

HG/HN

LINEAR MOTOR AXES | HG/HN LINEAR AXIS



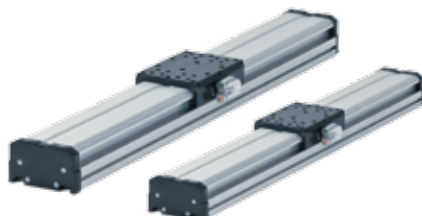
HG/HN LINEAR MOTOR AXES

TWO SIZES

The two sizes of the HG axis: HG 25 with a peak force of 180 N, and HG 12 with a peak force of 110 N

WEISS APPLICATION SOFTWARE

Fast, easy and secure setting through its unique user software



W.A.S. handling
WEISS Application Software

OKU relies on the perfect combination of HN and HL axes for its ball bearing assembly cell. User-programmable linear motor axes are the ideal choice for extremely fast process movements and strict requirements in terms of both dynamic performance and precision.



The latest in uncompromising, highly dynamic drive technology for your basic axis. Highly integrated and ready for installation. Compact and precise ball-type linear guides and an absolute measuring system are just as much a part of the concept as the automatic lubrication. The HN version is available in many different sizes – with a robust steel body or lightweight aluminium body. The aluminium profile-based HG axes can also be used in areas in which cost factors have typically made conventional drives the standard choice in the past: the most advanced linear technology at extremely attractive conditions. Both versions impress with their smooth movements and maximum dynamics.

ADVANTAGES

- Freely positionable
- Extremely dynamic
- Monitored movement
- No maintenance costs, no wearing parts
- Hygienic linear drive/no pneumatics, no oil, no gearbox
- Low energy costs
- Compact design
- Convincing price-quality ratio (particularly in the case of HG axes)
- HN axes with high power density available in many different sizes
- HG axes with covered guide profile with standard attachment options
- Absolute measuring system (up to 1,000 mm)

HG 12

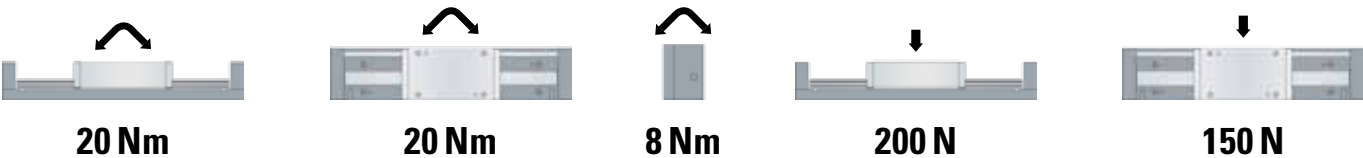
TECHNICAL DATA

Nom. force (N)	33	System accuracy (µm/m)	5 absolute (BISS/C, SSI) up to 1 m
Peak force(N)	102	Repeatability (µm)	5 incremental (Sin/Cos 1Vss)
Max. speed (m/s)	4	Repeatability (µm)	2 absolute (BISS/C, SSI) up to 1 m
Max. acceleration (m/s²)	40	Available strokes (mm)	up to 1000
Max. load capacity (kg)	5	Thermal sensor	PTC
Max. DC voltage (VDC)	800	Weight of rail, 0 stroke (kg)	1.44
Nom. current (Arms)	0.6	Weight of rail/100 mm (kg)	0.72
Peak current (Arms)	2	Weight of carriage (kg)	1.45
System accuracy (µm/m)	10 incremental (Sin/Cos 1Vss)		

