

## Pneumatic Toggle Clamps

### with Horizontal Mounting Base

#### SPECIFICATION

##### Types

- Type **AP**: Forked clamping arm, with two flanged washers
- Type **CP**: Forked clamping arm, with two flanged washers and clamping screw GN 708.1
- Type **EP**: Solid clamping arm, with clasp for welding

##### Coding

- Coding **M**: Magnetic piston

Sheet metal parts  
Case-hardened steel C10  
Zinc plated, blue passivated

Bearing pins hardened

Bearing rivets  
case-hardened

Air cylinder bearing pins  
case-hardened

Double-action air cylinder  
Max. pressure 6 bar

All moving parts

Lubricated with special grease

Clamping screw GN 708.1 (see page ), type A

- Steel, zinc plated, blue passivated
- Rubber thrust pad 85 Shore A

#### INFORMATION

The clamping principle of toggle clamps GN 860 is identical in construction and dimensions to the manually operated vertical toggle clamps GN 810 (see page 1562).

To ensure an extended life of the mechanical parts as well as the air cylinders the operating pressure should not exceed 6 bar and a compressed air maintenance unit should be installed upstream.

Toggle clamps GN 860 (see page 1614) have a permanent magnet integrated into the piston. In conjunction with sensors GN 3380 (see page ), it is possible to detect the end position, such as for implementing machine controls.

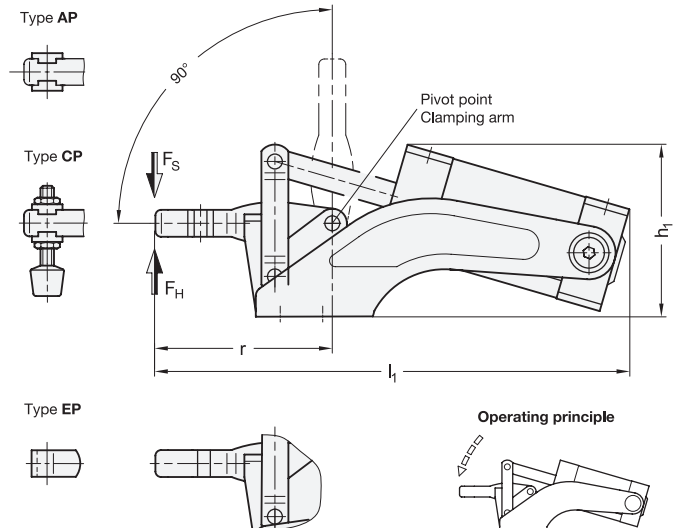
#### TECHNICAL INFORMATION

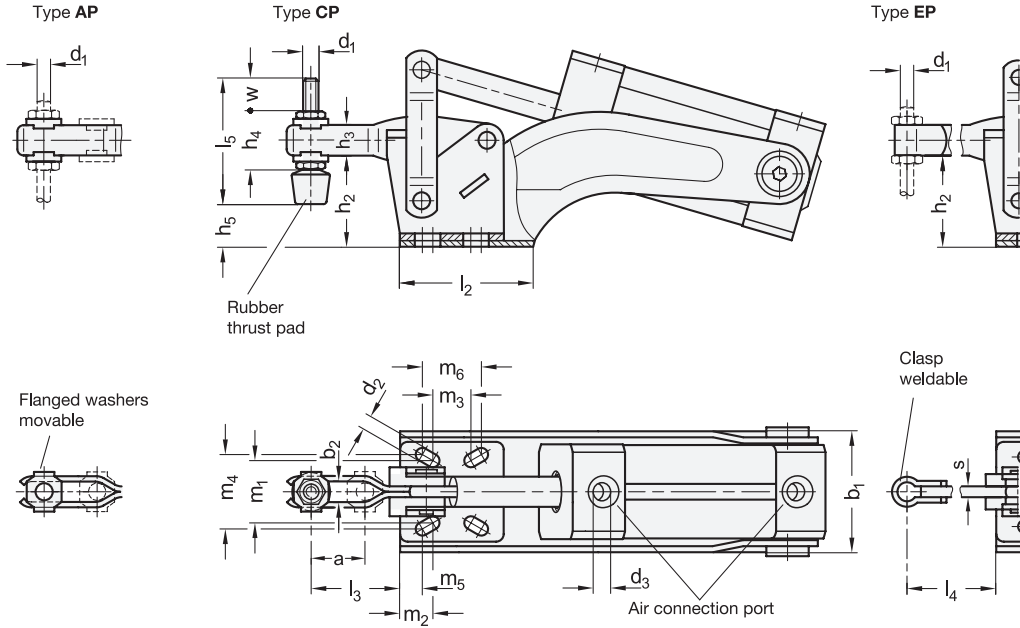
- General information for toggle clamps (see page 1560)
- List of pneumatic clamps (see page )



