

Camloc Tension Latches



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Tension Latches

V934L Series	B-1 - B-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.

Each of our customers will feel the full benefit of our 70 years of fastening experience.

Customer proximity, environmental awareness and quality are the main criteria of our services and products.



ISO/TS 16949: 2002



DIN EN ISO 14001 : 2005

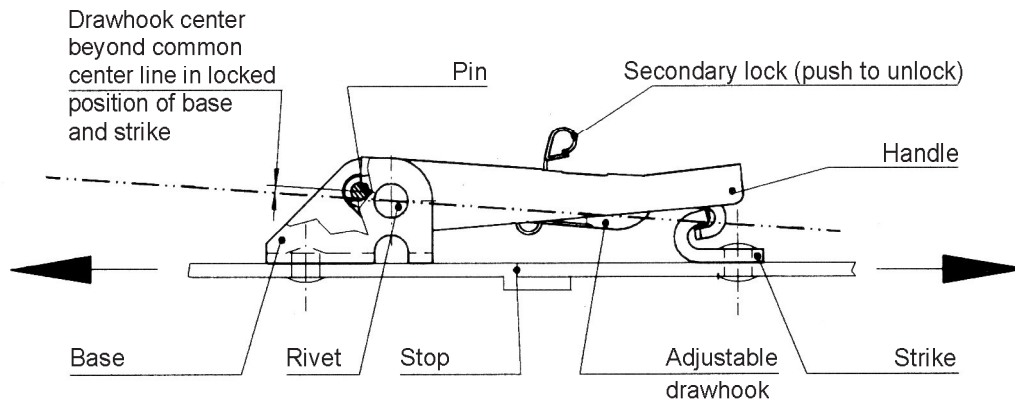
Please find additional information about our environmental program under: www.alcoa.com.

Your Alcoa Fastening Systems team

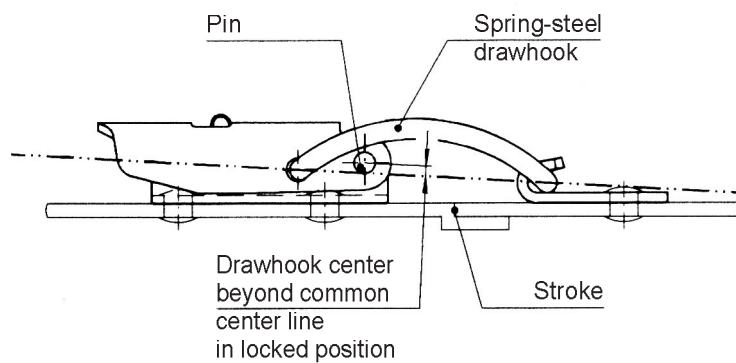
Disclaimer:

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.

How It Operates



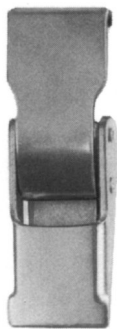
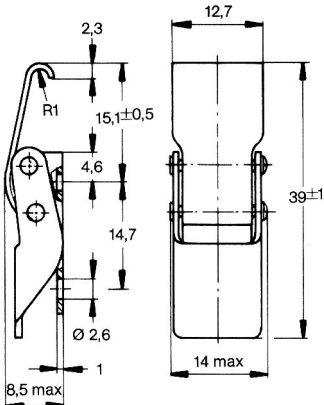

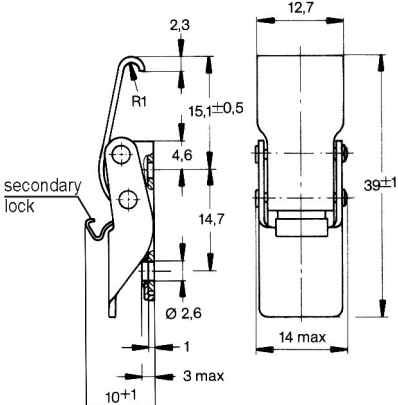
- Tension latches are a safe locking system for industrial applications. They can take high tensile loads. Lateral forces must be kept off the tension latch by the design of the parts linked with each other.
- Via lever action, the panels connected with the tension latch and the strike are pulled together. If necessary, a stop must be provided.
- Positive lock is achieved when drawhook center is beyond the common center line of the base and strike.




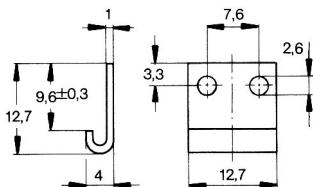
- For unlocking, the secondary lock is operated and the handle lifted. For locking, the secondary lock automatically engages.
- Most of the tension latches can be adjusted by a drawhook. For fixed series, a spring-steel drawhook serves for tolerance compensation.

Max tensile strength 550 N

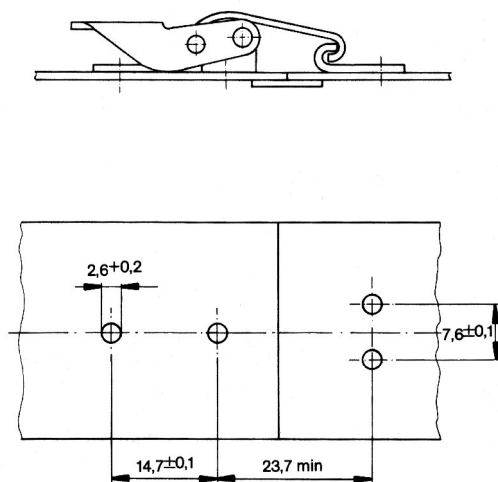
Working load 310 N

Style	Dimensions	Materials / Finish	Part No.
		Stainless steel	V934L01-1-1BP
With secondary lock 		Stainless steel	V934L01-1X1BP

Strikes

Style	Dimensions	Materials / Finish	D	Part No.
		Stainless steel ¹⁾	2,6	V934L02-1BP

Dimensions


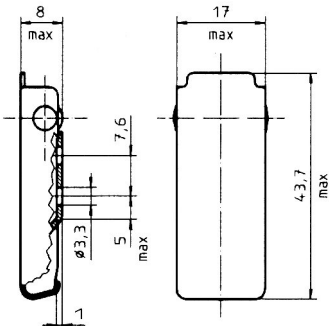

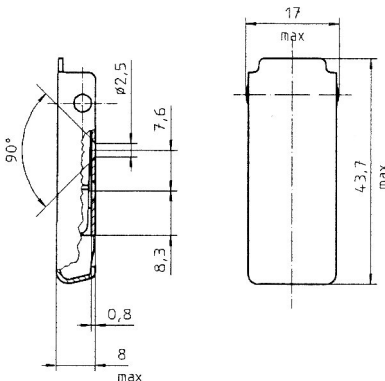


Max. tensile strength 220 N


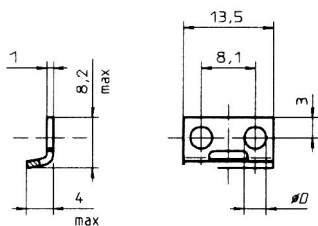
Handle conceals all interior parts and strike

Self-compensating spring steel drawhook

Low profile

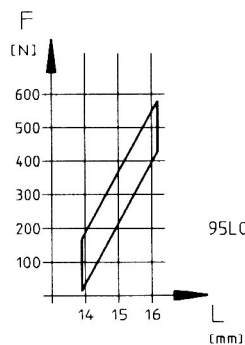
Style	Dimensions	Materials / Finish	Part No.
Self-compensating spring steel drawhook 		Stainless steel	95L07-1-1BC
Self-compensating spring steel drawhook 		Steel / chrome-plated Interior parts: Steel / zinc-plated, CrVI-free, transparent passivated	V95L15-1BD

Strike

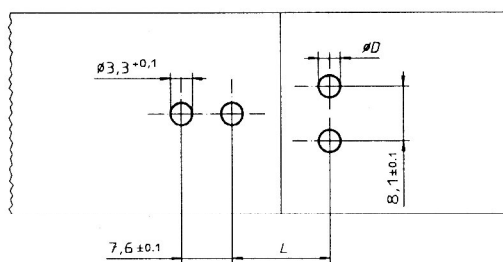
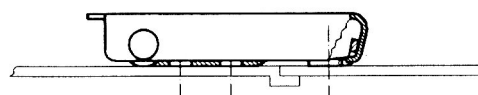
Style	Dimensions	Materials / Finish	D	Part No.
		Stainless steel	3,3	95H07-1-1BC

