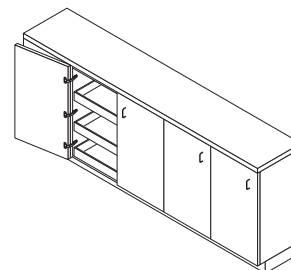


# Tiomos 160

## 160° Wide angle hinge



- 3-dimensional adjustment with suitable base plate
- Accommodates overlays up to 25.4 mm (1")
- Soft-close or Self-close hinges available
- For face frame or frameless cabinets
- Convenient depth adjustment with worm gear
- Zero protrusion when door is opened 90°
- 10mm cup depth
- For door thicknesses up to 32 mm (1 1/4")
- Minimal reveal



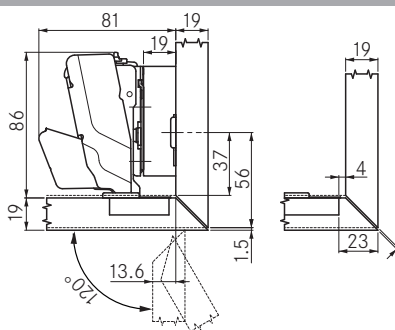
**Tiomos 160**      **Opening Angle 160°**      **Impresso**      **Screw-on**      **Dowelled**

Full overlay	Cranking 00	Pattern	Type	Item No.	Pattern	Type	Item No.	Item No.	PU
	Hinge cup: steel, nickel-plated Hinge arm: steel, nickel-plated	42 / 45	Soft-close	<b>F017139435217</b>	45	Soft-close	<b>F028138561217</b>	<b>F028138564217</b>	50
			Self-close	<b>F034139406217</b>		Self-close	<b>F045138499217</b>	<b>F045138502217</b>	50
					42	Soft-close	-	<b>F028138382217</b>	50
						Self-close	-	<b>F045138320217</b>	50
Overlay	Cranking 03	Pattern	Type	Item No.	Pattern	Type	Item No.	Item No.	PU
	Hinge cup: steel, nickel-plated Hinge arm: steel, nickel-plated	42 / 45	Soft-close	<b>F017139436217</b>	45	Soft-close	<b>F028138562217</b>	<b>F028138565217</b>	50
			Self-close	<b>F034139407217</b>		Self-close	<b>F045138500217</b>	<b>F045138503217</b>	50
					42	Soft-close	-	<b>F028138383217</b>	50
						Self-close	-	<b>F045138321217</b>	50
Half overlay	Cranking 9.5	Pattern	Type	Item No.	Pattern	Type	Item No.	Item No.	PU
	Hinge cup: steel, nickel-plated Hinge arm: zinc, nickel-plated	42 / 45	Soft-close	<b>F017139437217</b>	45	Soft-close	<b>F028138563217</b>	<b>F028138566217</b>	50
			Self-close	<b>F034139408217</b>		Self-close	<b>F045138501217</b>	<b>F045138504217</b>	50
					42	Soft-close	-	<b>F028138384217</b>	50
						Self-close	-	<b>F045138322217</b>	50

### Mitered corner application

Use Full overlay hinge (00 Cranking) with 19 mm base plate.

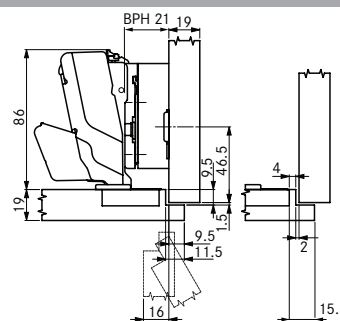
Use 120° opening angle reduction clip. Prevents doors from bumping with the cabinet side in inset applications and mitered corner applications.



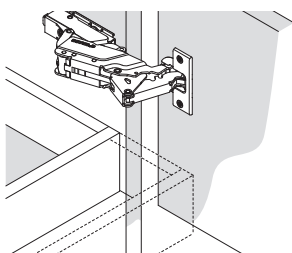
### 3/8" Lip door application

Use Full overlay hinge (00 Cranking) with 21 mm base plate.

Use 120° opening angle reduction clip. Prevents doors from bumping with the cabinet side in inset applications and mitered corner applications.



