screws

Hinge cup to door, #6 x $^5/8$ " Flat head screw Base plate to face frame, #8 x $^3/4$ " Flat head screw

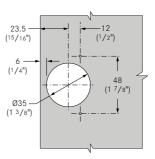


Overall Dimensions



Drilling Pattern

48mm drilling pattern



IMPORTANT

To determine the correct application, GRASS strongly recommends a trial mounting for all hinges and base plates.

Machinery

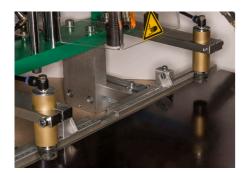
GRASS PRO1 drilling and insertion machine for 45mm boring pattern



- Depth stop can be adjusted to material thickness
- Functional design
- Easy, fast and efficient operation
- Easy maintenance
- 45mm boring pattern

Description	Item No.	PU
220v single phase pneumatic	94559-01	1
220v three phase pneumatic	94560-01	1
110v single phase pneumatic	94561-01	1

GRASS PRO1 Features



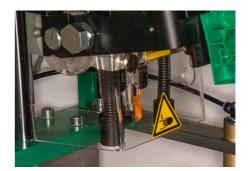
Adjustable hold-down devices

Adjustable hold-down devices are suitable for a wide range of material thicknesses. Holds door firmly in place for drilling and insertion and features manual release.



Pneumatic controls

Two-hand start button controls for safe drilling and insertion functions.



Quick change chucks

Easy drill bit removal and insertion using quick change chucks.

PU - Packaging unit

Machinery

GRASS PRO1 accessories



Drill Bits





	Description	Item No.	PU
1	35mm diameter, RH	00077-01	1
2	8mm diameter, LH	00160-01	1

1 x 35mm/RH, 2 x 8mm/LH 00213-01 1	Bit set for hinge drilling	Item No.	PU
	1 x 35mm/RH, 2 x 8mm/LH	00213-01	1

Fence Stops



Description	Item No.	PU
Additional fence stop	949.200.21.0000	1
Universal fence stop	949.200.21.0100	1

Insertion Dies









Description	Item No.	PU
1 Tiomos 110°/120°	F146 101 310 201	1
2 Universal Die for Tiomos 110°/120°/100°	F146 101 308 201	1
3 TEC Die for all cup styles	92617	1
4 TEC Hand insertion tool	03987-01	1

Extension Fence



Assembly Hardware

Shelf Supports



Description	Item No.	PU
Plastic, clear, with steel pin	499.582.50.0050	5000
Metal spoon, nickel plated	499.582.50.2050	2000
Shelf support 7006/9.5, nickel	517.206.64.1015	2500
Shelf support 7035, nickel	517.206.61.0015	2500
H-802 plastic, square, clear	00036-43	500

Bumper Pads

AIRSOFT Bumper Pads, Plastic, Round





Item No.	PU
63480-99	480
63482-30	5000
63481-43	500
63483-30	5000
	63480-99 63482-30 63481-43

Self-adhesive Bumper Pads





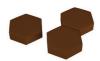
Description	Item No.	PU
Self-adhesive bumper pad, clear, 7mm	630.000.03.0750	1088
Self-adhesive bumper pad, clear, 10mm	630.000.03.1050	1050
Self-adhesive bumper pad, clear, 12mm	630.000.02.1250	5000

Bumper Pads



Description	Item No.	PU
Bumper pad, round, clear, 3mm	31002-43	500
Bumper pad, round, clear, 1.5mm	31004-43	500

Bumper Pads



Description	Item No.	PU
Bumper pad, hexagonal, butterscotch, 3mm	00464-43	500

Door Stop



Description	Item No.	PU
H-950 door stop, clear	00068-43	500

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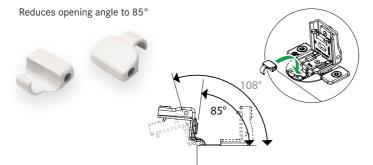
Cover Caps

Hole covers for 35mm cup drillings



Description	Item No.	PU
35mm cover cap, white	22227-42	100
35mm cover cap, almond	22228-42	100
35mm cover cap, brown	22229-42	100

Angle Reduction Clip



Description	Item No.	PU
85° Angle reduction clip	80125-42	100

Spacers



Description	Item No.	PU
860-048 1.5mm ($^{1}/_{16}$ ") thick, without locating pins	00264-42	100
860-076 1.5mm (1/16") thick, slotted	00047-42	100
1.5mm (1/16") thick, hinge cup spacer	00284-42	100
1.5mm (1/16") thick, slotted for MDF, clear	00209-42	100

Screws



	Description	Item No.	PU
0	No. 6 \times $^{1}/_{2}$ " Flat head, nickel	81014-43	500
0	No. 6 x ⁵ /8" Flat head, nickel	81001-43	500
3	No. 8 \times $^{3}/_{4}$ " Round head, self-drilling, zinc	81018-43	500
4	No. 10 x ³ / ₄ " Pan head, nickel	81007-43	500
6	No. 8 x $^5/_8$ " Round head, truss quad, self-drilling, zinc	81017-43	500

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