Dimensions

Spring steel drawhook tension latch / strike




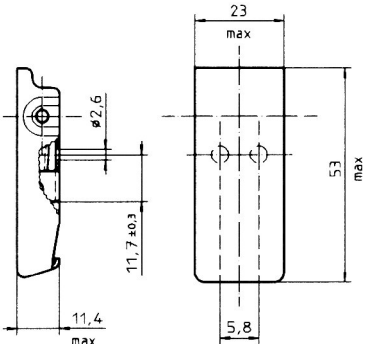
95L07-1-18C



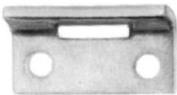
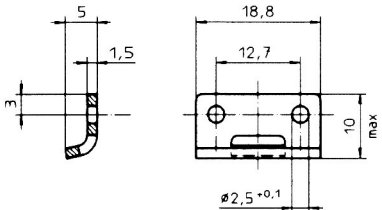
Select diameter D in accordance with the style

V96L Series

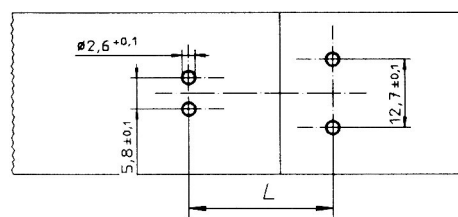
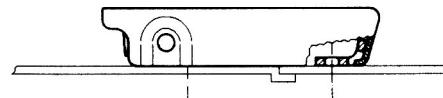
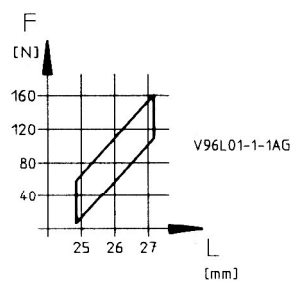
Max. tensile strength 1.000 N
Handle conceals all interior parts and strike
Self-compensating spring steel drawhook
Low profile

Style	Dimensions	Materials / Finish	Part No.
Self-compensating spring steel drawhook 		Steel / zinc-plated, CrVI-free, transparent passivated	V96L01-1-1AO
		Steel / chrome-plated Interior parts: Steel / zinc-plated, CrVI-free, transparent passivated	V96L01-1-1AG


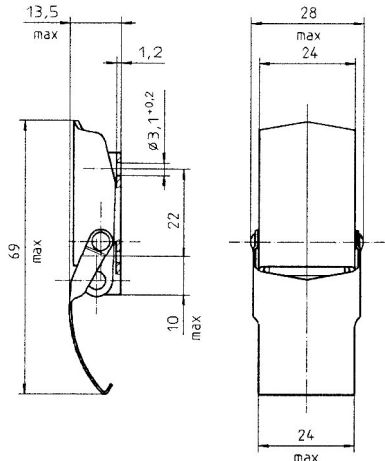

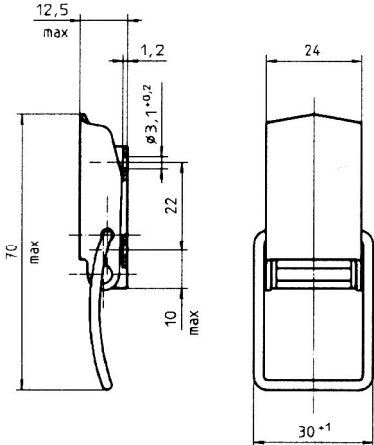
Strike

Style	Dimensions	Materials / Finish	D	Part No.
		Steel / zinc-plated, CrVI-free, transparent passivated	2,5	V96H01-1-1AO

Dimensions




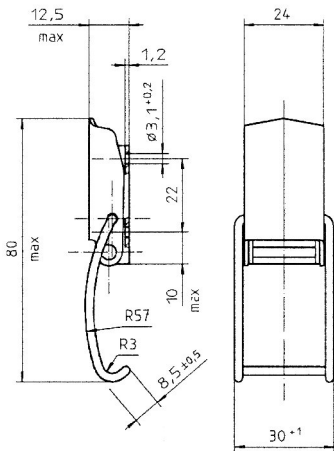

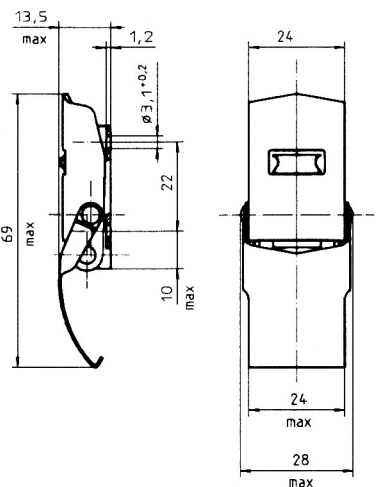
Max. tensile strength 1.500 N
Available with secondary lock
Three different drawhook types available

Style	Dimensions	Materials / Finish	D	Part No.
With drawhook 		Steel / zinc-plated, CrVI-free, transparent passivated ¹⁾ Stainless steel ²⁾	3,1 3,1	1429L02-1-1AG 1429L02-1-1BP
With clip 		Steel / zinc-plated, CrVI-free, transparent passivated ¹⁾ Stainless steel ³⁾	3,1 3,1	1429L02-2-1AG 1429L02-2-1BP

¹⁾ Max. tensile strength: 450 N with 1429L8-1AG strike

²⁾ Max. tensile strength: 300 N with 1429L8-1BP strike


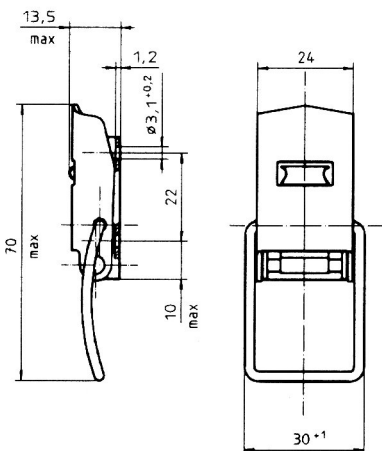

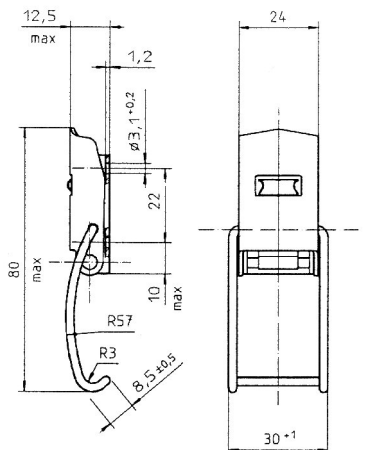
³⁾ Max. tensile strength: 1.500 N with 1429L9-1AG / -1BP strike

Style	Dimensions	Materials / Finish	D	Part No.
With bent clip 		Steel / zinc-plated, CrVI-free, transparent passivated ¹⁾	3,1	1429L02-3-1AG
		Stainless steel ¹⁾	3,1	1429L02-3-1BP
With drawhook and secondary lock 		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	3,1	1429L02-1X1AG
		Stainless steel ³⁾	3,1	1429L02-1X1BP

¹⁾ Max. tensile strength: 1.100 N with 1429L9-1AG / -1BP strike
or in conjunction with adapted component contour


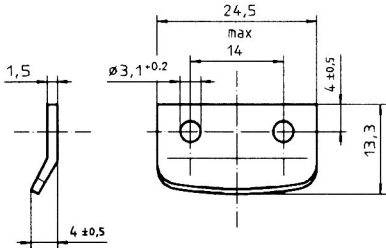

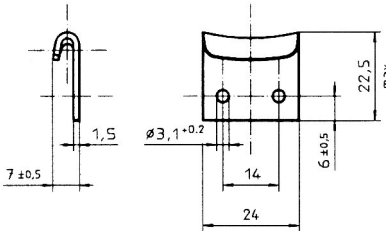
²⁾ Max. tensile strength: 450 N with 1429L8-1AG strike

³⁾ Max. tensile strength: 300 N with 1429L8-1BP strike

Style	Dimensions	Materials / Finish	D	Part No.
With clip and secondary lock 		Steel / zinc-plated, CrVI-free, transparent passivated ¹⁾ Stainless steel ¹⁾	3,1 3,1	1429L02-2X1AG 1429L02-2X1BP
With bent clip and secondary lock 		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾ Stainless steel ²⁾	3,1 3,1	1429L02-3X1AG 1429L02-3X1BP

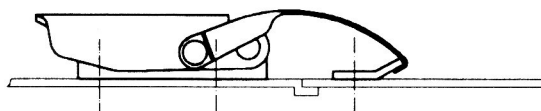
¹⁾ Max. tensile strength: max. 1.500 N with 1429L9-1AG / -1BP strike

