

## Vertical acting toggle clamps

Steel / Stainless Steel, with horizontal mounting base

### SPECIFICATION

#### Types

- Type **A**: U-bar version, with two flanged washers
- Type **C**: U-bar version, with two flanged washers and GN 708.1 spindle assembly (see page 1625)
- Type **E**: Solid bar version, with clasp

#### Version in Steel

- Case-hardened Steel C10, zinc plated, blue passivated
- Bearing pins tempered
- Bearing rivets (for size 230 and up), case-hardened

#### All moving parts

lubricated with special grease

#### Hand grip

High quality, oil resistant red plastic

Spindle assembly GN 708.1, Type A (see page 1625)

- Steel, zinc plated
- Rubber tip 85 Shore A

#### Version in Stainless Steel NI

Stainless Steel AISI 304

#### All moving parts

lubricated with special grease

#### Hand grip

High quality, oil resistant red plastic

Spindle assembly GN 708.1, Type A (see page 1625)

- Stainless Steel AISI 304
- Rubber tip 85 Shore A

### ACCESSORY

- Spindle assemblies (see page 1623)
- GN 801 clamp mounts for toggle clamps (for Type A) (see page 1629)
- GN 809 clamp mounts for toggle clamps (for Type E) (see page 1630)



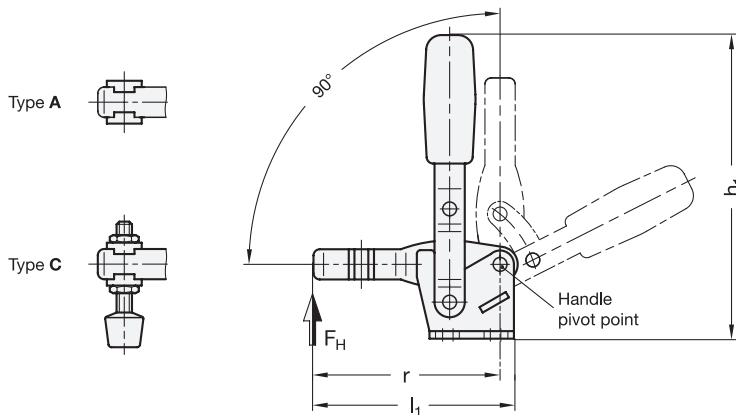
### INFORMATION

GN 810 vertical acting toggle clamps 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.

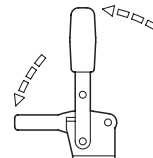
Vertical acting toggle clamps in the U-bar version with two flanged washers (Type A) can accommodate an application specific clamping screw. A spindle assembly with neoprene rubber tip is also included for Type C.

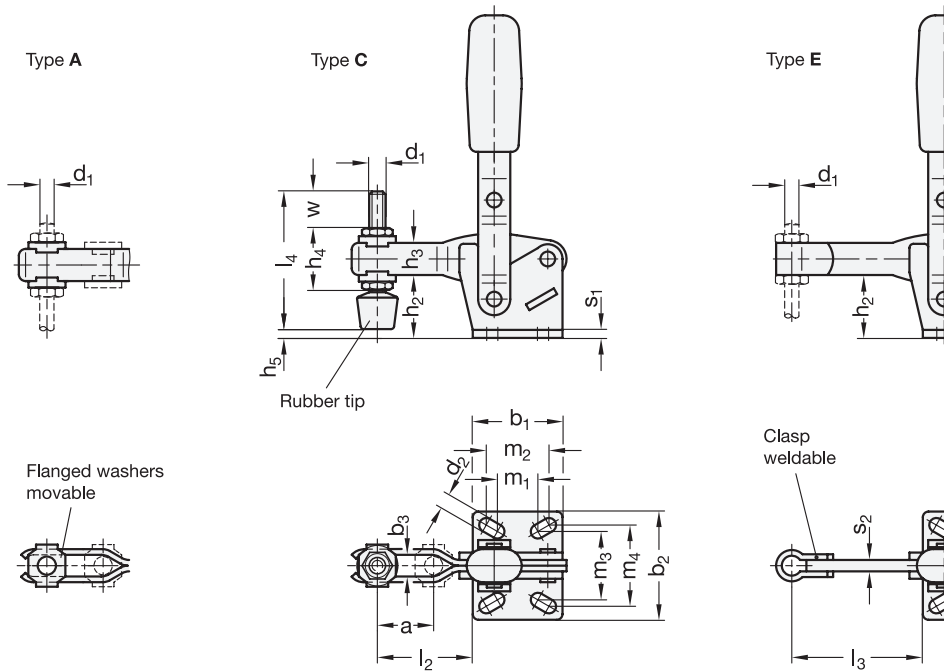
Type E version can either be utilized by welding the clasp which can then accommodate an application specific hold-down fastener component, or by utilizing the bar in conjunction with the GN 809 (see page 1630) clamp mounts to hold the work piece in place.

