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## Specials

V964L Series .....	B-1 - B-2
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2939L Series .....	D-1
2812L Series .....	E-1 - E-6
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VKM Series .....	G-1 - G-2
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The Camloc brand was established in 1937. Since that time our fastening systems have been successfully integrated into numerous applications within many different industries.

Our customers benefit from our more than 80 years of fastening experience.

We provide local support for innovative, high quality fastening systems supplied globally to the strictest environmental and working conditions.



**IATF 16949:2016**



**ISO 14001:2015**

Your Howmet Fastening Systems team

## Disclaimer:

Parts listed are subject to technical changes. All dimensions in mm. All information is correct to the best of our knowledge at the time of printing. No liability for disadvantages caused by printing errors or false application.

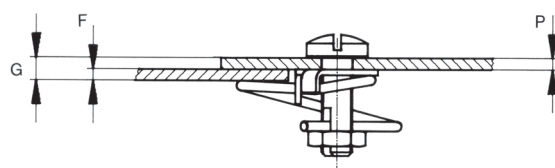
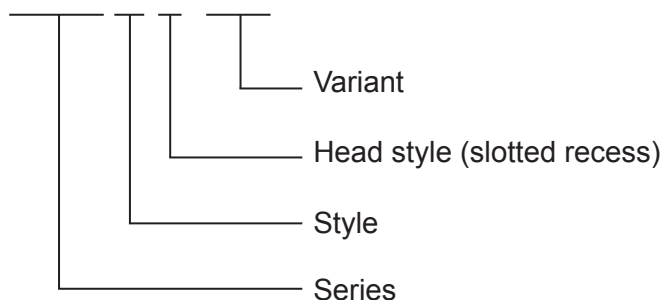
## Features

Wide grip range (total thickness G up to 15 mm).  
Suitable for a large range of applications.  
Easy installation with single-hole mounting.  
Either tool-operated (slotted recess head) or hand-operated (fixed wing head).  
Clockwise locking 3/4 turn maximum.

## Part no. example

Pawl Latches, slotted recess head, with decorative washer.

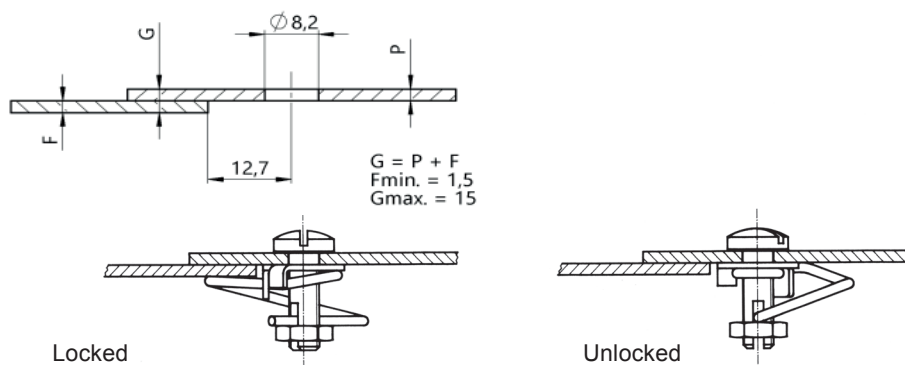
## V964L 01 -1 -2AG



$$G = P + F \text{ (see page B-2)}$$

Style	Dimensions	Materials / Finish	°C	Part No.
<b>Slotted Recess Head</b> 		Stud: Steel / zinc-plated CrVI-free, clear passivation  Spring: Stainless steel	120	<b>V964L01-1-1AG</b>
<b>Slotted Recess Head with Decorative Washer</b> 		Stud: Steel / zinc-plated CrVI-free, clear passivation  Spring: Stainless steel	120	<b>V964L01-1-2AG</b>
<b>Fixed Wing Handle Plastic</b> 		Stud: Steel / zinc-plated CrVI-free, clear passivation  Spring: Stainless steel  Wing: Plastic (POM) black	-40 up to +100	<b>V964L01-2-1AG</b>

Installation Dimensions



## Features

Variable grip fastener. Available in two grip ranges from 1,0 mm to 18,8 mm.

Tool or hand operated head styles available.

Single hole mounting - low installation cost.

Clockwise locking as standard.