²⁾ Max. tensile strength: max. 1.100 N with 1429L9-1AG / -BP strike
or in conjunction with adapted component contour

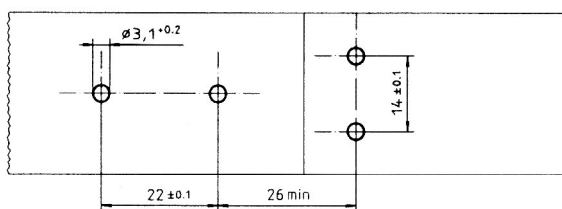
Style	Dimensions	Materials / Finish	D	Part No.
For drawhook 		Steel / zinc-plated, CrVI-free, transparent passivated Stainless steel	3,1 3,1	1429L8-1AG 1429L8-1BP
For clip 		Steel / zinc-plated, CrVI-free, transparent passivated Stainless steel	3,1 3,1	1429L9-1AG 1429L9-1BP

Dimensions

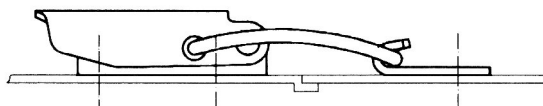
Drawhook tension latch / drawhook strike



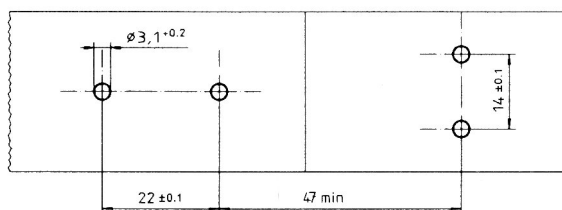
1429L02-1-*
1429L8-*



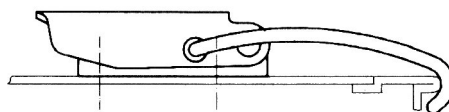
Clip tension latch / clip strike



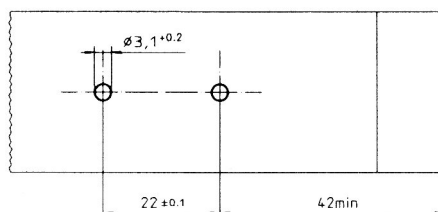
1429L02-2-*
1429L9-*



Bent clip tension latch / adapted component contour



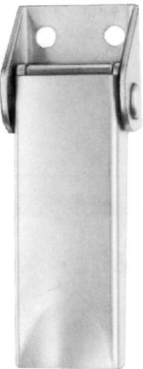
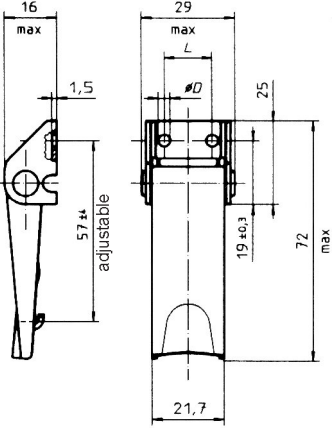
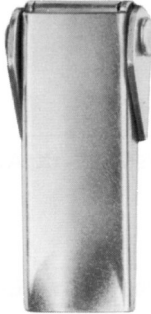
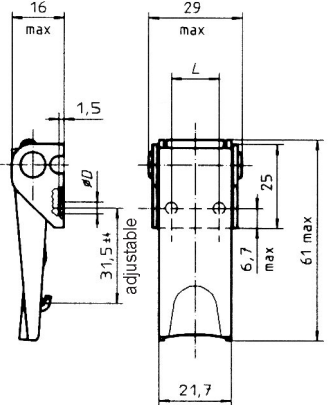
1429L02-3-*
(1429L9-*)



Max. tensile strength 2.300 N

Adjustable drawhook

Available with secondary lock and hasp

Style	Dimensions	Materials / Finish	Mounting Type ¹⁾	D	L	Part No.
Open base 		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	N	3,6	14,3	V951L02-1-1AGV
		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	N	4,2	12,7	V951L02-1-5AGV
		Steel / zinc-plated, CrVI-free, transparent passivated Base: Steel / zinc-plated ²⁾	S	-	-	V951L02-1-2AGV
		Steel / chrome-plated Interior parts: Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	N	3,6	14,3	V951L02-1-1AD
		Stainless steel ³⁾	N	3,6	14,3	V951L02-1-1BP
		Stainless steel ³⁾	N	4,2	12,7	V951L02-1-5BP
		Stainless steel ³⁾	S	-	-	V951L02-1-2BP
Concealed base ⁴⁾ 		Steel / zinc-plated, CrVI-free, transparent passivated	N	3,6	14,3	V951L03-1-1AGV
		Steel / zinc-plated, CrVI-free, transparent passivated	N	4,2	12,7	V951L03-1-5AGV
		Steel / chrome-plated Interior parts: Steel / zinc-plated, CrVI-free, transparent passivated	N	3,6	14,3	V951L03-1-1AD
		Stainless steel	N	3,6	14,3	V951L03-1-1BP
		Stainless steel	N	4,2	12,7	V951L03-1-5BP

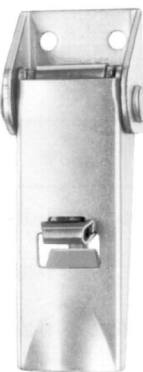
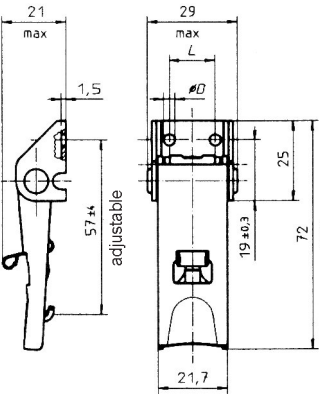

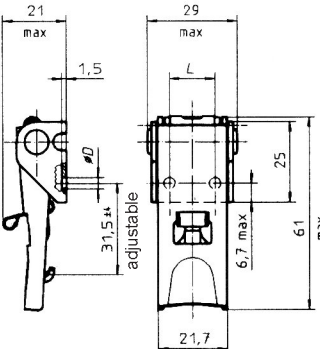
¹⁾ Mounting type: N = With holes for riveting or screwing

S = Without holes, for welding


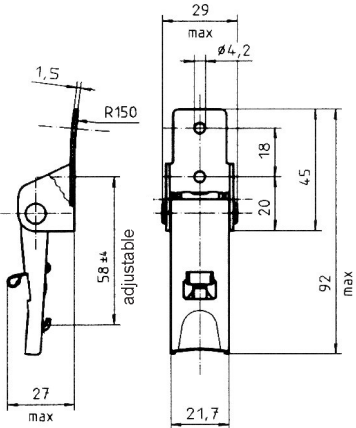
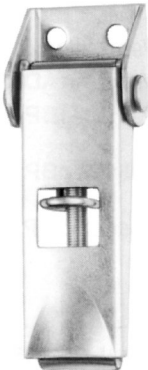
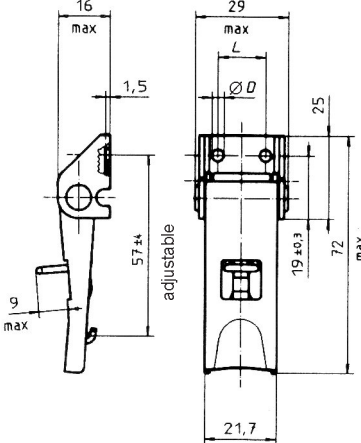
²⁾ Max. tensile strength: 2.300 N with V951L07-*A* and V951L52-1AF strike
2.000 N with V951L50-1A* strike

³⁾ Max. tensile strength: 1.500 N with V951L07-*BP* and V951L52-1BP strike

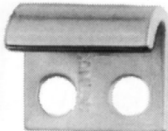
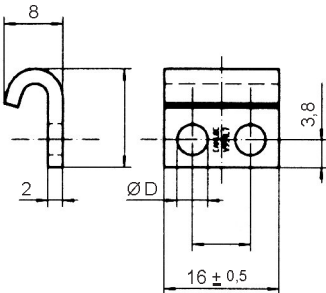

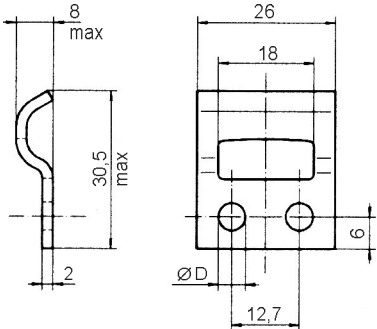

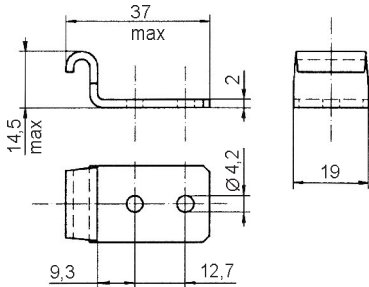
⁴⁾ Due to the mounting geometry, tensile strength reduced to approx. 1200 N

