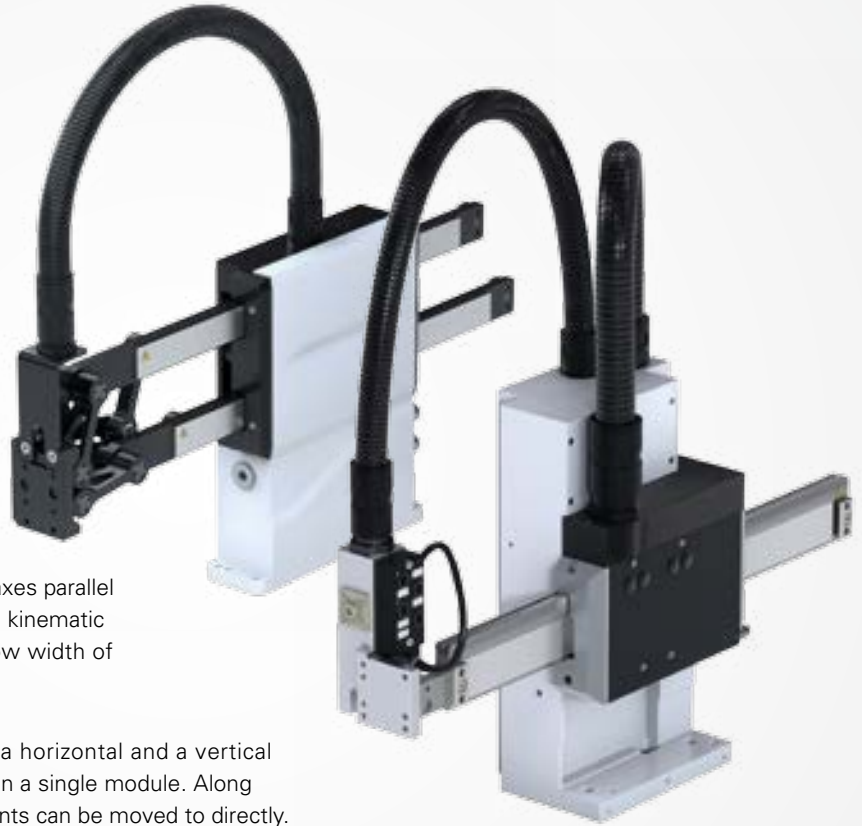


HP

HANDLING MODULES | HP PICK & PLACE



Pick & Place HP 70: two horizontal linear axes parallel on top of each other, connected through a kinematic unit. Because of the construction a narrow width of only 60 mm is possible.

Pick & Place HP 140: a horizontal and a vertical linear axis integrated in a single module. Along these two axes all points can be moved to directly.

HP PICK & PLACE: THE DIRECT ALTERNATIVE

THE SOLUTION FOR CLEANROOMS

The HP 140T CL 6 Pick & Place has been designed for use in cleanrooms and is certified to air purity class 6 in line with ISO 14644-1.