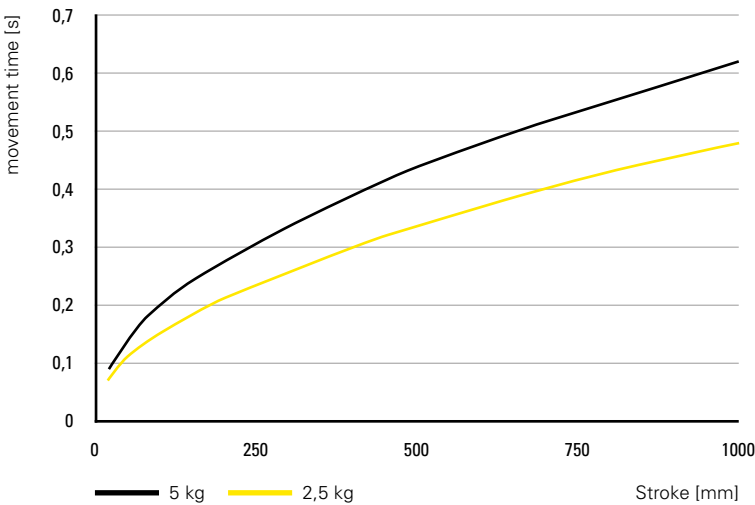
STATIC LOAD



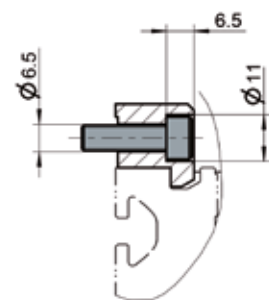
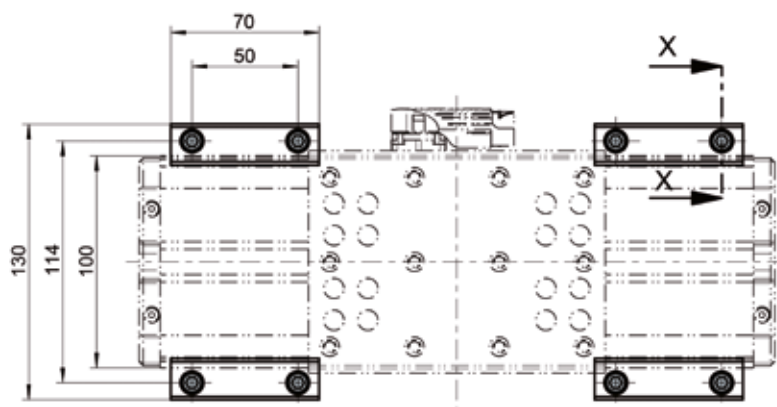
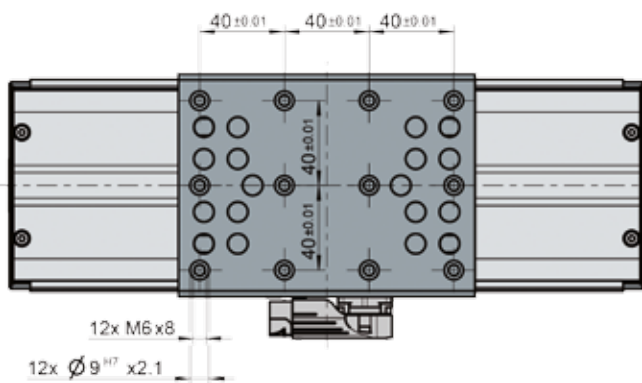
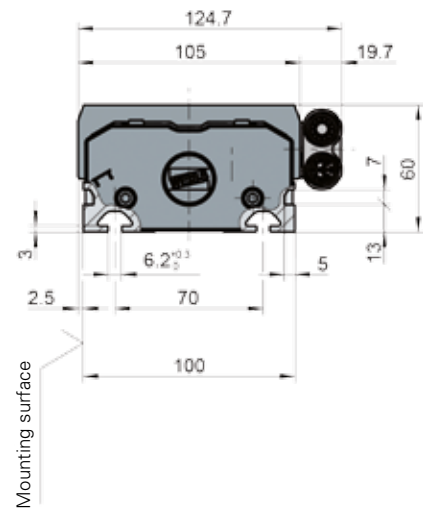
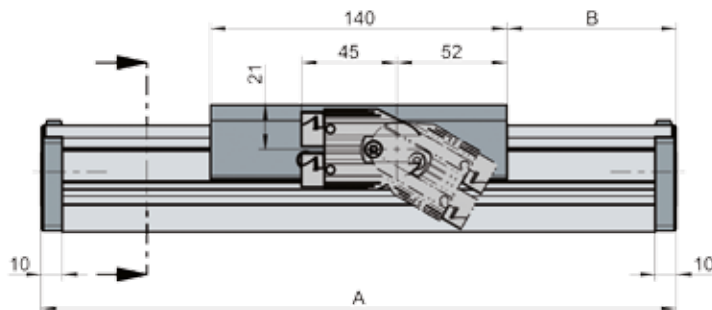
DYNAMIC LOAD



TIMING DIAGRAM



DIMENSIONS



X-X (1:1)

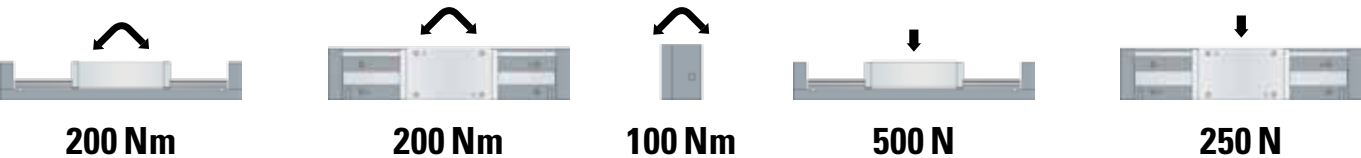
Standard strokes	A	B
100	300	80
200	400	130
300	500	180
400	600	230
500	700	280
600	800	330
700	900	380
800	1000	430
900	1100	480
1000	1200	530

HG 25

TECHNICAL DATA

Nom. force (N)	65	System accuracy (µm/m)	5 absolute (BISS/C, SSI) up to 1 m
Peak force (N)	180	Repeatability (µm)	5 incremental (Sin/Cos 1Vss)
Max. speed (m/s)	4	Repeatability (µm)	2 absolute (BISS/C, SSI) up to 1 m
Max. acceleration (m/s²)	40	Available strokes (mm)	up to 1000
Max. load capacity (kg)	10	Thermal sensor	PTC
Max. DC voltage (VDC)	800	Weight of rail, 0 stroke (kg)	2.24
Nom. current (Arms)	2.4	Weight of rail/100 mm (kg)	1.00
Peak current (Arms)	6	Weight of carriage (kg)	2.05
System accuracy (µm/m)	10 incremental (Sin/Cos 1Vss)		