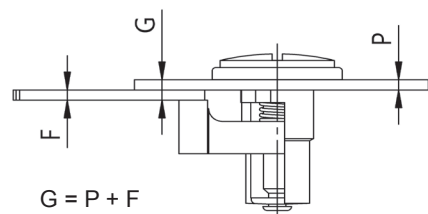
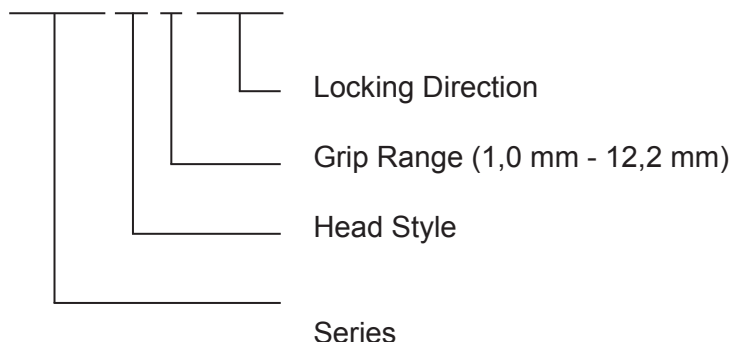
Counterclockwise locking fasteners upon request.

## Part no. example

Pawl Latches, Flat head.

Grip range 1,0 mm - 12,2 mm.

## V965L 23 -1 R1AG


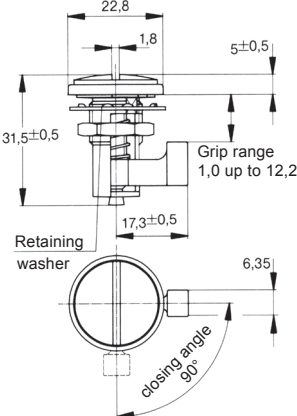

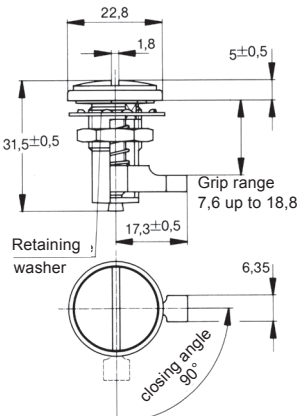



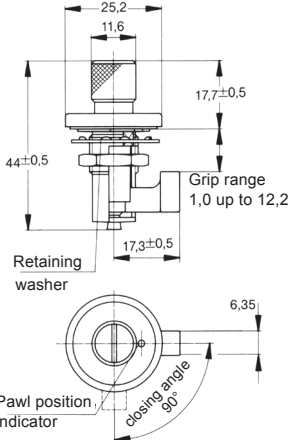

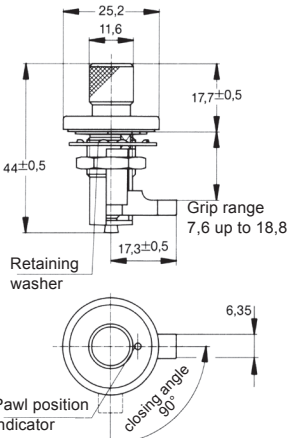
$$G = P + F$$

$$P_{min} = 0,5mm$$

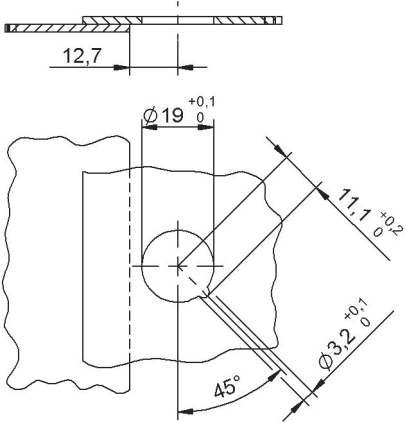
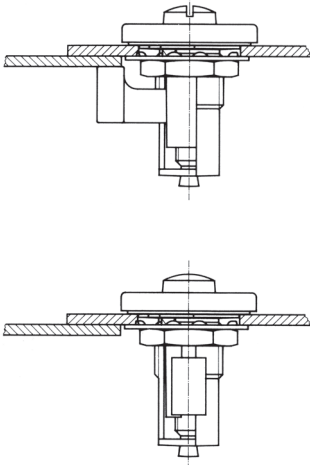
$$P_{max} = 0,5mm$$

