

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	Total Closing Force	Max Pressure	Clamping center accuracy*	Max Jaw height	Fluid consumption double stroke	Closing/ opening time	Repeat Accuracy	Weight
		@ Max pressure	@ Max pressure							
UVH 100	2 mm 0.08 in	8900 N 2001 lb	17800 N 4002 lb	60 bar 870.2 psi	± 0.01 mm ±0.0004 in	60 mm 2.36 in	30 cm³ 1.83 in³	1 s	± 0.01 mm ±0.0004 in	5.00 Kg 11.00 lb
UVH 100 X	6 mm 0.24 in	6680 N 1502 lb	13360 N 3004 lb	120 bar 1740.5 psi	± 0.01 mm ±0.0004 in	120 mm 4.72 in	30 cm³ 1.83 in³	1 s	± 0.01 mm ±0.0004 in	5.00 Kg 11.00 lb
UVH 140	3 mm 0.12 in	17800 N 4001 lb	35600 N 8003 lb	60 bar 870.2 psi	± 0.01 mm ±0.0004 in	60 mm 2.36 in	56 cm³ 3.42 in³	1 s	± 0.01 mm ±0.0004 in	9.00 Kg 20.00 lb
UVH 140 X	7 mm 0.28 in	16200 N 3641 lb	32400 N 7283 lb	120 bar 1740.5 psi	± 0.01 mm ±0.0004 in	150 mm 5.91 in	56 cm³ 3.42 in³	1 s	± 0.01 mm ±0.0004 in	9.00 Kg 20.00 lb
UVH 160	3 mm 0.12 in	22500 N 5058 lb	45000 N 10116 lb	60 bar 870.2 psi	± 0.01 mm ±0.0004 in	60 mm 2.36 in	100 cm³ 6.10 in³	1.5 s	± 0.02 mm ±0.0008 in	14.00 Kg 31.00 lb
UVH 160 X	8 mm 0.31 in	19765 N 4443 lb	39530 N 8886 lb	120 bar 1740.5 psi	± 0.01 mm ±0.0004 in	200 mm 7.87 in	100 cm³ 6.10 in³	1.5 s	± 0.02 mm ±0.0008 in	14.00 Kg 31.00 lb

*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



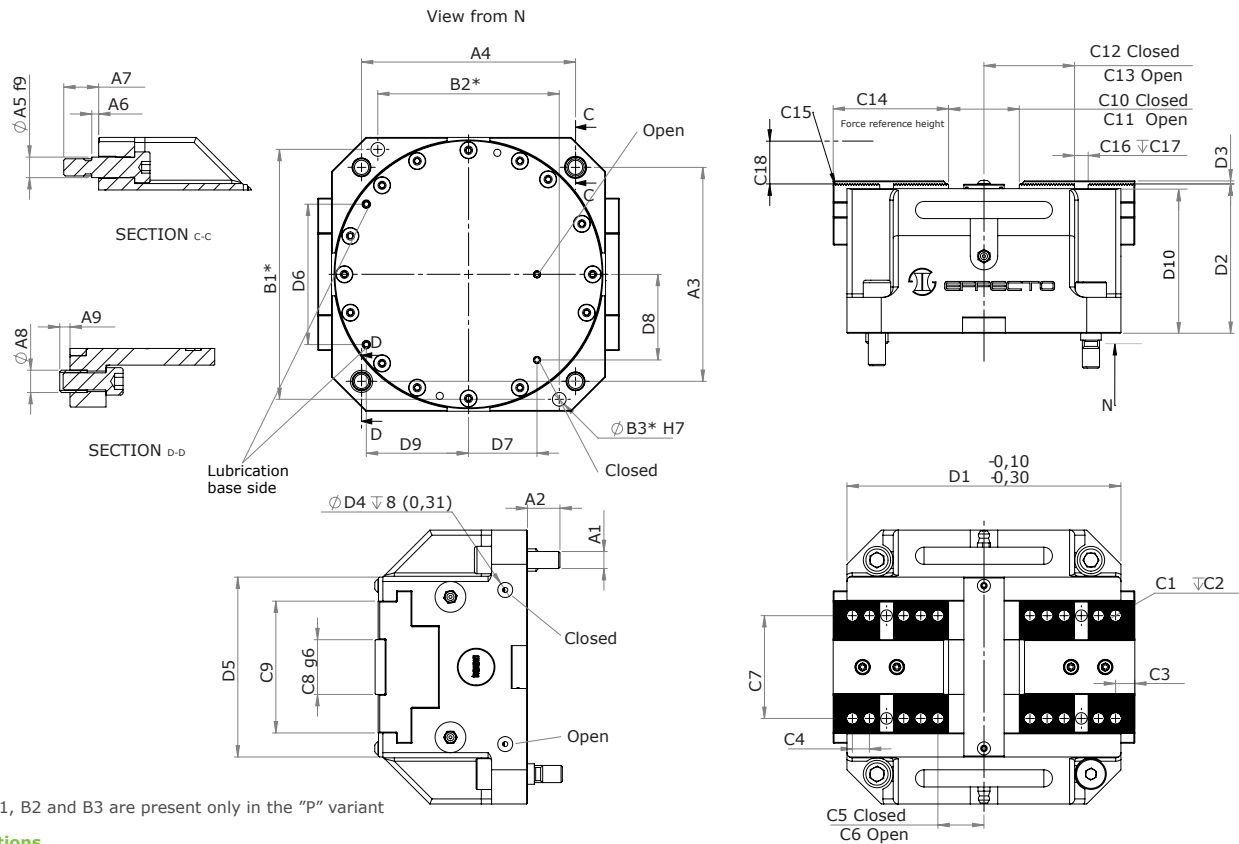
For optimum utilization of the holding force,
we recommend placing the gripping point
as close as possible to the front edge of the vise.