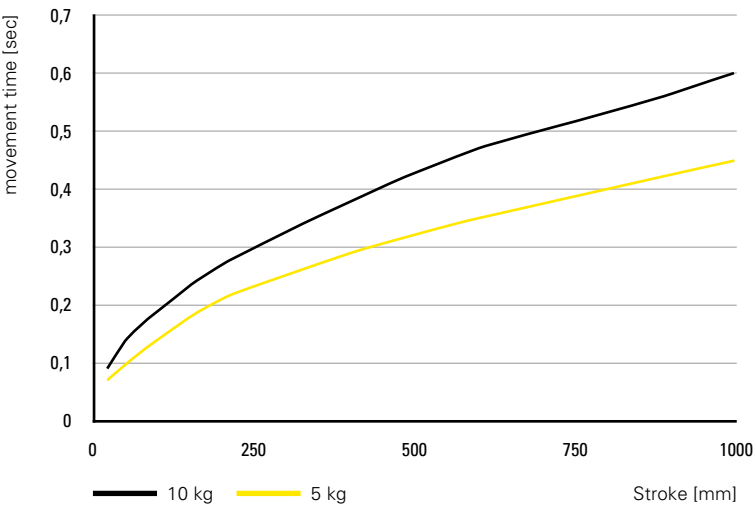
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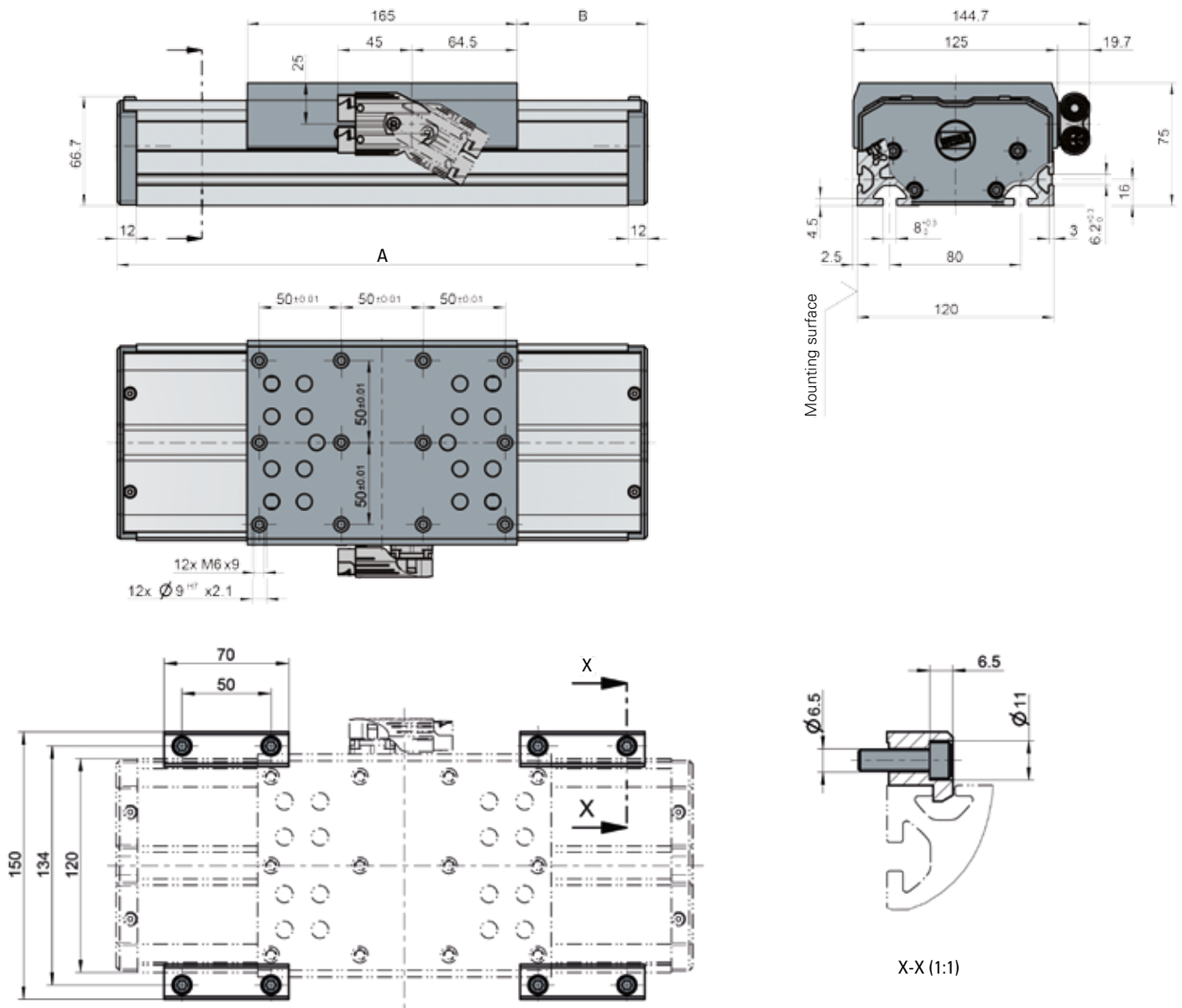
DYNAMIC LOAD



TIMING DIAGRAM



DIMENSIONS

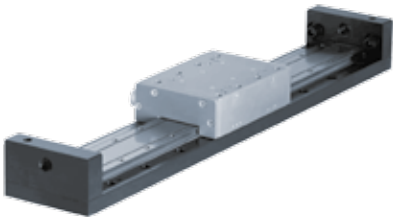


Standard strokes	A	B
100	324	79.5
200	424	129.5
300	524	179.5
400	624	229.5
500	724	279.5
600	824	329.5
700	924	379.5
800	1024	429.5
900	1124	479.5
1000	1224	529.5