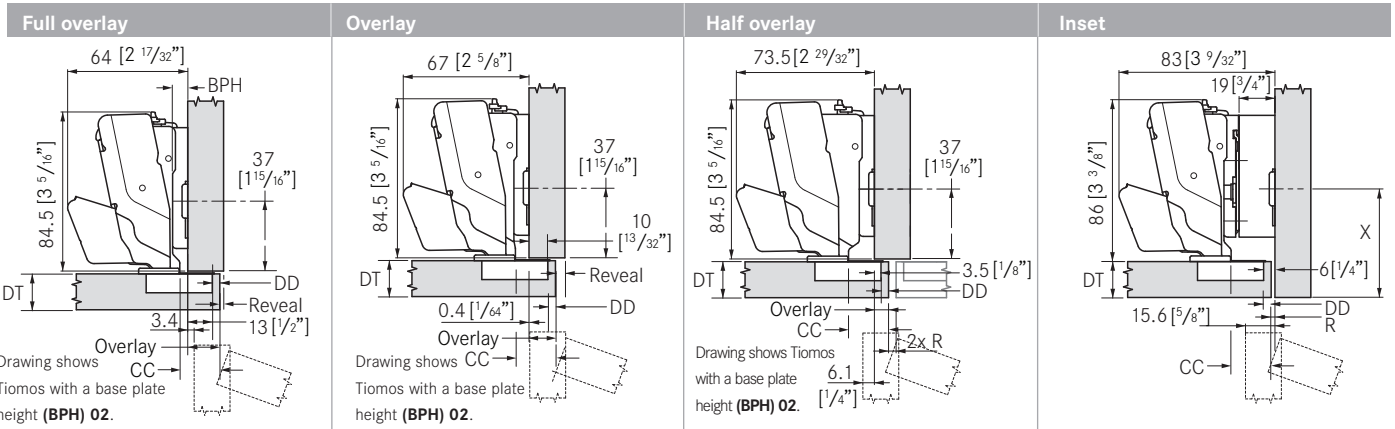
### Zero door protrusion at 90°



Zero protrusion for application with inset drawers. With 00 cranking and 00 height of base plate the door is flush with the cabinet at 90°.

Hinge cup cover cap	Item No.	PU
Steel, nickel-plated	<b>F072135503228</b>	150
Angle reduction clip to 120°	Item No.	PU
Plastic, black	<b>F072135753117</b>	50

PU = packaging unit



**Drilling Distance (DD)**

	3	4	5	6	7	8	9	10
25.0								0
24.0							0	
23.0						0		2
22.0					0		2	3
21.0			0			2	3	
20.0		0		2	3			
19.0	0		2	3				
18.5				3.5				
18.0	0		2	3				
17.5				3.5				
17.0		2	3					
16.5			3.5					
16.0	2	3						
15.5		3.5						
15.0		3						
14.5	3.5							

Door overlay

Base Plate Height (BPH)

**Drilling Distance (DD)**

	3	4	5	6	7	8	9	10
22.0								0
21.0							0	
20.0						0		2
19.0					0		2	3
18.0			0			2	3	
17.0		0		2	3			
16.5					3.5			
16.0	0		2	3				
15.5					3.5			
15.0	0		2	3				
14.5				3.5				
14.0		2	3					
13.5			3.5					
13.0	2	3						
12.5		3.5						
12.0	3							
11.5	3.5							

Door overlay

Base Plate Height (BPH)

**Drilling Distance (DD)**

	3	4	5	6	7	8	9	10
15.5								0
14.5							0	
13.5						0		2
12.5					0		2	3
11.5			0			2	3	
10.5		0		2	3			
10.0					3.5			
9.5	0		2	3				
9.0					3.5			
8.5	0		2	3				
8.0				3.5				
7.5		2	3					
7.0			3.5					
6.5	2	3						
6.0		3.5						
5.5	3							
5.0	3.5							

Door overlay

Base Plate Height (BPH)

**Drilling Distance (DD)**

	3	4	5	6	7
0.0					19
0.5					
1.0				19	
1.5					
2.0			19		
3.0	19				
4.0					

Reveal (R)

Base Plate Height (BPH)

**Minimum gaps**

The minimum gap is the gap between the closed door and the front of the cabinet.

\*only achievable with 120° angle reduction clip

**Drilling Distance (DD)**

	3	4	5	6	7	8	9	10
32.0	1.0	1.0						
31.0	1.0	1.0	1.0					
30.0	1.0	1.0	1.0					
29.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
28.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
26.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
24.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
22.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
21.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
20.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
18.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
16.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Door Thickness (DT)

Minimum gap

**Reveal**

Reveal dimensions were determined with an edge radius (of the door) of 1mm. Hinge dimensions and reveal calculation based on factory setting.

**IMPORTANT**

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

**Drilling Distance (DD)**

	3	4	5	6	7	8	9	10
32.0	0.2*0.2*							
31.0	0.2*0.2*0.2*							
30.0	0.2	0.2	0.2*0.2*0.2*					
29.0	0.2	0.2	0.2	0.2	0.2	0.2*0.2*		
28.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Door Thickness (DT)

Reveal (R)