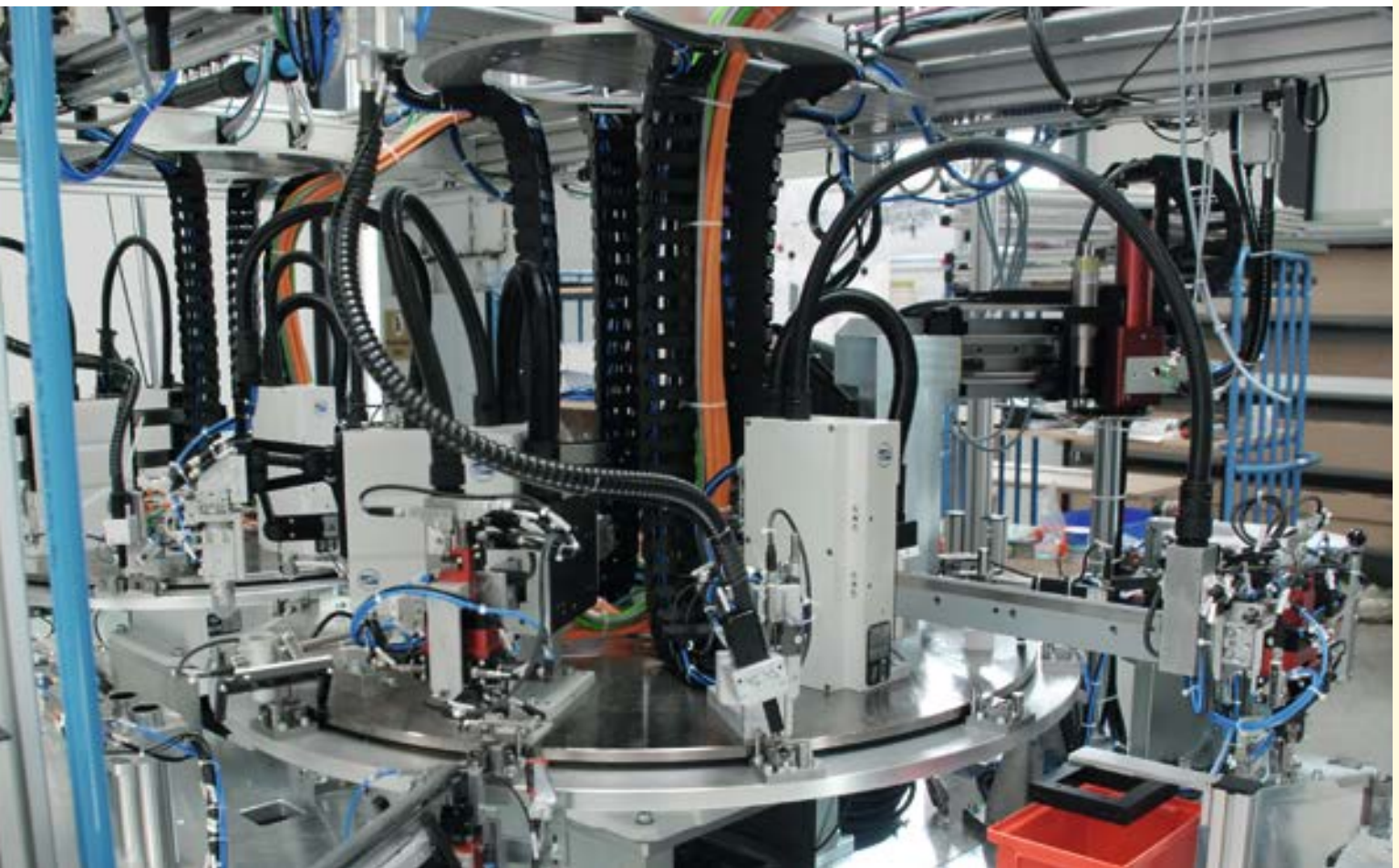


FREELY AND INTUITIVELY PROGRAMMABLE

W.A.S. 2 – WEISS Application Software: secure and fast commissioning with free-of-charge user software.



Automated assembly system for electromechanical sensors from UBH Mechanical Engineering: eleven Pick & Place units achieve the required repeat accuracy of 0.02 mm – at a cycle time of 1.5 s.



Whether HP 140 or HP 70: The Pick & Place from WEISS works with two linear axes and therefore profit from all advantages of a direct drive: rapid dynamic performance, free user-programmability, minimal wear and highest precision. The HP overcomes limits of traditional pneumatic systems regarding variability, dynamic performance and efficiency.

ADVANTAGES

- Extremely high dynamic performance thanks to direct drive
- Ready-to-install complete solution
- Free programmability
- Permanent feedback of position, process forces, speed (adjustable control circuit)
- Low maintenance costs
- Significantly lower energy consumption, in particular in comparison with pneumatic systems
- Very compact and slim design, offering greater flexibility for integration and assembly of the machine
- W.A.S. 2 – WEISS Application Software for simple commissioning
- Impressive price-performance

GENERAL INFORMATION

- All motors are equipped with overtemperature protection (PTC)

OPTIONS

- The Pick & Place units can be equipped with manual or automatic lubrication
- For efficient cable laying to the screw-on surface, the HP units can optionally be equipped with a tool connector. In addition to this, up to 2 valves can be installed directly in the housing (screwed down to the tool connector)
- Absolute measuring systems
- Functional safety (secure encoder attachment)