For  $G = 7,6mm$  to  $18,8mm$  applies  $P+F \geq 7,6mm$

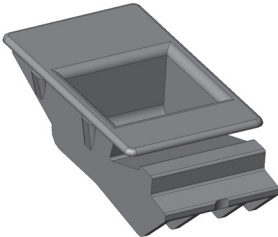
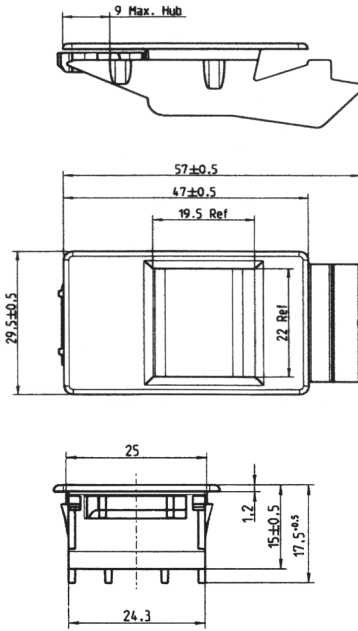
Style	Dimensions	Materials / Finish	°C	Part No.
<b>Flat Head</b> <b>Grip Range</b> <b>1,0 up to 12,2</b> 		Steel / zinc-plated CrVI-free, clear passivation	-40 up to +100	<b>V965L23-1R1AG</b>
<b>Flat Head</b> <b>Grip Range</b> <b>7,6 up to 18,8</b> 		Steel / zinc-plated CrVI-free, clear passivation	-40 up to +100	<b>V965L23-2R1AG</b>

Style	Dimensions	Materials / Finish	°C	Part No.
<b>Knurled Head</b> <b>Grip Range</b> <b>1,0 up to 12,2</b> 		Steel / zinc-plated CrVI-free, clear passivation	-40 up to +100	<b>V965L1-1R1AG</b>
<b>Knurled Head</b> <b>Grip Range</b> <b>7,6 up to 18,8</b> 		Steel / zinc-plated CrVI-free, clear passivation	-40 up to +100	<b>V965L1-2R1AG</b>

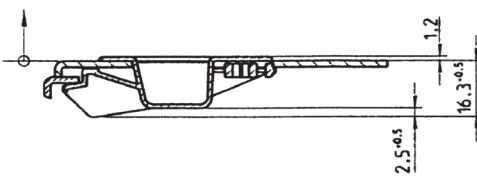
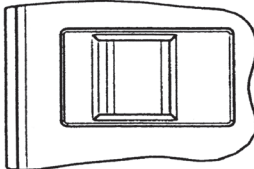
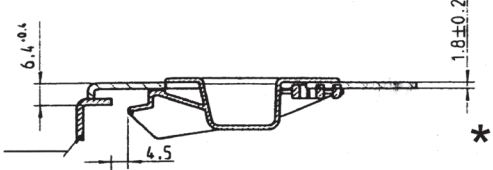
## Pawl Latches Installation Instructions

Instruction Dimensions	
<p><b>Clockwise locking</b></p>  	



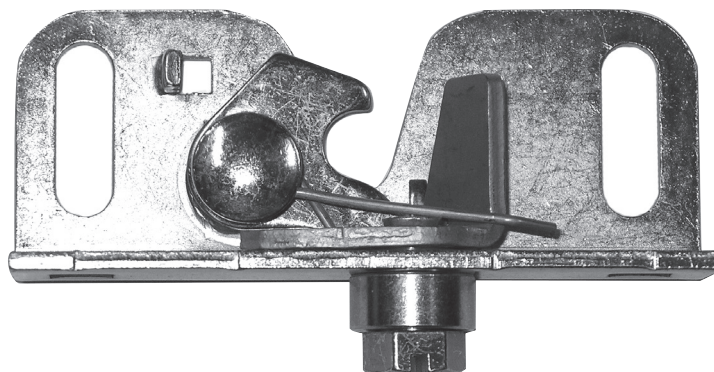
Style	Dimensions	Materials / Finish	°C	Part No.
<b>Slam latch</b>  	 <p>9 Max. Hub</p> <p>57±0.5</p> <p>47±0.5</p> <p>19.5 Ref</p> <p>29.5±0.5</p> <p>22 Ref</p> <p>25</p> <p>1.2</p> <p>15±0.5</p> <p>17.5±0.5</p> <p>24.3</p>	Plastic (POM) black	-10 up to +60	<b>2939L01-01-1K</b>

## Installation Instructions

Dimension	
<b>Locked</b>   <p>1.2</p> <p>16.3±0.5</p> <p>2.5±0.5</p> 	<b>Unlocked</b>   <p>6.4±0.4</p> <p>4.5</p> <p>1.8±0.2</p> <p>*</p> <p>Frame</p> <p>14.5±1</p> <p>38±0.15</p> <p>max R0.5</p> <p>25.5±0.15</p>

\* Other panel thicknesses upon request.