HN 50

TECHNICAL DATA

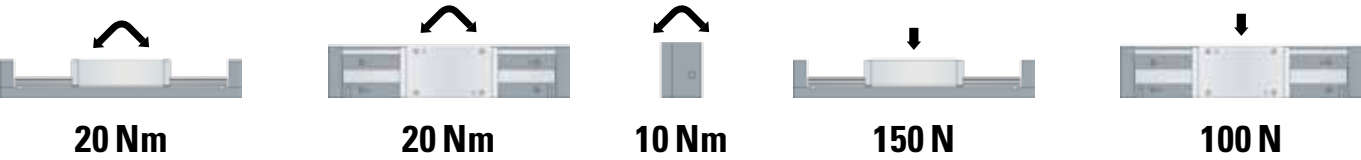
Nom. force (N)	65	Available strokes (mm)	up to 2000	
Peak force (N)	180	Thermal sensor	PTC	
Max. speed (m/s)	4	Weight	Steel base	Alu base
Max. acceleration (m/s²)	40	of rail, 0 stroke (kg):	6.00	2.51
Max. load capacity (kg)	15	of rail/100 mm (kg):	1.82	0.83
Max. DC voltage (VDC)	800	of carriage (kg):	2.20	2.20
Nom. current (Arms)	2.4			
Peak current (Arms)	6			
System accuracy (µm/m)	10 incremental (Sin/Cos 1Vss)			
System accuracy (µm/m)	5 absolute (BISS/C, SSI) up to 1 m			
Repeatability (µm)	5 incremental (Sin/Cos 1Vss)			
Repeatability (µm)	2 absolute (BISS/C, SSI) up to 1 m			



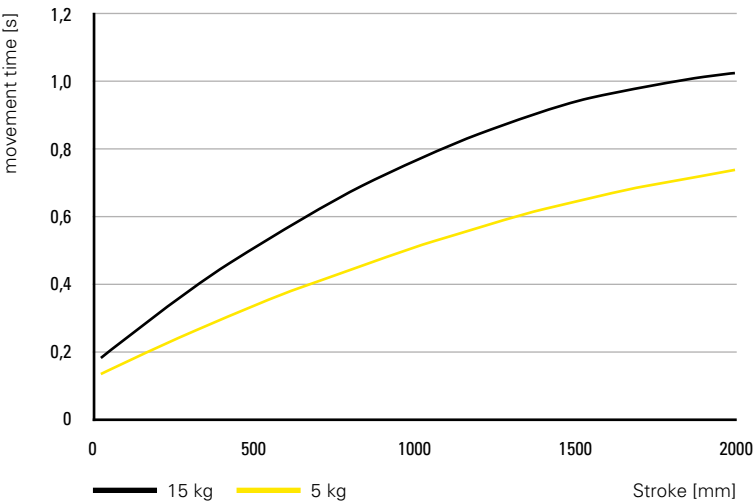
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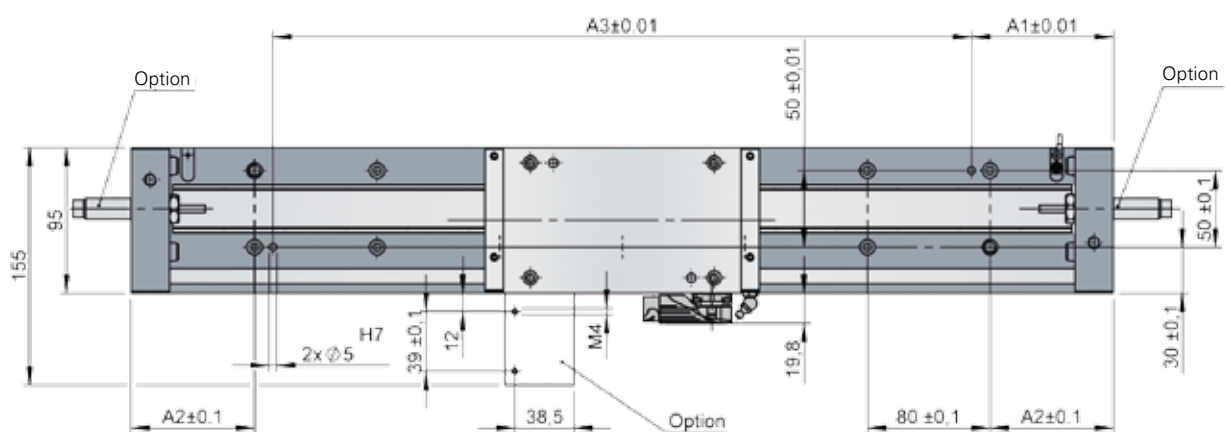
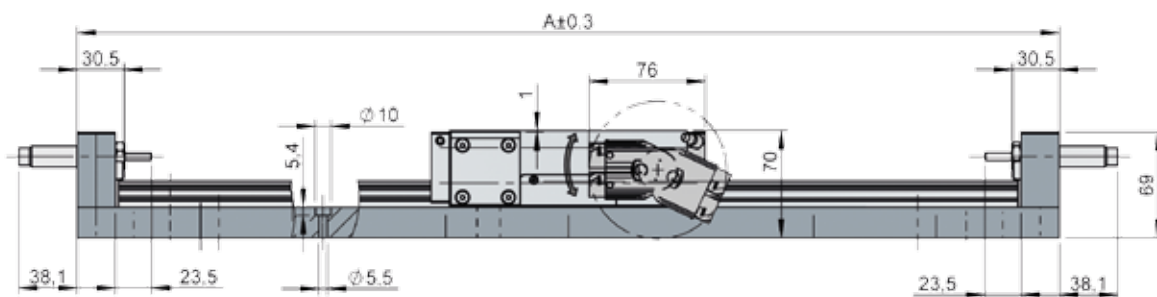
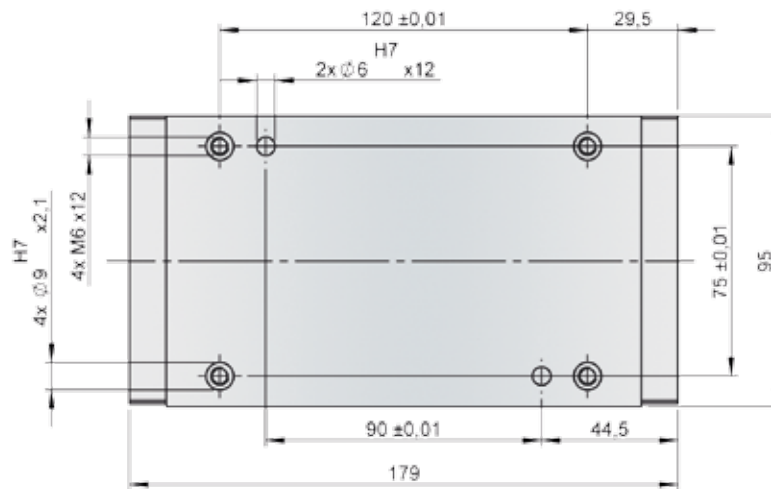
DYNAMIC LOAD



