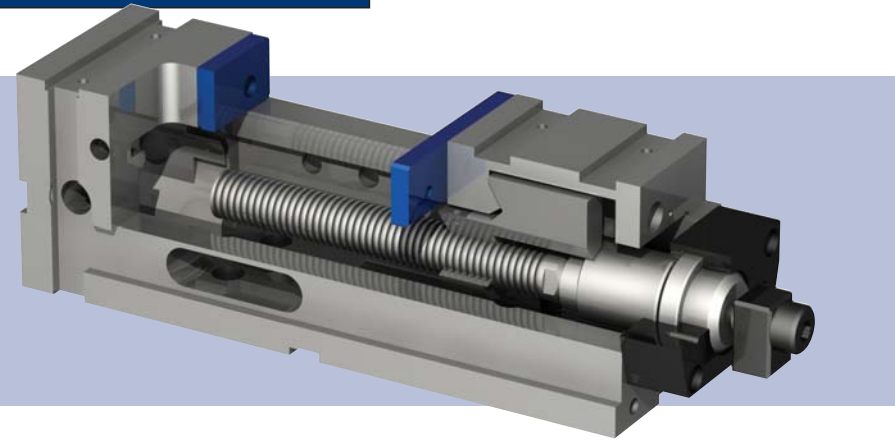


# high pressure automatic vises

## Arnold Mat Hydraulic

Arnold Mat high pressure hydraulic vises maintain their length irrespective of the size of the work pieces - a must for machining centers.

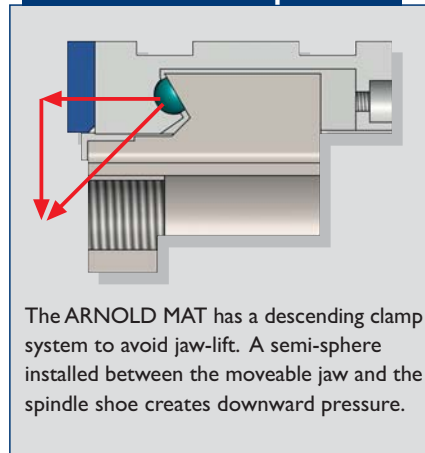


- Can be mounted on the base, on the side or vertically on the head.
- Suitable for working in horizontal and vertical machining centers.
- All surfaces ground to 0.02 mm (0.0008").
- 0.01 mm (0.0004") clamping repeatability.
- Monoblock design prevents deformations due to high pressure and offers great rigidity.
- High pressure single acting hydraulic intensifier.
- Clamping force is directly proportional to the oil pressure input (see manual).
- Maximum pressure with input pressure of 500 bar (7,250 psi)
- Clamping force is 2.5 to 5 tons (5,500 to 11,000 lbs) depending on size.
- Rotary connection at the inlet and the outlet of the oil.

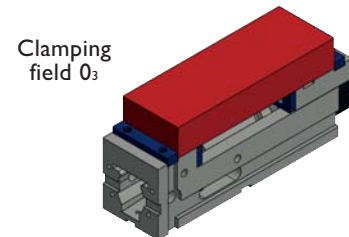
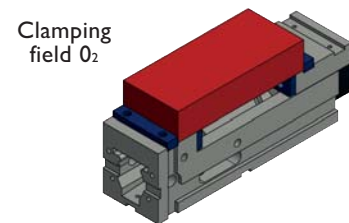
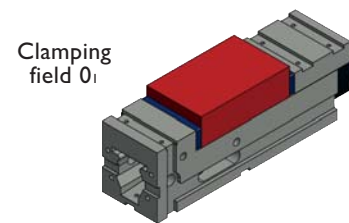
- Side openings for easy cleaning.

- Can be mounted in series next to each other to hold large parts and operated from a single hydraulic power source. Simultaneous clamping improves part location and reduces part deformation.

### Pull-down Semi-sphere



### Clamping possibilities



### Components needed for the operation not supplied with the vise:

- Hydraulic unit or single effect 500 bar (7,250 psi) pneumatic pump
- Connection hoses
- Pressure control switch
- Pressure gauge
- Safety valve integrated into the unit
- ON – OFF switch

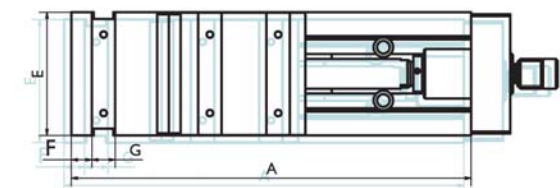
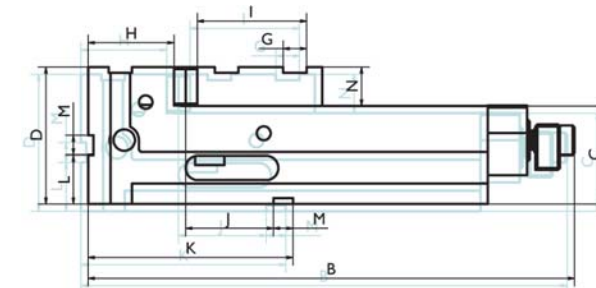


- Optional top jaws mount in slots on the vise jaws to hold oversized parts.

### OPERATION

- Manually advance the moveable jaw to about 2,5mm (0.10") from the work piece. Hydraulic pressure will move the jaw about 4mm (0.16") to ensure positive clamping and easy part loading.

Size	090	125	160	200
<b>Hydraulic Arnold Mat</b>	<b>020 140 090</b>	<b>020 140 125</b>	<b>020 140 160</b>	<b>020 140 200</b>
Clamping force (kg / lbs)	2500 / 5500	4000 / 8800	5000 / 11000	5000 / 11000
A (mm / inches)	300 / 11.81	410 / 16.14	570 / 22.44	570 / 22.44
B (mm / inches)	385 / 15.16	488 / 19.21	648 / 25.51	648 / 25.51
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 / 2.17	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 / 2.12	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
<b>Clampings</b>	<b>090</b>	<b>125</b>	<b>160</b>	<b>200</b>
Clamping field 0 <sub>1</sub> (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 <sub>2</sub> (mm / inches)	80-210/0-8.27	80-285 / 3.15-11.22	110-420 / 4.33-16.53	110-420 / 4.33-16.53
Clamping field 0 <sub>3</sub> (mm / inches)		150-355 / 5.91-13.98	180-490 / 7.09-19.29	180-490 / 7.09-19.29



### Supplied with

- base body
- hydraulic spindle
- rotary connection
- 1 set of plain jaws
- 1 handle
- 4 toe clamps
- instruction manual