HP 70T

GENERAL INFORMATION

- The HP 70 can be used in any installation situation and therefore offers a maximum degree of flexibility
- Drawings of the HP 70 for custom installation locations are available on request

OPTIONS

- The Pick&Place unit can optionally be supplied with a clamping element for the y-axis and z-axis

TECHNICAL DATA

U	Voltage range:	200-600 V _{AC Effektiv}
a_{Max}	Max. acceleration:	40 m/s ²
v_{Max}	Max. speed:	3.6 m/s
F_{N mot}	Nominal force:	65 N
F_{P mot}	Peak force:	180 N
s_{h Max}	Horizontal stroke:	125, 225, 325 mm
s_{v Max}	Vertical stroke:	70 mm
m	Weight:	9 kg
	Repeat accuracy:	0.005 mm
m_{rec}	Max. recommended load:	1 kg

LOAD DATA

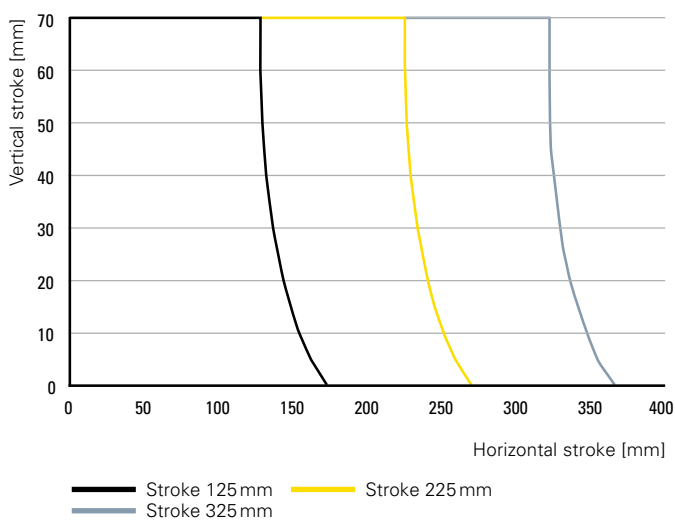
M_{X stat}	Max. static moment about the X-axis:	61 Nm
M_{Y stat}	Max. static moment about the Y-axis:	41 Nm
M_{Z stat}	Max. static moment about the Z-axis:	120 Nm
F_{Y stat}	Max. static force in the Y-axis:	100 N
F_{Z stat}	Max. static force in the Z-axis:	100 N

Please do not exceed the given forces – especially during pick or place operations. The accuracy is given for constant temperature and without outside forces.