TIMING DIAGRAM



DIMENSIONS



Standard strokes	A	A1	A2	A3
300	541	122.5	110.5	296
500	741	62.5	50.5	616
1000	1241	72.5	60.5	1096

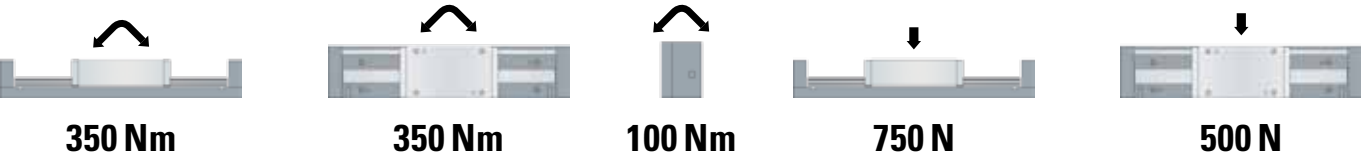
Intermediate strokes available in 100 mm steps on request

HN 100

TECHNICAL DATA

Nom. force (N)	150	Repeatability (μm)	5 incremental (Sin/Cos 1Vpp)	
Peak force (N)	380	Repeatability (μm)	2 absolute (BISS/C, SSI) up to 1 m	
Max. speed (m/s)	4	Available strokes (mm)	up to 4000	
Max. acceleration (m/s²)	40	Thermal sensor	PTC	
Max. load capacity (kg)	25			
Max. DC voltage (VDC)	800			
Nom. current (Arms)	3.6	Weight	Steel base	Alu base
Peak current (Arms)	9.5	of rail, 0 stroke (kg):	11.50	5.59
System accuracy (μm/m)	10 incremental (Sin/Cos 1Vpp)	of rail/100 mm (kg):	2.99	1.61
System accuracy (μm/m)	5 absolute (BISS/C, SSI) up to 1 m	of carriage (kg):	4.70	4.70