Style	Dimensions	Materials / Finish	Mounting Type ¹⁾	D	L	Part No.
With secondary lock, open base 		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	N	3,6	14,3	V951L04-1X1AGV
		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	N	4,2	12,7	V951L04-1X5AGV
		Steel / chrome-plated Interior parts: Steel / zinc-plated, CrVI-free, transparent passivated Secondary lock: Stainless steel	N	3,6	14,3	V951L04-1X1AD
		Stainless steel ³⁾	N	3,6	14,3	V951L04-1X1BP
		Stainless steel ³⁾	N	4,2	12,7	V951L04-1X5BP
		Stainless steel ³⁾	S	-	-	V951L04-1X2BP
With secondary lock, concealed base 4) 		Steel / zinc-plated, CrVI-free, transparent passivated	N	4,2	12,7	V951L03-1X5AGV
		Steel / chrome-plated Interior parts: Steel / zinc-plated, CrVI-free, transparent passivated Secondary lock: Stainless steel	N	3,6	14,3	V951L03-1X1AD
		Stainless steel	N	3,6	14,3	V951L03-1X1BP
		Stainless steel	N	4,2	12,7	V951L03-1X5BP

For footnotes refer to page F-1.

Style	Dimensions	Materials / Finish	Mounting Type ¹⁾	D	Part No.
With secondary lock, high base 		Steel / zinc-plated, CrVI-free, transparent passivated Secondary lock: Stainless steel ²⁾	N	4,2	V951L05-1X1AGV
		Stainless steel ³⁾	N	4,2	V951L05-1X1BP
With hasp 	 <p>Hasp for Padlock Ø 6 max.</p>	Steel / zinc-plated, CrVI-free, transparent passivated ²⁾ Base: Steel / zinc-plated	S	-	V951L01-1Y2AGV
		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	N	4,2	V951L01-1Y5AGV

For footnotes refer to page F-1.

Style	Dimensions	Materials / Finish	Mounting Type ¹⁾	D	Part No.
Short type 		Steel / zinc-plated, CrVI-free, transparent passivated	N	3,6	V951L7-1AGV
		Steel / zinc-plated, CrVI-free, transparent passivated	N	4,2	V951L7-5AGV
		Steel / zinc-plated	S ²⁾	-	V951L7-2AZ
		Steel / chrome-plated	N	3,6	V951L7-1AD
		Stainless steel	N	3,6	V951L7-1BP
		Stainless steel	N	4,2	V951L7-5BP
		Stainless steel	S	-	V951L7-2BP
With guidance 		Steel / zinc-plated, CrVI-free, transparent passivated	N	4,2	V951L50-1AGV
		Stainless steel	N	4,2	V951L50-1BP
		Stainless steel	N	3,6	V951L50-2BP
		Stainless steel	S	-	V951L50-3BP
Corner mounting 		Steel / zinc-plated, CrVI-free, transparent passivated	N	4,2	V951L52-1AGV
		Stainless steel	N	4,2	V951L52-1BP

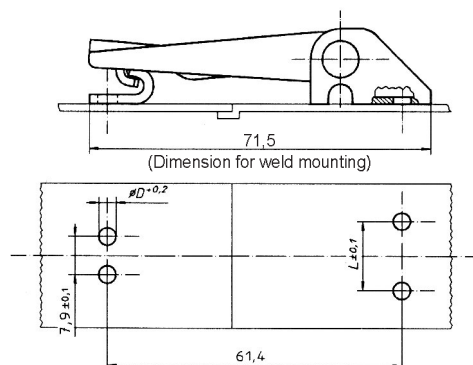
¹⁾ Mounting type: N = With holes for riveting or screwing

S = Without holes, for welding

²⁾ Material C45, HRC 36-39 steel, please use high-alloy filler metals

Dimensions

Open-base tension latch / short-type strike

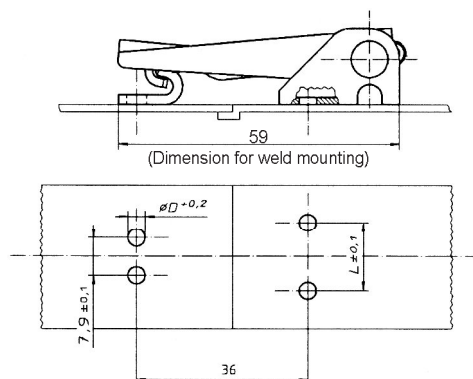


V951L02-
V951L04-
V951L01-

V951L7-

Select diameter D and distance L in accordance with the strike and tension latch style.

Concealed-base tension latch / short-type strike

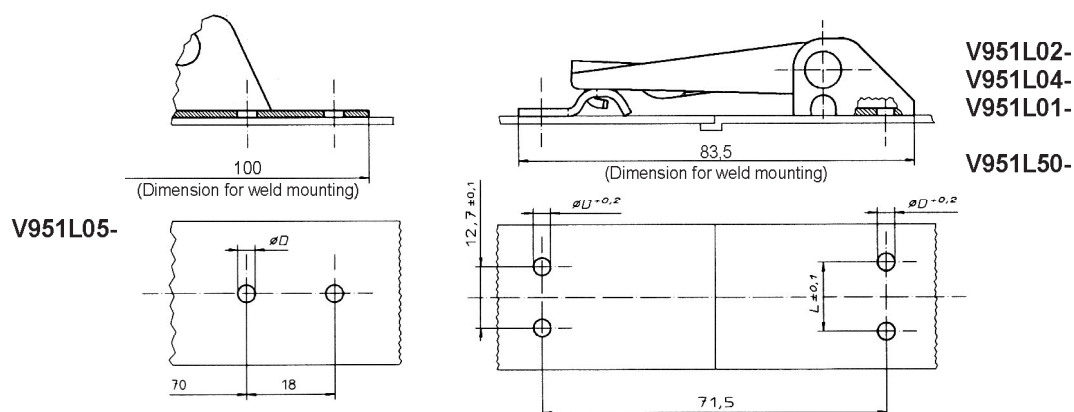


V951L03-

V951L7-

Select diameter D and distance L in accordance with the strike and tension latch style.

Open-base tension latch / strike with guidance



V951L02-
V951L04-
V951L01-

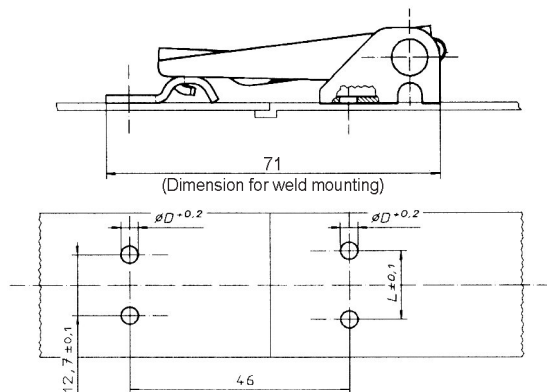
V951L50-

V951L05-

Select diameter D and distance L in accordance with the strike and tension latch style.

Dimensions

Concealed-base tension latch / strike with guidance

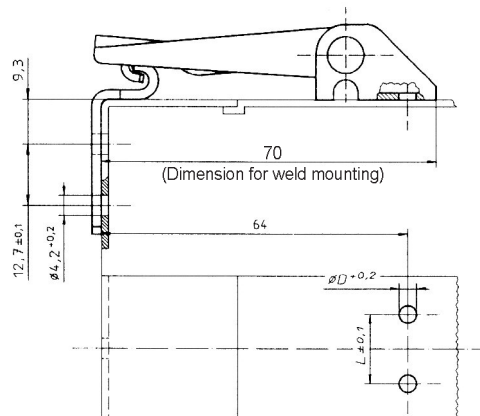


V951L03-

V951L50-

Select diameter D and distance L in accordance with the strike and tension latch style.

Open-base tension latch / corner-mounting strike



V951L02-

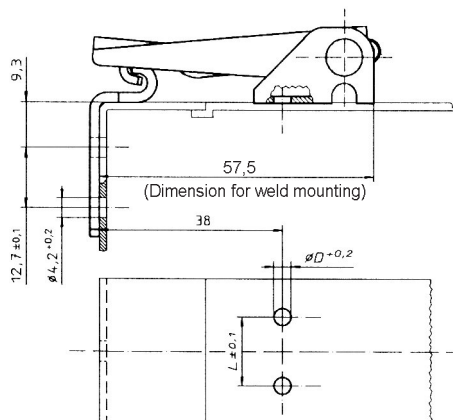
V951L04-

V951L01-

V951L52-

Select diameter D and distance L in accordance with the strike and tension latch style.