#### ACCESSORY

- Clamping Screws (see page )
- Holders for Clamping Screws GN 801 (for Type AP) (see page 1629)
- Holders for Clamping Screws GN 809 (for Type EP) (see page 1630)
- Sensor GN 3380 (see page )





GN 860

Description	Size	FH in N	Fs in N	a ≈	b1	b2	d1	d2	d3	Inside Ø connection tube	h1	h2	h3	h4	h5	l1 ≈	l2 ≈	l3 ≈	l4 ≈ max.	l5	m1	m2	m3	m4	m5	m6	r ≈	s	w	⚖
GN 860-75-AP-M	75	700	380	20	40	5.2	M 5	4.5	M 5	4	54	22	11	-	-	162.5	40	32	-	-	24	7	14.5	24	6.5	16.5	62.5	-	-	400
GN 860-130-AP-M	130	1600	800	28	47.5	6.2	M 6	5.6	G 1/8	4	66	30	16	-	-	195	45	42	-	-	27	11.2	12.5	29	8	19	79	-	-	650
GN 860-230-AP-M	230	2200	1200	40	52	8.2	M 8	6.7	G 1/8	4	78	36	18	-	-	259	55	57.5	-	-	32	12	18.5	32	11.5	20.5	104	-	-	1150
GN 860-330-AP-M	330	2500	1750	45	74	10.5	M 10	8.6	G 1/4	6	96	46	22	-	-	308	64	67	-	-	46	10.5	29	45	9	32	121	-	-	1850
GN 860-430-AP-M	430	4000	3200	48	73	12.5	M 12	8.5	G 1/4	8	115	55	26	-	-	364	78	73	-	-	45	14	32	45	14	32	140	-	-	3300
GN 860-75-CP-M	75	700	380	20	40	5.2	M 5	4.5	M 5	4	54	22	11	19	7.3	162.5	40	32	-	45	24	7	14.5	24	6.5	16.5	62.5	-	15	410
GN 860-130-CP-M	130	1600	800	28	47.5	6.2	M 6	5.6	G 1/8	4	66	30	16	25.5	13.5	195	45	42	-	55	27	11.2	12.5	29	8	19	79	-	17.5	666
GN 860-230-CP-M	230	2200	1200	40	52	8.2	M 8	6.7	G 1/8	4	78	36	18	30	12.5	259	55	57.5	-	68	32	12	18.5	32	11.5	20.5	104	-	20	1179
GN 860-330-CP-M	330	2500	1750	45	74	10.5	M 10	8.6	G 1/4	6	96	46	22	37	18	308	64	67	-	77	46	10.5	29	45	9	32	121	-	19	1905
GN 860-430-CP-M	430	4000	3200	48	73	12.5	M 12	8.5	G 1/4	8	115	55	26	43	22.5	364	78	73	-	100	45	14	32	45	14	32	140	-	33	3411
GN 860-75-EP-M	75	700	380	-	40	-	M 5	4.5	M 5	4	54	22	11	-	-	163	40	-	42	-	24	7	14.5	24	6.5	16.5	63	4	-	400
GN 860-130-EP-M	130	1600	800	-	47.5	-	M 6	5.6	G 1/8	4	66	30	16	-	-	196	45	-	54	-	27	11.2	12.5	29	8	19	80	5	-	650
GN 860-230-EP-M	230	2200	1200	-	52	-	M 8	6.7	G 1/8	4	78	36	18	-	-	260	55	-	75	-	32	12	18.5	32	11.5	20.5	105	6	-	1130
GN 860-330-EP-M	330	2500	1750	-	74	-	M 10	8.6	G 1/4	6	96	46	22	-	-	310	64	-	85	-	46	10.5	29	45	9	32	123	7	-	1900
GN 860-430-EP-M	430	4000	3200	-	73	-	M 12	8.5	G 1/4	8	115	55	26	-	-	365	78	-	98	-	45	14	32	45	14	32	141	10	-	3300

