

Universal Self-Centering Vise

UVP – Pneumatic drive

UVP is a pneumatically actuated 2-jaw self-centering vise in 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*	Max Jaw height	Fluid consumption double stroke	Closing/ opening time	Repeat Accuracy	Weight
UVP 100	2 mm 0.08 in	10750 N 2417 lb	21500 N 4833 lb	9 bar 130.5 psi	± 0.01 mm ±0.0004 in	60 mm 2.36 in	141 cm³ 8.60 in³	0.2 s	± 0.01 mm ±0.0004 in	3.50 Kg 7.72 lb
UVP 100 X	6 mm 0.24 in	4100 N 922 lb	8200 N 1843 lb	9 bar 130.5 psi	± 0.01 mm ±0.0004 in	120 mm 4.72 in	141 cm³ 8.60 in³	0.2 s	± 0.01 mm ±0.0004 in	3.50 Kg 7.72 lb
UVP 140	3 mm 0.12 in	17000 N 3822 lb	34000 N 7644 lb	9 bar 130.5 psi	± 0.01 mm ±0.0004 in	60 mm 2.36 in	334 cm³ 20.38 in³	0.2 s	± 0.01 mm ±0.0004 in	7.20 Kg 15.87 lb
UVP 140 X	7 mm 0.27 in	7750 N 1742 lb	15500 N 3485 lb	9 bar 130.5 psi	± 0.01 mm ±0.0004 in	150 mm 5.91 in	334 cm³ 20.38 in³	0.2 s	± 0.01 mm ±0.0004 in	7.20 Kg 15.87 lb
UVP 160	3 mm 0.12 in	25000 N 5620 lb	50000 N 11240 lb	9 bar 130.5 psi	± 0.01 mm ±0.0004 in	60 mm 2.36 in	530 cm³ 32.34 in³	0.4 s	± 0.01 mm ±0.0004 in	11.00 Kg 24.25 lb
UVP 160 X	8 mm 0.31 in	10000 N 2248 lb	20000 N 4496 lb	9 bar 130.5 psi	± 0.01 mm ±0.0004 in	200 mm 7.87 in	530 cm³ 32.34 in³	0.4 s	± 0.01 mm ±0.0004 in	11.00 Kg 24.25 lb
UVP 250	5 mm 0.20 in	28500 N 6407 lb	57000 N 12814 lb	6 bar 87.0 psi	± 0.01 mm ±0.0004 in	150 mm 5.91 in	1660 cm³ 101.30 in³	0.4 s	± 0.01 mm ±0.0004 in	32.00 Kg 70.55 lb
UVP 250 X	15 mm 0.59 in	10500 N 2360 lb	21000 N 4721 lb	6 bar 87.0 psi	± 0.01 mm ±0.0004 in	500 mm 19.69 in	1660 cm³ 101.30 in³	0.4 s	± 0.01 mm ±0.0004 in	32.00 Kg 70.55 lb

*The closing force is referred to the clamping height C18 of the dimensional drawing

**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



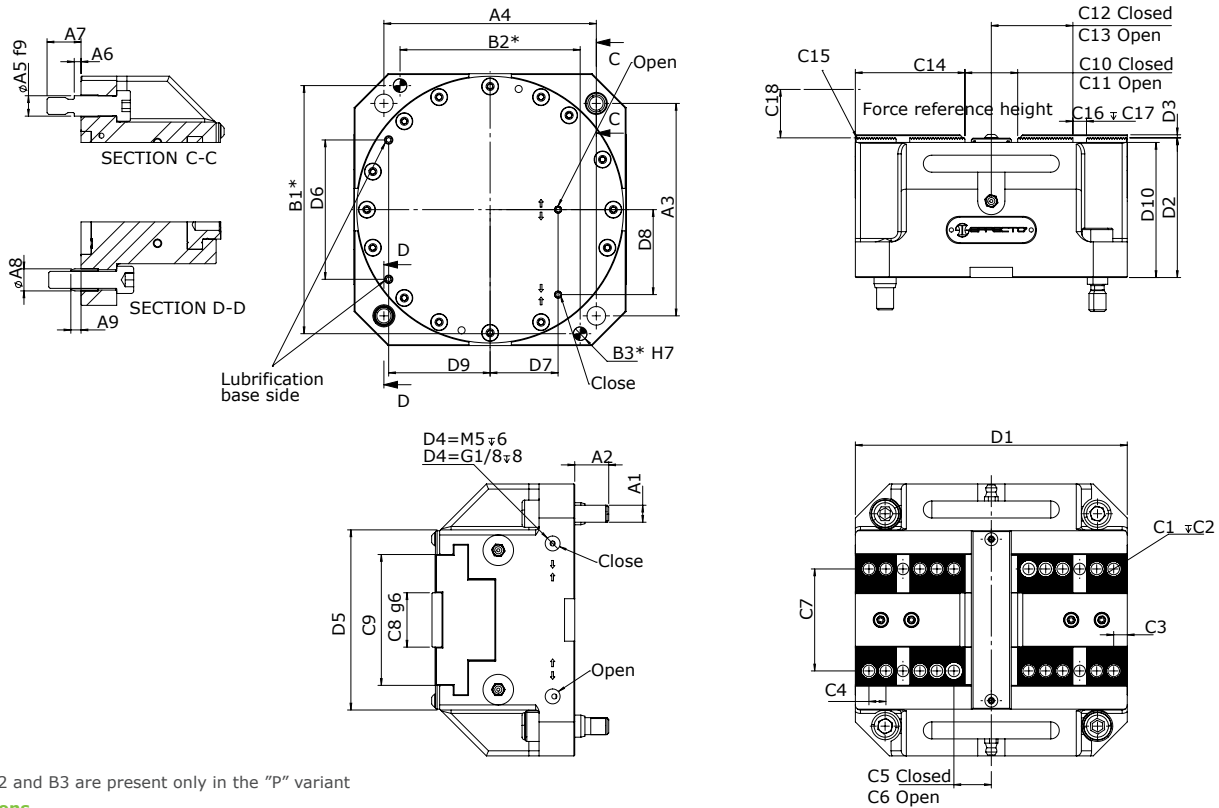
For optimum utilization of the holding force,
we recommend placing the gripping point
as close as possible to the front edge of the vise.