Concealed-base tension latch / corner-mounting strike



V951L03-

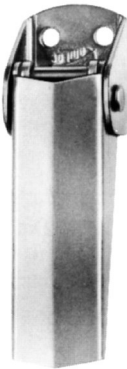
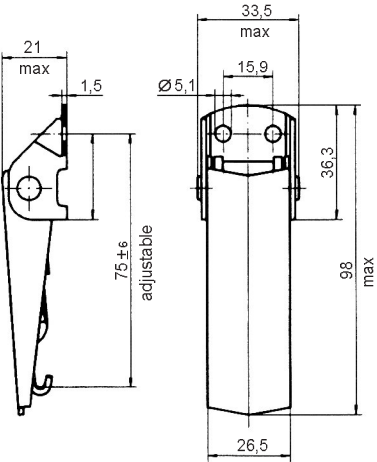
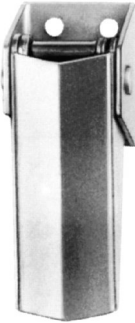
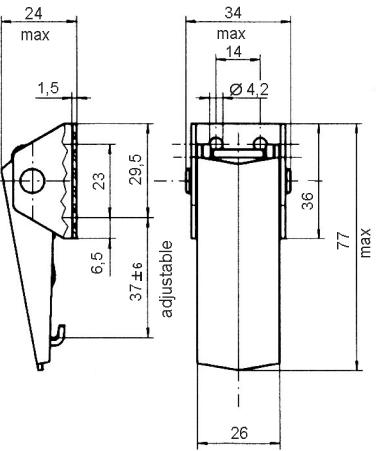
V951L52-

Select diameter D and distance L in accordance with the strike and tension latch style.

Max. tensile strength 3.600 N

Adjustable drawhook

Available with secondary lock and hasp

Style	Dimensions	Materials / Finish	Mounting Type ¹⁾	D	Part No.
Open base 		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾ Stainless steel ³⁾	N N	5,1 5,1	V917L01-1-1AG V917L01-1-1BP
High base 		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	N	4,2	V17L12-1-1AA

¹⁾ Mounting type: N = With hole for riveting or screwing

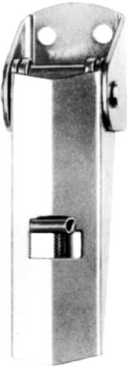
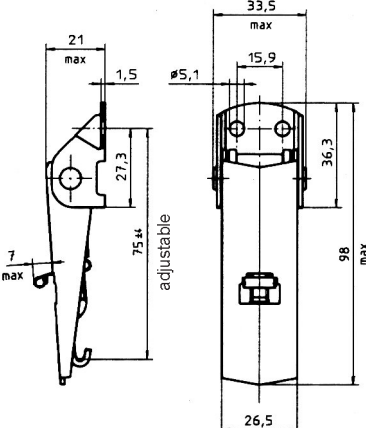
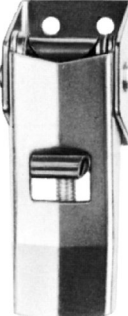
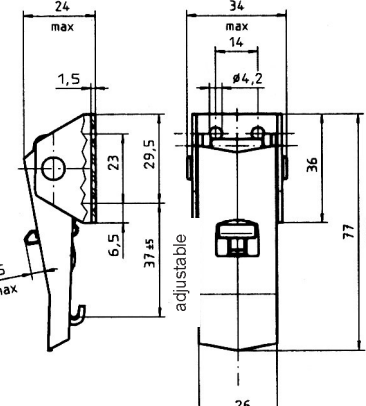
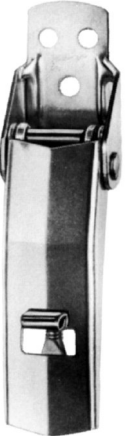
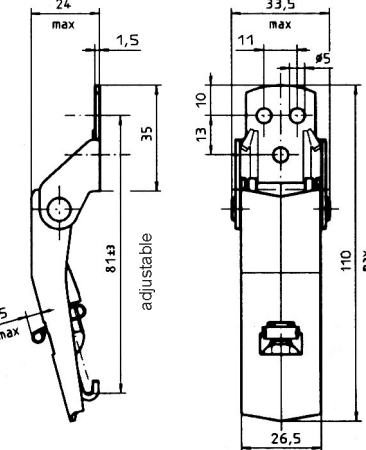
S = Without holes, for welding

²⁾ Max. tensile strength: 3.200 N with V917L11-1- *AG strike

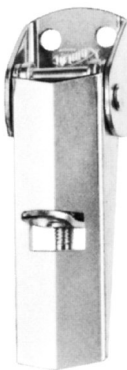
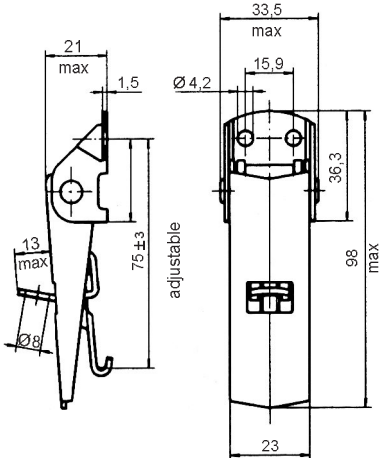
2.200 N with V951L50-1- *AGV strike

³⁾ Max. tensile strength: 3.600 N with V951L50-1- *BP strike

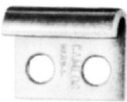
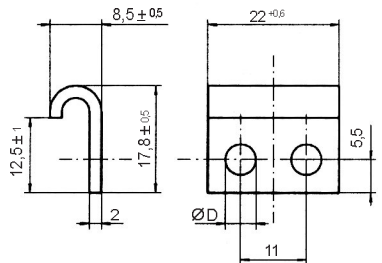

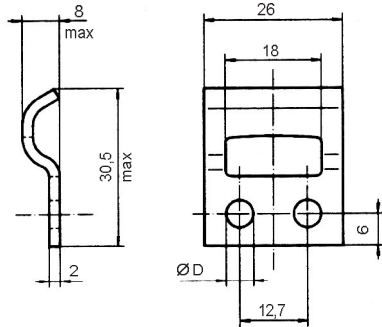
max. 2.300 N with V917L11-1-1BP strike

Style	Dimensions	Materials / Finish	Mounting Type ¹⁾	D	Part No.
With secondary lock, open base 		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	N	5,1	V917L01-1X1AG
		Stainless steel ³⁾	N	5,1	V917L01-1X1BP
		Stainless steel ³⁾	S	-	V917L01-1X2BP
		Stainless steel V4A ³⁾	N	5,1	V917L01-1X1CP
		Stainless steel V4A ³⁾	S	-	V917L01-1X2CP
With secondary lock, high base 		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	N	4,2	V17L12-2X1AA
With secondary lock, for curved surfaces (R min = 125 mm) 		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	N	5,0	1449L02-1X1AG
		Stainless steel ³⁾	N	5,0	1449L02-1X1BP

For footnotes refer to page G-1.

Style	Dimensions	Materials / Finish	Mounting Type ¹⁾	D	Part No.
Open base, with hasp 	 <p>21 max 1,5 13 max Ø8 75 ±3 adjustable 33,5 max 15,9 Ø4,2 36,3 98 max 23</p>	Steel / zinc-plated, CrVI-free, transparent passivated ²	N	5,1	V917L01-1Y1AG

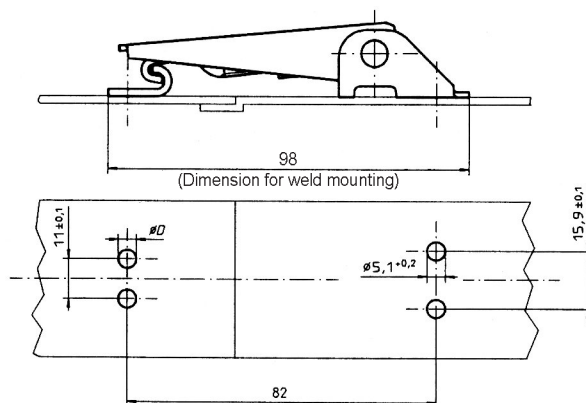
Strikes

Style	Dimensions	Materials / Finish	Mounting Type ¹⁾	D	Part No.
	 <p>8,5 ±0,5 22 +0,6 12,5 ±1 17,8 ±0,5 2 ØD 11 5,5</p>	Steel / zinc-plated, CrVI-free, transparent passivated	N	5,1	V917L11-1-1AG
		Steel / zinc-plated, CrVI-free, transparent passivated	N	4,2	V917L11-1-3AG
		Stainless steel	N	5,1	V917L11-1-1BP
With guidance 	 <p>8 max 30,5 max 2 26 18 6 12,7 ØD</p>	Steel / zinc-plated, CrVI-free, transparent passivated	N	4,2	V951L50-1AGV
		Steel / zinc-plated, CrVI-free, transparent passivated	N	5,1	V951L50-5AGV
		Stainless steel	N	4,2	V951L50-1BP
		Stainless steel	S	-	V951L50-3BP

For footnotes refer to page G-1.

