

Universal Self-Centering Vise UVH – Hydraulic drive

UVH is a hydraulically actuated 2-jaw self-centering vise in a compact design with a high clamping force. The vises are available with standard stroke, or long stroke or with one fixed jaw.

Advantages

- Precise wedge-hook mechanism allows machining accuracy
- High force drive for secure clamping
- Extended clamping range with long jaw guidance
- Optimum jaw guides (hardened, sturdy, low-backlash) allow high clamping forces and a long service life
- Low profile: Maximum use of the machine room and excellent rigidity of the system
- Lean outer contour for optimal accessibility of the machine spindle to the workpiece
- Cubic design: ideal for 6-sided machining
- Optimized lubrication system for consistently high clamping forces
- Base jaws with tongue and groove or fine serration as standard for high flexibility of top jaws
- All functional parts are hardened and ground to ensure a long service life

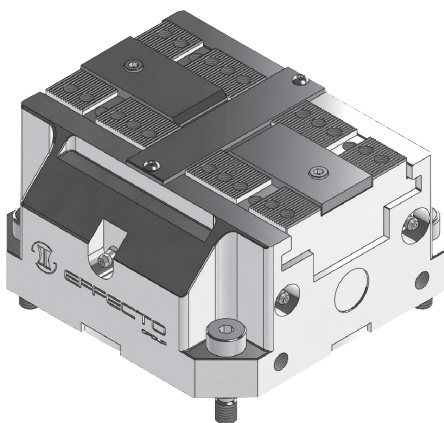


SPECIFICATIONS

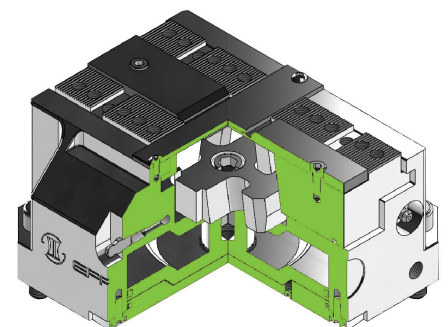
| Model | Stroke Per Jaw | Closing Force Per Jaw @ Max pressure | Total Closing Force @ Max pressure | Max Pressure | Clamping center accuracy* | Repeatability | Max Jaw height | Fluid consumption per double stroke | Closing/opening time | Weight |
|------------------|----------------|--------------------------------------|------------------------------------|--------------|---------------------------|---------------|----------------|-------------------------------------|----------------------|----------|
| UVH 100 | 2 mm | 8900 N | 17800 N | 60 bar | ± 0.01 mm | ± 0.01 mm | 60 mm | 30 cm ³ | 1 s | 5.00 Kg |
| | 0.08 in | 2001 lb | 4002 lb | 870.2 psi | ±0.0004 in | ±0.0004 in | 2.36 in | 1.83 in ³ | | |
| UVH 100 X | 6 mm | 6680 N | 13360 N | 120 bar | ± 0.01 mm | ± 0.01 mm | 60 mm | 30 cm ³ | 1 s | 5.00 Kg |
| | 0.24 in | 1502 lb | 3004 lb | 1740.5 psi | ±0.0004 in | ±0.0004 in | 2.36 in | 1.83 in ³ | | |
| UVH 160 | 3 mm | 22500 N | 45000 N | 60 bar | ± 0.01 mm | ± 0.02 mm | 60 mm | 100 cm ³ | 1.5 s | 14.00 Kg |
| | 0.12 in | 5058 lb | 10116 lb | 870.2psi | ±0.0004 in | ±0.0008 in | 2.36 in | 6.10 in ³ | | |
| UVH 160 X | 8 mm | 19765 N | 39530 N | 120 bar | ± 0.01 mm | ± 0.02 mm | 60 mm | 100 cm ³ | 1.5 s | 14.00 Kg |
| | 0.31 in | 4443 lb | 8886 lb | 1740.5 psi | ±0.0004 in | ±0.0008 in | 2.36 in | 6.10 in ³ | | |

*The values are referred to the "P" variant (by means of alignment dowels - optional)
Shoulder screws (included in the supply): +/-0.02 mm
Sleeve and screws (included in the supply): +/-0.04 mm