PRODUCT INFORMATION



03.2.5_Rev.08



* B1, B2 and B3 are present only in the "P" variant

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 140	M8	19 (0.75)	110 (4.33)	110 (4.33)	10 (0.39)	4 (0.16)	17 (0.67)	11 (0.43)	4 (0.16)	126 (4.96)	92 (3.62)	8 (0.31)	M8	12 (0.47)	8 (0.31)	10 (0.39)	19 (0.75)	22 (0.87)	48 (1.89)	28 (1.10)
UVH 140 X	M8	19 (0.75)	110 (4.33)	110 (4.33)	10 (0.39)	4 (0.16)	17 (0.67)	11 (0.43)	4 (0.16)	126 (4.96)	92 (3.62)	8 (0.31)	M8	12 (0.47)	8 (0.31)	10 (0.39)	19 (0.75)	26 (1.02)	48 (1.89)	28 (1.10)
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 140	68 (2.68)	23 (0.91)	29 (1.14)	35 (1.38)	38 (1.50)	55.5 (2.19)	1.5 X 60°	8 (0.31)	3.2 (0.13)	30 (1.18)	140 (5.51)	77.7 (3.06)	1.8 (0.07)	G 1/8"	92 (3.62)	74 (2.91)	40 (1.57)	25 (0.98)	51.8 (2.04)	74 (2.91)
UVH 140 X	68 (2.68)	23.5 (0.93)	37.6 (1.48)	35.3 (1.39)	42.3 (1.67)	55.5 (2.19)	1.5 X 60°	8 (0.31)	3.2 (0.13)	30 (1.18)	140 (5.51)	77.7 (3.06)	1.8 (0.07)	G 1/8"	92 (3.62)	74 (2.91)	40 (1.57)	25 (0.98)	51.8 (2.04)	74 (2.91)
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)	40 (1.57)	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)	40 (1.57)	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



Effecto Group S.p.A.
Via Roma, 141/143
28017 San Maurizio d'Opaglio (NO) - IT
Tel. +39 0322 96142
info@effecto.com

Effecto, Inc.
648 Saratoga Road
Glenville, NY 12302 - US
Tel. +1 518 384 1000
info@us.effecto.com

Effecto GmbH
Liegnitzer Str. 6
82194 Gröbenzell - DE
Tel. +49 8142 59397 0
info@de.effecto.com

www.effecto.com