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
UVP 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)
UVP 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)
UVP 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)
UVP 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)	19.2 (0.76)	26.3 (1.04)	48 (1.89)	28 (1.10)
UVP 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)
UVP 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)
UVP 250	M12	20 (0.79)	200 (7.87)	200 (7.87)	14 (0.55)	5 (0.20)	20 (0.79)	16 (0.63)	6 (0.24)	230 (9.06)	154 (6.06)	10 (0.39)	M10	18 (0.71)	11 (0.43)	12 (0.47)	25 (0.98)	30 (1.18)	90 (3.54)	50 (1.97)
UVP 250 X	M12	20 (0.79)	200 (7.87)	200 (7.87)	14 (0.55)	5 (0.20)	20 (0.79)	16 (0.63)	6 (0.24)	230 (9.06)	154 (6.06)	10 (0.39)	M10	18 (0.71)	15 (0.59)	12 (0.47)	32.5 (1.28)	47.5 (1.87)	90 (3.54)	50 (1.97)

	Finger Application									Informational Dimensions										
	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10
UVP 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)	69.2 (2.72)	1.8 (0.07)	M5	64 (2.52)	55 (2.17)	32 (1.26)	29.5 (1.16)	34.5 (1.36)	66.5 (2.62)
UVP 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)	69.2 (2.72)	1.8 (0.07)	M5	64 (2.52)	55 (2.17)	32 (1.26)	29.5 (1.16)	34.5 (1.36)	66.5 (2.62)
UVP 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)	72.7 (2.86)	1.8 (0.07)	G 1/8"	92 (3.62)	74 (2.91)	45.5 (1.79)	44 (1.73)	51.8 (2.04)	69 (2.72)
UVP 140 X	68 (2.68)	23.5 (0.93)	37.5 (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)	72.7 (2.86)	1.8 (0.07)	G 1/8"	92 (3.62)	74 (2.91)	45.5 (1.79)	44 (1.73)	51.8 (2.04)	69 (2.72)
UVP 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)	82.2 (3.24)	1.8 (0.07)	G 1/8"	105 (4.13)	82 (3.23)	40 (1.57)	50 (1.97)	59.7 (2.35)	79.5 (3.13)
UVP 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)	82.2 (3.24)	1.8 (0.07)	G 1/8"	105 (4.13)	82 (3.23)	40 (1.57)	50 (1.97)	59.7 (2.35)	79.5 (3.13)
UVP 250	125 (4.92)	36 (1.42)	46 (1.81)	56 (2.20)	61 (2.40)	102 (4.02)	1.5 X 60°	10 (0.39)	4 (0.16)	50 (1.97)	250 (9.84)	98.2 (3.87)	2.3 (0.09)	G 1/8"	170 (6.69)	139.6 (5.50)	64 (2.52)	75 (2.95)	92.6 (3.65)	93.7 (3.69)
UVP 250 X	125 (4.92)	35 (1.38)	65 (2.56)	51.5 (2.03)	66.5 (2.62)	102 (4.02)	1.5 X 60°	10 (0.39)	4 (0.16)	50 (1.97)	250 (9.84)	98.2 (3.87)	2.3 (0.09)	G 1/8"	170 (6.69)	139.6 (5.50)	64 (2.52)	75 (2.95)	92.6 (3.65)	93.7 (3.69)

* 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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