- General information for toggle clamps (see page 1560)



### Operating principle





GN 810

Description	Size	FH in N	a ≈	b1	b2	b3	d1	d2 ≈	h1 ≈	h2	h3	h4	h5	l1 ≈	l2 ≈	l3 max.	l4	m1	m2	m3	m4	r ≈	s1	s2	w	⚖
GN 810-75-A	75	750	20	29	34	5.2	M5	4.5	98	20.5	11	-	-	66.5	31.5	-	-	15	16	24	24	62.5	2	-	-	98
GN 810-130-A	130	1050	28	35	42	6.2	M6	5.5	142	28	16	-	-	85	42	-	-	12.5	19	27	29	79.5	2.5	-	-	220
GN 810-230-A	230	2000	40	43	45	8.5	M8	6.5	168	33.5	18	-	-	110.5	58	-	-	19	20	32	32	104	3	-	-	370
GN 810-330-A	330	2400	43	50	65	10.5	M10	8.5	195	43	22	-	-	129	66	-	-	29	32	46	45	122	3.5	-	-	601
GN 810-430-A	430	2800	64	58	65	12.5	M12	8.5	247	55.5	26	-	-	164	88	-	-	32	32	45	45	156	4	-	-	1050
GN 810-530-A	530	4500	90	80	95	12.5	M12	12.5	303	84.5	32	-	-	223	125	-	-	50	51	70	70	212	7	-	-	2100
GN 810-75-C	75	750	20	29	34	5.2	M5	4.5	98	20.5	11	19	5.5	66.5	31.5	-	45	15	16	24	24	62.5	2	-	15	100
GN 810-130-C	130	1050	28	35	42	6.2	M6	5.5	142	28	16	25.5	11.3	85	42	-	55	12.5	19	27	29	79.5	2.5	-	17.5	230
GN 810-230-C	230	2000	40	43	45	8.5	M8	6.5	168	33.5	18	30	9.5	110.5	58	-	68	19	20	32	32	104	3	-	20	400
GN 810-330-C	330	2400	43	50	65	10.5	M10	8.5	195	43	22	37	15	129	66	-	77	29	32	46	45	122	3.5	-	19	600
GN 810-430-C	430	2800	64	58	65	12.5	M12	8.5	247	55.5	26	43	23	164	88	-	100	32	32	45	45	156	4	-	33	1100
GN 810-530-C	530	4500	90	80	95	12.5	M12	12.5	303	84.5	32	49	52	223	125	-	100	50	51	70	70	212	7	-	27	2180
GN 810-75-E	75	750	-	29	34	-	M5	4.5	98	20.5	11	-	-	67	-	41	-	15	16	24	24	62.5	2	4	-	106
GN 810-130-E	130	1050	-	35	42	-	M6	5.5	142	28	16	-	-	86	-	54	-	12.5	19	27	29	79.5	2.5	5	-	220
GN 810-230-E	230	2000	-	43	45	-	M8	6.5	168	33.5	18	-	-	112	-	73	-	19	20	32	32	104	3	6	-	401
GN 810-330-E	330	2400	-	50	65	-	M10	8.5	195	43	22	-	-	130.5	-	86	-	29	32	46	45	122	3.5	7	-	580
GN 810-430-E	430	2800	-	58	65	-	M12	8.5	247	55.5	26	-	-	166	-	114	-	32	32	45	45	156	4	10	-	1090
GN 810-530-E	530	4500	-	80	95	-	M12	12.5	303	84.5	32	-	-	225	-	152	-	50	51	70	70	212	7	10	-	2066

GN 810-NI

STAINLESS STEEL

Description	Size	FH in N	a ≈	b1	b2	b3	d1	d2 ≈	h1 ≈	h2	h3	h4	h5	l1 ≈	l2 ≈	l3 max.	l4	m1	m2	m3	m4	r ≈	s1	s2	w	⚖
GN 810-75-A-NI	75	750	20	29	34	5.2	M5	4.5	98	20.5	11	-	-	66.5	31.5	-	-	15	16	24	24	62.5	2	-	-	92
GN 810-130-A-NI	130	1050	28	35	42	6.2	M6	5.5	142	28	16	-	-	85	42	-	-	12.5	19	27	29	79.5	2.5	-	-	228
GN 810-230-A-NI	230	2000	40	43	45	8.5	M8	6.5	168	33.5	18	-	-	110.5	58	-	-	19	20	32	32	104	3	-	-	379
GN 810-75-C-NI	75	750	20	29	34	5.2	M5	4.5	98	20.5	11	19	5.5	66.5	31.5	-	45	15	16	24	24	62.5	2	-	15	92
GN 810-130-C-NI	130	1050	28	35	42	6.2	M6	5.5	142	28	16	25.5	11.3	85	42	-	55	12.5	19	27	29	79.5	2.5	-	17.5	228
GN 810-230-C-NI	230	2000	40	43	45	8.5	M8	6.5	168	33.5	18	30	9.5	110.5	58	-	68	19	20	32	32	104	3	-	20	390
GN 810-75-E-NI	75	750	-	29	34	-	M5	4.5	98	20.5	11	-	-	67	-	41	-	15	16	24	24	62.5	2	4	-	100
GN 810-130-E-NI	130	1050	-	35	42	-	M6	5.5	142	28	16	-	-	86	-	54	-	12.5	19	27	29	79.5	2.5	5	-	230
GN 810-230-E-NI	230	2000	-	43	45	-	M8	6.5	168	33.5	18	-	-	112	-	73	-	19	20	32	32	104	3	6	-	389

