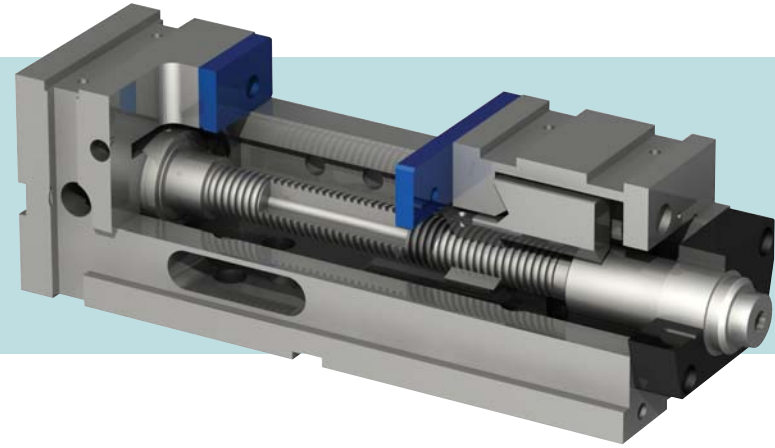


# high pressure manual vises

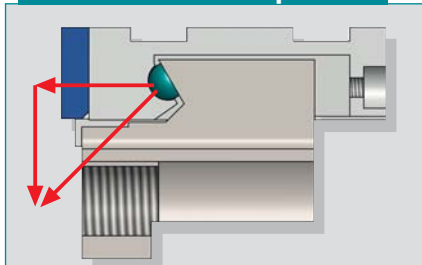
## Arnold Mat with Hydraulic Booster

High Pressure ARNOLD MAT  
MECHANICAL vises maintain  
their length irrespective of the size  
of the parts - ideal for use in  
machining centers.



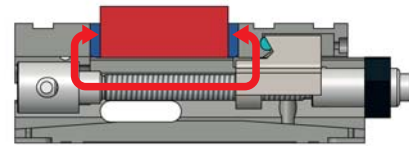
- Possible working positions: supported on the base, on the side or on the head vertically.
- Suitable for working in horizontal and vertical machining centers.
- All surfaces ground with a parallelism and perpendicularity of 0,02 mm (0.0008").
- 0,01 mm (0.0004") clamping repeatability.
- Monoblock design avoids deformations due to high pressure and offers great rigidity.
- Side windows for easy interior cleaning of the vises.
- Fitted with a high pressure hydraulic intensifier incorporated into the spindle, which maintains the clamping force for hours.
- Clamping force from 2,5 to 5 tons (5,500 to 11,000 lbs), depending on model.
- Power regulator optional.
- Ideal for long machining cycles.
- Angle driver for handle clearance available.

### Pull-Down Semi-sphere



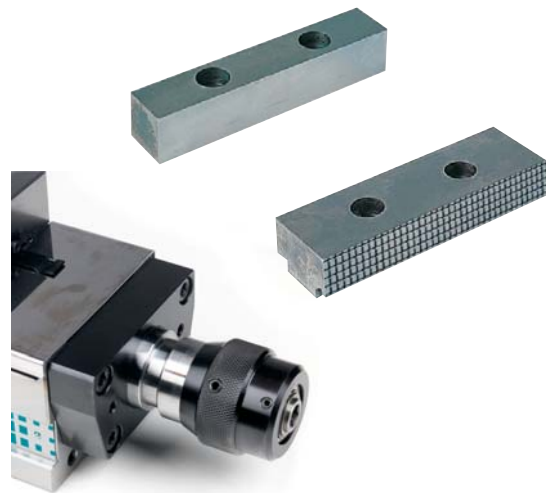
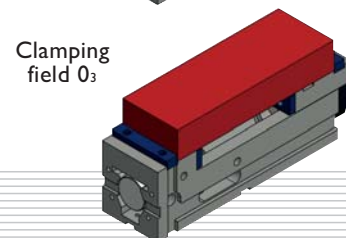
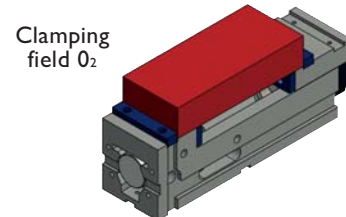
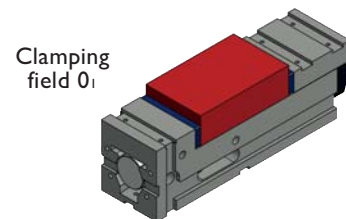
The ARNOLD MAT has a descending clamp system to avoid jaw-lift. A semi-sphere installed between the moveable jaw and the spindle shoe creates downward pressure.

### Compensated clamp



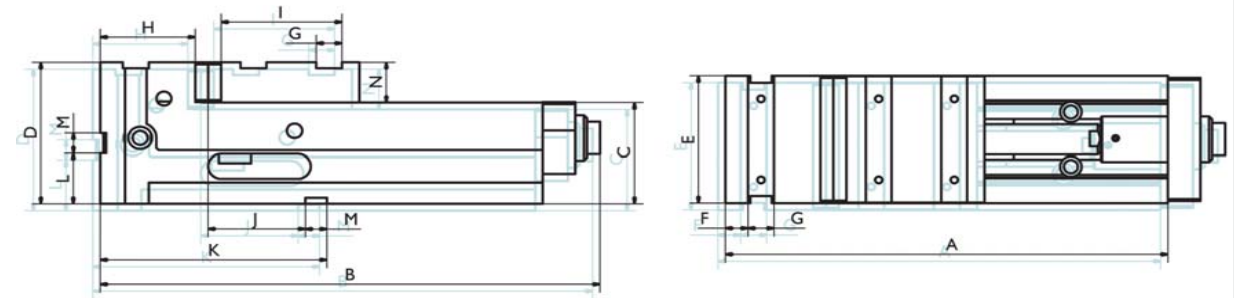
- These vises provide an enveloping clamp. The spindle does not push the moveable jaw from the end clamp, but it pulls it from the head.
- This effect means that the head of the vise and the work-piece suffer less deformation stress with high pressure.

### Clamping possibilities



Optional Power Regulator

| Size  | 090                | 125                  | 160                   | 200                   |
|---|--------------------|----------------------|-----------------------|-----------------------|
| Arnold Mat Hydraulic                        | 020 200 090        | 020 200 125          | 020 200 160           | 020 200 200           |
| Arnold Mat Hydraulic with regulator         |                    | 020 210 125          | 020 210 160           | 020 210 200           |
| Clamping force (kg / lbs)                   | 2.500 / 5,500      | 4.000 / 8,800        | 5.000 / 11,000        | 5.000 / 11,000        |
| A (mm / inches)                             | 300 / 11.81        | 410 / 16.14          | 570 / 22.44           | 570 / 22.4            |
| B (mm / inches)                             | 356 / 15.24        | 460 / 18.11          | 620 / 24.41           | 620 / 24.4            |
| B (with regulator)                          |                    | 527 / 20.75          | 687 / 27.05           | 687 / 27.0            |
| 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 / 6.8             |
| E (mm / inches)                             | 91 / 3.58          | 126 / 4.96           | 161 / 6.34            | 201 / 7.9             |
| F (mm / inches)                             | 21 / 0.83          | 21 / 0.83            | 21 / 0.83             | 21 / 0.83             |
| G (mm / inches)                             | 20 / 0.78          | 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 / 5.12         | 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 / 0.78          | 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 / 3.15-8.27 | 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
- 1 set of plain jaws
- 1 handle
- 4 toe clamps
- instruction manual