SECTIONAL DIAGRAM

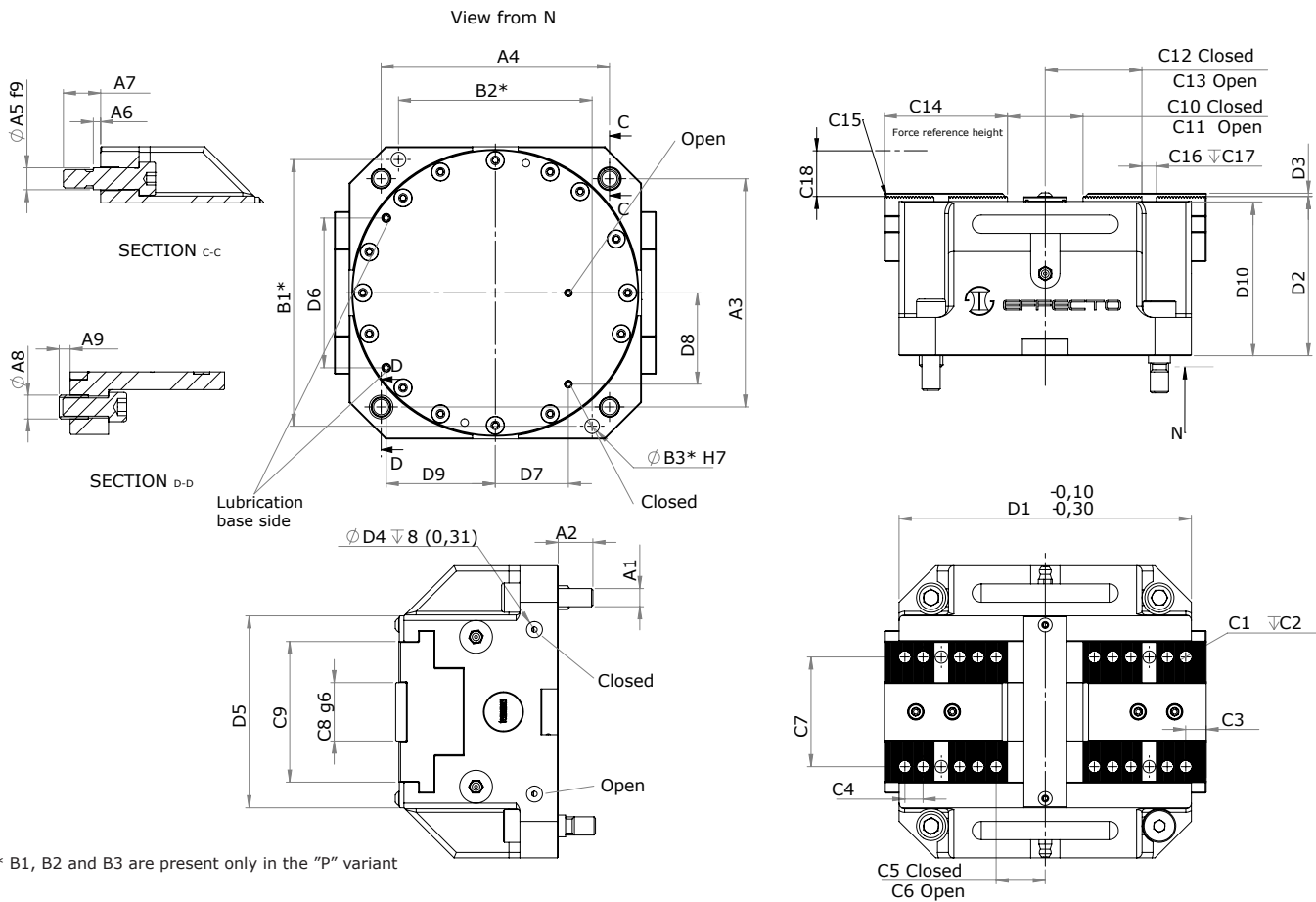


For a better operation of the vise please consider the distance between the clamping point and the top surface of the jaws.



PRODUCT INFORMATION

UVH – Hydraulic drive



- Options**
- Fixed jaw
 - High precision mounting via alignment dowel holes ("P" variant)
 - Semi finished top jaws