Dimensions

Open-base tension latch / short-type strike

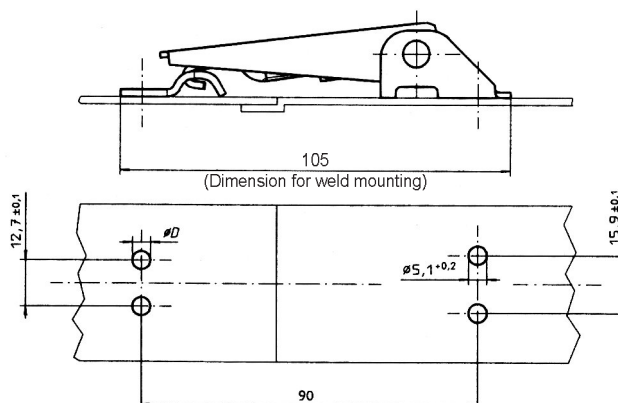


V917L01-

V917L11-

Select diameter D in accordance with the strike style.

Open-base tension latch / strike with guidance

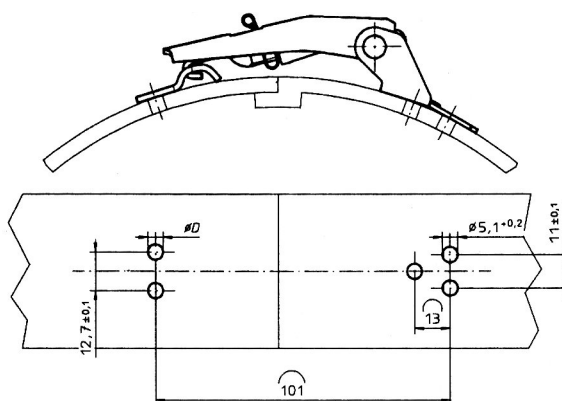


V917L01-

V951L50-

Select diameter D in accordance with the strike style.

Tension latch for curved surfaces



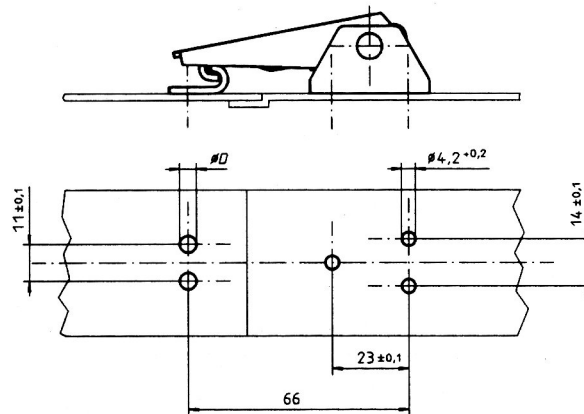
1449L02-

V951L50-

Select diameter D in accordance with the strike style.

Dimensions

High-base tension latch / short-type strike



V17L12-

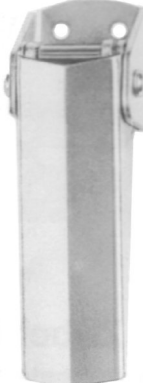
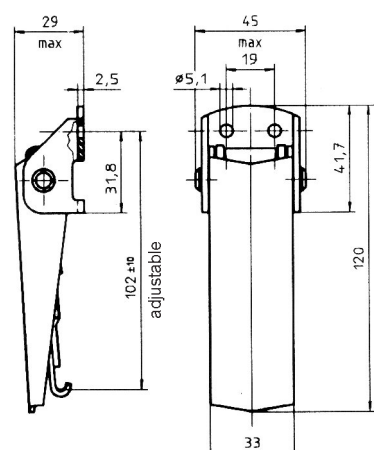

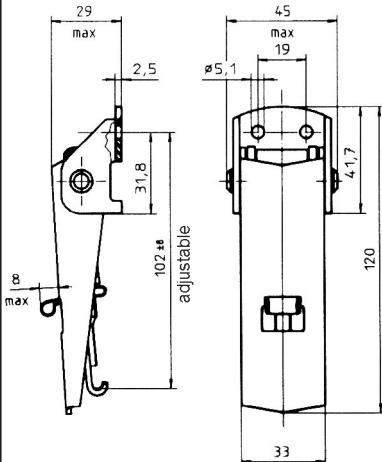
V917L11-

Select diameter D in accordance with the strike style.

Max. tensile strength 6.000 N

Adjustable drawhook

Available with secondary lock, hasp and lift spring

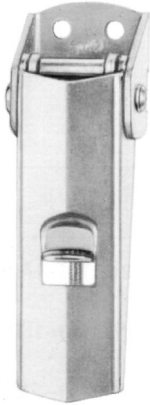
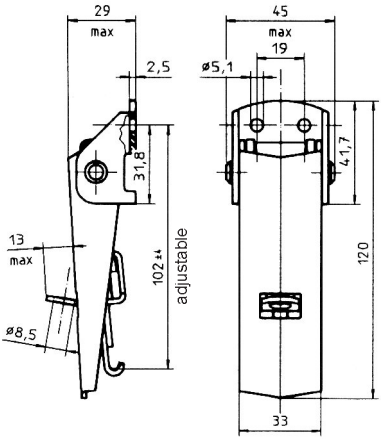
Style	Dimensions	Materials / Finish	Mounting Type ¹⁾	D	Part No.
		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	N	5,1	V18L01-1-1AA
		Stainless steel ³⁾	N	5,1	V18L01-1-1BF
		Stainless steel ³⁾	S	-	V18L01-1-2BF
With secondary lock 		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	N	5,1	V18L01-1X1AA
		Stainless steel ³⁾	N	5,1	V18L01-1X1BF
		Stainless steel ³⁾	S	-	V18L01-1X2BF

¹⁾ Mounting type: N = With hole for riveting or screwing

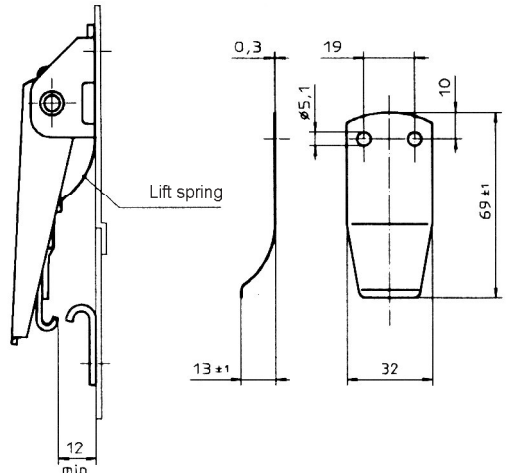
S = Without holes, for welding

²⁾ Max. tensile strength: 6.000 N with V18L13-1-1AA strike

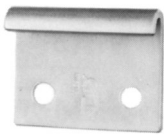
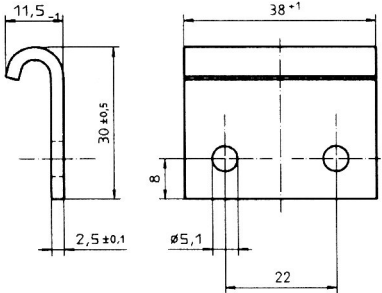

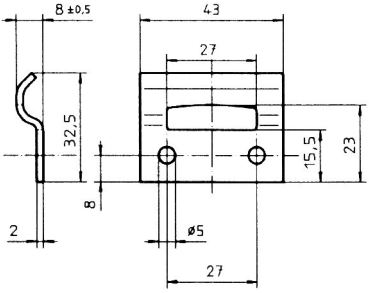
³⁾ Max. tensile strength: 4.600 N with V18L13-1-*BF or 1449L07-1BP strike

Style	Dimensions	Materials / Finish	Mounting Type ¹⁾	D	Part No.
With hasp 		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	N	5,1	V18L01-1Y1AA

Accessories

Dimensions	Materials / Finish	Mounting Type ¹⁾	D	Part No.
Lift spring 	Stainless steel	N	5,1	V18L45-1BP

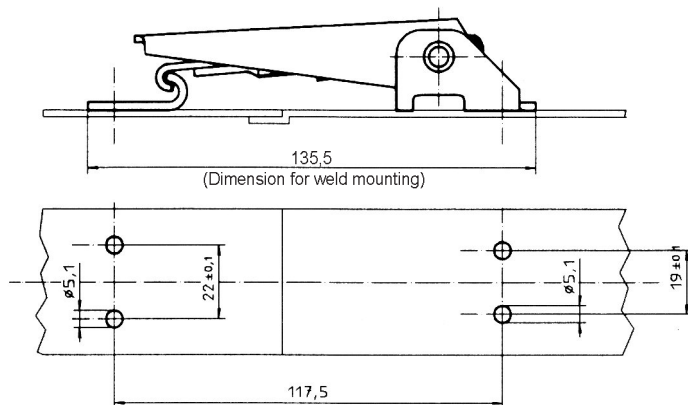
For footnotes refer to page H-1.

