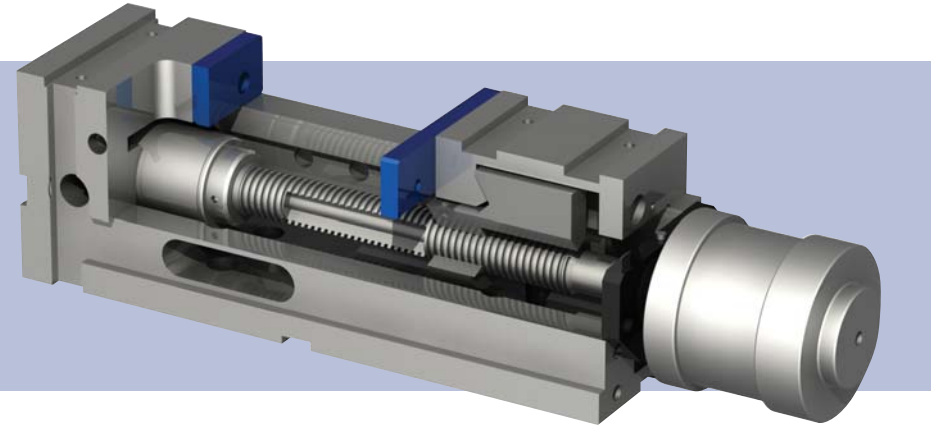


high pressure automatic vises

Arnold Mat Hydro-Pneumatic

High Pressure ARNOLD MAT HYDRO-PNEUMATIC Vises generate high pressure clamping with readily available compressed air - no high pressure plumbing required!

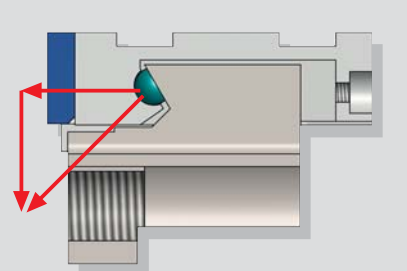


- Can be mounted on base, side or on vertically on end.
- Suitable for working in horizontal and vertical machining centers.
- All surfaces ground with a parallelism and perpendicularity of 0.02 mm (0.0008").
- 0.01mm (0.0004") clamping repeatability.
- Monoblock design avoids deformations due to high pressure and offers great rigidity.
- Side openings for easy chip removal.
- Fitted with a high pressure single action hydro-pneumatic intensifier, supplied by compressed air at 6 bars (87 psi).
- Air pressure regulates the clamping force. (see manual).
- Air must be clean and dry.
- Clamping force is 2.5 to 5 tons (5,000 to 11,000 lbs), depending on model.
- Automatically opens and closes 4 mm (0.16").
- Ideal for high volume / short cycle machining.

- Supplied with a manual valve set.
- Can be operated with an optional pedal.

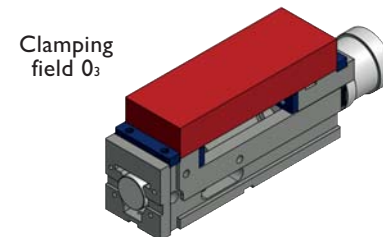
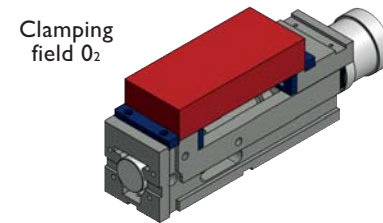
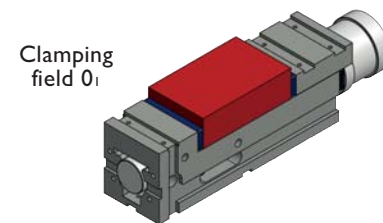
- Clamping mechanism with chip protection.
- The spindle pulls the moveable jaw from the vise head for reduced deflection.

Pull-down Semi-sphere



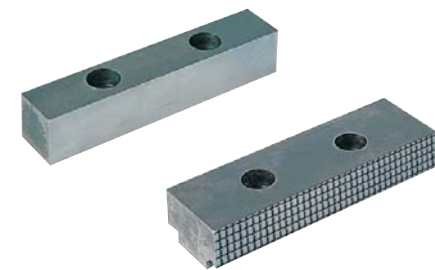
The ARNOLD MAT has a descending clamp system to avoid jaw-lift. A semi-sphere installed between the moveable jaw and the spindle shoe creates downward pressure.