### Particular Features

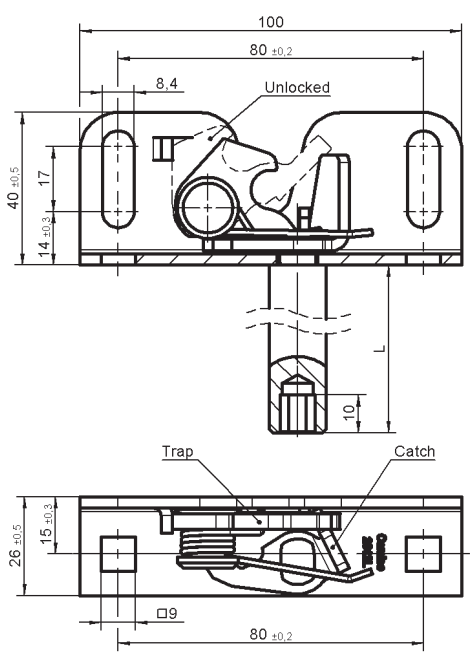
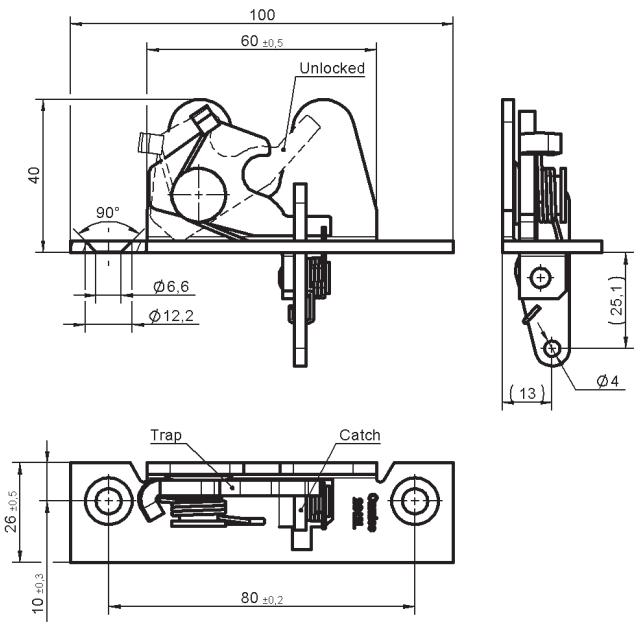
Robust slam latch, self locking

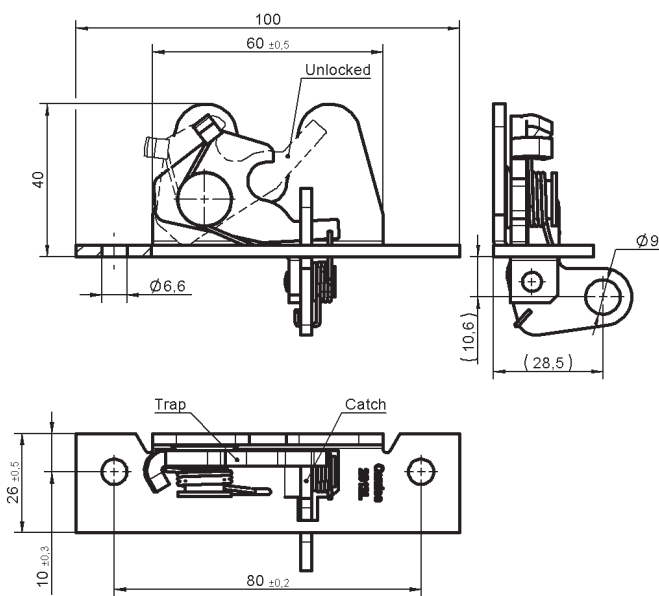
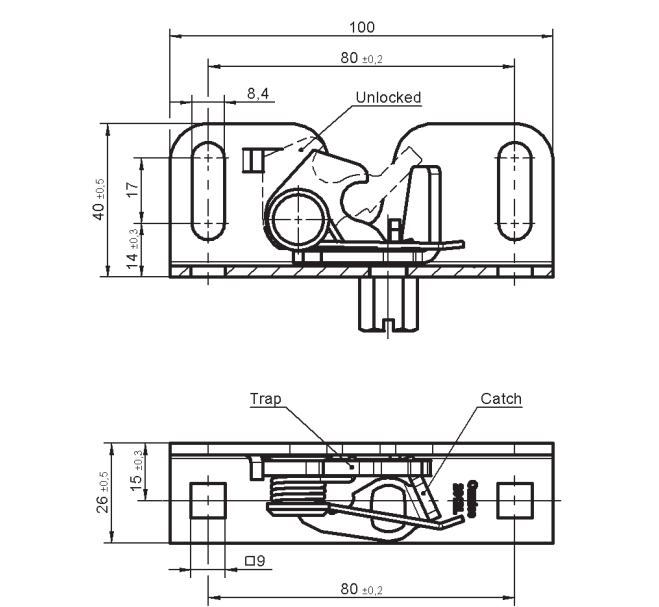
Max. locking force: 230 N