Style	Dimensions	Materials / Finish	Mounting Type ¹⁾	D	Part No.
		Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	N	5,1	V18L13-1-1AA
		Stainless steel	N	5,1	V18L13-1-1BF
		Stainless steel	S	-	V18L13-1-2BF
With guidance 		Stainless steel	N	5,0	1449L07-1BP

For footnotes refer to page H-1.

Dimensions

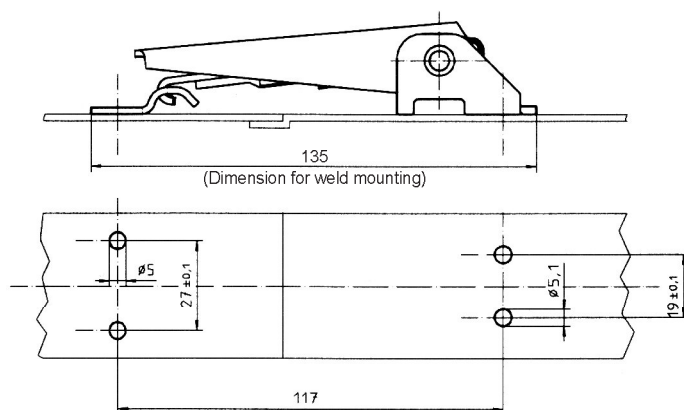
Tension latch / short-type strike



V18L01-

V18L13-

Tension latch / strike with guidance



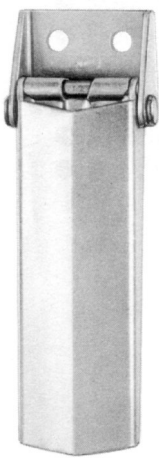
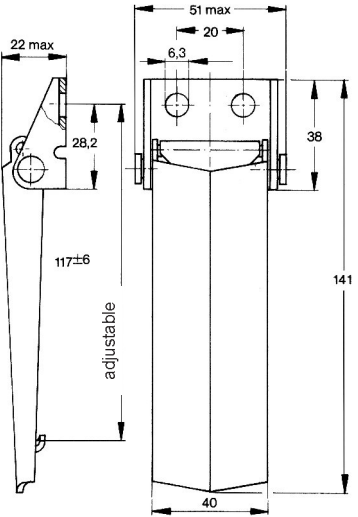
V18L01-

1449L07-

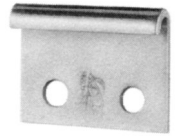
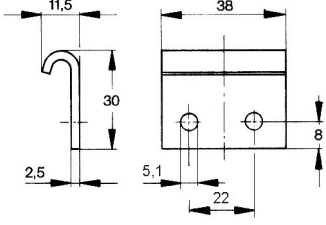
V46L Series

Max. tensile strength 4.500 N

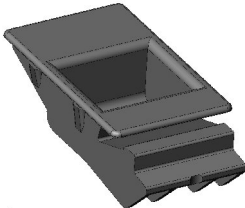
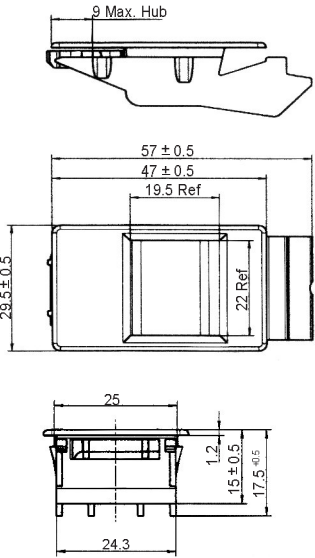
Adjustable drawhook

Style	Dimensions	Materials / Finish	Mounting Type ¹⁾	D	Part No.
		Steel / zinc-plated and yellow chromate	N	6,3	V46L38-1-6AA
		Steel / zinc-plated and yellow chromate	S	-	V46L38-1-1AA

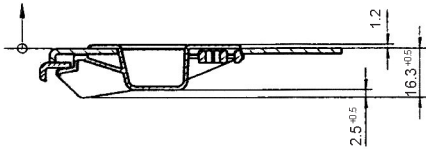
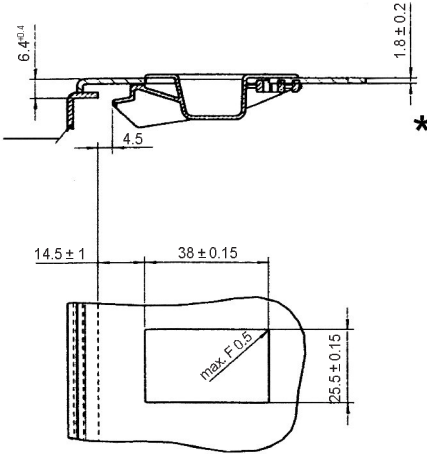
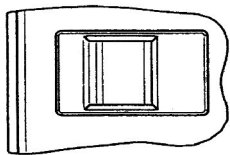
Strike

Style	Dimensions	Materials / Finish	Mounting Type ¹⁾	D	Part No.
		Steel / zinc-plated and yellow chromate	N	6,3	V18L13-1-1AC

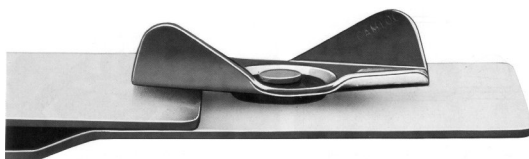
¹⁾ Mounting type:
N = With hole for riveting or screwing
S = Without holes, for welding

Style	Dimensions	Materials / Finish	°C	Part No.
Slam latch 	 <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	2939L01-01-1K

Installation Instructions

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

* Other panel thicknesses upon request.



Particular Features

Easy and economic fastener for trap, lid, etc.

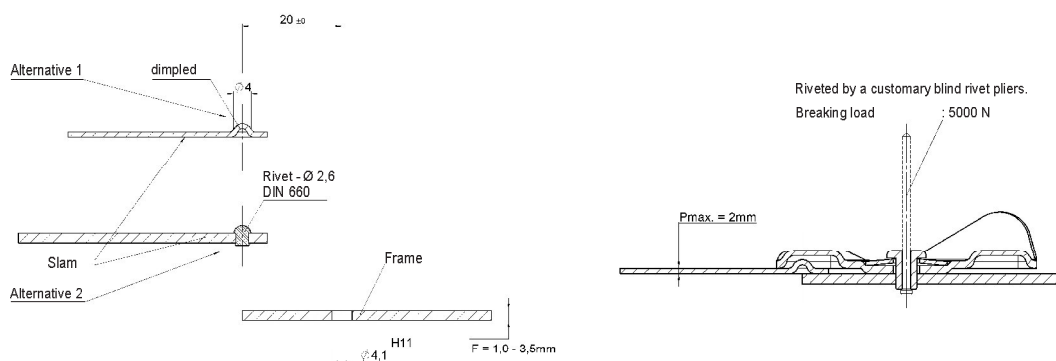
Easy installation by blind riveting.

Engaged when locked.

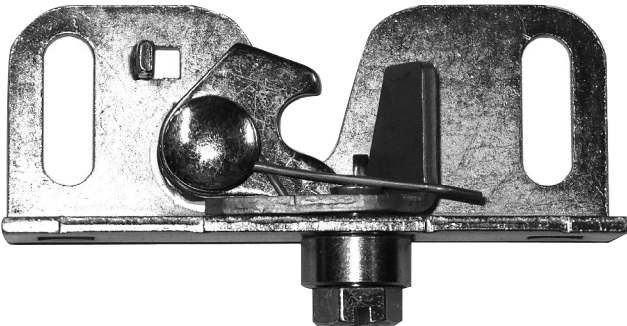
High catch force by spring tension.

