



- 2 Type**
- APV** Clamping bar with slotted hole, with two flanged washers
  - CPV** Clamping bar with slotted hole, with two flanged washers and GN 708.1 spindle assembly
  - EPV** Clamping arm with bushing
- 3 Coding**
- M** Magnetic piston

**Specification**

- Toggle clamp  
Steel, phosphate-treated
- Bearing pins / bushings  
Steel, hardened and ground
- Double-action air cylinder,  
with adjustable end position damping  
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**

- Sensor GN 3380 → page 888

**Information**

GN 962 heavy duty pneumatic toggle clamps are equipped with a reinforced body, and bearing pins and bushings are hardened and ground. This makes them suitable for applications in which substantial forces arise and a long service life is required.

To ensure an extended life of the mechanical parts as well as the pneumatic cylinder, the operating pressure should not exceed 6 bar. In addition, a compressed-air control unit should be mounted in the air intake line.

GN 962 heavy duty pneumatic toggle clamps are equipped with a magnetic piston as standard. This makes end position detection possible in connection with GN 3380 sensors.

see also...

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

<p>How to order</p> <p><b>GN962-440-APV-M</b></p>	1	Size
	2	Type
	3	Coding

**Metric table**

Dimensions in: millimeters - inches

Size	Type APV Type CPV	Type EPV	F <sub>H</sub> Holding capacity	F <sub>S</sub> Clamping force at 6 bar ≈	a ≈	b <sub>1</sub> ≈	b <sub>2</sub>	b <sub>3</sub>	b <sub>4</sub>	d <sub>1</sub> Thread	d <sub>2</sub>	d <sub>3</sub> Thread	d <sub>4</sub>	Inside Ø connection tube	e ≈
220	-	-	2200 N 495 lbf	870 N 196 lbf	35 1.38	62 2.44	48 1.89	36 1.42	6.3 0.25	M 6	6.5 0.26	G 1/8	-	4 0.16	38.3 1.51
440	-	-	4400 N 989 lbf	1220 N 274 lbf	35 1.38	74 2.91	65 2.56	54 2.13	10.3 0.41	M 10	8.5 0.33	G 1/4	-	6 0.24	54.1 2.13
-	850	-	8500 N 1911 lbf	2280 N 513 lbf	-	87.5 3.44	75 2.95	75 2.95	-	M 12	10.5 0.41	G 1/4	12.5 0.49	8 0.31	70.7 2.78

Size	Type APV Type CPV	Type EPV	h <sub>1</sub> ≈	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub> ≈	h <sub>5</sub>	l <sub>1</sub> ≈	l <sub>2</sub> ≈	l <sub>3</sub> ≈	l <sub>4</sub>	m <sub>1</sub>	m <sub>2</sub>	m <sub>3</sub>	r	s <sub>1</sub>	s <sub>2</sub>	w Adjustable range
220	-	-	221 8.70	77 3.03	16.6 0.65	26 1.02	60.3 2.37	161 6.34	51 2.01	-	65 2.56	30 1.18	34 1.34	20 0.79	96 3.78	3.5 0.14	-	27 1.06
440	-	-	287 11.30	106 4.17	24 0.94	38 1.50	78 3.07	195 7.68	60 2.36	-	77 3.03	42.5 1.67	46.5 1.83	30 1.18	125 4.92	5 0.20	-	18 0.71
-	850	-	355 13.98	140 5.51	31 1.22	-	-	229 9.02	-	68 2.68	-	52 2.05	56 2.20	55 2.17	151 5.94	6 0.24	12 0.47	-