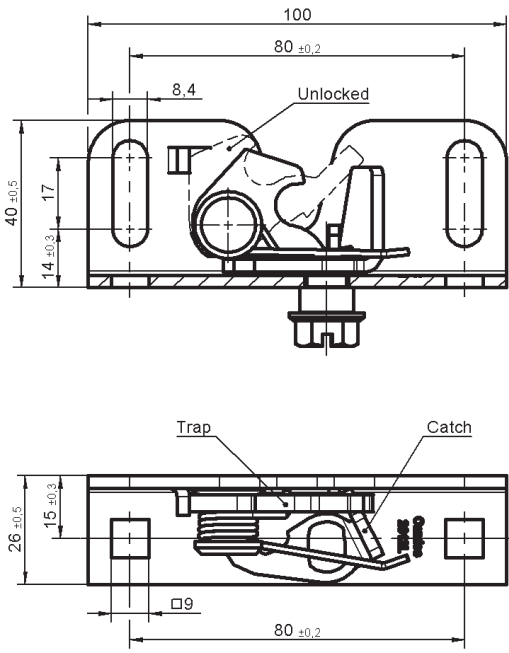
Max. tension strength: 2.400 N

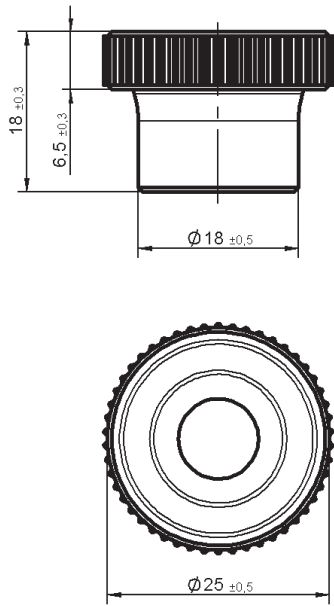
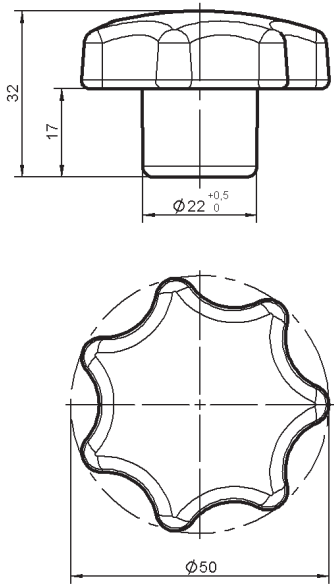
Max. torque: 40 Nm