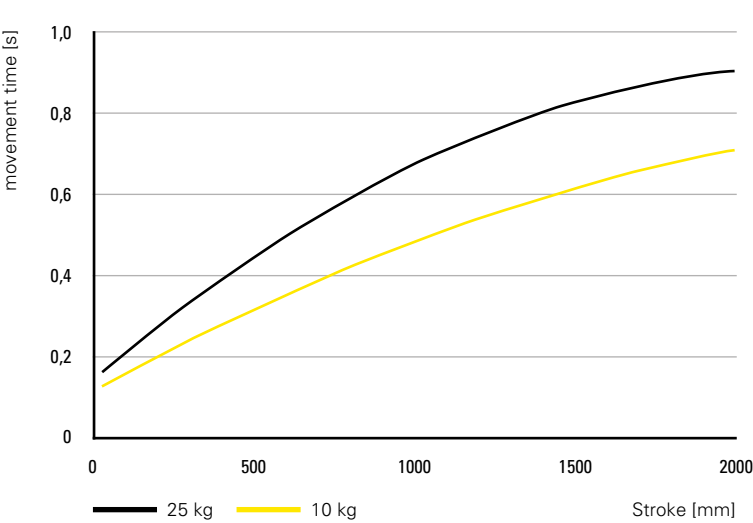
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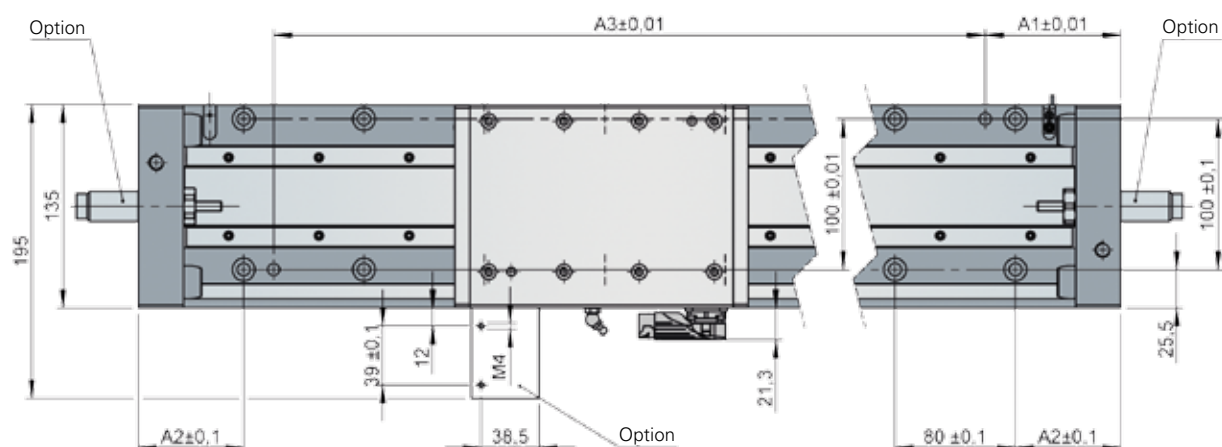
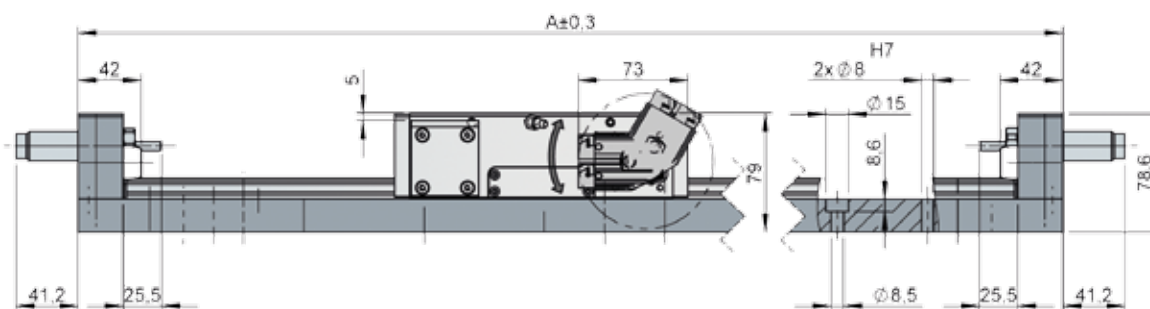
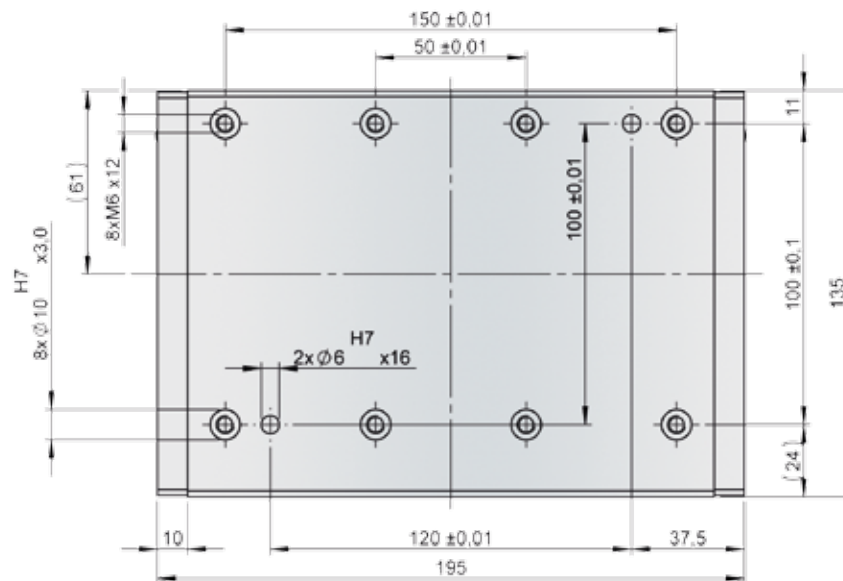
DYNAMIC LOAD



TIMING DIAGRAM



DIMENSIONS



Standard strokes	A	A1	A2	A3
500	780	90	70	600
1000	1280	140	80	1000
1500	1780	140	90	1500
2000	2280	140	100	2000

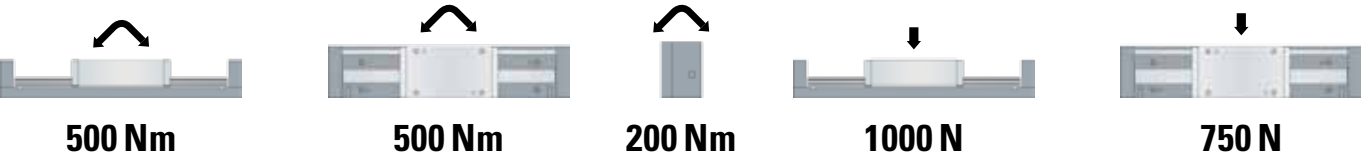
Intermediate strokes available in 100 mm steps on request