Dimensions	Materials / Finish	°C	Part No.
	Steel / zinc-plated, CrVI-free, transparent passivated ²⁾	230	52E02*-1AG

Selection and Installation Instructions



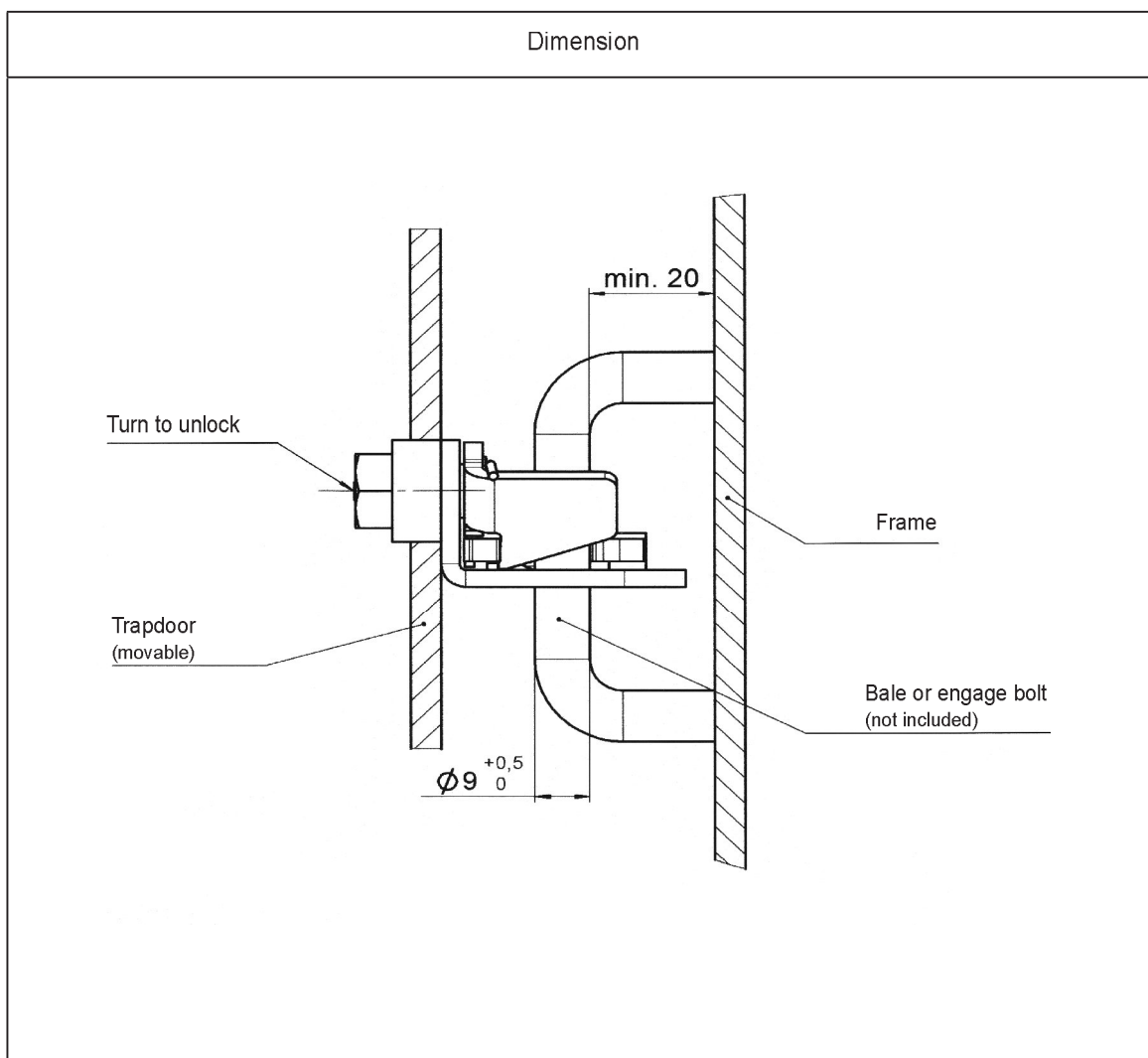
Part No.	Panel Thickness P	Height H
52E02-01-1AG	0 (flush)	0,7
52E02-02-1AG	1	1,1
52E02-03-1AG	2	1,7



Particular Features

Robust slam latch, self locking
Max. locking force: 230 N
Max. tension strength: 2.400 N
Max. torque: 40 Nm

Dimensions	Materials / Finish	°C	Part No.
<p>Technical drawing of the 2812L03-1AF Slam Latch showing two views: a side view and a front view. The side view shows a width of 80 ±0.2 mm and a height of 40 ±0.5 mm. The front view shows a width of 80 ±0.2 mm and a height of 26 ±0.5 mm. Labels include 'Unlocked', 'Trap', and 'Bolt'.</p>	Steel / zinc-plated and yellow chromate Bolt: zinc flake coated	230	2812L03-1AF



Part No.	Page	Part No.	Page	Part No.	Page
1429L02-1-1AG	E1	V917L01-1X1AG	G2	V951L50-3BP	F4,G3
1429L02-1-1BP	E1	V917L01-1X1BP	G2	V951L50-5AGV	G3
1429L02-1X1AG	E2	V917L01-1X2BP	G2	V951L52-1AGV	F4
1429L02-1X1BP	E2	V917L01-1X1CP	G2	V951L52-1BP	F4
1429L02-2-1AG	E1	V917L01-1X2CP	G2	V951L7-1AD	F4
1429L02-2-1BP	E1	V917L01-1Y1AG	G3	V951L7-1AGV	F4
1429L02-2X1AG	E3	V917L11-1-1AG	G3	V951L7-1BP	F4
1429L02-2X1BP	E3	V917L11-1-3AG	G3	V951L7-2AZ	F4
1429L02-3-1AG	E2	V917L11-1-1BP	G3	V951L7-2BP	F4
1429L02-3-1BP	E2	V934L01-1-1BP	B1	V951L7-5AGV	F4
1429L02-3X1AG	E3	V934L01-1X1BP	B1	V951L7-5BP	F4
1429L02-3X1BP	E3	V934L02-1BP	B1	V96H01-1-1AO	D1
1429L8-1AG	E4	V95L15-1BD	C1	V96L01-1-1AG	D1
1429L8-1BP	E4	V951L01-1Y2AGV	F3	V96L01-1-1AO	D1
1429L9-1AG	E4	V951L01-1Y5AGV	F3		
1429L9-1BP	E4	V951L02-1-1AD	F1		
1449L02-1X1AG	G2	V951L02-1-1AGV	F1		
1449L02-1X1BP	G2	V951L02-1-1BP	F1		
1449L07-1BP	H3	V951L02-1-2AGV	F1		
2812L03-1AF	L1	V951L02-1-2BP	F1		
2939L01-01-1K	J1	V951L02-1-5AGV	F1		
52E02*-1AG	K1	V951L02-1-5BP	F1		
95H07-1-1BC	C1	V951L03-1-1AD	F1		
95L07-1-1BC	C1	V951L03-1-1AGV	F1		
V17L12-1-1AA	G1	V951L03-1-1BP	F1		
V17L12-2X1AA	G2	V951L03-1-5AGV	F1		
V18L01-1-1AA	H1	V951L03-1-5BP	F1		
V18L01-1-1BF	H1	V951L03-1X1AD	F2		
V18L01-1-2BF	H1	V951L03-1X1BP	F2		
V18L01-1X1AA	H1	V951L03-1X5AGV	F2		
V18L01-1X1BF	H1	V951L03-1X5BP	F2		
V18L01-1X2BF	H1	V951L04-1X1AD	F2		
V18L01-1Y1AA	H2	V951L04-1X1AGV	F2		
V18L13-1-1AA	H3	V951L04-1X1BP	F2		
V18L13-1-1BF	H3	V951L04-1X2BP	F2		
V18L13-1-2BF	H3	V951L04-1X5AGV	F2		
V18L13-1-1AC	I1	V951L04-1X5BP	F2		
V18L45-1BP	H2	V951L05-1X1AGV	F3		
V46L38-1-6AA	I1	V951L05-1X1BP	F3		
V46L38-1-1AA	I1	V951L50-1AGV	F4,G3		
V917L01-1-1AG	G1	V951L50-1BP	F4,G3		
V917L01-1-1BP	G1	V951L50-2BP	F4		