



- 2 Type**
  - AP** U-bar version, with two flanged washers
  - CP** U-bar version, with two flanged washers and GN 708.1 spindle assembly
  - EP** Solid bar version, with weldable clasp
- 3 Coding**
  - M** Magnetic piston

### Specification

- Parts in sheet metal  
Case-hardened steel C10  
Zinc plated, blue passivated finish
- Hardened bearing pins
- Case-hardened bearing rivets
- Case-hardened air cylinder bearing pins
- Double-action air cylinder  
Max. pressure 6 bar
- All moving parts lubricated with special grease
- Spindle assembly GN 708.1, Type A  
→ page 858
  - Steel, zinc plated, blue passivated finish
  - Rubber tip 85 shore A
- **RoHS compliant**

### Accessory

- Spindle assemblies → starting from page 856
- Clamp mounts GN 801 (for type AP3)  
→ [www.jwwinco.com](http://www.jwwinco.com)
- Sensor GN 3380 → page 888

### Information

The clamping principle of GN 860 pneumatic toggle clamps is identical in construction and dimensions to the manually operated GN 810 vertical acting toggle clamps.

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.

GN 860 toggle clamps have a permanent magnet integrated into the piston. In conjunction with GN 3380 sensors, it is possible to detect the piston position, which can deliver a signal, for instance to a machine controller.

**see also...**

- [General Information on Pneumatic Toggle Clamps](#) → page 840
- [List of Pneumatic Clamps](#) → page 834

<b>How to order</b>	<b>1 Size</b>
<b>GN860-330-AP-M</b>	<b>2 Type</b>
	<b>3 Coding</b>

## Universal table



Dimensions in: millimeters - inches

Size	F <sub>H</sub> Holding capacity	F <sub>S</sub> Clamping force at 6 bar ≈	a ≈	b <sub>1</sub>	b <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub> Compressed air connections	Inside Ø connection tube	h <sub>1</sub> ≈	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub>	h <sub>5</sub>
75	700 N 157 lbf	380 N 85.43 lbf	20 0.79	42 1.65	5.2 0.20	M 5	4.5 0.18	M 5	4 0.16	54 2.13	22 0.87	11 0.43	19 0.75	7.3 0.29
130	1600 N 360 lbf	800 N 180 lbf	28 1.10	47.5 1.87	6.2 0.24	M 6	5.6 0.22	G 1/8	4 0.16	66 2.60	30 1.18	16 0.63	25.5 1.00	13.5 0.53
230	2200 N 495 lbf	1200 N 270 lbf	40 1.57	52 2.05	8.2 0.32	M 8	6.7 0.26	G 1/8	4 0.16	78 3.07	36 1.42	18 0.71	30 1.18	12.5 0.49
330	2500 N 562 lbf	1750 N 393 lbf	45 1.77	74 2.91	10.5 0.41	M 10	8.6 0.34	G 1/4	6 0.24	96 3.78	46 1.81	22 0.87	37 1.46	18 0.71
430	4000 N 899 lbf	3200 N 719 lbf	48 1.89	73 2.87	12.5 0.49	M 12	8.5 0.33	G 1/4	8 0.31	115 4.53	55 2.17	26 1.02	43 1.69	22.5 0.89

Size	l <sub>1</sub> ≈ Type AP Type CP	Type EP	l <sub>2</sub> ≈	l <sub>3</sub> ≈	l <sub>4</sub> ≈ max.	l <sub>5</sub>	m <sub>1</sub>	m <sub>2</sub>	m <sub>3</sub>	m <sub>4</sub>	m <sub>5</sub>	m <sub>6</sub>	r ≈ Type AP Type CP	Type EP	s <sub>1</sub>	s <sub>2</sub>	w Adjustable range
75	162.5 6.40	163 6.42	40 1.57	32 1.26	42 1.65	45 1.77	24 0.94	7 0.28	14.5 0.57	24 0.94	6.5 0.26	16.5 0.65	62.5 2.46	63 2.48	4 0.16	4 0.16	15 0.59
130	195 7.68	196 7.72	45 1.77	42 1.65	54 2.13	55 2.17	27 1.06	11.2 0.44	12.5 0.49	29 1.14	8 0.31	19 0.75	79 3.11	80 3.15	5 0.20	5 0.20	17.5 0.69
230	259 10.20	260 10.24	55 2.17	57.5 2.26	75 2.95	68 2.68	32 1.26	12 0.47	18.5 0.73	32 1.26	11.5 0.45	20.5 0.81	104 4.09	105 4.13	6 0.24	6 0.24	20 0.79
330	308 12.13	310 12.20	64 2.52	67 2.64	85 3.35	77 3.03	46 1.81	10.5 0.41	29 1.14	45 1.77	9 0.35	32 1.26	121 4.76	123 4.84	7 0.28	7 0.28	19 0.75
430	364 14.33	365 14.37	78 3.07	73 2.87	98 3.86	100 3.94	45 1.77	14 0.55	32 1.26	45 1.77	14 0.55	32 1.26	140 5.51	141 5.55	8 0.31	10 0.39	33 1.30