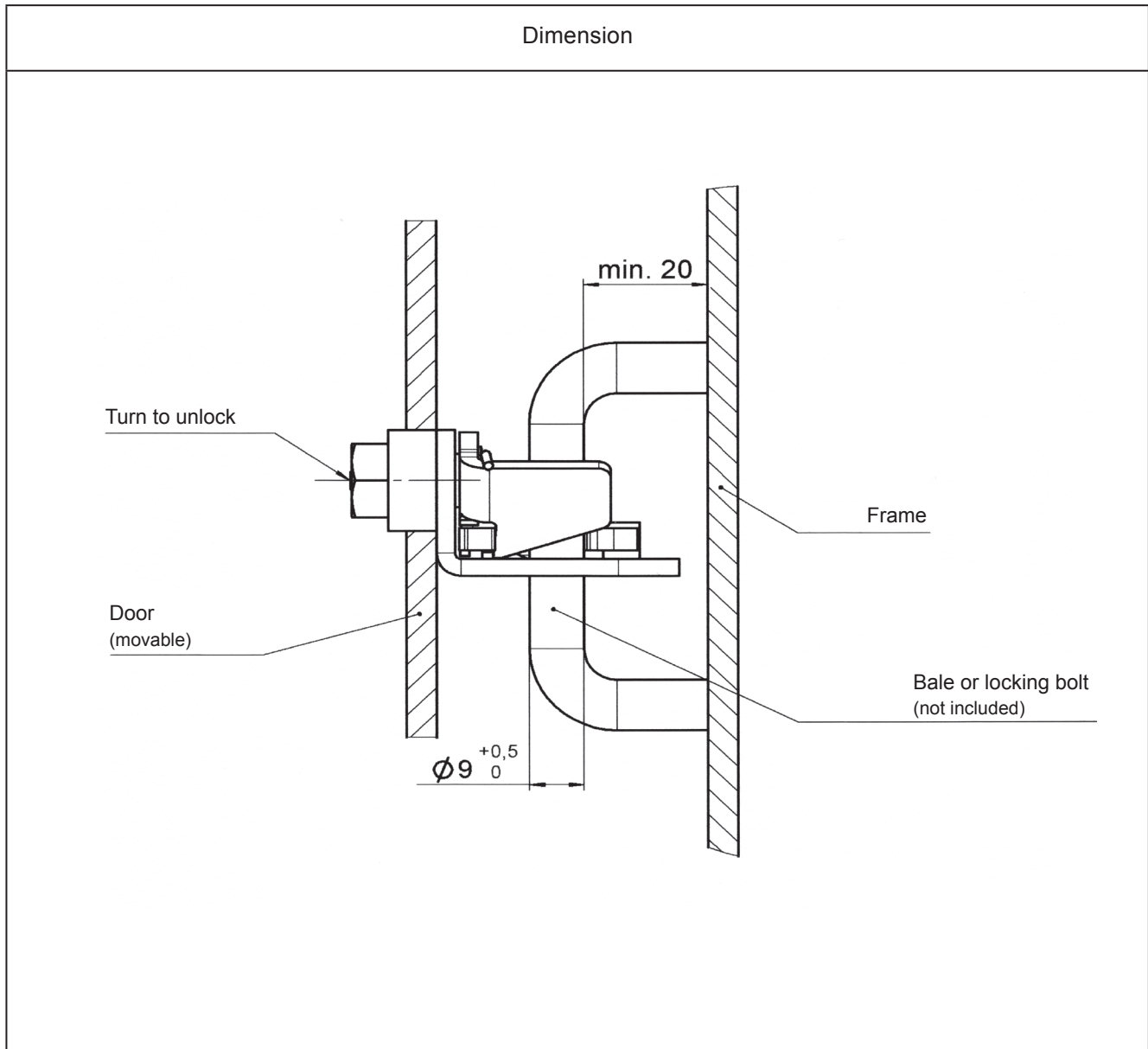
Dimensions	Materials / Finish	Type	°C	Part No.
	Steel / zinc-plated and yellow chromated (CrVI free) Catch: zinc flake coated	A	100	<b>2812L03-1AF</b>
	Steel / zinc-plated and yellow chromated (CrVI free) Catch: zinc flake coated	B	100	<b>2812L03-2AF</b>

Dimensions	Materials / Finish	L	°C	Part No.
	Steel / zinc-plated and yellow chromated (CrVI free) Catch: zinc flake coated	110	100	<b>2812L05-1AF</b>
	Steel / zinc-plated and yellow chromated (CrVI free) Catch: zinc flake coated	50	100	<b>2812L05-2AF</b>
	Steel / zinc-plated and yellow chromated (CrVI free) Catch: zinc flake coated		100	<b>2812L06-1AF</b>