HN 200

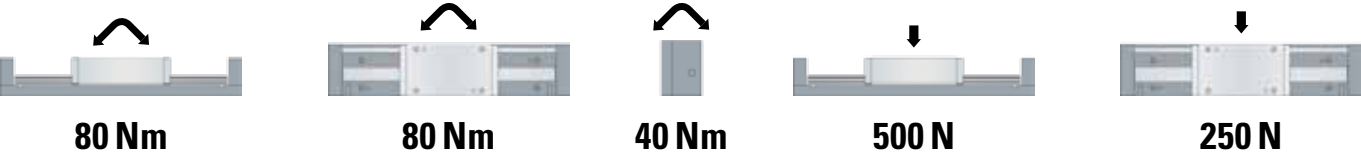
TECHNICAL DATA

Nom. force (N)	250	Repeatability (μm)	5 incremental (Sin/Cos 1Vpp)	
Peak force(N)	700	Repeatability (μm)	2 absolute (BISS/C, SSI) up to 1 m	
Max. speed (m/s)	4	Available strokes (mm)	up to 4000	
Max. acceleration (m/s²)	40	Thermal sensor	PTC	
Max. load capacity (kg)	50			
Max. DC voltage (VDC)	800			
Nom. current (Arms)	4.5	Weight	Steel base	Alu base
Peak current (Arms)	11.2	of rail, 0 stroke (kg)	20.42	9.59
System accuracy (μm/m)	10 incremental (Sin/Cos 1Vpp)	of rail/100 mm (kg)	4.33	2.22
System accuracy (μm/m)	5 absolute (BISS/C, SSI) up to 1 m	of carriage (kg)	8.10	8.10

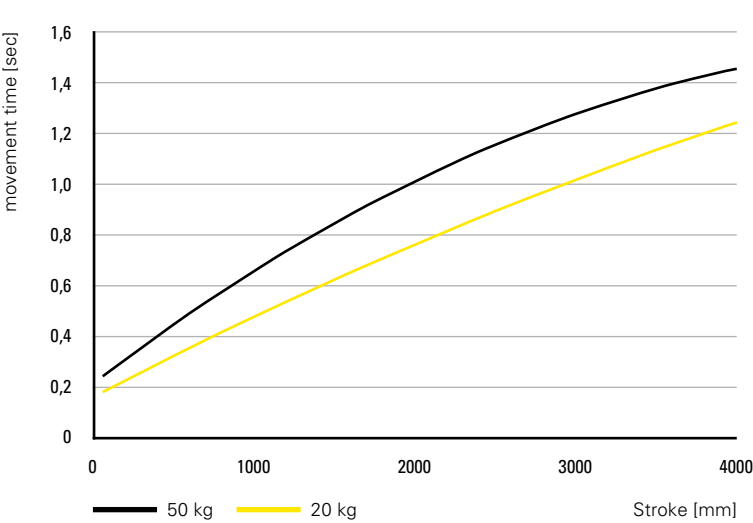
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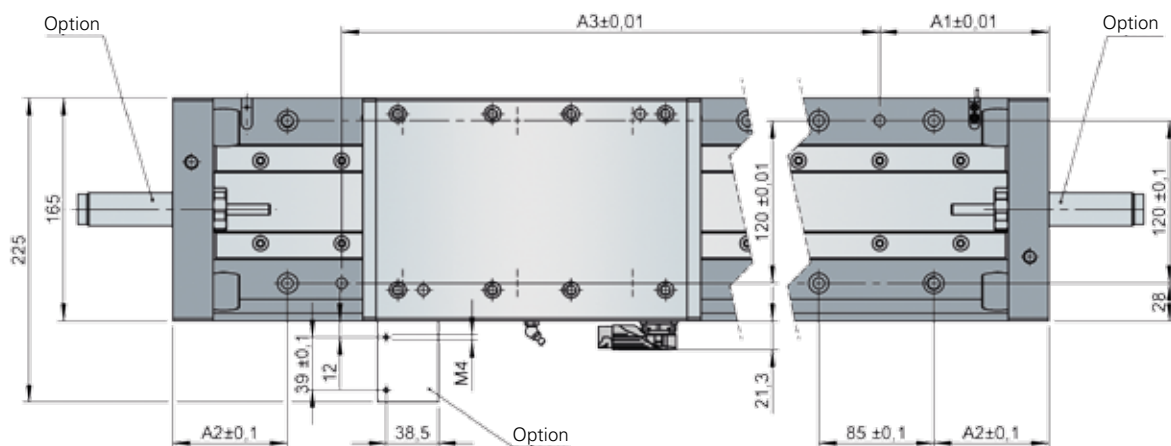
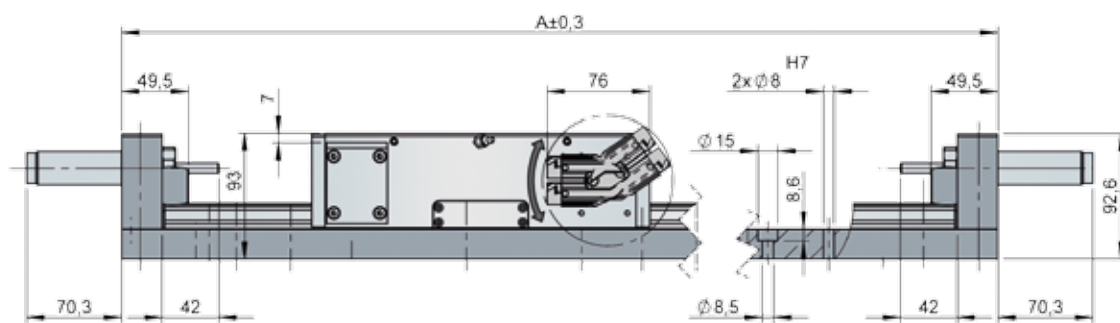
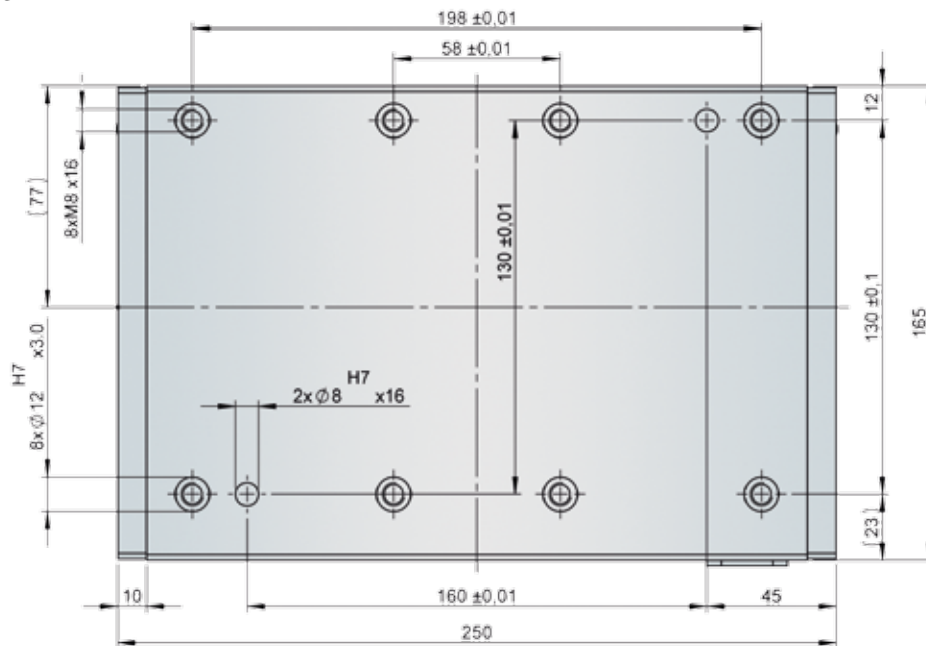
DYNAMIC LOAD