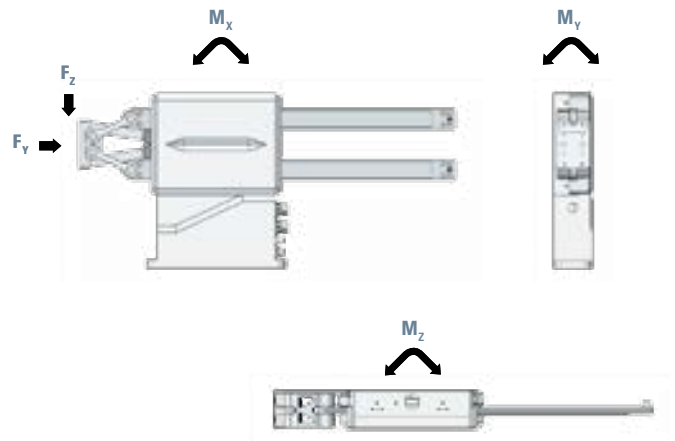
ENCODER

Balluff	sin/cos
Balluff	BISS
Balluff	SSI

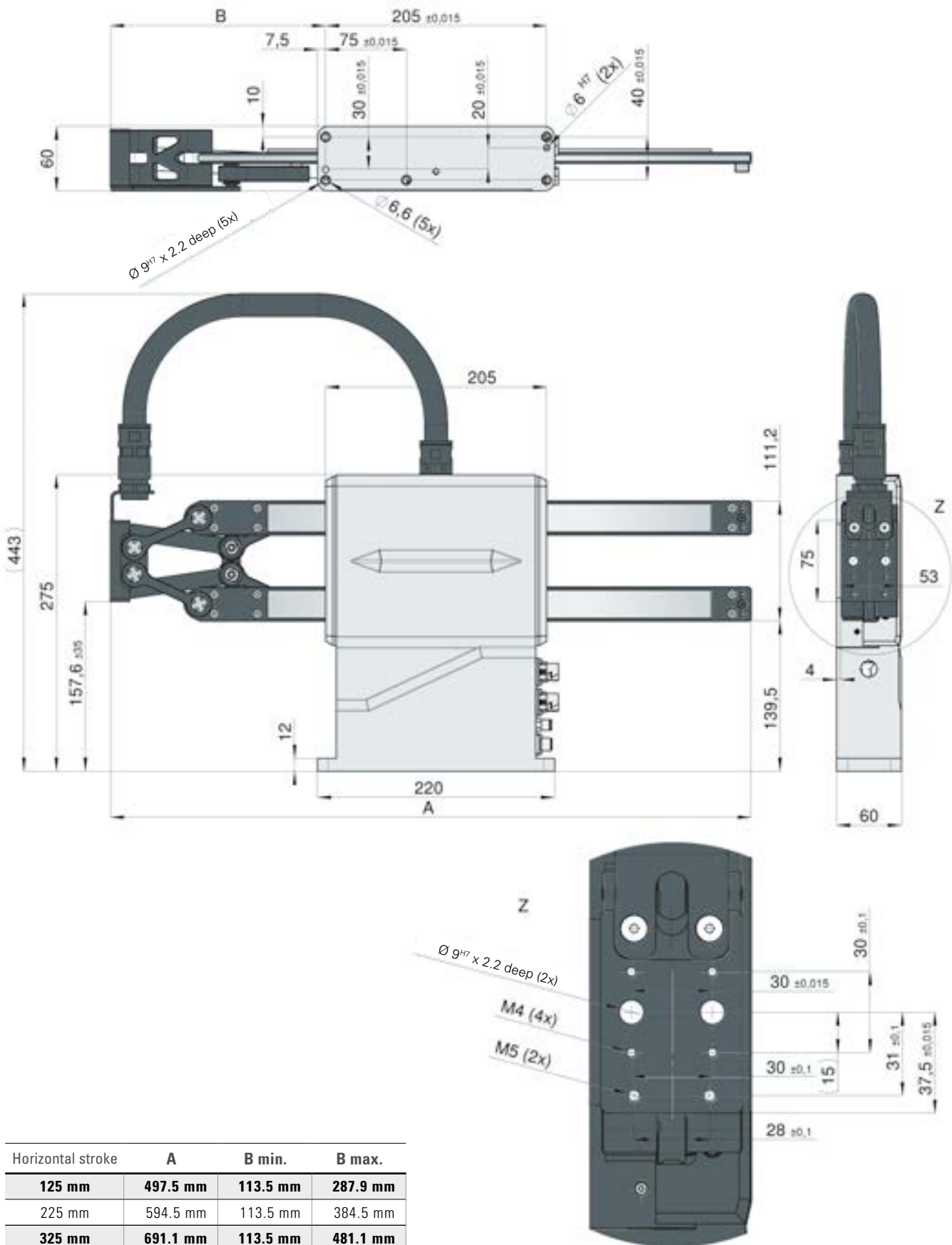
MECHANICAL STROKE



LOAD DATA



DIMENSIONS



Horizontal stroke	A	B min.	B max.
125 mm	497.5 mm	113.5 mm	287.9 mm
225 mm	594.5 mm	113.5 mm	384.5 mm
325 mm	691.1 mm	113.5 mm	481.1 mm

HP 140T

GENERAL INFORMATION

- The HP140 is only suitable for horizontal installation

OPTIONS

- The Pick&Place unit can optionally be designed with a clamping element for the z-axis