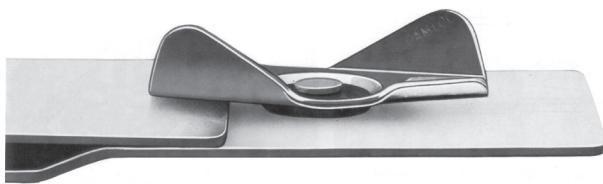
Dimensions	Materials / Finish	°C	Part No.
	Steel / zinc-plated and yellow chromated (CrVI free) Catch: zinc flake coated	100	<b>2812L07-1AF</b>
	Steel / zinc-plated and yellow chromated Catch: zinc flake coated	100	<b>2812L08-1AF</b>

Dimensions	Materials / Finish	°C	Part No.
 <p>The drawing shows two views of the latch. The top view is a front elevation with dimensions: overall width 100, mounting hole spacing 80 ±0.2, distance from left edge to first hole 8.4, and mounting hole diameter 14 ±0.3. The latch is shown in an 'Unlocked' state. The bottom view is a side elevation with dimensions: overall height 26 ±0.5, mounting hole spacing 80 ±0.2, distance from top edge to mounting holes 15 ±0.3, and a 9mm square feature. Labels 'Trap' and 'Catch' point to internal components.</p>	<p>Steel / zinc-plated and yellow chromated Catch: zinc flake coated</p>	<p>100</p>	<p><b>2812L09-1AF</b></p>

Dimensions	Materials / Finish	°C	Part No.
	Plastic (POM) / black  to be used with: 2812L03-1AF 2812L03-2AF 2812L08-1AF 2812L09-1AF	-25 up to +90	<b>2812L80-1K</b>
	Plastic (PA6) / black  to be used with: 2812L03-1AF 2812L03-2AF 2812L08-1AF 2812L09-1AF	-40 up to +60	<b>2812L82-1K</b>







### Particular Features

Simple and economic fastener for lids, etc.

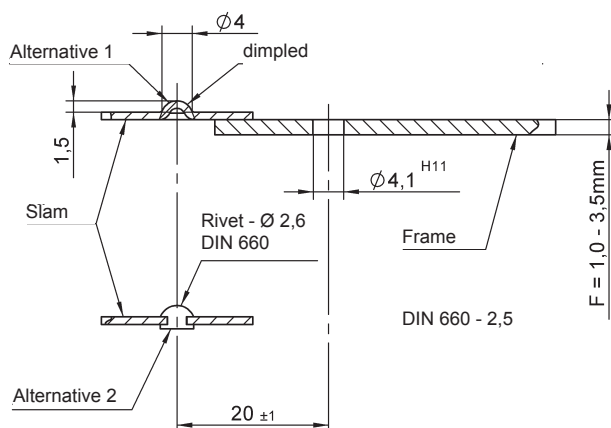
Easy installation by blind riveting.

¼ Turn to lock

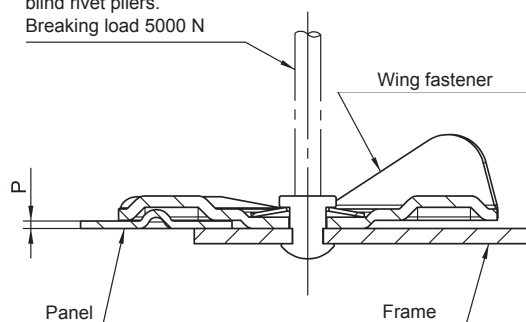
Secure locking on detent.

Dimensions	Materials / Finish	°C	Part No.
	Steel / zinc-plated, CrVI-free, clear passivation	100	<b>52E02-*-1AG</b>

### Selection and Installation Instructions



Riveted by standard  
blind rivet pliers.  
Breaking load 5000 N



Part No.	Panel Thickness P	Height H
52E02-01-1AG	0 (flush)	0,7
52E02-02-1AG	1	1,1
52E02-03-1AG	2	1,7



## Particular Features

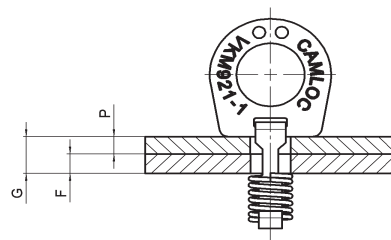
Operation by hand installation.

Easy installation with single-hole mounting.

Absorbs shock and vibration.

Ideal for sheet metal panel applications.

Delivery: spring and clip assembled, handle packed separately.