| | Mounting - Option # 1 | | | | | | | | | Mounting - Option # 2 | | | Finger Application | | | | | | | |
|------------------|-----------------------|--------------|---------------|---------------|--------------|-------------|--------------|--------------|---------------|-----------------------|---------------|-------------|--------------------|--------------|----------------|--------------|----------------|----------------|--------------|--------------|
| | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 | A9 | B1 | B2 | B3 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 |
| UVH 100 | M8 | 15 (0.59) | 80 (3.15) | 80 (3.15) | 10 (0.39) | 4 (0.16) | 17 (0.67) | 11 (0.43) | 4.5 (0.18) | 90 (3.54) | 64 (2.52) | 6 (0.24) | M6 | 9 (0.35) | 5 (0.20) | 7 (0.28) | 15 (0.59) | 17 (0.67) | 35 (1.38) | 20 (0.79) |
| UVH 100 X | M8 | 15 (0.59) | 80 (3.15) | 80 (3.15) | 10 (0.39) | 4 (0.16) | 17 (0.67) | 11 (0.43) | 4.5 (0.18) | 90 (3.54) | 64 (2.52) | 6 (0.24) | M6 | 9 (0.35) | 7.5 (0.30) | 7 (0.28) | 14.5 (0.57) | 20.5 (0.81) | 35 (1.38) | 20 (0.79) |
| UVH 160 | M10 | 19 (0.75) | 125 (4.92) | 125 (4.92) | 12 (0.47) | 4 (0.16) | 20 (0.79) | 13 (0.51) | 6 (0.24) | 146 (5.75) | 106 (4.17) | 8 (0.31) | M8 | 12 (0.47) | 8 (0.31) | 10 (0.39) | 19 (0.75) | 22 (0.87) | 60 (2.36) | 32 (1.26) |
| UVH 160 X | M10 | 19 (0.75) | 125 (4.92) | 125 (4.92) | 12 (0.47) | 4 (0.16) | 20 (0.79) | 13 (0.51) | 6 (0.24) | 146 (5.75) | 106 (4.17) | 8 (0.31) | M8 | 12 (0.47) | 11.2 (0.44) | 10 (0.39) | 18.8 (0.74) | 26.8 (1.06) | 60 (2.36) | 32 (1.26) |

| | Finger Application | | | | | | | | | | Informational Dimensions | | | | | | | | | |
|------------------|--------------------|----------------|----------------|----------------|----------------|----------------|-----------|-------------|---------------|--------------|--------------------------|----------------|---------------|--------|---------------|--------------|--------------|----------------|----------------|----------------|
| | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 | C17 | C18 | D1 | D2 | D3 | D4 | D5 | D6 | D7 | D8 | D9 | D10 |
| UVH 100 | 47 (1.85) | 21.2 (0.83) | 25.2 (0.99) | 26 (1.02) | 28 (1.10) | 37.4 (1.47) | 1.5 X 60° | 6 (0.24) | 2.7 (0.11) | 16 (0.63) | 100 (3.94) | 74.2 (2.92) | 1.8 (0.07) | G 1/8" | 64 (2.52) | 55 (2.17) | 32 (1.26) | 29.5 (1.16) | 34.5 (1.36) | 71.5 (2.81) |
| UVH 100 X | 47 (1.85) | 19.2 (0.76) | 31.2 (1.23) | 25.5 (1.00) | 31.5 (1.24) | 40.4 (1.59) | 1.5 X 60° | 6 (0.24) | 2.7 (0.11) | 16 (0.63) | 100 (3.94) | 74.2 (2.92) | 1.8 (0.07) | G 1/8" | 64 (2.52) | 55 (2.17) | 32 (1.26) | 29.5 (1.16) | 34.5 (1.36) | 71.5 (2.81) |
| UVH 160 | 77 (3.03) | 25 (0.98) | 31 (1.22) | 45 (1.77) | 48 (1.89) | 64.5 (2.54) | 1.5 X 60° | 8 (0.31) | 3.2 (0.13) | 25 (0.98) | 160 (6.30) | 87.2 (3.43) | 1.8 (0.07) | G 1/8" | 105 (4.13) | 82 (3.23) | 40 (1.57) | 50 (1.97) | 59.7 (2.35) | 84.5 (3.33) |
| UVH 160 X | 77 (3.03) | 25.2 (0.99) | 41.2 (1.62) | 44.8 (1.76) | 52.8 (2.08) | 67.4 (2.65) | 1.5 X 60° | 8 (0.31) | 3.2 (0.13) | 25 (0.98) | 160 (6.30) | 87.2 (3.43) | 1.8 (0.07) | G 1/8" | 105 (4.13) | 82 (3.23) | 40 (1.57) | 50 (1.97) | 59.7 (2.35) | 84.5 (3.33) |

* Dimensions are in millimeters (inches).

** All dimensions are descriptive and subject to variation for technical upgrading. We reserve the right to make variations without prior notification



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