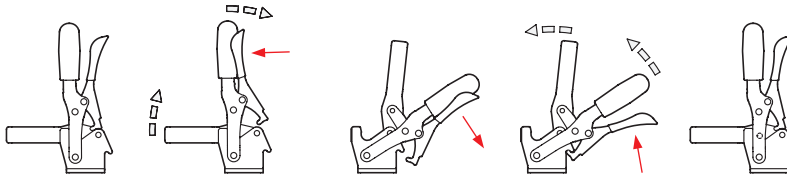


**2 Type**

- AL** Forked clamping arm, with two flanged washers
- CL** Forked clamping arm, with two flanged washers and clamping screw GN 708.1
- EL** Solid clamping arm, with clasp for welding

**Operating principle**



**1**

Size	F <sub>H</sub> in N Holding capacity	a ≈	b <sub>1</sub>	b <sub>2</sub>	b <sub>3</sub>	d <sub>1</sub>	d <sub>2</sub> ≈	h <sub>1</sub> ≈	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub>	h <sub>5</sub>
130	1050	28	35	42	6,2	M 6	5,5	142	28	16	25,5	11,3
230	2000	40	43	45	8,5	M 8	6,5	168	33,5	18	30	9,5

Size	l <sub>1</sub> ≈		l <sub>2</sub> ≈	l <sub>3</sub> max.	l <sub>4</sub>	m <sub>1</sub>	m <sub>2</sub>	m <sub>3</sub>	m <sub>4</sub>	r ≈	s <sub>1</sub>	s <sub>2</sub>	W Adjustable range
	Type AL Type CL	Type EL											
130	85	86	42	54	55	12,5	19	27	29	79,5	2,5	5	17,5
230	110,5	112	58	73	68	18	21	32	32	104	3	6	20

**How to order (Steel)**

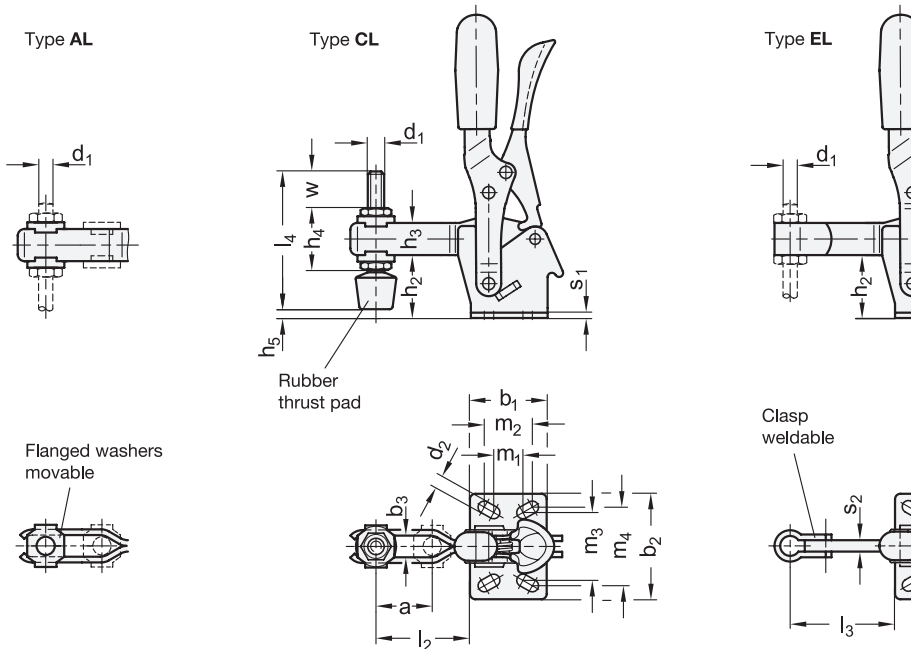
**GN 810.3-230-EL**

- 1** Size
- 2** Type

**How to order (Stainless steel)**

**GN 810.3-130-CL-NI**

- 1** Size
- 2** Type
- 3** Material



## Specification

### Tensioning mechanism

- Steel —
  - Sheet metal parts
  - Case-hardened steel C10, zinc plated, blue passivated
  - Bearing pins tempered
  - Bearing rivets case-hardened
  - Moving parts lubricated with special grease
- Stainless steel **NI**
  - Sheet metal parts AISI 304
  - Bearing pins / Bearing rivets AISI 304
  - Moving parts lubricated with special grease

### Handle

- Plastic
- Red, oil resistant

### Flanged washers GN 898 for type AL / CL

- Steel, zinc plated, blue passivated
- Stainless steel AISI 304 for NI

### Clasp for type EL

- Steel, zinc plated, blue passivated
- Stainless steel AISI 304 for NI

### Clamping screws GN 708.1 for type CL

- Steel, zinc plated, blue passivated
- Stainless steel AISI 304 for NI
- Rubber tip
  - 85 Shore A
  - Type A (flat pressure area)

RoHS

Toggle clamps GN 810.3 are latched in both end positions. In the clamped position, this prevents unintentional opening or opening caused by vibrations; and in the open position, it prevents self-closing of the toggle clamp, such as due to an extended clamping arm. The latching can be disabled with a single hand to allow for opening / closing.

They work according to the toggle principle: lever and clamping bar move in the same direction. In the clamped position the operating lever is in its vertical position.

Toggle clamps in the U-bar version with two flanged washers (type AL) can accommodate an application specific clamping screw. A clamping screw with neoprene rubber tip is also included for type CL.

Type EL version can be utilized by welding the clasp which can then accommodate an application specific hold-down fastener component.

see also...

	Page
<b>GN 810.10</b> Toggle Clamps („Longlife“)	QVX
<b>GN 810.4</b> Toggle Clamps (with Vertical Mounting Base)	QVX

### Technical Information

General Information for Toggle Clamps	QVX
Stainless Steel Characteristics	QVX

### Accessory

Clamping Screws	QVX ff.
<b>GN 801</b> Holders for Clamping Screws (for type AL)	QVX
<b>GN 801.1</b> Clamping Arm Extenders (for type AL)	QVX
<b>GN 801.2</b> Clamping Arm Extenders (for type AL)	QVX
<b>GN 809.1</b> Clamping Arm Extenders (for type EL)	QVX