VKM1040-1AGV

VKM921-1AGV

$G = P + F$

Gmax. = 6mm

Gmin. = 1mm

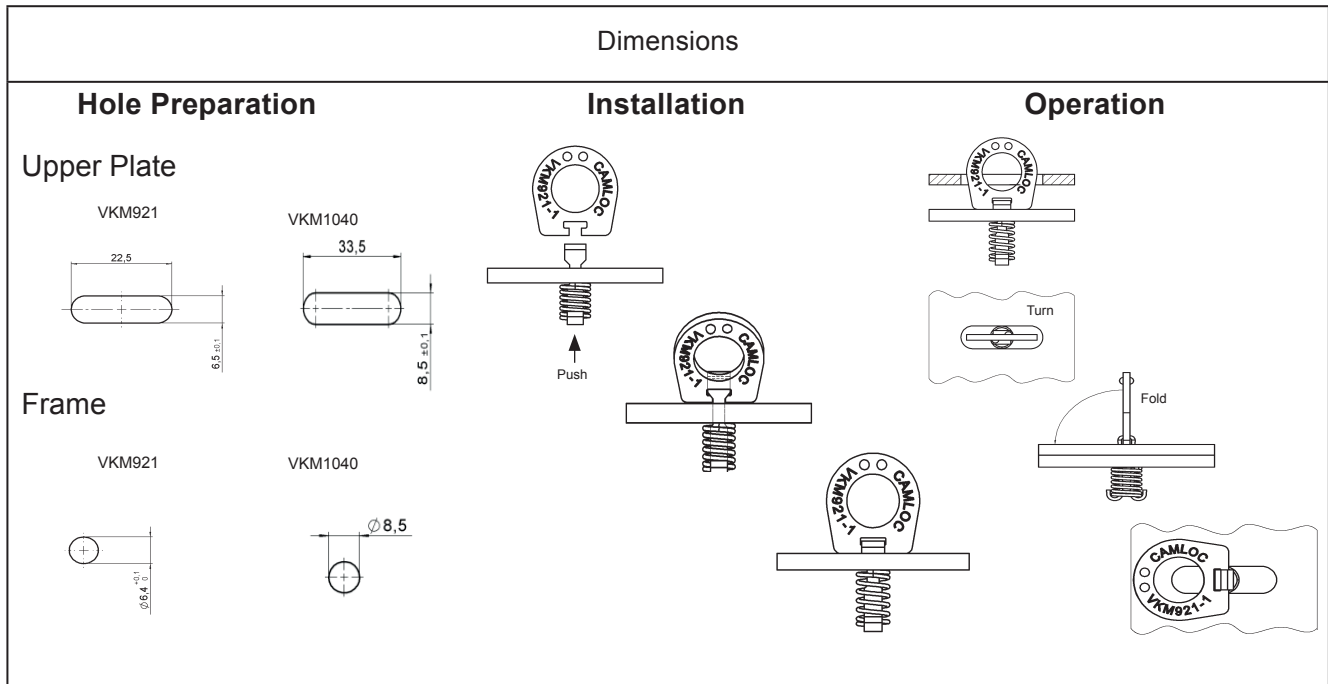
$G = P + F$

Gmax. = 6,35mm

Gmin. = 1,5mm

Product	Dimensions	Materials / Finish	°C	Part No.
<b>folding handle</b> 		Steel / zinc-plated, CrVI-free transparent, iricedent passivated and sealed	120	<b>VKM921-1AGV</b>
<b>folding handle</b> 		Steel / zinc-plated, CrVI-free transparent, iricedent passivated and sealed	120	<b>VKM1040-1AGV</b>

## Installation Instructions



Part No.	Page
52E02-*-1AG	F1
2812L03-1AF	E1
2812L03-2AF	E1
2812L05-1AF	E2
2812L05-2AF	E2
2812L06-1AF	E2
2812L07-1AF	E3
2812L08-1AF	E3
2812L09-1AF	E4
2812L80-1K	E5
2812L82-1K	E5
2939L01-01-1K	D1
V964L01-1-1AG	B1
V964L01-1-2AG	B1
V964L01-2-1AG	B1
V965L1-1R1AG	C2
V965L1-2R1AG	C2
V965L23-1R1AG	C1
V965L23-2R1AG	C1
VKM921-1AGV	G1
VKM1040-1AGV	G1