TECHNICAL DATA

U	Voltage range:	200-600 V _{AC} Effektiv
a_{Max}	Max. acceleration:	40 m/s ²
v_{Max}	Max. speed:	4 m/s
F_{N mot}	Nominal force:	100 N (Y), 150 N (Z)
F_{P mot}	Peak force:	240 N (Y), 370 N (Z)
s_{h Max}	Horizontal stroke:	160, 215, 270, 300, 400 mm
s_{v Max}	Vertical stroke:	65, 100, 150 mm
m	Weight:	11-18 kg
	Installation position::	horizontal
	Repeat accuracy:	0.005 mm
m_{rec}	Max. recommended load:	3 kg

LOAD DATA

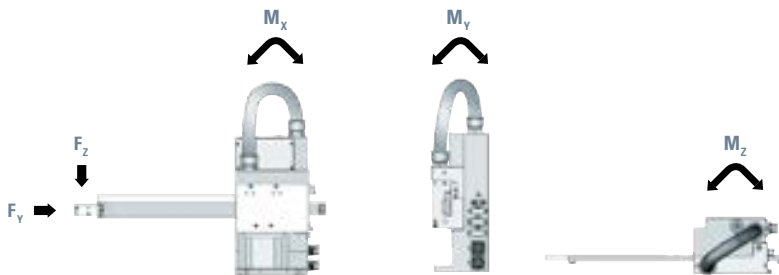
M_{X stat}	Max. static moment about the X-axis:	49 Nm
M_{Y stat}	Max. static moment about the Y-axis:	15 Nm
M_{Z stat}	Max. static moment about the Z-axis:	36 Nm
F_{Y stat}	Max. static force in the Y-axis:	100 N
F_{Z stat}	Max. static force in the Z-axis:	100 N

Please do not exceed the given forces – especially during pick or place operations. The accuracy is given for constant temperature and without outside forces.