Clamping possibilities



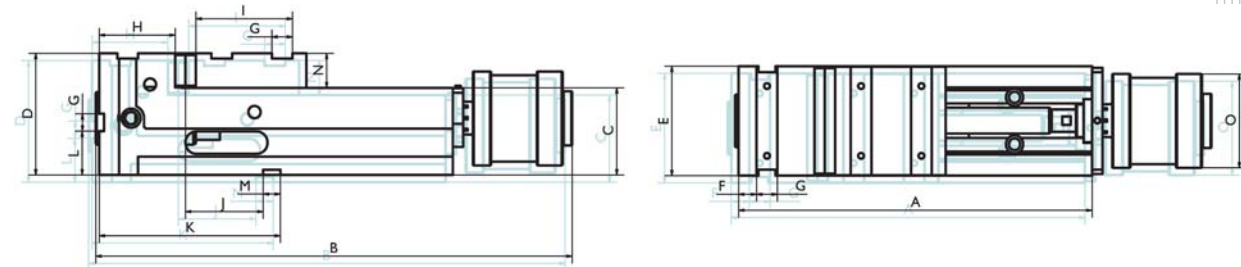
Elements needed for the operation not supplied with the vise

- Connection to the compressed air
- Filter unit, pressure gauge, pressure regulator and air lubricator.
- Note:** If using a pedal: The set of valves supplied with the vise must be placed between the compressor and the pedal, not between the pedal and the vise.



- Optional top jaws mount in slots on the vise jaws to hold oversized parts.

Size	090	125	160	200
Hydro-Pneumatic Arnold Mat	020 600 090	020 600 125	020 600 160	020 600 200
Clamping force (kg / lbs)	2500 / 5500	4000 / 8800	5000 / 1100	5000 / 11000
A (mm / inches)	300 / 11.81	410 / 16.14	570 / 22.44	570 / 22.44
B (mm / inches)	435 / 17.16	545 / 21.46	705 / 27.76	705 / 27.76
C - 0.02 (mm / inches)	75 / 2.95	100 / 3.94	110 / 4.33	110 / 4.33
D (mm / inches)	115 / 4.53	140 / 5.51	160 / 6.30	173 / 6.81
E (mm / inches)	91 / 3.58	126 / 4.96	161 / 6.34	201 / 7.91
F (mm / inches)	21 / 0.83	21 / 0.83	21 / 0.83	21 / 0.83
G (mm / inches)	20 / 0.79	24 / 0.94	24 / 0.94	24 / 0.94
H (mm / inches)	58 / 2.28	88 / 3.46	99 / 3.90	99 / 3.90
I (mm / inches)	55 / 2.16	112 / 4.41	112 / 4.41	112 / 4.41
J + 0.02 (mm / inches)	40 / 1.57	90 / 3.54	115 / 4.53	111 / 4.37
K (mm / inches)	130 / 5.16	210 / 8.27	250 / 9.84	250 / 9.84
L (mm / inches)	40 / 1.57	50 / 1.97	60 / 2.36	60 / 2.36
M H7 (mm / inches)	20 / 0.79	20 / 0.79	20 / 0.79	20 / 0.79
N (mm / inches)	40 / 1.57	40 / 1.57	50 / 1.97	63 / 2.48
Weight (kg / lbs)	16 / 35	35 / 77	70 / 154	93 / 205
Clampings	090	125	160	200
Clamping field 0 ₁ (mm / inches)	0-135/0-5.31	0-200 / 0-7.87	0-314 / 0-12.36	0-314 / 0-12.36
Clamping field 0 ₂ (mm / inches)	80-210/3.14-8.27	80-285 / 3.15-11.22	110-420 / 4.33-16.53	110-420 / 4.33-16.53
Clamping field 0 ₃ (mm / inches)		150-355 / 5.91-13.98	180-490 / 7.09-19.29	180-490 / 7.09-19.29



Supplied with

- base body
- hydro-pneumatic spindle
- anti return open-close valve
- 1 set of plain jaws
- 4 toe clamps
- instruction manual

