

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*	Repeatability	Max Jaw height	Fluid consumption per double stroke	Closing/opening time	Weight
UVP 100	2 mm	8950 N	17900 N	9 bar	± 0.01 mm	± 0.01 mm	60 mm	1000 cm ³	0.2 s	4.00 Kg
	0.08 in	2012 lb	4024 lb	130.5 psi	± 0.0004 in	± 0.0004 in	2.36 in	61.00 in ³		9.00 lb
UVP 100 X	6 mm	3350 N	6700 N	9 bar	± 0.01 mm	± 0.01 mm	150 mm	1000 cm ³	0.2 s	4.00 Kg
	0.24 in	753 lb	1506 lb	130.5 psi	± 0.0004 in	± 0.0004 in	5.91 in	61.00 in ³		9.00 lb
UVP 160	3 mm	21250 N	42500 N	9 bar	± 0.01 mm	± 0.02 mm	60 mm	3400 cm ³	0.4 s	11.00 Kg
	0.12 in	4777 lb	9554 lb	130.5 psi	± 0.0004 in	± 0.0008 in	2.36 in	208.00 in ³		24.50 lb
UVP 160 X	8 mm	9380 N	18760 N	9 bar	± 0.01 mm	± 0.02 mm	200 mm	3400 cm ³	0.4 s	11.00 Kg
	0.31 in	2109 lb	4218 lb	130.5 psi	± 0.0004 in	± 0.0008 in	7.87 in	208.00 in ³		24.50 lb

*The values are referred to the "P" variant (by means of alignment dowels - optional)

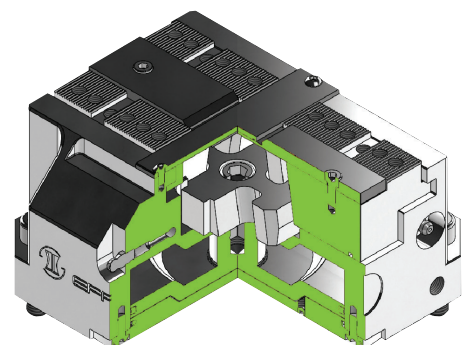
Shoulder screws (included in the supply): +/-0.02 mm

Sleeve and screws (included in the supply): +/-0.04 mm

SECTIONAL DIAGRAM

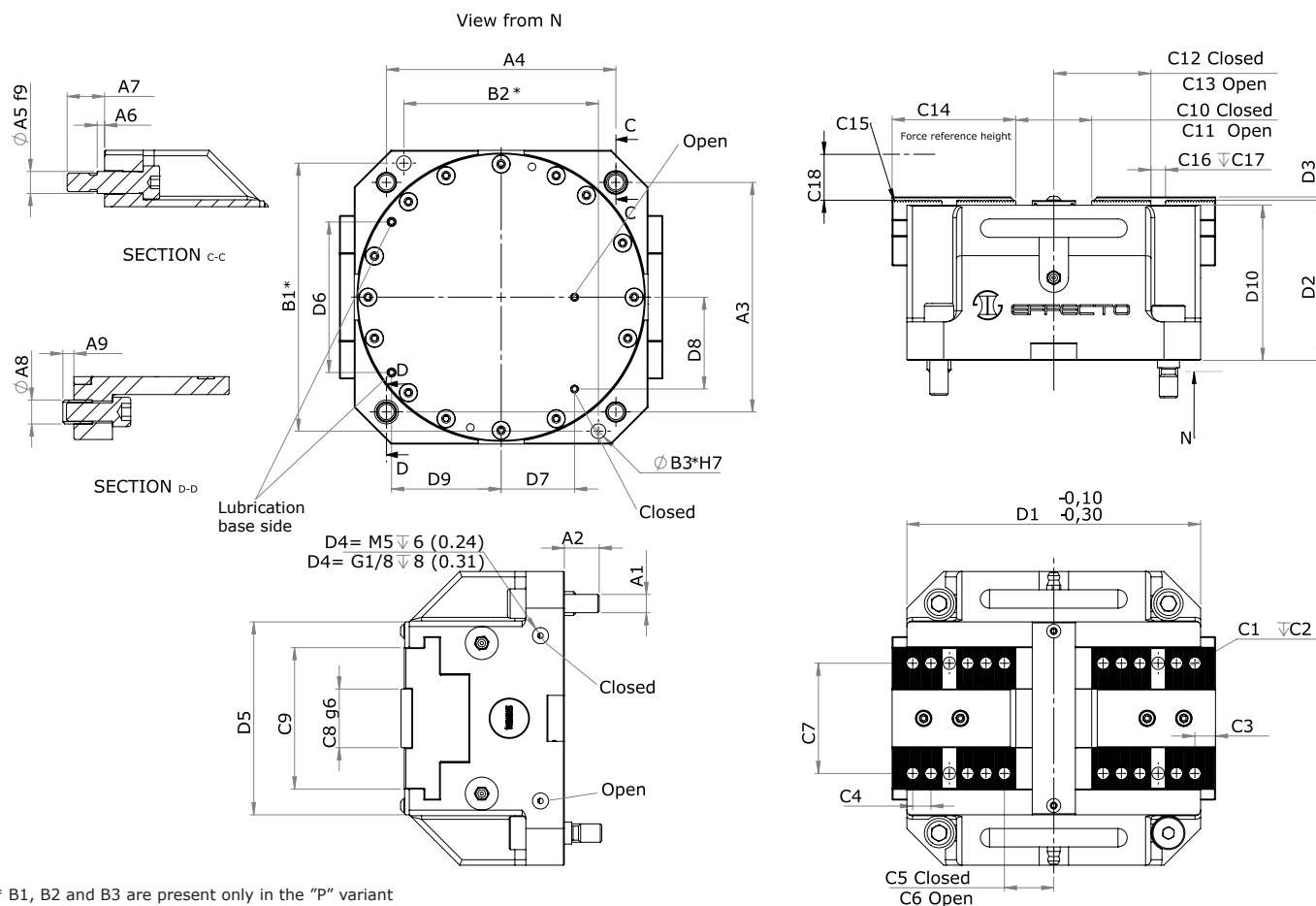


For a better operation of the vise please consider the distance between the clamping point and the top surface of the jaws.



PRODUCT INFORMATION

UVP – Pneumatic drive



* 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 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)	
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 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)	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)	25 (0.98)	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)	

* 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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