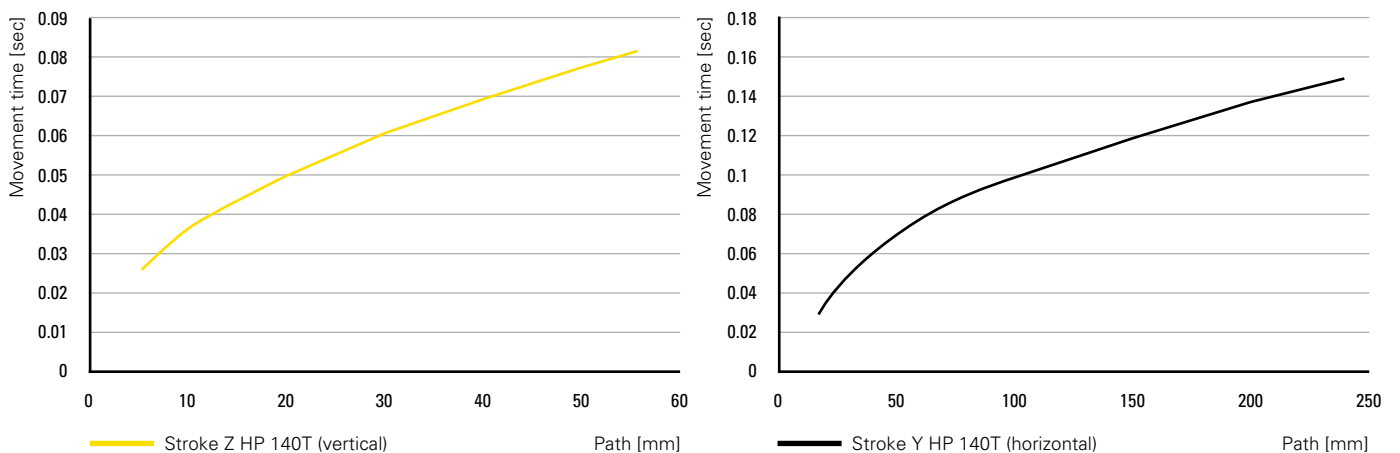
ENCODER

Balluff	sin/cos
Balluff	BISS
Balluff	SSI

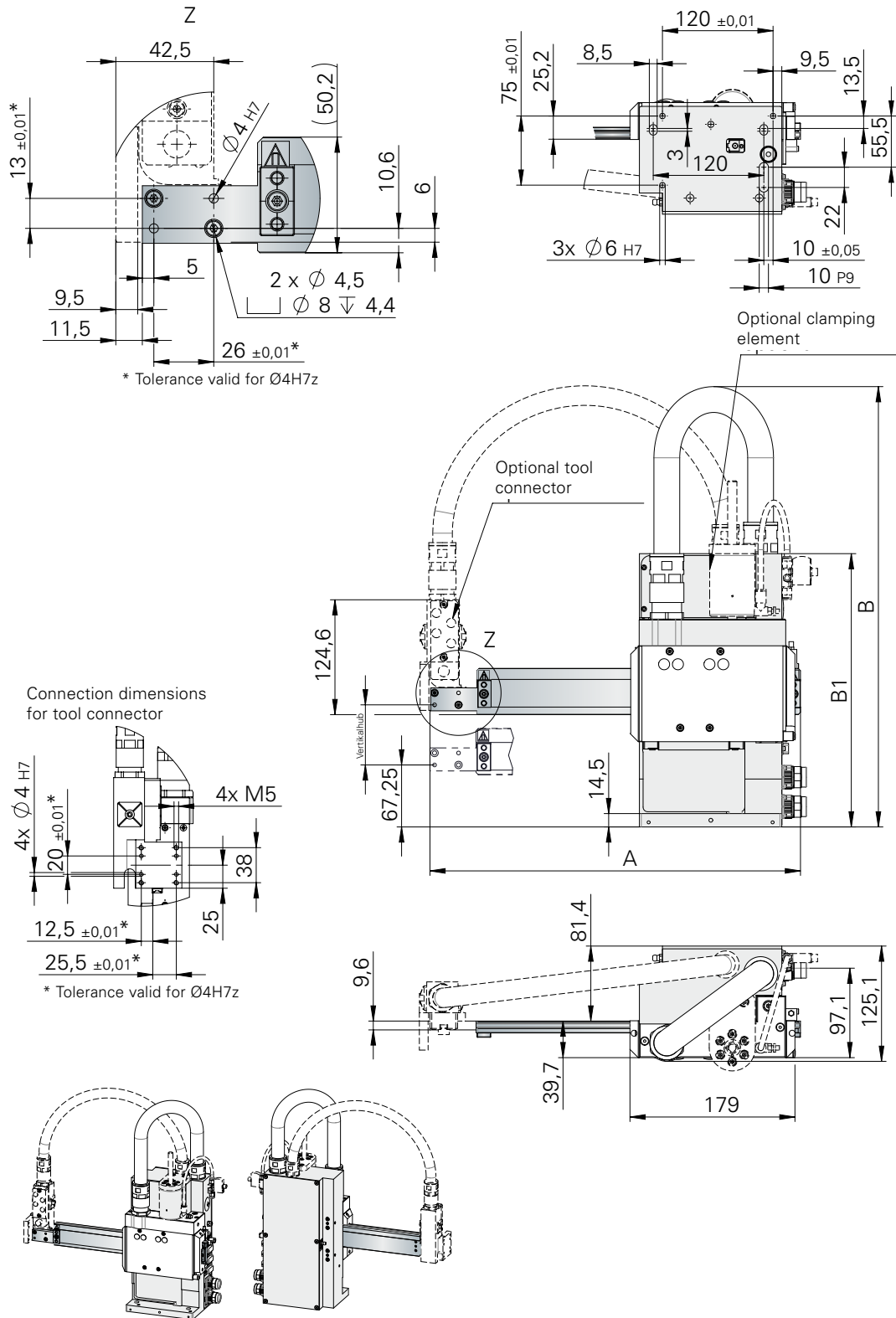
LOAD DATA



TIMING DIAGRAM To help calculate the exact cycle time, please forward your proposed sequence.



DIMENSIONS



Vertical stroke	B	B ₁	Horizontal stroke	A
65	478	296.5	160	402 *
100	581	371.5	270	512 *
150	653	471.5	300	542 *
			400	642 *