TIMING DIAGRAM



DIMENSIONS



Standard strokes	A	A1	A2	A3
500	850	125	85	600
1000	1350	125	80	1100
1500	1850	125	75	1600
2000	2350	125	70	2100

Intermediate strokes available in 100mm steps on request

HN 400

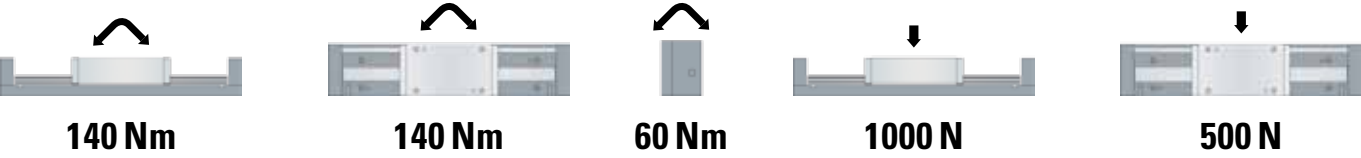
TECHNICAL DATA

Nom. force (N)	500	Repeatability (μm)	5 incremental (Sin/Cos 1Vpp)	
Peak force (N)	1400	Repeatability (μm)	2 absolute (BISS/C, SSI) up to 1 m	
Max. speed (m/s)	4	Available strokes (mm)	up to 4000	
Max. acceleration (m/s²)	40	Thermal sensor	PTC	
Max. load capacity (kg)	100			
Max. DC voltage (VDC)	800			
Nom. current (Arms)	7	Weight	Steel base	Alu base
Peak current (Arms)	18	of rail, 0 stroke (kg)	31.36	15.11
System accuracy (μm/m)	10 incremental (Sin/Cos 1Vpp)	of rail/100 mm (kg)	5.52	2.90
System accuracy (μm/m)	5 absolute (BISS/C, SSI) up to 1 m	of carriage (kg)	13.40	13.40

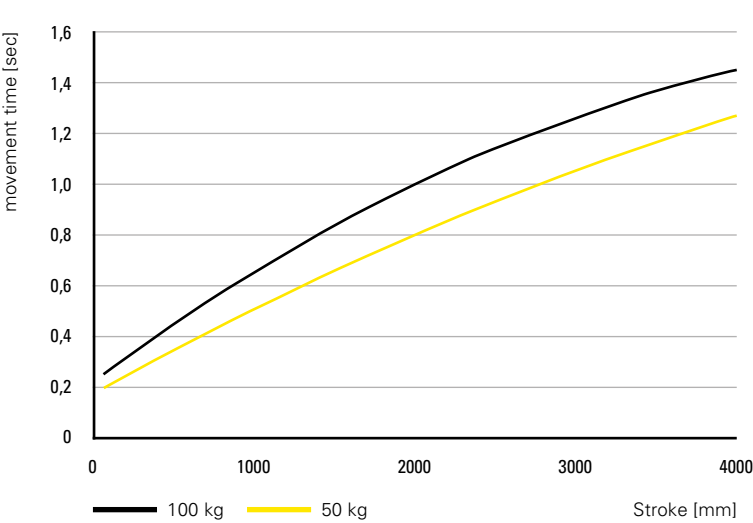
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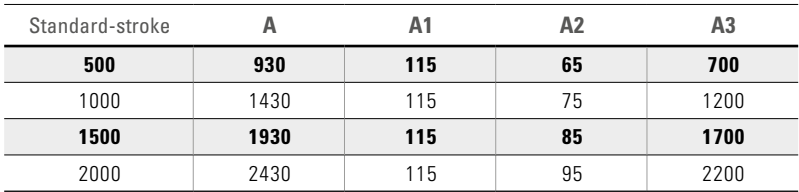


DYNAMIC LOAD



TIMING DIAGRAM





Intermediate strokes available in 100 mm steps on request