

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

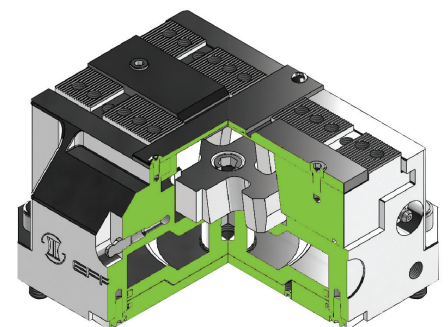
Model	Stroke Per Jaw	Closing Force Per Jaw @ Max pressure	Total Closing Force @ Max pressure	Max Pressure	Clamping center accuracy*	Repeatability	Max Jaw height	Fluid consumption per double stroke	Closing/opening time	Weight
UVH 100	2 mm	8900 N	17800 N	60 bar	± 0.01 mm	± 0.01 mm	60 mm	30 cm ³	1 s	5.00 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

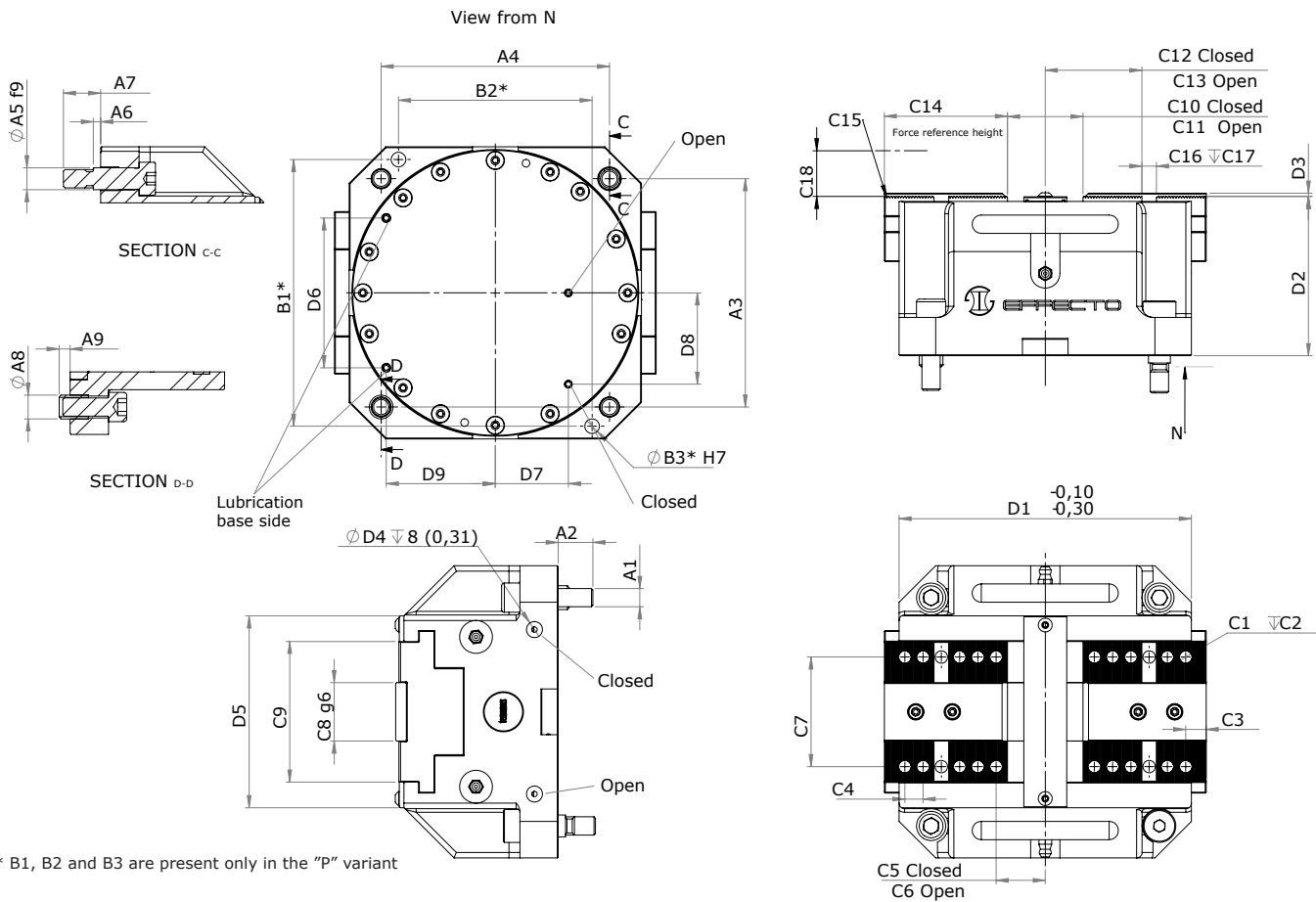


For a better operation of the vise please consider the distance between the clamping point and the top surface of the jaws.



PRODUCT INFORMATION

UVH – Hydraulic drive



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

	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
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)
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)
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)
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)

* 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



Applied Robotics
648 Saratoga Road
Glenville, NY 12302 USA
Tel. +1 518 384 1000 Fax +1.5183841200
info@appliedrobotics.com
www.appliedrobotics.com



EFFECTO GROUP S.p.A.
Via Roma, 141/143
28017 San Maurizio d'Opaglio (NO) - Italy
Tel. +39 0322 96142 Fax +39 0322 967453
info@effectogroup.com
www.effectogroup.com

